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PORTS and HARBORS

March, 1986 Vol. 31, No.3

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Mr. Henri Allard, former General Manager, Port of Quebec, Canada, has sent a telex to Secretary General Sato confirming his resignation from the post of Second Vice-President of IAPH, due to his retirement from the Port of Quebec in October 1985.

On hearing the news, President den Toom instructed the Secretary General to call a meeting of the Board of Directors by correspondence to elect Mr. Allard’s successor as Second Vice-President in accordance with the provisions of Section 22 of the By-Laws, which stipulate that in the event of a vacancy occurring in the office of President, First Vice-President, Second Vice-President or Third Vice-President by reason of death, resignation, ineligibility, accession to another office or otherwise, such a vacancy shall as soon as practicable be filled for the unexpired term.

Another strong Vice-Presidential candidate from the American region prior to Mr. Allard’s eventual nomination at the Hamburg Conference was Mr. J.H. McJunkin of Long Beach. President den Toom and the other Vice-Presidents are thus unanimous in recommending Mr. McJunkin’s candidacy to the Board of Directors. Consequently the members of the Board of Directors are requested to express their position concerning the election of the new Second Vice-President by returning their completed ballot forms to the Head Office no later than February 25, 1986.

Voluntary Contributions to “Special Fund” total $25,000 against targeted $70,000

The amount of voluntary contributions to the Special Port Technical Assistance Fund (“the Special Fund”) as of January 31, 1986, totaled US$25,000 as against the targeted amount of US$70,000. The list of contributors and the sums received or pledged are shown in the box below.

One of the provisions stipulated in the Hamburg resolution concerning the fund-raising to replenish the Special Fund was that if the voluntary contributions did not amount to 70,000 dollars by January 31, 1986, special dues would be assessed to the extent necessary to cover the difference between the total of the voluntary contributions received and 70,000 U.S. dollars – provided, however, that the Secretary General in calculating any “special dues” assessment made appropriate allowance for the voluntary contributions made by the members.

The Secretary General comments that the campaign has not yielded a response of the level he expected, although he recognizes that some members, for example Japanese regular members, need more time to come up with their contributions as a result of their budgetary systems and in view of the fact that the fiscal year starting from April 1986 will be the earliest possible time for the disbursement of budgeted items.

The Secretary General is now preparing a report on the progress of the campaign for the Finance and Executive Committee, which will meet this April in Auckland, New Zealand. He urges the continued support of all members for the project.
EXCO Meeting in Auckland

The site for the inter-conference year meeting of the Executive Committee is Auckland. The meeting will be hosted by the Auckland Harbour Board (General Manager Mr. R. Cooper) for two days on Wednesday April 9 and Thursday, April 10. All members of the Exco, Chairmen of the internal and technical committees, Liaison Officers and Legal Counselors are invited to attend the Conference.

Although the venues and schedules of the technical committees are not yet finalized in every detail, an outline of the events in Auckland is as follows:

April 7 (Monday): Finance Committee Meeting (afternoon) + Meetings of Technical Committees: Public Affairs, Legal Protection of Port Interests (timings yet to be finalized)

April 8 (Tuesday): Membership Committee (Morning) and Constitution & By-Laws Committee Meetings (Afternoon) + Meetings of Technical Committees: Public Affairs and others (yet to be finalized)

April 9 (Wednesday): Executive Committee Meeting (Full day)

April 10 (Thursday): Executive Committee Meeting (Full day)

April 11 (Friday): Visit to the Port of Auckland

Membership campaign letter sent to 170 non-member ports

A campaign letter dated January 6, 1986 and jointly signed by President den Toom and Mr. John Mather, Chairman of the Membership Committee of IAPH, has been circulated to some 170 non-member ports together with the up-dated version of the IAPH brochure and application forms for both regular and temporary membership.

The temporary membership status was introduced by the Association at reduced membership dues of SDR500 for one year, with a view to encouraging new members to join and become familiar with the Association, and also to enable them to participate in our next conference — in this case the 15th Conference in Seoul, Korea, from April 25 to May 2, 1987.

Since the creation of the “temporary membership” category in 1980, as of the end of 1985 altogether 52 ports had applied for such membership of IAPH. Moreover, as a result of this campaign, a majority of these organizations have joined as regular members after their one-year trial period.

In the campaign letter, the President and the Membership Committee Chairman are seeking to convince the recipients that, through the various contacts they will be able to make in IAPH with members throughout the world, they will find ways to enhance the overall efficiency of their own organizations, while at the same time helping other members to obtain similar benefits.

For the IAPH President and the Membership Committee members, how to attract more members to join the Association has traditionally been a matter of the greatest concern. None of them believed that a single letter would be sufficient to elicit from the eligible bodies a favourable response concerning membership in IAPH, but all were aware that their continued efforts would someday succeed in persuading new members to join this worldwide organization and its diverse activities. Indeed, the gradual increase in our membership, from the original 14 members in the initial year to the current figures of 359 members, has mainly been attained as a result of personal contacts by the officers, Committee Chairmen and Board members as well as the Head Office staff, who have made the best use of their periodic meetings with people from non-member ports.

It is sincerely hoped that all members will be able to assist us in our membership campaign efforts, whenever and wherever possible, by speaking of the merits of being a member of IAPH and the positive interaction and undoubted mutual benefits enjoyed by the respective parties.

We look forward to progress in this year’s campaign and trust that we will be able to present you with a favourable report in this matter.

Mr. André Pages contributes a paper on National Associations of Maritime Law and the International Maritime Committee

According to Mr. Paul Valls, Director-General, Port Autonome de Bordeaux and Chairman of the IAPH Committee on the Legal Protection of Port Interests (CLPPI), his committee held a meeting in London on November 21, 1985 to prepare its report to the Executive Committee, which will meet in Auckland in April this year.

At the London meeting, a paper entitled “The National Associations of Maritime Law & the International Maritime Committee” was presented by Mr. André Pages, Mr. Valls’ predecessor as Chairman of the CLPPI and an Honorary member of IAPH.

Chairman Valls was kind enough to have Mr. Pages’ paper, which was originally written in French, translated at his office for the benefit of all members. The English translation of the paper is reproduced on page 10 of this issue.

Bursary recipient Ahoyo submits report on Seminar in Le Havre

The Secretary General had received a report from Mrs. Christine Edwidge Ahoyo, Assistant to the Finance Director, the Port of Cotonou, Benin, who attended the Seminar on the Justification and Finance of Port Projects organized jointly by UNCTAD, and the Ecole Nationale des Ponts et Chausées and the Institut Portuaire d’Enseignement et Recherche (IPER) of Le Havre, June 12-26, 1985, via the office of Mr. Bert Kruk, Port of Rotterdam and Chairman of the IAPH Committee on International Port Development.

The original report as it was submitted to Mr. Kruk was prepared in French. However, for the benefit of all members, Mr. J. Dubois of the Port of Le Havre kindly took the kind assistance given by the Port of Le Havre people, we are able to carry the English version of the report on page 13 of this issue.

Membership Notes

New Members

Regular Members

Port Autonome d’Abidjan
Boite Postale V-85, Abidjan, Ivory Coast
Office Phone: 32-01-66
Telex: COMPORT 3674
(Mr. J.M. Moulod, Director General)
Port Autonome de Papeete  
B.P. 9164, Papeete, Tahiti  
Office Phone: 3 60 60  
(Mr. Alban Ellacott, Director General)

Port of Chuna Authority  
G.P.O., Khulna, Bangladesh  
Office Phone: 62331, 60930  
Telex: 27241 MONPORT BJ  
(Capt. S.Y. Kamal, Chairman)

Waterford Harbour Commissioners  
Georges Street, Waterford, Ireland  
Office Phone: 051 74907/8  
(Mr. M.J. Curtin, Deputy General Manager)

Associate Member  
Finnish Port Association (Class B)  
Toinen Linja 14, 05300 Helsinki, Finland  
Office Phone: 90-7711  
(Mr. Alpo Naski, Managing Director)

Changes

Cameroon National Ports Authority  
Chairman: Mr. André-Bosco Cheoua  
General Manager: Mr. Siegfried Dibong  
Works Manager: Mr. Nseke Njoh

The Japan Warehousing Association Inc.  
Vice-Presidents: Mr. Goro Hara  
Mr. Johtarao Wada  
Mr. Kenichiro Nishikawa  
Mr. Kozo Aritaki  
Mr. Nobuyoshi Shiraishi  
Mr. Kazuyoshi Okihawa

Chittagong Port Authority  
Mr. A.S. Nasiruddin has taken over Mr. Narul Momen Khan as Chairman of the Chittagong Port Authority and the IAPH Director from Bangladesh as of December 1985.

Former Editor  
Yoshio Hayashi passes away

Mr. Yoshio Hayashi, who served as Editor of the IAPH journal "Ports and Harbors" for the period 1967 – 1981 and then remained as a part-time staff member of the Head Office, died on December 19, 1985 in a Tokyo hospital. He was 74 years old.

The funeral service was held the following day at his Tokyo residence. It was attended by Dr. Hajime Sato, Secretary General, who made a memorial address on behalf of the Head Office, as well as all the staff members of the Secretariat.

Mr. Hayashi officially became a member of the Head Office staff in July 1967, although he had already been assisting the late Mr. Gaku Matsumoto, a founding father and the first Secretary General of IAPH, in editing the IAPH journal (which was then issued quarterly, prior to becoming a monthly publication from 1968). At the same time he assisted Mr. Matsumoto with his preparatory work for the establishment of the World Trade Center of Japan.

Mr. Hayashi made an outstanding contribution to the affairs of the Association, in particular maintaining and improving the Association's journal and thus uniting our members all over the world. Dr. Sato in his memorial address praised the loyal service and valuable contribution Mr. Hayashi gave IAPH, without which the present substance and prestige of our journal would have been difficult to achieve.

We wish to take this opportunity of expressing our warm appreciation to all members of IAPH for the cooperation and friendship they afforded Mr. Hayashi in the past. We trust such support will continue to be given so that we can ensure the steady progress of IAPH.
The National Associations of Maritime Law and The International Maritime Committee

by André Pages
Ingénieur Général des Ponts et Chaussées
Honorary Member of IAPH
Member of CLPPI

Translation by Pamela Le Garrec
(Port Autonome de Bordeaux)

Introduction

The Committee on Legal Protection of Port Interests (CLPPI) recently held a meeting in London to prepare its report to the Executive Committee in Auckland, April, 1986.

The following paper was presented to that meeting by my predecessor as Chairman of CLPPI, and now an Honorary Member of IAPH, Mr. André Pages.

André's vast experience in the workings of maritime legislation (a great deal of which he has gained working on IAPH's behalf) led him to write this paper on the CMI and its enormous impact in the field of Maritime Law.

It also puts forward a way in which we can all help to further IAPH's cause and influence as a truly representative body of Port Authorities the world over. It is for this reason that CLPPI decided that the paper should be submitted for publication in Ports and Harbors Magazine, prior to the Auckland Meetings, where it will, of course, also be submitted to the Executive Committee as part of CLPPI's Report.

Paul Valls
Chairman, CLPPI

Maritime law associations, which have developed since the end of the 19th century in many countries, and the International Maritime Committee (CMI), which regroups their activities in the international field, play a major role in both the everyday practical application of maritime law and in its development at national and international level.

These activities warrant a brief historical résumé.

1. NATIONAL ASSOCIATIONS OF MARITIME LAW

1.1. The Progressive Creation of Associations

The Belgium Association of Maritime Law was the first to be founded, in 1896. It was rapidly followed by numerous others, across the globe.

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To this list, which was drawn up in 1984, can be added:—

- the USSR, which does have a national association of maritime law, although the date when it was founded is unknown;
- and Uruguay and the West African States, which have recently been in the process of setting up such associations.

1.2. The Membership of these Associations

The memberships of these associations include both private members as well as corporate ones, the various companies involved all having maritime connections:

- jurists, professors of law, magistrates, barristers and advocates,
- arbiters, average adjusters, maritime surveyors,
- merchant and military naval officers, maritime journalists,
- the various shipping companies, owners, builders, agents, brokers, stevedores and forwarding agents,
- bankers, underwriters, insurance companies, all dealing in maritime trade.

But, to date, representatives of the Port Authorities appear to have played a very limited role in the life of these associations.

1.3. The Activities of these Associations

Such associations focus their attention on all the different day-to-day aspects of maritime trade and their legal implications, within their respective countries.
They show a particular interest in the developments in maritime law at the national level and at the international level, more specifically by their participation in the activities of the International Maritime Committee.

Their work covers highly varied subjects:
- charter parties, bills of lading, seaway bills, arbitration, towage, compensation for damage in collision cases, general average, case law in the courts, conversion of gold limitation units into SDR, etc.

2. THE INTERNATIONAL MARITIME COMMITTEE (CMI)

2.1. Antecedent International Activities

Jurists in many countries became aware of the need to unify the multiple national rules and regulations across the globe, especially in maritime law, in the middle of the 19th century, and it was this that inspired the foundation:
- in 1857, in London, of the National Association for Social Sciences, which, in 1864, drew up the first rules designed to codify general average;
- in 1873, of the Association for the Reform and Codification of the Law of Nations, cradle of the International Law Association, which was to sponsor the York/ Antwerp Rules in 1890; and
- shortly afterwards, in Ghent, of the “Institut de Droit International” which promoted The Hague International Conventions.

This same feeling, of the need for unification in the rules of maritime law, led the Belgian government to take the initiative and organize a first congress in Antwerp (1885), and a second in Brussels (1888), which were to facilitate the successful conclusion of:
- the Washington Convention on the Regulations for Preventing Collisions at Sea, in 1899, the basis of the present day, 1960 London Convention on the Safety of Human Lives at Sea; and
- the Harter Act, passed by the USA Congress in 1893, which is a prefiguration of the Hague Rules and the 1924 Brussels Convention for the Unification of certain Rules relating to Bills of Lading.

2.2. The Constitution of the International Maritime Committee

 Barely a year after the Belgium Maritime Law Association had been founded, several national associations were projected, using it as a model. They joined together to form the International Maritime Committee, the first conference of which was held in Brussels in 1897.

 The CMI took on the form of a group of National Associations.

Since then, the CMI has held conferences periodically, at a rate varying from annually to once every 4 years (except during the two world wars), to debate the major concerns of the time, and, more specifically, to establish draft international conventions on these subjects, which are then submitted to Diplomatic Conferences.

Delegations from the different national associations of maritime law attend these conferences, bringing with them the fruits of their own work on the subjects being debated.

2.3. International Conventions of Maritime Law and the International Maritime Committee

In this way, the National Associations of Maritime Law and the CMI have established a great many draft international conventions in this field. The CMI representatives present, comment on and defend such drafts at appropriate Diplomatic Conferences, where they enjoy observer status as delegates of an approved non-governmental consultative organization.

2.3.1. The Brussels International Maritime Law Conventions

Originally, it was the Belgian government which agreed to accept the CMI drafts, to convene other governments to Diplomatic Conferences and to be the depository of the instruments of ratification.

The Brussels International Maritime Law Conventions consist of the following:
- 1910 Collision between Vessels,
- 1910 Assistance and Salvage at Sea and the 1967 Protocol,
- 1924 Limitation of Liability of Owners of Sea-going Vessels,
- 1924 Bills of Lading, plus the 1968 and 1979 Protocols,
- 1926 Maritime Liens and Mortgages and its Protocol,
- 1926 Immunity of State-owned Ships,
- 1952 Civil Jurisdictions in matters of Collision,
- 1952 Penal Jurisdiction in matters of Collision or other Incidents of Navigation,
- 1952 Arrest of Sea-going Ships,
- 1957 Limitation of Liability of Owners of Sea-going Vessels and the 1979 Protocol,
- 1957 Stowaways,
- 1961 Carriage of Passengers by Sea,
- 1962 Liability of Operators of Nuclear Ships,
- 1967 Vessels under Construction,
- 1967 Carriage of Passengers’ Luggage by Sea,
- 1967 Maritime Liens and Mortgages.

2.3.2. IMO Conventions

The United Nations came into being after the second World War, with its head office in New York, and progressively formed various specialist agencies in different fields.

As far as the maritime community is concerned, the Convention establishing the International Maritime Consultative Organization (IMCO), since 1982 renamed the International Maritime Organization (IMO), was adopted at the United Nations Maritime Conference, held in Geneva in 1948. This Convention entered into force in 1958 and the new organization held its first session in 1959, at its London headquarters.

At about this same period, the United Nations Conference on Trade and Development (UNCTAD) was established in Geneva, which is where the International Labour Organization (ILO) also has its headquarters. The ILO was founded in 1919 and became the first UN Agency in 1946. Other UN Agencies also have maritime connections, such as the International Atomic Energy Agency and the United Nations Commission on International Trade Law (UNCITRAL), both of which are based in Vienna.

Thus it was to the United Nations and its Specialist Agencies that the CMI submitted its work.

All these UN Agencies have highly qualified permanent secretariats to prepare their various activities (specialist Working Committees, Council Meetings, General Assemblies, Diplomatic Conferences, etc.).

Where Maritime Law is concerned, the CMI (and through it the National Associations of Maritime Law) continues to play a major role in the submission and presentation of projects, by virtue of the fact that as a recognized non-
governmental organization it enjoys a consultative status at the different United Nations Agencies. In this way, its representatives can intervene during Sessions from the observers bench, to expound on and defend their positions.

Mention can be made, among recent IMO Conventions, of the:-
1. 1969 Brussels Convention on Civil Liability for Oil Pollution Damage and the 1976 and 1984 London Protocols,
2. 1971 Brussels Convention for the International Fund for Compensation for Oil Pollution Damage and the 1976 and 1984 London Protocols,
3. 1971 Brussels Convention on the Maritime Carriage of Nuclear Material,
and, among those still under debate:-
1. the Revision of the 1910 Salvage Convention,
2. Maritime Liens and Mortgages,
3. the Carriage of Noxious and Hazardous Substances by Sea;
with, finally, those listed on IMO's long term work plan for its Legal Committee:-
1. the Review and Updating of the Brussels Conventions,
2. the Revision of various Conventions relating to Limitations of Liability,
3. the Regime of Vessels in Foreign Ports,
4. Wreck Removal and related issues,
5. the Arrest of Sea-going ships.

2.3.3. CMI's Activities with other United Nations Agencies

The scopes of IMO and UNCTAD's activities tend to overlap in certain areas, particularly when economic and commercial interests are combined with legal implications. Thus it was that the IMO and UNCTAD simultaneously added the examination of the draft convention on:-
1. Maritime Liens and Mortgages to their respective agendas.

Overlapping also occurs between the ILO and the IMO when working conditions are involved.

Hence the ILO was responsible for:-
1. 1936 Convention concerning Minimum Requirements of Professional Capacity for Masters and Officers on board Merchant Ships,
2. 1946 Convention concerning the Certification of Able Seamen,
3. 1976 Convention concerning Minimum Standards in Merchant Ships;
whilst the IMO in association with the ILO dealt with:-

The same is also true for UNCITRAL and the International Atomic Energy Agency.

The CMI in this way is actively involved with the work of other United Nations Agencies besides the IMO, though, perhaps, not as involved as in the case of the Brussels and IMO Conventions, where it established the drafts of these conventions. Thus, the CMI took part in the work dealing with:-
1. The York/Antwerp Rules on General Average (1950),
3. UNCITRAL,
4. The Liability of Operators of Nuclear Ships (Brussels, 1962) — IAEA,
5. The 1976 Code of Conduct for Liner Conferences — UNCTAD.

It is also involved in the work being carried out by UNIDROIT and UNCITRAL concerning a draft convention (or standard form), relating to:-

3. OTHER ACTIVITIES OF THE UNITED NATIONS ORGANIZATION AND ITS AGENCIES

The United Nations Organization's scope of activities is not, of course, limited to the legal examination of Maritime Law, which is the main subject being dealt with in this paper.

Thus we can only briefly allude to the scope of these activities:-
1. of the various IMO technical Committees (Maritime Safety Committee, Marine Environment Protection Committee, Committee on Technical Cooperation, Facilitations Committee);
2. of the different divisions within UNCTAD (which are involved in questions concerning Ports, Maritime Transport, Technical Cooperation, or International Commerce); and
3. of the ILO's work in the maritime field (Minimum Standards, Working Conditions for seafarers, for dockworkers, etc.).

In addition to the International Conventions which result, there are also various Recommendations, Codes, Guidelines, etc. which are produced and which also have important legal and financial implications and which, from many points of view, are of interest to Ports.

Mention of these has been made in an annex to the present paper, since its main theme is that of the Activities of National Associations of Maritime Law and the CMI.

4. NATIONAL ASSOCIATION OF MARITIME LAW, CMI AND PORT AUTHORITIES

This rapid and, perhaps, incomplete review of the different International Conventions governing maritime life is intended to illustrate the very large proportion which are legal in nature.

As mentioned earlier, the presence of Port Authorities within the National Associations of Maritime Law appears to be very limited, and practically non-existent among their delegates to the CMI.

This situation is surprising and is to be regretted, since:-
1. Even if Port Authorities are involved only in one of the roles of maritime life, as a whole they are nonetheless very much a part of it. And, perhaps, their representatives could usefully clarify certain aspects which come under discussion.
2. On the other side of the coin, many questions raised at the IMO, UNCTAD, UNCITRAL, etc., have, during earlier phases, been carefully studied by these National Associations of Maritime Law and by the CMI. And Ports have every interest in learning of such projects concerning questions that involve them, as early as possible.
CONCLUSION

It is essential that Port Authorities appreciate that the establishment of the draft international conventions, guidelines, recommendations and regulations set out in the long term work programmes of the UN Agencies is a very slow process, involving:

- preparatory studies by private organizations, such as the CMI or IAPH (cf. Guidelines on Vessel Traffic Services),
- deliberation by Diplomatic Conferences,
- and, finally, ratification, entry into force and incorporation into the domestic legislation of each country.

Thus, IAPH, its members and its Technical Committees must remain vigilant over long periods of time to follow the course of all these procedures.

In conclusion, it is to be hoped that:

- Port Authorities will become much more aware of the impact on their everyday lives, of the framework within which their activities are increasingly being circumscribed by the numerous International Conventions and the National Laws stemming from them; and that:
- Port Authorities will establish locally good working relationships with their own National Associations of Maritime Law, and take part through these Associations in the deliberation of future draft conventions involving the legal and commercial aspects of maritime life.

ANNEX.

IMO INTERNATIONAL CONVENTIONS ON TECHNICAL AND SAFETY MEASURES

- Regulations for Preventing Collisions, 1960/1972;
- Prevention of Pollution of the Sea by Oil, 1954;
- Prevention of Pollution from Ships, 1973/1978;
- Facilitation of International Maritime Traffic, 1965;
- Load Lines, 1966;
- Tonnage Measurements of Ships, 1969;
- Intervention on the High Seas in cases of Pollution Casualties, 1969/1973;
- Safe Containers, 1972/1977;
- International Maritime Satellite Organization, 1979;
- Safety of Fishing Vessels, 1977;
- Marine Search and Rescue, 1979; and

Seminar on the Justification and Finance of Port Projects organized jointly by UNCTAD, the Ecole Nationale des Ponts et Chaussées de Paris and the Institut Portuaire d'Enseignement et de Recherche (IPER) of Le Havre, June 12-26, 1985

By Edwige Ahoyo
Assistant to the Port Financial Director,
Port Authority of Cotonou, Benin

The Permanent Committee of the National Executive Council, during its session on Wednesday, May 8, 1985, authorized the Port Authority of Cotonou to participate in the course on the “Justification and Financing of Port Projects” organized by the United Nations Conference for Trade and Development from June 12-26 in Le Havre (France).

In accordance with the summary of Administrative decisions N° 19/SG/CEN/REL of May 9, 1985, Comrade Christine Edwige Ahoyo, Administrator of Banks and Financial Institutions, Assistant to the Port Financial Director, represented our country, People’s Republic of Benin, in this seminar, which took place at the Institut Portuaire d’Enseignement et de Recherche (IPER) in Le Havre.

The material organization of the seminar, and the roundtrip travel expenses for Comrade Ahoyo were paid by the International Association of Ports and Harbors (IAPH).

The object of the seminar was to propose to Port Authorities and competent administrators a process to follow for compiling the files which are sent to lending organizations for the financing of necessary equipment and works.

Along these lines, the exposes presented were centred on three distinct points, namely:

1°) The inventory of the various problems which can come in Port Management or for port professionals, and their analysis, notably with the help of performance indicators.

2°) The determination of specific needs in space, equipment and men to efficiently receive the various types of traffic (conventional, ro/ro, containers, bulk...).

3°) The composition of justification files and the presentation, by a representative of the World Bank, of the negotiation methods and evaluation criteria used by the Bank.

Inventory of Port Problems

When an establishment wishes to make an investment, no matter what the anticipated source of financing (reserve capital or loans), a feasibility study always proves to be necessary. The goal of this study is to show the technical,
economic and financial feasibility of a particular investment.

Thus, concerning port investments, we will determine the work necessary in regard to the port situation and its development. But, even before this determination, it is necessary for a need to make itself felt and for a certain number of symptoms to be observed, showing the need to make a diagnosis.

The symptoms revealing port problems are many and variable. Among others, let us mention ship waits, rerouting of traffic, obstruction, offenses against goods, public funds or the port establishment's finances.

Thus the problems which face us in a port are also varied and can be related to the access, quays, open storage areas, warehouses, master plan, maintenance of infrastructures, need for equipment, equipment operation, equipment maintenance, need for rail and road connections, need for training, need for administrative and accounting management, or even the impact of other professions intervening in port life, etc.

Once the diagnosis is established, we must proceed to the needs determination.

Needs Determination

We must determine specific needs in space, equipment and men in order to efficiently receive the various types of traffic (conventional, ro/ro, containers, bulk, etc...). For this purpose, a market study should be done including (among others):

- product definition
- statistical study
- the determination of international commercial chains and logistics
- the determination of national commercial chains and logistics
- the determination of the port market
- the determination of a promotional plan of action.

Indeed, for all port investments, the whole project depends on the understanding of future traffic which, in particular, decides the cost of the project and the ease with which the initiating organization will recuperate the sums invested on a short or long range.

Thus, emphasis should be put on traffic predictions which should especially consider:

- the development tendencies of the commercial fleet
- the development tendencies of the coastal fleet
- the development policy of the national fleet
- a survey of shipping and forwarding agents
- port competition
- a study by type of packaging type
- a study by type of ship
- other factors.

The market studies and traffic predictions as well as the various techniques for calculating equipment capacity allow for the determination of port needs and supplementary needs.

A detailed project study should be done from these factors. This study should begin with the definition of possible solutions to fill these needs.

In order to be accepted, the project should be the best among the solutions considered for a particular type of problem. From this point, many criteria are considered, among them being the cost/advantage analysis.

The solution chosen should not only be the best, but also economically profitable and financially endurable by the port organization and users. This choice of the optimum option necessitates the heavy use of economic and financial evaluation techniques for the projects and a study of the tariffing aspect.

The Composition of Justification Files

Once these studies are completed, we can proceed to the compilation of a justification file to be submitted to the lending organization, which, in turn, will study it before opening negotiations.

In short, during this seminar the successive stages of the drafting and compilation of justification files for port projects were developed and illustrated with specific case studies.

Evaluation of the Seminar

Apart from the technical contents of this seminar, it was an occasion for fruitful exchanges of experiences in the field of ports, an appreciable circle of giving and receiving.

All of the port operators feel that a simple needs definition is not sufficient for financing by the international banks, but that the justification of a case should come from the support of indispensable documents produced by the organization requesting financing.

Very often no data are available, no reliable statistics exist. This often leads the financing organization or institution to take the place of the Port Authorities and help them to compile a regular, regulation file.

The seminar also includes visits to the Port of Le Havre, its infrastructures and equipment.

We visited the port of Antifer, specializing in the reception of oil tankers and constructed as part of the decentralization of the port of Le Havre.

This seminar proved to be of great interest to the port of Cotonou. Through the themes developed, the port will from now on perceive more clearly its various specific problems and better direct its choice in forecasts and development in order to make its structures more operational.

In addition, this seminar provided techniques for evaluation, compilation of a port project financing file and negotiations with national and international financial institutions.

Conclusion

This mission report deals with the advantageous aspect of our country's participation in this seminar, at which all the ports of West Africa, France and Canada were represented.

The fundamental objective of the seminar is the efficiency of the executives assigned to port management.

These managers will be prepared by the programs followed to more easily find adequate solutions to the problems they meet in the exercise of their duties.

This is why it would be desirable for all executives in port management structures to be able to participate in the various seminars organized for port operators with a view to helping them to better follow developments in port problems and the new techniques in force in this field.

GET READY FOR THE REVOLUTION!

THE STRUGGLE CONTINUES.

(Report originally written in French)
Mauritius Marine Authority
Port Louis Harbour

Mauritius is a small independent island with an area of 720 square miles; it is situated in the Tropic of Capricorn at about 550 miles east of Madagascar and 1,250 miles from the East African Coast. Besides commanding the sea and air routes between the Indian Sub-continent, Australia and Africa, it occupies such a strategic position that it has been hailed as "the Star and the Key of the Indian Ocean". It enjoys a temperate climate with a heterogeneous population of 1 million.

Port Louis Harbour, being the gateway to the island, is the only Port which provides terminal facilities and services to shipping. It plays a vital role in the economic and social development of the country. The commercial facilities are concentrated in the city of Port Louis, which is also the principal trading centre.

The most urgent tasks facing the Authority were to eliminate congestion and provide a quick and reliable service to the shipping community.

Development of Port Louis Harbour

The first master plan for the overall development of Port Louis Harbour comprised the following main projects:
(i) Dredging and reclamation in the Port.
(ii) Construction of mooring dolphin for bulk cement carriers.
(iii) Construction of three deep water berths for general cargo.
(iv) Construction of transit sheds, Administrative Building and Workshop building.
(v) Procurement of cargo handling equipment and tugs.
(vi) Construction of quays and storage facilities for bulk sugar operations.

The main development projects are outlined below:
(i) Dredging of Main Channel and Reclamation

In 1976 the main channel was dredged to 40 ft, and about 200 acres of land were reclaimed for port development projects, and port related industries.

(ii) Construction of Lighterage Quay E, Flour Shed and Cement Dolphin

The Lighterage Quay E for general cargo and a transit shed at Mer Rouge for the storage of flour and cement dolphin were completed by 1976.

(iii) New Quays and Container Terminal

This project comprised the construction of three aligned deep water quays, namely Quay Nos. 2, 3 and the Container Terminal (Quay No. 4) together with their back-up facilities. These quays have a draft of 10.70 mts and provide an aligned berthing facility of 547 metres.

Quays 2 and 3 are equipped with transit sheds of 5,574 metres each together with wide open storage areas; these quays are mainly used for handling of general cargo.

The Quay 4 is mainly reserved for container vessels and the back-up facilities comprise:
(a) an area of 5.5 acres for laden containers with strong concrete base and asphaltic concrete wearing surface;
(b) an area of 2.5 acres for stacking empty containers; and
(c) an area of 3.75 acres for future development of container facilities.

The container park is provided with a container control building with a network of radio telephones for the tracking of containers. There is also 32 reefer points to accommodate the increasing movements of reefer containers.

The new berths are also provided with underground pipelines for bunkering purposes.

An extensive fleet of cargo/container handling equip-
Impact of Port Development

In order to maximize the utilization of the above facilities, the following measures were taken:

(i) new systems of operations were introduced for work alongside the quays;
(ii) efforts towards unitization were intensified, palletization was encouraged through increasing use of forklift trucks for the horizontal movement of cargo from point of discharge at the quay side to the transit shed.

Containerisation was also promoted.

The impact of the above measures on cargo handling activities have been as follows:

(i) almost total switch over from lighterage to alongside operations;
(ii) a drastic improvement in turnaround time of vessels in port, with complete elimination of port congestion, which at one time used to be up to two months;
(iii) a greater and more efficient planning of operations of vessel in port;
(iv) the orderly stacking of goods in storage areas bill of ladingwise, thus enabling easy location and quick delivery.

Other Developments

(i) Bulk Sugar Terminal

The Bulk Sugar Terminal became operational in July 1980. Sugar is loaded at a maximum rate of 1,400 tons per hour. Vessels up to 198 metres overall length and 11 metres draft can be accommodated. Two sheds with storage capacity of 175,000 tons of bulk sugar are available.

(ii) Workshop Fire Station Building

The Workshop Complex was completed in 1982 and houses also the Fire Station and stores. The Workshop is designed on modern lines to cater for all repairs and maintenance of cargo handling equipment and road transport equipment. The Fire Station is capable of accommodating two fire tenders. A Range Rover model fire tender is already in service and a second one will be available shortly.

(iii) Port Administration Building

A modern port administration building was also commissioned in 1983. This building which provides a panoramic view on the operational areas in Mer Rouge, houses almost all the Authority's departments (except the Marine Department); it is also equipped with modern canteen and banking facilities.

(iv) Fishing Port at Trou Fanfaron

The Trou Fanfaron Fishing Port financed by the Japanese Government has been commissioned in 1985 and is catering for locally registered fishing vessels, as well as vessels with frozen fish for transhipment. The construction of this fishing port is expected to give the necessary impetus to the fishing industry in Mauritius.

Cargo Handling

Since the MMA took over in 1976, it has been the sole body responsible for the proper planning, organisation and control of all cargo handling activities. Prior to 1st October 1983, cargo handling operations were undertaken by the Consolidated Cargo Services (Mtius) Ltd., under the supervision and control of the MMA. Since the 1st October 1983, these operations are being undertaken by the Cargo Handling Corporation Ltd., again under the supervision and control of the MMA. This Corporation is jointly owned by the Government and MMA. The taking-over of cargo handling activities by the CHC Ltd. has to a large extent contributed to the improvement recorded in Port performance. At present, all efforts are being deployed to improve further port productivity in an attempt to provide a more efficient and economic service in the port.

Manpower Training and Development – Setting up of a Training Centre

Under technical assistance from UNDP, September 1984 saw the opening of a Training Centre for Port personnel. The main objective of this centre is to offer proper training and guidance on port operational activities with a view to improving efficiency of our staff. Initially, it will provide training in stevedoring operations, general supervision, cargo and container operations. The long-term objective of the MMA is to develop it into a regional Training Centre for this part of Africa.

Transhipment Activities

Port Louis offers excellent transhipment facilities for container and general cargo with a free 14 day storage. The MMA is exploring the possibility to offer special revolutionary rates for all types of transhipment cargo. It is even being envisaged to make Port Louis the turntable of the Indian Ocean in transhipment activities.

Affiliation to International Organisations

The MMA is a member of

(i) the International Association of Ports and Harbors (IAPH) and the Chairman, Mr. H. Ramnarain, O.B.E., is an active member of the Committee on International Port Development;
(ii) the International Cargo Handling Co-ordination Association (ICHCA); and
(iii) the Port Management Association of Eastern and Southern Africa (PMAESA).

PMAESA Conference

It should be mentioned that the 12th Annual Council Meeting of the Port Management Association of Eastern (Continued on next page bottom)
Public Port Financing in the United States

— Executive Summary —

Prepared by:
Maritime Administration
Office of Port and Intermodal Development
Washington, DC
In cooperation with
The American Association of Port Authorities, Alexandria, VA

Overview

This final report represents an in-house effort undertaken by MARAD personnel with the assistance of the Finance Committee of the American Association of Port Authorities (AAPA).

MARAD's purpose for conducting the study was to provide the port industry with a broad national picture of how ports in the United States finance capital improvement projects. This was accomplished by examining the financing climate in terms of changes and trends, recent legislation, and proposed financing through 1989.

As planned, the report is an update of the original in-house study published in 1974. It focuses on landside development, expansion, and modernization/rehabilitation as delineated in the original study. Port channel maintenance is not addressed, except when included in broad issues and problems such as legislation and concepts of self-sufficiency.

(Continued from page 16)

and Southern Africa (PMAESA) held at the Continental Hotel from 5th to 9th November 1984, was hosted by the Mauritius Marine Authority (MMA) and was officially opened by Mr. Kader Bhayat, Minister of Trade and Shipping. It was a welcome opportunity for the members to identify, analyse, discuss freely the port management and operational problems and share the views resulting from the deliberations evolved in a spirit of camaderie. Delegates from UNCTAD, IMO, ESAMI, ISCONS, ECA and Netherlands Dredging Company attended the Conference.

The PMAESA Conference was an opportunity for member countries and neighbouring non-member countries of the Indian Ocean to discuss and exchange views on common grounds of interest thus seeking a greater regional co-operation and participation at all levels.

Conclusion

The MMA is making its very best to make Port Louis Harbour one of the most efficient port in this region of the world.

A Port Master Plan Study, undertaken by the French Consultants BCEOM (Bureau Central d'Etudes pour les equipments d'Outre Mer) has just been completed. The purpose of the study was to carry out operational and engineering investigations to determine the necessary expansion to Port Louis Harbour to handle the traffic up to the year 2000 and beyond. The plan makes a series of recommendations for the long-term development; intact two important projects will be undertaken shortly, namely the enlargement of the turning basin to accommodate vessels of 225 metres, and the purchase of a high powered multi-purpose tractor tug.

Note: Readers are invited to address their requests for any information to:

The Director-General
Mauritius Marine Authority
Port Louis Harbour
MAURITIUS.
Telephoe: 081986
Telex: 4238 MAUPORT 1W

The study covers coastal public ports that engage in the movement of international cargo. For purposes of analysis, these ports are divided into seven regions—Atlantic, South Atlantic, Gulf, North Pacific, South Pacific, Great Lakes, and U.S. Territory.

This derivation corresponds to AAPA Expenditure Survey information included in various chapters of this report.

A 10-year historical period is analyzed, beginning in 1973 and ending in 1982. Also included is a seven-year projection of proposed projects through 1989, with emphasis on shifts in financing methods and types of projects.

There are two volumes — Volume I, the Executive Summary; and Volume II, the Main Report. The Executive Summary contains a synopsis of major findings and conclusions.

There are three parts to the Main Report and an appendix. Part I addresses public port development and expansion. Part II discusses issues and conditions that impact financing of public port development and expansion. Part III provides case studies that highlight unique financing arrangements or reflect unusual trends and financing conditions.

MAJOR FINDINGS

Public Port Expenditures

Of the ports surveyed by the American Association of Port Authorities, an estimated $3 billion were expended for capital improvement projects during the period 1973 to 1982.
through 1982 as shown in Table 1-S. This total, distributed over the kinds of projects undertaken, shows that $2.5 billion were expended for new construction and another $500 million for modernization and rehabilitation. A breakdown of total expenditures by facility type shows that $1.1 billion were expended for specialized general cargo facilities, $700 million for conventional general cargo, and $600 million each for dry-bulk and liquid-bulk facilities.

Table 1-S further shows that additional expenditures of $3.2 billion are planned for the period 1983-1989. This total equates to $2.4 billion for new construction and $800 million for modernization/rehabilitation. By facility type, $1.6 billion is targeted for specialized general cargo, $700 million for conventional general cargo, $300 million for dry-bulk, and another $300 million for liquid-bulk facilities.

Total expenditures for mandated costs, i.e., financial obligations of U.S. ports as a result of certain Federal programs, were estimated to be $35.6 million for the period 1977 through 1982. Most expenditures were for environmental protection ($31.6 million) with the remainder for employee health and safety ($4 million). The total estimate, however, is only 18 percent of the previous period’s (1970-1976) total of $194 million, which suggests that mandated costs are not a major problem for U.S. ports.

It should be noted, however, that in the study, significant portions of the mandated costs are “hidden” within the cost of new projects. While costs of earlier mandated projects were highly visible, today such items have become simply higher standards, included as part of the total project cost.

Proposed expenditures due to mandated costs ($53 million) will continue to be less of a burden for U.S. ports through 1989 compared to the previous period projections. Of the proposed expenditures, $28.8 million are estimated for environmental protection and $23.9 million for employee health and safety.

Financing Sources

The use of traditional sources to finance capital improvement projects and mandated expenditures continued to dominate the present reporting period. Table 2-S outlines the top four methods for both categories.

Revenue bonds with $1.7 billion are the most common source for capital improvement projects. Here, “revenue bonds” is used as a generic term to encompass the various revenue-type securities, including consolidated bonds and industrial development bonds (IDBs). While the next two methods are comparable, the use of port revenues ($528.8 million) as a source is slightly more prevalent than the use of general obligation bonds ($430.5 million).

The primary method of financing mandated obligations is through port revenues with $18 million in expenditures. Long-term securities such as bonds appear to be less significant as a method further emphasizing that mandated costs have not been a major problem over the last reporting period.

The source labeled “OTHER” for capital improvement and mandated costs in Table 2-S is significant in terms of total expenditures and trends that are emerging. For capital improvement projects, the sources included under this heading represent $150 million in expenditures and

| Table 1-S |
| Public Port Expenditures Summary |
| (Millions of Dollars) |
| Coastal Region | Capital Improvement | Mandated Costs |
| North Atlantic | 595.5 | 657.5 | 1.7 | 19.0 |
| South Atlantic | 273.2 | 534.2 | 0.0 | 3.2 |
| Gulf | 1,143.3 | 942.7 | 13.1 | 8.5 |
| North Pacific | 301.0 | 180.8 | 2.7 | 14.8 |
| South Pacific | 468.9 | 820.3 | 16.8 | 7.2 |
| Great Lakes | 180.7 | 35.3 | 0.7 | 0.0 |
| U.S. Territory | 37.4 | 94.0 | 0.6 | 0.0 |
| Total | 3,000.0 | 3,264.8 | 35.6 | 52.7 |

Source: AAPA Port Expenditure Survey

| Table 2-S |
| Public Port Financing Methods Summary (Top Four) |
| (Millions of Dollars) |
| Year | Capital Improvement | Mandated Costs |
| 1973 to 1982 | Source | North Atlantic | South Atlantic | Gulf | North Pacific | South Pacific | Great Lakes | U.S. Territory | Total |
| | Port Revenues | 131.0 | 98.4 | 57.2 | 87.3 | 133.7 | 1.4 | 19.8 | 528.8 |
| | Revenue Bonds | 279.8 | 51.9 | 868.9 | 117.4 | 233.7 | 152.7 | 6.3 | 1,710.7 |
| | G.O. Bonds* | 59.6 | 103.8 | 171.5 | 63.2 | 32.3 | 0.1 | 0.0 | 430.5 |
| | Other** | 41.7 | 2.7 | 22.9 | 21.1 | 59.9 | 0.0 | 1.9 | 150.2 |
| | Regional Total | 512.1 | 256.8 | 1,120.5 | 289.0 | 459.6 | 154.2 | 28.0 | 2,820.2 |
| | Port Revenues | 0.0 | 0.0 | 5.1 | 2.5 | 10.3 | 0.1 | 0.0 | 18.0 |
| | Revenue Bonds | 0.0 | 0.0 | 1.7 | 0.0 | 1.5 | 0.0 | 0.0 | 3.2 |
| | G.O. Bonds* | 0.0 | 0.0 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 2.1 |
| | Other** | 1.4 | 0.0 | 5.0 | 0.0 | 5.0 | 0.0 | 0.0 | 11.4 |
| | Regional Total | 1.4 | 0.0 | 13.1 | 2.7 | 16.8 | 0.7 | 0.0 | 34.7 |

Source: AAPA port expenditure survey

* * *

Revenue bonds with $1.7 billion are the most common source for capital improvement projects. Here, “revenue bonds” is used as a generic term to encompass the various revenue-type securities, including consolidated bonds and industrial development bonds (IDBs). While the next two methods are comparable, the use of port revenues ($528.8 million) as a source is slightly more prevalent than the use of general obligation bonds ($430.5 million).

The primary method of financing mandated obligations is through port revenues with $18 million in expenditures. Long-term securities such as bonds appear to be less significant as a method further emphasizing that mandated costs have not been a major problem over the last reporting period.

The source labeled “OTHER” for capital improvement and mandated costs in Table 2-S is significant in terms of total expenditures and trends that are emerging. For capital improvement projects, the sources included under this heading represent $150 million in expenditures and
$11 million for mandated costs.

The "OTHER" method in both instances represents the use of non-traditional financing arrangements, clearly marking the port industry's willingness to try new approaches to reduce overall costs of financing port development where possible.

Methods of Financing

Table 3-S identifies sources of financing by traditional, innovative, and combination methods. This derivation is further divided into long-term and short-term sources.

Innovative sources include those that have been used/attempted by the port industry and those which are under consideration. As shown in the table, extensive innovation has taken place with short-term sources. Most of the innovation has been concentrated on short-term notes. The notes are employed in a variety of ways, including: defraying the total cost of a project, securing ordeferring the purchase of a long-term market instrument, or reducing the cost of long-term borrowing.

Increasingly, U.S. ports are using combinations of financing to undertake capital improvement projects. A common combination would be the use of governmental assistance such as grants and a market security. During the present reporting period, there were combinations which included port earnings and/or private funds coupled with one or more market securities.

For the financing of capital improvement projects among foreign ports, no clear-cut trends could be discerned due to the limited number of countries included in this study. Of the countries included, however, many ports have access to financing sources through their central governments in the form of direct/indirect grants and/or loan guarantees as needed.

Public Port Financing Issues

Four issues were identified as major concerns of the U.S. port industry during the current reporting period. They were legislation, the international trade climate, technological trends, and the trend toward self-sufficiency.

a. Legislative Issues

Port legislation as related to port finance has had direct and indirect impact over the past 10 to 12 years. The impact has spanned the spectrum from the easing of restrictions (e.g., environmental statutes) to tighter controls (e.g., restrictions imposed on tax-exempt industrial development bonds).

On the Federal level, major activity occurred in five different areas, examples of which follow:

- General Regulation — Continued FMC regulation of the port industry and related activity.
- Environmental Statutes and Regulation — FMC General Order No. 45 attempts to avoid unnecessary environmental assessments for activities that have no significant effect on the environment.
- Canadian Diversion — H.R. 1511 (Canadian Cargo Diversion Bill of 1984) was rejected by the House of Representatives.

State and local legislation has dealt mainly with what has been called "proposition 13" type legislation which can potentially limit governmental support of port activity. Several states have enacted legislation which sets limited restrictions on property tax rates/receipts and spending, potentially reducing U.S. ports' access to developmental dollars as the demand for public funds increases from other sectors.

b. International Trade Climate

The international trade climate appears to have gone through broad-based changes since the late 1960s. These changes or trends are basically related to the development and maturity of containerization throughout the world. As a result, traditional market structures and traffic flow patterns have altered accordingly. The extended use of various forms of landbridge operations such as minibridge and microbridge during the 1970s marked a major change in containerization as it matured. Shifts during the 1980s, however, are more related to changes in the level/distribution of foreign trade, in the commodities traded and in U.S. trading partners. Emerging trends suggest broader application of intermodalism with round-the-world service, as a new generation of super-sized containerships are put into operation. This trend further suggests the development or emergence of "load center" ports to reduce the number of vessel port calls. Inherent in the load center concept is the requirement for feeder systems that can include both land or sea port feeder systems and transport systems.

Table 3-S
Methods of Financing
Summary

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<tr>
<th>Method</th>
<th>Long Term Source</th>
<th>Short Term Source</th>
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<td>Traditional</td>
<td>General Obligation Bonds</td>
<td>Port Earnings</td>
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<td>Revenue Bonds (i.e., IDBs, Consolidated)</td>
<td>Governmental Assistance</td>
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<td>Governmental Assistance (i.e., Federal, State, Local)</td>
<td>Bank Loans</td>
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<tr>
<td></td>
<td>Port Earnings</td>
<td></td>
</tr>
<tr>
<td>Innovative</td>
<td>Leasing Arrangements</td>
<td>Tax-Exempt Commercial Paper</td>
</tr>
<tr>
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<td>Zero Coupon Bonds</td>
<td>Warrants</td>
</tr>
<tr>
<td></td>
<td>Variable Rate Bonds</td>
<td>Bond or Tax Anticipation Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Variable Rates Demand Securities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Option Tender or 'Put' Bonds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Letter/Line of Credit</td>
</tr>
<tr>
<td>Combination</td>
<td>This category includes various combinations of long- and short-term sources, subject to the specific port's needs and access to financing options.</td>
<td></td>
</tr>
</tbody>
</table>

Source: (1) AAPA port expenditure Survey
c. Technological Innovations

The impact of technological innovation on ports is directly related to ship design and construction. Shipbuilding industry trends are moving toward larger vessels, particularly containerships. Container vessel capacity has averaged 2,000 TEU up to a maximum of 4,000 TEU or 75,000 deadweight tons (dwt). U.S. ports will be expected to keep pace with the proposed changes in container vessel size and design to remain competitive.

Another trend is the modernization or revitalization of obsolete terminals to handle newer/larger vessels and cargo handling equipment. Some emphasis has been placed on the conversion of obsolete break bulk facilities to container or multi-purpose terminals.

d. Trends Toward Self-Sufficiency

In general, public ports in the United States are being asked by all levels of government to become more self-sustaining in terms of development and operation. Public ports, in turn, are gradually moving away from public support, toward a more self-sufficient revenue base as the amount of governmental dollars decreases and as competition for these funds increases.

The adoption of a compensatory rate structure(s) is seen as one way for public ports to move closer to self-sufficiency. Here, compensatory rates are being defined as those rates which allow public ports to cover the full economic costs of the usage services provided, including a return on invested capital. There are extenuating circumstances which may preclude recovery of full economic costs in the short-term; however, consideration of compensatory rates in the long-term is possible.

A number of methodologies exist to allow ports to determine compensatory tariff rates, including a formula developed by MARAD. The MARAD formula allows ports to examine where they are vis-a-vis where they should be in terms of compensatory tariffs in the short-term and to develop compensatory tariffs based on cost in the long-term.

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e. Other Financial Concerns

In addition to the aforementioned items, ports are concerned about future financial demands in the following areas.

○ Changes in U.S. Customs procedures that will require some ports to pay for certain inspectional services and to develop what may be very expensive computerized cargo clearance systems to remain competitive.

○ Changes in traditional funding of port channel dredging whereby the costs of such dredging would be shifted from the general taxpayer to the occasional users of the ports. Possible imposition of user fees to recover the cost of such projects or services is of great concern to port managers.

○ Changes in traditional routing of cargo movements whereby container carriers concentrate shipments through selected “load center” or “gateway” ports. Competition among ports will be intense and will lead to tariff and rental rate reductions which will, in turn, affect the overall ability of ports to sell bonds and generate needed rate of return on investment.

Conclusions

The financing of port development, expansion, rehabilitation, and modernization is going through a transitional phase resulting in more varied and complex methods of financing. In the interim, the port industry has experienced a definite increase in the cost of capital improvement projects and an increase in borrowing for such purposes. These increases are attributed to a variety of reasons, including adverse economic conditions and the political climate – be it Federal, State, or local.

The AAPA Expenditure Survey shows a significantly reduced dollar cost for mandated costs compared to the previous study period. Ports now include mandated costs in current operating and capital requirements. As a result, these costs are hidden in the total cost of work performed. In the past, the major way of financing such expenditures was through port revenues.

Methods of financing capital improvement projects remain in a state of transition and U.S. ports are becoming strongly attuned to self-sustaining projects as public support from general tax sources wanes. As such, the dominant source of financing is through revenue-type municipal instruments or port earnings where feasible. Governmental assistance or subsidy continues, but is on the decline. This decline translates into an absolute decrease in direct assistance/subsidy and an increase in indirect support – largely through revenue-type bonds – based on dedicated revenues from the use of port assets.

To curtail the rising cost of borrowing, some U.S. public ports have broadened their consideration of short-term municipal market instruments. There has also been some consideration and use of a combination of long and short-term methods, tailored to the specific port’s needs.

Based on sample information, the financing of port capital improvement projects in foreign countries seems to be taking a different turn from the United States. The trend in this country is away from governmental support, while the tendency in foreign countries is to maintain the present level of support or increase it as the project warrants.

The port industry identified several issues and conditions that impact capital improvement financing of which legislation, international trade, and trends toward self-sufficiency emerged as major national concerns. In terms of legislation, the industry’s concern is over direct and indirect national legislative activity, which can affect the operation and financing of U.S. public ports and “proposition 13” type State and local enactments which can limit governmental support.

Trends in international trade continue to impact market structures and traffic flow patterns that have resulted from the evolution of containerization. The changes that have taken place tend to build on each other, rather than displace existing ones. The development of intermodalism with extended use of various landbridge operations is an example of this layered effect.

One of the emerging trends, round-the-world service, has caused some concern in that it implies the development of “load center” ports to the potential detriment of others. As the trend develops, the concept of load center may take many forms, based on the commodity(s), the carrier, or port. Such developments imply the potential for port specialization.

(Continued on next page bottom)
Rhine-Main-Danube Canal progresses:

“Port Record, New Orleans” reports

The Rhine-Main Danube (RMD) Waterway, which early in the next decade will make it possible for barge traffic to travel from Rotterdam on the North Sea to Constantza, Romania, on the Black Sea, has moved one more step toward completion. A portion of the remaining middle 66-mile segment needed to complete the waterway has been opened.

Although the distance from the North Sea to the Black Sea is 2,190 miles, the canal itself covers 423 miles from Aschaffenburg on the Main River, southeast of Frankfurt, to Passau on the Danube River at the German-Austrian frontier. A connection to the Black Sea has been built independently by Romania from Cernavoda where the Danube turns northward before joining the sea, thereby providing a shortcut of 232 miles or a saving of nearly two days in travel time as well as an all-year route.

The RMD Waterway presently consists of two sections, which were under construction for 50 years. The canal between Aschaffenburg and Nuremberg was completed in 1972 while the section between Kelheim and Passau was finished in 1978. The waterway is a joint project of the Federal Republic of Germany and the Bavarian governments. Disagreements among officials about the value of the canal delayed further construction for a time, but work is now moving steadily ahead toward a 1992 completion date.

The 66-mile segment between Nuremberg and Kelheim is perhaps the most difficult because a new 40-mile canal must be cut to connect with the Altmuhl River at Dietfurt that goes on to Kelheim. What is more, the canal must climb some 300 feet, with three of the locks having a lift or level difference of 70 feet. Just completed was the 14-mile section from Nuremberg south to Roth, where the canal swings southeast to Dietfurt.

Progress of the RMD Waterway has been closely monitored by Herbert Haar, assistant executive port director, Port of New Orleans, who has visited the site twice in recent years. He has referred to the canal as a “unique, innovative, and technologically advanced project.” Haar, a retired high official of the U.S. Army Corps of Engineers, is convinced that much can be learned about canal construction and operation from this project and applied to U.S. waterway projects. He notes the Corps of Engineers has followed the construction of the waterway with keen interest. In addition, the waterway would make it possible for Lash and Seabee barges loaded on mother ships at the Port of New Orleans to transport U.S. cargo by an all-water route deep into the heart of Europe. European exports can enjoy the same conveniences.

Franz Joseph Strauss, Bavarian’s prime minister, noted at the ceremony opening the new section that the canal capitalizes on water transportation, which is the cheapest transport mode. The waterway is 180 feet wide and can accommodate self-propelled European standard barges with 1,350-metric ton carrying capacity and pushboat lighter tandems with 3,300 metric tons of goods.

The RMD organization, which has a long-term concession for generating electric power, operates 53 hydroelectric plants spaced along the waterway. In addition to providing a significant source of electric energy, the waterway has become a magnet for new industries in parks adjoining canal ports.

(Continued from page 20)

Most of the changes or trends in port development occur in response to dynamic changes in ship design and construction. The tendency in the industry is toward larger vessels, especially containerships, whose capacities have now expanded in excess of 2,000 TEU.

In keeping pace with new ship design and construction, the port industry is continuing to expand and modernize obsolete facilities to meet operational needs.

U.S. public ports, based on the AAPA Expenditure Survey, feel increasing pressure to become more self-supporting, largely due to decreasing developmental dollars from all levels of government. This trend developed in the wake of increasing competition for alternative use of public funds which tend to have priority over port development.

A compensatory rate structure(s) would balance the loss of public support or subsidy and assist ports to move closer to self-sufficiency. The use of compensatory pricing methodologies can provide a benchmark to determine the minimum tariffs ports should consider. The practicality of such compensatory rates, however, is directly proportional to the extent of interport competition for business. Concentration of cargo movements to a declining number of shipping lines along with the growth in the size and operating costs of ships are definitely leading the lines to consider concentrating their calls to a lesser number of ports than in the past.

Map shows the route of the Rhine-Main-Danube Waterway from Rotterdam on the North Sea to Constantza on the Black Sea. The section within the white square is the 423-mile canalized portion that has been under construction for 50 years. The final 66-mile center segment is expected to be completed in 1992.

* * *

PORTS and HARBORS — MARCH 1986
### UNCTAD/IPER Course:

**APPRASING AND FINANCING PORT PROJECTS**  
Le Havre  
Wednesday 16 April to Wednesday 30 April 1986

**Course Outline**

The purpose of this course is to propose a methodology for the preparation of projects that port authorities or government administrations submit to lending institutions to obtain funds to finance the facilities and equipment they need. The first lectures will concentrate on the analysis of the various issues at stake in port management and the use of performance indicators.

The profitability of any port investment depends on the correct evaluation of future traffic which affects cost and the possibility to recover invested funds. Market studies and traffic forecasting techniques will be discussed in detail. These are of considerable assistance in defining requirements in terms of berths, handling equipment and stacking areas. Attention will also be paid to the problem of transshipment ports, feeder services and hinterland connections.

The syllabus will then concentrate on area requisites, equipment and manpower requirement to efficiently handle the different types of traffic (break-bulk, RoRo, container and bulk cargoes). Capacity calculation techniques will be discussed and illustrated by case studies. Subsequently the economic and financial implications of port projects will be studied: it is appropriate to resort to cost-benefit analysis techniques to select the best solution as it is indeed essential to ensure economic profitability so that the cost can be borne by the port and its users. A case study will outline the relationship between cost and port tariffs.

Finally, the point of view of financing institutions will be discussed and representatives of major banks will explain which negotiation procedures and criteria are used.

**Of interest to:**

All the executives who hold financial or economic responsibilities whether they belong to a port authority, a government department, or a company which utilises port facilities and who are in charge or preparing and submitting studies concerning the financial aspects of port projects.

**Course fee:** 11,000 FF  
Payable to CHAMBRE DE COMMERCE ET D'INDUSTRIE DU HAVRE  
By bank transfer: CREDIT INDUSTRIEL DE NORMANDIE  
ACCOUNT: 041 19 70 00 9W  
Course fee includes tuition fee and midday meals (Monday to Friday)

---

**Registration:**

Complete the form and mail to:  
Institut Portuaire d'Enseignement et de Recherche (IPER)  
1, rue Emile Zola  
76090 LE HAVRE CEDEX – FRANCE  
Tél.: 35.42.09.23 – Telex: CHAMCOM 190091 F  
Registration deadline: 30 March 1986

**Course Director**  
M. Jean-Georges BAUDELAIRE

**Lecturers**

- M. GROSDIDIER DE MATONS: Special adviser for Institutional Development – The World Bank  
- M. HUCHER: Chief Economist, Port of Le Havre  
- M. HUNTER: Economist, Maritime Transport Division, UNCTAD  
- M. DE MONIE: Economist, Director of APEC  
- M. PREVOT: Deputy Commercial Manager, Port of Le Havre  
- M. REYNAUD: Head of Engineering Department, Port of Le Havre  
- M. VELTER: Development Manager, Port of Le Havre  
- M. WILLEMS: Financial Expert, Port of Le Havre

**Working language:** English

**Programme**

- **Wednesday 16 April**  
  Introduction: the role of ports  
  Appraisal of the general situation and diagnosis

- **Thursday 17 April**  
  The main characteristics of the world fleet  
  Analysis of the present situation: port requirements in terminals, equipment and operational structures for:  
  - Break-bulk cargo  
  - Containerized and Ro/Ro cargo

- **Friday 18 April**  
  Forecasting techniques:  
  - the collection of economic data  
  - traffic forecast techniques  
  - the limitation of economic forecasts

- **Monday 21 April**  
  Capacity calculations  
  Manpower planning and impact of port development on the environment transhipment, feeder ports and inland transport

- **Wednesday 23 April**  
  Principles of economic and financial analysis  
  The various sources of finance

- **Thursday 24 April**  
  Preparing the tender: the technical aspects  
  Port tariffs General principles
The University of Bordeaux I

The University Institute of Technology “A”
The Bassin d’Aquitaine Institute of Geology
together with
The Port of Bordeaux Authority

Are offering a one year University Training Course, specializing in Port Hydrography.

The course is open to recently qualified or professionally experienced Senior Technicians and provides the possibility of acquiring practical experience and competence.

The importance of maritime transport in the economies of coastal states has led to the development in such countries of the coastal areas and ports.

To fully exploit coastal sites implies a sound knowledge of the marine environment, which requires the use of hydrographic techniques which are more and more performed, in order to improve port access and improve exploitation. Port hydrography, amongst other advantages, offers a means of reducing dredging production costs and improving efficiencies of major dredging works.

The Programme is therefore directed essentially towards port activities and coastal developments. It has the fully backing of the technical experience of the Port of Bordeaux Authority, whose reputation in the field of Port Hydrography is internationally respected.

The training offered accords a large proportion to practical application so that at the end of the course students will be immediately operational. The instructors, who have worked in close collaboration, are drawn from both the University and from the profession.

A French Diploma “d’études supérieures techniques en hydrographie portuaire” will be awarded to graduates by the University of Bordeaux I.

All Instruction is in FRENCH only.

For further information, please contact:
Monsieur le Professeur C. VIGUIER
I.U.T. “A” Domaine Universitaire
33405 TALENCE CEDEX
FRANCE

International Seminar on Port Management 1986: IHE, Delft Netherlands

The Seminar

The International Seminar on Port Management provides port administrators from all over the world with new information and know-how on port management. Twenty-one previous seminars have brought together 612 port administrators from 86 different countries. They have attended lectures, made visits to a number of ports, worked out exercises on port management in groups and exchanged their experience with their colleagues.

The seminar is organized by the International Institute for Hydraulic and Environmental Engineering in Delft in close co-operation with the Port Authorities of Amsterdam and Rotterdam. The International Cooperation Department of the Netherlands Ministry of Foreign Affairs gives its valuable support.

The International Institute for Hydraulic and Environmental Engineering also offers an eleven-month postgraduate programme for port and coastal engineers. It is obvious that the same ground cannot be covered in a six-week seminar as in a full eleven-month course. Therefore the seminar programme does not include constructional and hydraulic aspects but rather is confined to a thorough treatment of the organization and management of ports.

The seminar programme comprises regular study visits to the ports of Amsterdam and Rotterdam. These cities are located at only small distances from the Institute at Delft. Also a few smaller ports in the Netherlands will be studied. As part of the programme a study tour will be made to ports in Belgium and France.

Dates for the Seminar: May 21 – June 26, 1986

The programme will start on Wednesday, May 21 and will be concluded on Thursday, June 26, 1986. All participants are expected to take the entire programme of the seminar. Therefore, those participants who have other business to attend to in the Netherlands are expected to arrive a few days prior to the beginning, or stay on after completion of the seminar.

Programme

The seminar will be conducted in the form of lectures and discussions alternated by day-trips or half-day visits to the ports of Amsterdam, Rotterdam and other ports in the Netherlands. There will be sufficient opportunity to study the ports organization and various port operations. The study tour to Belgium and France will give an extra opportunity for comparison of the organization of various harbours. Considerable time will be devoted at Delft to exercises in wharf lay-out, the organization of cargo handling, labour relations and traffic management.

Themes of the Seminar

1. Transportation
   - Logistics and quantification of transport processes.
   - Integration of the transport chain from producer to consumer.
- Functions of road, rail, pipe line, inland water, air and sea transport.
- Merchant shipping.
- Economy of sea transport.
- Interest of the shipowner and of the shipper.

2. Patterns of Port Organization
- Functions of a port authority.
- Relation to other public bodies and to industry.
- Political context.
- Internal structures.

3. Port Finance
- Financial autonomy.
- Ownership of facilities.
- Sources of revenue and of loan capital.
- Pricing of port services.
- Port accounting.

4. Reception of the Ships
- Tasks of the harbour-master.
- Traffic management.
- Pilotage and navigation aids.

5. Various Port Operations
- Marketing and public relations.
- Conservancy of the fairway and dredging.
- Port security, access to the port area.
- Control of cargo losses.
- Fire prevention and fighting.
- Prevention of pollution.
- Legal liabilities of various parties engaged in port operations.

6. Dock Labour
- Manpower planning.
- Forecasting of requirements and of availability of workers.
- Training and career planning.
- Occupational health and safety.
- Systems of payment and relations with organized labour.

7. Systems Approach to solving Port Problems
- Introduction.
- Port management defines objectives.
- Review of port operations.
- Injection of port policy.
- The “environment” as a constraint.
- Project phasing and cases.

8. Cargoes
- Classical general cargo.
- Mass break-bulk cargo.
- Bulk cargo and liquids.
- Requirements and equipment for handling.
- Cargo unitization, warehousing and storage.
- Handling of dangerous goods.

9. Terminal Operation
- Planning, management and operation of terminals.
- Productivity indicators and their measurement.
- Improving productivity.
- Exercise in resource management.

Application and Admission

The seminar is open to port officials and other qualified candidates who in their daily activities are regularly confronted with problems of port management. Preferably, candidates should have a university degree, although in special cases experience can replace university background. No simple formula can be given for the conditions of admission and for this reason applications will be considered individually. In order to make a proper judgment of applications possible, candidates should fill in the enclosed application form as completely and clearly as possible and return it to the Registrar. Candidates are required to submit a letter of recommendation from their employer. In order to promote a close contact between the lecturers and participants and to stimulate discussions, the number of participants will be limited to 30.

Language

Since the seminar will be held in English, a good working knowledge of this language is a prerequisite.

Fees and Other Expenses

The participants’ fee is Dfl. 3200,—, which includes the tuition fee, travel cost for all study tours and lodging during these study tours outside the Netherlands. Participants will pay their accommodation during their stay in the Netherlands. The organizer will upon request take care of hotel reservations. The participants’ fee should be paid on or before the day of registration. Those preferring to pay in advance are requested to have the participation fee paid to the account number 47.35.75.108 of NUFFIC at the Amsterdam-Rotterdam Bank, 14 Wagenstraat, Den Haag.

For further information, please contact:
The International Institute for Hydraulic and Environmental Engineering (IHE)
Address: Oude Delft 95, P.O. Box 3015, 2601 DA Delft, Netherlands, tel. 015-783401, Telex 38099
Director: Prof. ir. W.A. Segeren

National Conference on Barge Fleeting: MarAd

The Maritime Administration, U.S. announced plans to sponsor with the Inland Rivers Ports and Terminals, Inc. (IRPT) a National Conference on Barge Fleeting. The conference will be held in Memphis, Tennessee on April 8 and 9, 1986 at the Holiday Inn’s Crowne Plaza Hotel prior to the Annual Meeting of the IRPT on April 10 and 11.

The conference is being held to broaden awareness of the technical findings of Maritime Administration’s (Marad) study entitled “Lower Mississippi River Regional Barge Fleeting Assessment, Plan, and Handbook Guide,” which was completed in March 1985. That study, which was performed by E.J. Bentz and Associates, Inc. of Springfield, Virginia, was jointly sponsored by Marad and the State of Louisiana, and concerned itself with the 235-mile-long deep river corridor of the Mississippi River from Baton Rouge to the Gulf of Mexico. The conference is also being held to extend the findings to other waterway regions of the country.

A Steering Committee of key maritime and port industry representatives along with government leaders, met at the U.S. Department of Transportation on December 10 to review plans for the conference. The agenda of the
April conference, the issues to be discussed, and arrangements were presented to and approved by the Steering Committee.

Reservations for the conference may be made by contacting Inland Rivers Ports and Terminals, Inc.; P.O. Box 863 Central Station; St. Louis, Missouri 63188 or Carl Ranft at (618) 877-8444 in Granite City, Illinois. Hotel reservations may be made by contacting Holiday Inn's Crowne Plaza Hotel in Memphis at (901) 527-7300, where a block of rooms has been set aside for conference attendees. Additional information on the conference may be obtained from Marad's Office of Port and Intermodal Development (Attn: Mr. William Bristor) at (202) 426-4357.

IMO programme of meetings
1 January – 31 December 1986

<table>
<thead>
<tr>
<th>Date</th>
<th>Committee/Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 January</td>
<td>Maritime Safety Committee – 52nd session</td>
</tr>
<tr>
<td>5 February</td>
<td>Sub-Committee on Fire Protection – 31st session</td>
</tr>
<tr>
<td>24–28 February</td>
<td>Facilitation Committee – 16th session</td>
</tr>
<tr>
<td>3–7 March</td>
<td>Conference of Contracting Governments to amend the 1965 Facilitation Convention</td>
</tr>
<tr>
<td>17–21 March</td>
<td>Sub-Committee on Safety of Navigation – 32nd session</td>
</tr>
<tr>
<td>7–11 April</td>
<td>Legal Committee – 56th session</td>
</tr>
<tr>
<td>14–18 April</td>
<td>Sub-Committee on Radiocommunications – 31st session</td>
</tr>
<tr>
<td>21–25 April</td>
<td>Sub-Committee on the Carriage of Dangerous Goods – 38th session</td>
</tr>
<tr>
<td>28 April –</td>
<td>Sub-Committee on Bulk Chemicals – 16th session</td>
</tr>
<tr>
<td>2 May</td>
<td>Sub-Committee on Containers and Cargoes – 27th session</td>
</tr>
<tr>
<td>12–16 May</td>
<td>Sub-Committee on Ship Design and Equipment – 29th session</td>
</tr>
<tr>
<td>19–23 May</td>
<td>Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety – 31st session</td>
</tr>
<tr>
<td>2–6 June</td>
<td>Sub-Committee on International Oil Pollution Compensation Fund – 9th session</td>
</tr>
<tr>
<td>16–20 June</td>
<td>Council – 56th session</td>
</tr>
<tr>
<td>19 June</td>
<td>Sub-Committee on Technical Co-operation – 27th session</td>
</tr>
<tr>
<td>23–27 June</td>
<td>Sub-Committee on Life-Saving Appliances – 18th session</td>
</tr>
<tr>
<td>7–11 July</td>
<td>Marine Environment Protection Committee – 23rd session</td>
</tr>
<tr>
<td>8–17 September</td>
<td>*Maritime Safety Committee – 53rd session</td>
</tr>
<tr>
<td>29 September</td>
<td>Sub-Committee on Standards of Training and Watchkeeping – 19th session</td>
</tr>
<tr>
<td>3 October</td>
<td>Tenth Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter</td>
</tr>
<tr>
<td>13–17 October</td>
<td>Tenth Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter</td>
</tr>
<tr>
<td>20–24 October</td>
<td>International Oil Pollution Compensation Fund – Assembly – 9th session</td>
</tr>
<tr>
<td>27–31 October</td>
<td>Legal Committee – 57th session</td>
</tr>
<tr>
<td>10–14 November</td>
<td>Council – 57th session</td>
</tr>
<tr>
<td>13 November</td>
<td>*Committee on Technical Co-operation – 28th session</td>
</tr>
<tr>
<td>1–5 December</td>
<td>*Sub-Committee on Radiocommunications – 32nd session</td>
</tr>
</tbody>
</table>

* Tentative

Review of maritime transport, 1984: UNCTAD
(Extracts from UNCTAD document: TD/B/C.4/289)

The Development of International Seaborne Trade

1. As shown in Table 1, 1984 marked the first time in five years that the total volume of international seaborne trade increased to reach a level of 3.3 billion tons. This is a significant trend reversal in the volume of goods loaded over 1983 (up 6.7 per cent over 1983) during the 1980–1984 period. Tanker cargoes in 1984 showed a slight increase over 1983, but were still 23.7 per cent less than in 1980. Dry cargo, however, reached record volumes in 1984 (1.9 billion tons) with both main bulk commodities and other dry cargo increasing by more than 10.6 per cent over 1983.

2. Trends in ton-miles are equally important to the demand for shipping services and are summarized in Table 2. Total 1984 ton-miles increased 3.8 per cent over 1983. Liquid hydrocarbons' share of the 1984 total ton-miles declined to 42.1 per cent, while the proportion of main dry bulk commodities (iron ore, coal, grain, bauxite/alumina and phosphates) amounted to 29.6 per cent. The changes from 1983 reflect the greater use of shorter-haul routes for petroleum shipments, as more production shifted from Middle East suppliers to producers closer to major consumption centres in Europe, and the recent expansion of the world iron and steel industry.

3. Globally, the dry cargo segment represents 57.0 per cent of the loaded goods in 1984, while crude oil comprises 32.6 per cent. The 1984 country grouping data indicate that developing countries generate 48.5 per cent of all goods loaded and 25.4 per cent of all goods unloaded, while developed market-economy countries generate 44.1 per cent of all goods loaded and 68.0 per cent of all goods unloaded. The socialist countries' shares are 7.4 per cent of the goods loaded and 6.6 per cent of all goods unloaded. The percentage shares of goods loaded and unloaded combined are 37, 56 and 7, respectively.

4. Over the 1980–1984 period the percentage share of goods loaded from developing countries declined from 56.3 per cent to 48.5 per cent. Conversely, developed market-economy countries increased their share of goods loaded from 37.0 per cent to 44.1 per cent. During the same five years (1980–1984) the percentage share of goods unloaded in developed market-economy countries decreased from 70.5 per cent to 68.0 per cent but developing countries increased their share of unloaded goods.

PORTS and HARBORS – MARCH 1986
Table 1 Development of international seaborne trade, a/ 1970 and 1980–1984
(Estimates of goods loaded)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tanker cargo</th>
<th>Dry cargo</th>
<th>Total</th>
<th>Of which: main bulk commodities b/</th>
<th>Total (all goods)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Millions of tons</td>
<td>Percentage increase/ decrease over previous year</td>
<td>Millions of tons</td>
<td>Percentage increase/ decrease over previous year</td>
<td>Millions of tons</td>
</tr>
<tr>
<td>1970</td>
<td>1,440</td>
<td>13.1</td>
<td>1,165</td>
<td>13.0</td>
<td>2,605</td>
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<tr>
<td>1980</td>
<td>1,871</td>
<td>-6.6</td>
<td>1,833</td>
<td>3.3</td>
<td>3,704</td>
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<tr>
<td>1981</td>
<td>1,693</td>
<td>-9.5</td>
<td>1,866</td>
<td>1.8</td>
<td>3,559</td>
</tr>
<tr>
<td>1982</td>
<td>1,480</td>
<td>-12.6</td>
<td>1,793</td>
<td>-3.9</td>
<td>3,273</td>
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<tr>
<td>1983</td>
<td>1,400</td>
<td>-7.4</td>
<td>1,710</td>
<td>-2.8</td>
<td>3,110</td>
</tr>
<tr>
<td>1984</td>
<td>1,427</td>
<td>1.9</td>
<td>1,893</td>
<td>10.7</td>
<td>3,320</td>
</tr>
</tbody>
</table>

Sources: (i) For tanker cargo, total dry cargo and all goods, base data were communicated to the UNCTAD secretariat by the United Nations Statistical Office. Owing to possible subsequent revisions or other factors, these detailed data may differ marginally from the aggregated figures reported in the United Nations, Monthly Bulletin of Statistics, January issues.

(ii) For main bulk commodities: Fearnleys, World Bulk Trades 1983 (Oslo), and Review 1984.

a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system, but excluding such traffic in main bulk commodities. Also including petroleum imports into the Netherlands Antilles and Trinidad and Tobago for refining and re-export.

b/ Iron ore, grain, coal, bauxite/alumina and phosphate.

Table 2 World seaborne trade by types of cargo, 1970 and 1980–1984
(Billions of ton-miles)

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude oil</th>
<th>Oil product</th>
<th>Iron ore</th>
<th>Coal</th>
<th>Grain a/</th>
<th>Other cargo</th>
<th>Total trade</th>
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</thead>
<tbody>
<tr>
<td>1970</td>
<td>5,597</td>
<td>890</td>
<td>1,093</td>
<td>481</td>
<td>475</td>
<td>2,118</td>
<td>10,654</td>
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<tr>
<td>1980</td>
<td>8,219</td>
<td>1,020</td>
<td>1,613</td>
<td>952</td>
<td>1,087</td>
<td>3,720</td>
<td>16,611</td>
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<tr>
<td>1981</td>
<td>7,193</td>
<td>1,000</td>
<td>1,508</td>
<td>1,120</td>
<td>1,123</td>
<td>3,710</td>
<td>15,662</td>
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<tr>
<td>1982</td>
<td>5,212</td>
<td>1,070</td>
<td>1,443</td>
<td>1,094</td>
<td>1,120</td>
<td>3,560</td>
<td>13,499</td>
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<tr>
<td>1983</td>
<td>4,478</td>
<td>1,080</td>
<td>1,320</td>
<td>1,057</td>
<td>1,135</td>
<td>3,510</td>
<td>12,580</td>
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<tr>
<td>1984</td>
<td>4,450</td>
<td>1,050</td>
<td>1,510</td>
<td>1,200</td>
<td>1,150</td>
<td>3,700</td>
<td>13,060</td>
</tr>
</tbody>
</table>

Source: Fearnley, Review 1984 (Oslo).

a/ Including wheat, maize, barley, oats, rye, sorghum and soya beans.

Report examines ‘expert shore team’ proposal: Israel Shipping and Aviation Research Institute

“Communication between a Ship in Distress and the Shore: The Psychological and Legal Implications”

Both active ship masters and shore-based marine superintendents favor setting up a central control room at company headquarters to provide guidance and advice to ship’s command when the ship is in distress, according to a study issued by the Israeli Shipping and Aviation Research Institute. Such a control room, to be staffed by an “expert shore team,” constituted a key recommendation by a committee of inquiry into the 1981 sinking of the Zim bulk carrier Mezada.

Despite the near unanimity of agreement in the importance of implementing this recommendation, the study warned that sea-going masters and shore superintendents still display to each other a certain absence of trust. That plus the feeling of having different, sometimes contradictory, interests might impair communication between ship and shore even during a distress situation.

The conclusion and warning emanate from a unique attitude study of Israeli ship masters and marine superintendents carried out by Dan Shoshani, a former master himself. His research on “The Human Factors Involved in Operating a Shore-Based, Central Control Room” forms one part of a three-study report, entitled Communication Between a Ship in Distress and the Shore: The Psychological and Legal Implications. The two other parts of the report are “Legal Implications of the Shipowner-Master Relationship in Times of Emergency,” by Dr. Amos Herman, a maritime law expert, and “Distress at Sea: Ten Cases and Some Lessons to Be Drawn,” by Capt. Amos Cohen, also a former ship’s master.

Shoshani’s study, perhaps the first of its kind, focuses on the Phenomenon of job stress afflicting a ship’s master, especially during a time of distress. It also analyzes a range of factors that may affect the interaction between the two sides that would have to remain in close, continuous com-
munication during an emergency – the master and the expert shore team (EST).

Among some of the specific conclusions reached by this research:

- A ship’s master is necessarily under some stress by the very fact of the ship’s being at sea and his being in command, responsible for both life and property.
- During a distress situation, such as a force 10 storm, this stress intensifies and might adversely affect the master’s thinking and decision-making.
- The greatest aid in making decisions during stressful situations is achieved by external consultation; this effort helps reduce stress, enabling (in this case) the master to devote greater resources to making a correct decision in the right way.
- Training to the point of “over-learning” procedures for action and rescue during various distress situations will also help a ship master to withstand stress when his ship is faced with an emergency.
- The gaps and lack of trust between seafarers and shore personnel revealed by the survey must be bridged by appropriate forms of education and training.
- Each of the separate studies by Shoshani, Herman, and Cohen, though interrelated, stands as a work on its own. Read together, they offer a valuable contribution to the literature on maritime safety.


**$2.8 million waterfront project underway: Port of Nanaimo**

A $2.8 million project is underway at a site on the shore of Newcastle Channel. Bulldozers and trucks were working day and night shortly before Christmas, taking advantage of December’s low tides to complete the landfill portion of site preparation for a public market complex.

The rumble of bulldozers has replaced the sounds of the old sawmill which had occupied this bit of shoreline for some 25 years or more. The last signs of the sawmill have all but disappeared and building of a 25,000-square foot market is to start immediately.

A ground-breaking ceremony last month brought together principals of the company undertaking the project as well as Nanaimo’s mayor and representatives of the Nanaimo Harbour Commission. Modelled on the style of Vancouver’s Granville Island, the Nanaimo market will include a restaurant and marina pub.

Crafts Market

A 9,000-square foot section will be established as a crafts market for artisans and craftspeople, according to project manager Ken Tidderington. He also says that there will be “the finest fish market on Vancouver Island.”

Moorage for pleasure craft and charter boats is to be provided, making use of the shoreline on Newcastle Channel that will fit the Harbour Commission’s overall development plan.

Port Manager Lloyd Bingham says he is pleased to see the development go ahead because it is the type of project envisaged in the Harbour Commission’s Waterfront Proposal. Put before the public in 1982, the proposal offered guidelines for the development of the Nanaimo waterfront. At the time, the Harbour Commission said that the concepts set out in the proposal would hopefully stimulate both the public and private sectors toward action keyed to a “people-oriented” waterfront.

**Housing and Stores**

Nanaimo Public Market Ltd. was granted a 20-year lease on the foreshore by the Harbour Commission. A second phase of development has been announced by the company, which calls for construction of apartment dwellings and retail stores along the waterfront. Tidderington says this could be started later this year or in early 1987.

Principals in Nanaimo Public Market Ltd. are Doug Jones, Ed Unger and Charles Stirskey, all of Vancouver. The company expects that about 75 jobs will result from the construction and that possibly 200 people will be employed in the operation of the market eventually.

(Nanaimo Harbour News)

**PRG2 demonstrates high speed unloading, cleaning capacity: Prince Rupert**

The new grain export terminal on Ridley Island is demonstrating its potential for extremely fast grain unloading and cleaning.

Recently the staff at Prince Rupert Grain Ltd. unloaded 89 railcars in one 8-hour shift, setting a new terminal record. According to PRG's CEO Michael Thompson, the numbers become more significant when you realize 79 cars were unloaded in 8 hours the day before and 76 cars the day after.

“It demonstrates that grain cleaning and processing is able to keep up with railcar unloading. It is encouraging because as yet we have not reached our potential”, Thompson sent a congratulatory note to all terminal employees.

PRG2 is one of the few terminals in the world that has been designed to clean and process grain as fast as it is unloaded from railcars. This is reflected in the fact it has storage for only 200,000 tonnes yet has an annual throughput capability of 3.5 million tonnes.

(Currents)

**Highlights of port activity in 1985: Port of Québec**

- The Honourable Donald Mazankowski, Minister of Transport, announced in July the appointment of a new Board of Directors at the Port of Québec presided by Mr. Ross Gaudreault, General Manager of the Province of Québec for Irving Oil Inc. The Honourable Jean Marchand was named vice-chairman and Mr. Gary Q. Ouellet, Q.C., Corporate Secretary. Board members are: Mr. Roméo Savard, Mrs. Denise R. Bélanger, Mr. Claude Gagné, Mr. Yvon Dolbec and Mr. Raymond S. McBain.
- Intermodal flexibility for the unloading of grain at the elevator operated by Bunge of Canada Ltd. was demonstrated in November by the reception of eight unit trains, following the shut-down of the Great Lakes St.
Lawrence Seaway due to the collapse of a lock wall in the Welland Canal. The Canadian Wheat Board used the 96 car single cargo, single destination trains as an alternative transportation solution to deliver grain from Western Canada to ships waiting on the St. Lawrence River.

- Construction of an 11,200 m² general cargo shed at the Port of Québec’s Estuary Sector began in September. The $4 million investment represents the first phase in the development of a new multi-purpose terminal. In addition to providing 7,000 more square meters of storage space than its predecessor, the new structure will be located closer to dockside, further facilitating winter operations.
- Gagnon and Boucher invested $1 million to expand its feed grain distribution center located at Anse au Foulon. The project adds three new silos to the facility, boosting storage capacity by 8,000 tonnes to a total of 46,000 tonnes. The investment enables the company to guarantee year-round availability of all types of feed grain to Québec feed manufacturers and livestock producers.

1986 GOLD-HEADED CANE at Port of Québec

Captain Giuliano Folco, Master of the NILAM, received gold-headed cane from Ross Gaudreault, Chairman of the Board, Port of Québec. The Liberian flag, 76,000 dwt OBO vessel was the first ocean-going ship of the year, arriving in port January 5, 1986.

The story of the gold-headed cane, presented to the captain of the first ocean-going ship of the year, arriving from a foreign port, dates back to the early 19th century at the Port of Québec. According to tradition, merchants offered a gold-plated snuffbox, or a gold-headed cane, as a trophy to promote commerce at Québec.

The gold-headed cane remains today a much-coveted prize. In the 19th century, it became the source of intense rivalry among ship captains and it was common to see dozens of vessels gather in the Gulf of St. Lawrence at the end of each winter, waiting for favourable winds and currents to begin the race to Québec.

Since the inauguration of winter navigation on the St. Lawrence in 1959, the gold-headed cane has been awarded in January.

In 1981, the Port of Québec and the “Corporation des artisans” worked together to present a cane that would symbolize the history of the port and the culture of its region. Andrée Veilleux-Cossette, a ceramist from Cap-Rouge, produced this cane fashioned from maple. It boasts a white porcelain cylinder on which the artist used silk-screen printing to depict the port as it once was and as it is today, along with the port logo and coat of arms. The blue turquoise images symbolize the sea and, of course, the cane features the gold-plated head for which it is famous.

The gold-headed cane is an enduring symbol of cooperation between the port administration and those who use the Port of Québec’s harbour and services.

Port of Québec remains Eastern Canada’s major grain handling center in 1985

In spite of strong competition in the maritime bulk transportation industry, the Port of Québec remained the most important grain handling center in Eastern Canada in 1985.

“The figures demonstrate the Port of Québec’s competitive services to shippers of bulk goods, who benefit from the advantages of deep water, intermodal transportation and year-round navigation,” said port General Manager and Chief Executive Officer, Mr. Jean-Michel Tessier, during the presentation of the traditional gold headed cane to the first ship of 1986.

Shipment of minerals increased to 2,473,000 tonnes during the first eleven months of 1985, compared to 1,382,000 tonnes for the January to December period in 1984.

Mr. Tessier also noted that the decline in Canada’s grain exports resulted in an overall drop in tonnage at the Port of Québec in 1985. “Grain handling ports have felt the effects of poor harvests and a weak international market,” he stated.

Some 4,782,000 tonnes of grain were handled at the Port of Québec from January to December 1985, compared to 7,711,000 tonnes during the same period in 1984.

This decrease in grain shipments was the principal contributing factor to the overall decline in port activity to 13,766,000 tonnes of cargo, down from 16,550,000 tonnes during the first eleven months of 1984.

“While 1985 has been a difficult year in terms of overall tonnage, Québec has remained Eastern Canada’s leading grain port and continues to develop as a bulk transhipment center,” added Mr. Tessier. Bunge of Canada Ltd. operates at the Port of Québec the fastest grain elevator in the country.

The volume of petroleum products attained 5,692,000 tonnes through November 1985, down from 6,278,000 tonnes in the previous year. However, Ultramar’s recent purchase of Gulf and its network of service stations in Eastern Canada will increase the port’s volume of petroleum products by up to 3 million tonnes annually. The entire port community, from ship chandler to towing service, will benefit as activity intensifies at Ultramar’s St. Romuald refinery.
Poor international markets for lumber caused a decrease in general cargo shipments to 396,000 tonnes in December 1985, down from 504,000 tonnes for the same period during the previous year.

Mr. Tessier also underlined the objectives of the port's new Board of Directors. "With a dynamic marketing strategy and the efforts of all port clients and users, Québec could handle 20 million tonnes of cargo annually and, in the near future, become Eastern Canada's number one port in terms of total cargo."

"The Port will seek a leadership role in the development of Québec City's economic resources at the regional, national and international levels." Mr. Tessier concluded by reaffirming the new Board's "belief in Québec City's potential as a major maritime center."

**Port of Vancouver to host Pan-Pacific Seminar III September 29 - October 2 1986**

During the final weeks of Expo 86, the Port of Vancouver will host the Pan-Pacific Seminar III, co-sponsored by the Ports of Yokohama and Oakland.

The seminar will be a gathering of sister ports of the Pacific Rim countries, together with representatives from other ports and business interests around the world.

The conference will be held at the Hyatt Regency Hotel in Vancouver, September 29 – October 2.

Discussions will be directed towards the enhancement of trade, particularly between countries within the Pacific Rim, as well as other matters of general interest to ports and the transportation industry.

**IMO Anti-Terrorism Resolution: AAPA ADVISORY**

A recent resolution by the International Maritime Organization (IMO) calling for measures "to combat terrorism and other unlawful acts at sea" has been described as "a good beginning" by Transportation Secretary Elizabeth H. Dole "in what [she] hopes will be an international effort to safeguard seagoing passengers and crew from tragedies like the Achille Lauro."

The IMO resolution directs the organization's Maritime Safety Committee (MSC) to develop, on a priority basis, detailed and practical measures to strengthen port and onboard ship security. The IMO cited as a model for MSC's consideration recent actions by the International Civil Aviation Organization to tighten security at airports around the world. The IMO resolution also calls upon "governments, port authorities and administrations, ship owners, ship operators, ship masters and crews to take, as soon as possible, steps to review and, as necessary, strengthen port and onboard security."

The United States was one of nine nations cosponsoring the resolution.

Mrs. Dole has asked the Coast Guard to work with the Department of State in developing recommendations on technical preventative measures in preparation for the January 1986 meeting of the MSC. "Our long-term objective," she said, "is the establishment of cooperative international agreements that will help in the fight against terrorism and other unlawful acts on the high seas. We will proceed in the meantime with IMO guidelines adopting safety measures and practices aimed at the prevention of terrorism." The Coast Guard has since assembled an adhoc committee of industry representatives to work on proposals for submission to the January meeting. AAPA Vice Chairman Carmen J. Lunetta, port director of the Port of Miami, will represent AAPA on that committee.

**Oily waste to be handled by ports: U.S. Coast Guard**

All U.S. ports and terminals that handle tankers and oceangoing vessels of over 400 gross tons will soon be required to have certified facilities to receive oily wastes from such ships.

"This action will further ensure protection of our marine environment from damages caused by routine oil discharges of oceangoing vessels," said Elizabeth Dole, U.S. Secretary of Transportation. The new regulations implement recently adopted international requirements to further prevent oil pollution at sea.

MARPOL, the International Convention for the Prevention of Pollution from Ships, was ratified by the United States in 1980, but the oily waste provisions are just now coming into force. MARPOL places strict limitations on the operational discharges of oil at sea and in port. Ships are required to transfer oily waste to certified land-based reception facilities.

The Coast Guard has issued regulations, which go into effect March 10, 1986, to standardize the waste facility requirements. Essentially, the terminals and ports that meet the criteria must be capable of receiving an average amount of oily waste based on the type and number of ships it serves. Facilities may be fixed or mobile, such as tank trucks and tank barges.

During a six-month phase-in period before the regulations take effect in March, Coast Guard Captains of the Port will work with the industry to complete applications and certify facilities. After this period, the Coast Guard is required by law to deny entry of oceangoing ships to ports and terminals that are not certified for oily wastes.

Future regulations will establish the Criteria of Adequacy for chemical wastes under Annex II of MARPOL.

**DOT studies drug use effects**

Secretary of Transportation Elizabeth Dole has assigned the Department of Transportation's (DOT) Transportation Systems Center to follow up on a preliminary study into the effects of licit and illicit drug use on safety by transportation operators.

The initial work, done by a DOT working group, agrees with the Safety Board that drug use may have significant safety implications on transportation operators. More detailed data is needed to determine the extent to which drug use, misuse and abuse present safety problems and what countermeasures are needed.

The study will center on these objectives:
- Identifying licit and illicit drugs that could cause safety problems.
- Surveying the specific effects of these drugs on operations critical to each mode of transportation.
• Reviewing the current methods used to detect and measure drug levels in individuals.
• Assessing the quality and limitations of available information.

The DOT has been working with the National Transportation Safety Board (NTSB) and National Institute on Drug Abuse. (SCSPA Port News)

**U.S. Seaway lock rehabilitation**

U.S. Seaway Administrator James L. Emery announced December 6 that the St. Lawrence Seaway Development Corporation has budgeted $4.0 million to rehabilitate deteriorated concrete at its Eisenhower Lock in Massena, New York, and to commission an engineering study of lock wall stability. “This work is preventative maintenance to ensure the United States’ locks are not the cause of a future Seaway shutdown,” Emery said. “It’s called integrity.”

The U.S. Seaway locks were constructed by the U.S. Army Corps of Engineers in the late 1950s. Since the Seaway’s opening to shipping in 1959, the Seaway Corporation has spent more than $40 million (in 1984 dollars) on repairs necessitated by a concrete deficiency that dates back to the original construction when an improper mix of concrete was used. The 1986 work represents the initial stage of the $39.2 million lock rehabilitation and stability work recommended by the Corps in its reconnaissance report on the Eisenhower and Snell locks, one requested by Emery and completed in February 1985. The Corporation intends to finance the work by issuing $3.2 million in bonds and through its capital reserve account, which consists of retained toll earnings. (AAPA Advisory)

**National database established for U.S. ship traffic and vessel locations: National Association of Maritime Exchanges**

Announcement of the launching of the first U.S. national database to provide fully automated information on the schedules and movements, locations and intra-harbor movement, of vessels at U.S. ports was recently made at a seminar, “U.S. Ports and National Defense Strategies — 1985” presented by the American Association of Port Authorities. Reporting to the gathering of port industry and government officials was Jeffrey L. Langner (right), president of JLL Data Management Inc., which designed and operates the database on behalf of the National Association of Maritime Exchanges (NAME). Among the participants were (left) RADM Roy F. Hoffman, AAPA U.S. national defense committee chairman, and Milwaukee port director Al Cisneros, general manager and port director of the Brownsville Navigation District. In his report, Langner traced the historic role of maritime exchanges at major U.S. ports — in the case of San Francisco, back to the Gold Rush era — in utilizing the latest technology in the gathering and dissemination of shipping information. Applying data processing techniques to these functions was sought over a decade ago, and with the creation of NAME in 1980 and a cooperative effort with the United States Maritime Administration, a prototype system was developed and tested at San Francisco.

“While applying the state-of-the-art creation of a database and online services is not unusual,” Langner said, “this is first time to our knowledge that it has been done with the original ship traffic information source — the reporting agencies themselves — and on a nonproprietary basis. Major interests has already been expressed by government agencies and a wide spectrum of the maritime industry.”

(Marine Exchange of the San Francisco Bay Region)

**Bulk Materials Dock #2 dedication: Port of Corpus Christi**

The Port of Corpus Christi has spent $12 million to make sure vessels don’t stay too long. The Bulk Materials Dock #2 dedication took place on December 12, 1985, and at this time the Bulk Materials Radial Shiploader was officially introduced.

The new facility is a 1,200 foot berth with 40 feet of water. Ships breast into a radial track which permits the shiploader to be positioned so that it can place the loading spout into successive holds of the receiving vessel as the loading progresses. The loader is fed by a 48 inch belt conveying system which is capable of moving up to 1,500 tons an hour of cargo. The cargo can be placed onto the conveyors via hoppers in the bulk commodities storage yards or from a central hopper receiving building which can receive directly from rail cars, trucks or from the conveyor belts. The entire system is equipped with “State-of-the-Art” dust control equipment. This new installation will
enable the Port to load vessels at approximately two and a half times the rate that it could load at the old dock with the traveling gantry crane. The old dock will continue to be used as an unloader for inbound cargoes. The new dock will give shippers a much faster turnaround of their vessels than has been the case.

Soros and Associates of New York City did the engineering design and construction management for the new project.

**The good news and the bad: Georgia Ports’ Executive Director**

The transportation industry is at times blinded by the problems and struggles caused by recent deregulation, George Nichols told the Atlanta Maritime Association’s first meeting of its fiscal year.

“We mustn’t lose sight of the fact that there are a lot more opportunities out there than there are problems,” the executive director of Georgia Ports Authority stated. “The problems are solvable; the opportunities will pass you if you don’t seize upon them.”

The dilemma is caused somewhat by the innovations within the industry, such as the huge ships and the double-stack trains, which are providing new ways to be competitive, to make a sale or to make a buck. “It’s not hard to make a sale, but it’s hard to make a buck,” Nichols surmised. He said it requires folks to think smarter. What with transportation companies crossing intermodal lines, Nichols said, “It’s hard to tell who’s who anymore, but hold on to your seats, the better ones will survive.”

Nichols outlined opportunities which outweigh the problems for those in transportation throughout the southeast United States. First, there is Atlanta. “So many of us look to Atlanta as the economic center of the South and the transportation center of the South,” he said, noting its growth toward the significance of Milwaukee. You can draw a 300-mile circumference around the latter city, he said, and encompass one-third of our gross national product.

Atlanta is expected to achieve a similar designation, if only due to its hinterland served. Georgia is ranked sixth in international growth into the year 2000. Florida is ranked number one, and Texas is number two. “All the states around us are close to the top ten . . . We have a heck of a future ahead of us,” Nichols asserted.

Saying that opportunities abound, however, does not imply that problems don’t exist. Nichols said certain issues need to be examined and supported by those in the maritime industry. He mentioned two, one regional and one national.

Close to home, the issue of spiraling labor costs needs addressing. “They’re coming this year, and they’re coming again next year. They continue to go unabated,” Nichols explained. He suggested that 1986 be a year of concessions, noting that ocean rates must compete to beat the landbridge. “It’s something you shouldn’t turn your back to,” he charged his audience, expounding the importance of keeping options viable and obtainable.

On the national level, user fees, with a bill in each the U.S. House and the U.S. Senate, are said by Nichols to be imminent. Nichols predicted that we will see some exporters automatically out of the business if the fees are initiated. They simply won’t be competitive anymore, he said.

Finally, Nichols called for a concerted effort from the southeast transportation industry, well-represented by his AMA audience. “We need to set forth a stronger initiative to sustain the economic viability of this region. There are those who would take it away from us should we weaken.”

(Georgia AnchorAge)

**Colonel’s Island onstream: Georgia Ports Authority**

The newly built Colonel’s Island dry bulk facility has officially become operational with the export loading of 7,000 short tons of crushed granite. The $35 million facility is located in Brunswick, Georgia, ninety miles south of Savannah.

The cargo was shipped by Vulcan Materials to the Bahamas. The Bahamian government was the consignee and will use the crushed stone as road construction aggregate. Transport was provided by the barge Madaket, towed by the oceangoing tug, Warrior. Both are operated by Resolve Towage & Storage.

The Colonel’s Island dry bulk facility is owned and operated by Georgia Ports Authority. The multiproduct export terminal is capable of throughput rates of 2,000 tons per hour. Amenities include a 135,000 square foot flat storage building, two loop tracks capable of accommodating unit trains, and a 700 car capacity rail storage yard. Vacuum and containment systems preclude cargo loss due to handling while providing complete environmental safety.

Lynn Gaskins, Vice President of Operations and Maintenance for Marine Port Terminals, which stevedored the move, is optimistic as to future traffic for Vulcan. He states, “We hope that this will be the first in a continuing series of movements.” Brunswick Ship Agency represents Resolve Towage in Brunswick.

**Patent application filed for hopper car door opener: Port of Houston**

A patent application has been filed for a device that will save the Port of Houston Authority an estimated $15,000 to $20,000 a year at its Bulk Materials Handling Plant.

The patent, if granted, will be held by the port authority. However, under an agreement authorized by the Port Commission, any net profits resulting from the sale or
licensing of the rights to the invention will be shared equally between the port authority and Melvin L. Tullos, the employee who developed the device — a railroad hopper car door opener.

The doors on a railroad hopper car are located on the bottom of the rail car and are difficult to reach. Tullos, during work hours and sometimes on personal time, invented an arm arrangement which allows workers to use a multivane air motor instead of an impact tool to open the doors.

The device has speeded unloading of railroad cars, cutting the time required to prepare a hopper car for unloading by 10 to 15 percent, according to Richard P. Leach, executive director, Port of Houston Authority.

Port of Long Beach Foreign Trade Zone in record performance

New records were set by the truckload at the Port of Long Beach's Foreign Trade Zone No. 50 during the 12 months ending September 30 as dramatic increases in employment, value of merchandise processed and cargo tonnage handled were tabulated at the Long Beach zone, two subzones and a 1,350-acre expansion zone in Ontario.

The Port's annual Federal Fiscal Year report, which was approved on January 6 by the Long Beach Harbor Commission and submitted to the Secretary of Commerce, reported some startling statistics: the number of different commodities involved increased from 62 to 362 during that period; tonnage soared from 5,506 tons to 706,455 tons; and the value of merchandise passing in and out of the zone jumped from $19.9 million to $79.2 million.

The biggest single increase was in the employment category, which pyramided during the year from 21 personnel in the original zone to 5,857 employees, largely through addition of San Diego's National Steel & Shipbuilding Company as Subzone No. 50-B. Substantial payroll increases were also recorded at the parent Zone and Subzone No. 50A, Toyota's Long Beach truck bed assembly plant.

The expanded zone served 225 business firms last year, 44 of which occupied zone facilities on a continuous basis. Goods handled originated in 30 different countries, compared to 22 countries of origin the previous year.

During fiscal 1985, the average rate of occupancy rose 328 percent, with an overall increase of 566 percent in the number of commodities involved and a 1,411 percent leap in overall value of merchandise.

Harbor Commission President Louise M. DuVall lauded the report, saying "It is most impressive, in view of the fact that the Long Beach FTZ Charter is just three years old, and that the concept is just beginning to be understood by the maritime and business industries. As the only such zone in Southern California, we have just scratched the surface potential of FTZ benefits to the community in creation of new jobs."

Revenue sharing pact the first: Port of Los Angeles

With the Los Angeles Harbor Commission approval of a three-year contract with Yang Ming Marine Transport Ltd., this Taiwanese steamship line became the first shipper to sign a direct contract with WORLDPORT LA.

The revenue-sharing pact guarantees the Port an annual $1 million in revenue. In exchange, Yang Ming will keep 50 percent of tariff fees typically due the Port after it has paid $1.2 million in charges.

The contract allows Yang Ming the use of 20 acres of the Seaside Container Terminal Complex at Berths 228-236. There, its containers will be stored at the Overseas Shipping Co. terminal.

The unique Yang Ming agreement is attractive to WORLDPORT LA because it helps to stabilize the Port's revenue source. "Also it's part of an overall plan to have a more direct relationship with the lines that call at our Port," said Steven Paul Resnick, WORLDPORT LA Director of Marketing.

Wharfage fees increased: Port of Los Angeles

The Los Angeles City Council has approved a 12.8 percent increase in wharfage fees on most cargo handled at WORLDPORT LA. A similar tariff increase took effect earlier at the Port of Long Beach. Port of Los Angeles fees have risen from $3.90 a ton to $4.40 a ton. Approximately $10 million a year will be raised by the increases with $2 million of that going to Port tenants through revenue-sharing plans.

Harbor area Councilwoman Joan Milke Flores told the Council that the new fees will bring Los Angeles in line with Port of Long Beach, its chief competitor.

Flores and Port Executive Director Ezunial Burts say the increases are needed to finance capital improvement programs necessary to keep the harbor competitive with other ports, noting that it's been four years since rates were raised.

The ongoing program of renovation will total $500 million by 1989, mostly for the construction of new cargo terminals and dredging to lower sections of the harbor floor by 10 feet.

Study urges joint state port planning: Louisiana State University

Louisiana ports need unified planning and marketing to continue to compete with other U.S. Gulf and East Coast ports, according to a recent Louisiana State University Ports and Waterways Institute study for the Governor's Study Commission on Ports.

Calling for centralized state planning and marketing to bring together diverse transportation groups and individuals, the report sees worldwide economic trends and changing shipping patterns challenging a Louisiana port system described as too fragmented to respond effectively.

A state planning office is needed to target marketing worldwide to regain market share lost since 1970, according to Dr. Anatoly Hochstein, director.

The report underscores the port system's economic importance by citing an average annual payroll exceeding $700 million for the 43,000 workers employed by some 1,400 establishments engaged in deep draft and shallow draft transportation. Besides a planned, overall marketing effort, Hochstein called for among other things a more adequately maintained 40-foot channel in the river. A reliable 40-foot channel is critical to help to ensure a competitive edge, he said.
David A. Wagner named Acting Maryland Port Administrator

Transportation Secretary William K. Hellmann appointed David A. Wagner acting Maryland Port Administrator, effective January 1. Mr. Wagner is the Maryland Department of Transportation's Deputy Secretary. He will continue to serve in that capacity.


Baltimore Port business up in 1985; Export trade shows healthy increase

Foreign waterborne commerce in the port of Baltimore increased 1.7 percent during 1985, according to statistical projections prepared by the Maryland Port Administration. The port handled 25,421,659 tons of foreign trade in 1985 compared to 25,005,777 tons in 1984.

In addition, export cargo, specifically coal and grain, showed substantial increases over 1984 levels.

The cargo figures are reported by the MPA as a year-end compilation and are based on 10 months of actual monthly statistics, and projections for the remainder of the calendar year.

Total export cargo in 1985 reached 13,775,641 tons, a 23.8 percent increase over the 11,125,430 tons reported in 1984. Total import cargo during 1985 declined 16.1 percent, going from the 13,880,347 tons reported in 1984 to 11,646,018 tons.

Total export bulk cargo reached 12,294,820 tons in 1985, a 31.9 percent jump over the 9,324,669 tons reported in 1984. Total import bulk cargo dropped 22.4 percent, going from the 9,817,561 tons reported in 1984 to 7,617,850 tons.

Total import-export bulk cargo in 1985 reached 19,912,670 tons in 1985, a 4 percent gain over the 19,142,230 tons reported in 1984. Total import-export general cargo reached 5,508,989 tons, a 6 percent decline over the 5,863,547 tons reported in 1984.

General cargo exports reached a total of 1,480,821 tons in 1985, a 17.8 percent decline from the 1,800,761 tons reported in 1984. General cargo imports reached 4,028,168 tons, a .9 percent drop over the 4,062,786 tons reported in 1984.

Baltimore retained its status as the second leading container port in the U.S. East and Gulf Coast range in 1985, despite the fact that the 5,055,000 tons of container cargo handled for the year was a 7.8 percent decline from the record-setting 5,480,600 tons reported in 1984.

A total of 2,859 vessels called at the port of Baltimore in 1985, a 4.3 percent drop from the 2,986 ships which called in 1984. Vessel transit through the Chesapeake & Delaware (C & D) Canal in 1985 dropped 10.1 percent, from 2,007 ships in 1984 to 1,804 ships.

Significant 1985 port of Baltimore developments included the following:
- Baltimore's handling of its 3 millionth container of cargo. The container was loaded at the Dundalk Marine Terminal. Dundalk handled the port's 1 millionth container in 1977. It handled the port's 2 millionth container in 1981. Its handling of the 3 millionth container came at a 10 percent faster pace than its prior time sequence of million-container increments.
- The development of a computerized cargo release system to enhance the efficient and economical movement of goods through the port of Baltimore. The system, which is expected to be on-line by October 1986, will interface directly with the U.S. Customs Automated Commercial System, allowing members of the maritime community to readily track and process cargo through the port.
- The opening of the C & D Canal, Baltimore's northern link to the Atlantic Ocean, to 886-foot-long vessels. The canal, which cuts ten hours transit time to northern Europe, had previously been opened to ships with maximum lengths of 840 feet.
- Congressional approval of funding provisions for the long-awaited project to deepen Baltimore's shipping channel from 42 feet to 50 feet. The dredging is scheduled to begin in May 1986. A 50-foot channel, according to MPA estimates, will boost the port's bulk cargo shipments by at least 4 million tons annually and create 1,650 additional jobs.

AA PA Service Awards presented to Reed, Haar: Port of New Orleans

Ned Reed, Port Director, and Herb Haar, Assistant Executive Port Director, received the American Association of Port Authorities (AA PA) Important Service Award at the annual meeting of the association in Portland, Oregon in September 1985. The prestigious award was initiated in 1983 and is restricted to those people readily recognized for distinguished service to the association and who have been active in the committee structure of AA PA for 10 years or more and have served as a committee chairman for at least 2 years. Four awards were made in Portland for 1985. In addition to Reed and Haar, Greg Halpin, the Port Director at Baltimore and outgoing Chairman of AA PA, and Mel Shore, the Port Director at Sacramento and former Chairman of AA PA, were also recipients of the award.

Reed was recognized for his work as a past Chairman of AA PA and service on a number of committees including Chairman of Operations, Projects and Publications, and Planning and Strategy Committees. Haar was recognized for his work as a past Chairman of the AA PA Dredging Task Force, and service on the Harbors and Navigation and Operations Committees. He has also served for many years as the AA PA representative to the EPA's Ocean Dumping Advisory Committee and Chairman of the International Association of Ports and Harbors' IAPH Dredging Task Force and as IAPH's observer to the UN's London Dumping Convention.

2nd year for port training seminar: Port of New Orleans

For the second year the international port executive training seminar will be held at the Port of New Orleans. The unique three-week intensive training program will run from January 30 to February 20, 1986.

Officially titled the International Program for Port
Planning and Management (IPPPM), the program provides port officials worldwide with a broad array of general planning and management skills and insights. In the first program held early this year there were a total of 31 attendees representing 12 nations, including the U.S. Paul Kent, IPPPM director, who is on the staff of the LSU’s Ports and Waterways Institute, reported that early registration for the 1986 seminar indicates a greater number of applicants from Latin America and the U.S.

IPPPM is co-sponsored by the Port of New Orleans, the International Trade Mart (now the World Trade Center), the American Association of Port Authorities (AAPA), the University of New Orleans, and LSU. The fee for the course is $1,500, with the seminar limited to 40 participants.

Lecturers for the program include top business executives, port managers, academicians, and researchers. In addition, top management personnel of the Port of New Orleans deliver lectures on trade development, marketing, dredging, accounting and finance, and personnel management. A panel session on general port operations featuring leaders in the New Orleans maritime industry is also scheduled.

Every conceivable aspect of port management is covered during the three-week period, including political and community relations, cargo documentation required for international trade, port environmental impact, port security, vessel technology, port investments, and port computerization.

One of the most valuable features of the program, according to Kent, is organizing small study groups and informal meetings, which allows extended discussions among officials from different areas of the world. In addition to classroom work, participants go on field trips to port facilities in the area, including visits to a ship repair drydock, a grain elevator, industrial facilities, and dredging operations.

Kent noted that the enthusiastic response to the announced plans to hold a second seminar shows that there is a definite need for such a port training program. “Far too often port officials make crucial far-reaching decisions without extensive prior information or on the basis of inadequate information,” he said.

FTZ automation urged by Customs Commissioner: Port of New Orleans

In an address delivered at the National Association of Foreign Trade Zones conference U.S. Commissioner of Customs William von Raab announced that he fully intends “in the near future not to recommend approval of new foreign trade zones unless there is a commitment to deal with the U.S. Customs Service directly through our Automated Commercial System (ACS).” He said he is also recommending to the Foreign Trade Zone Board that all FTZs should be able to interface electronically with ACS.

ACS consists of a group of separate automated systems developed by U.S. Customs to process Customs documentation electronically that are now being consolidated. Von Raab predicted that when ACS is totally integrated, which “we expect within the next year and a half,” all Customs entries will be able to be filed electronically.

(The Port of New Orleans is in the process of installing its new $2.3 million automated cargo documentation system known as CRESCENT. When it goes into operation in mid-1986, New Orleans will be the first U.S. port that will allow members of the local maritime community, whether or not they are automated themselves, to link directly to ACS for electronic processing of Customs entries. The Port’s foreign trade zone will also be included in the system.)

Revitalized Red Hook Terminal marks a new era for the Brooklyn waterfront

With the beautiful Manhattan skyline as a backdrop, officials of New York City and State joined with those of The Port Authority of New York and New Jersey to commemorate the completion of a multimillion dollar expansion program at Brooklyn’s Red Hook Marine Terminal. The project, which included the erection of a $3-million crane, two modern berths and doubling the terminal’s land area to nearly 80 acres was marked in a special message sent by Governor Mario Cuomo, who stressed his strong and continued support for the Brooklyn waterfront. The Governor’s message was delivered by New York State Director of Economic Development, Vincent Tese.

Via Mr. Tese, Governor Cuomo stated, “I am happy to report that today, even before the second stage of this project has achieved full operating potential, Red Hook is employing 500 people with 1,500 additional jobs generated in support services. That means there are 2,900 positions already on line, representing a payroll of approximately $18 million to $20 million per year.” It was also indicated that well over 3,000 jobs are projected for Red Hook over the next two years, according to experts at the Universal Maritime Services Corporation, the terminal’s operator.

Port Authority Chairman Kaltenbacher said, “The city, the state and the Port Authority are now vigorously engaged in promoting Brooklyn’s dynamic and growing container facilities, and the results are already gratifying.” The 50 percent increase in the terminal’s cargo handling capacity, when combined with the city’s planned expansion of the South Brooklyn Marine Terminal, is expected to boost Brooklyn’s total cargo handling capacity to approximately 2.7 million long tons per year.

Export traffic flourishing at Port of Oakland

Amid generally gloomy assessments of the United States balance of trade, American exports continue to show dramatic signs of health at the Port of Oakland.

Export tonnage crossing the docks of this West Coast container gateway was up 29 percent for the first quarter of 1985 as compared to the same period last year.

This continues a trend which saw a 12 percent increase in U.S. cargoes outbound on liner vessels from Oakland during 1984.

Two years ago, just over 2.3 million short tons of export
goods were loaded at the Port of Oakland. Last year, the figure rose to 2.6 million short tons — one of every five short tons of American shipments exiting the West Coast.

The export outlook at Oakland appears to be even brighter for 1985. Major U.S. commodities transiting the port en route to overseas buyers include, in order of volume:

- Cotton, up 28 percent in tonnage for the first four months of the year over the same quarter in 1984;
- Fruits and vegetables, up 47 percent;
- Pulp and waste paper, up 31 percent;
- Synthetic resins and plastics, up 43 percent;
- Animal feedstuffs, up 84 percent;
- Organic chemicals, up 54 percent;
- Crude fertilizers, up 141 percent.

Rounding out the top 10 export commodities at the Port of Oakland so far in 1985 are frozen meats and poultry, metal ore and scrap, and leather hides — all holding steady.

Already the predominant West Coast outlet for a variety of important export categories, from plastics, rubber and organic chemicals to vegetable oils and coffee, tea and spices, the Port of Oakland has continuously adapted and innovated to meet the specialized needs of American shippers.

Meanwhile, imports through Oakland have also increased some 6 percent, fueled by U.S. consumer demand for Asian electronic goods, clothing and footwear; parts supplied to the new joint Toyota-General Motors automobile assembly plant in nearby Fremont and the recent debut of double-stack Union Pacific trains hauling United States lines containers through the direct “Central Gateway” between Oakland and Chicago.

“As the primary port of debarcation for the harvest of the nation’s richest agricultural state, as well as for the raw materials that will build overseas consumer markets for manufacturers such as those in California’s high-tech capital, the neighboring Silicon Valley, the Port of Oakland has traditionally served as America’s Number One export gateway to the Pacific Rim,” says Oakland Board of Port Commissioners President Douglas J. Higgins.

“Obviously,” he continues, “it is in our best interests and those of our shippers to promote a balance between inbound and outbound cargoes. But we deplore any moves toward passage of protectionist legislation that would in the long run severely undermine this nation’s economic vigor. And we would suggest, from our informed perspective, that reports of the demise of the U.S. export trade are clearly premature.”

Port industrial parks attracting buyers: Port of Portland

The Port of Portland’s high level of land sales that resulted in a record year during 1984 for the Industrial Parks Division has continued during the first five months of the current Port fiscal year.

Port Real Estate General Manager John MacGregor reports land sales and leases have been registered in recent months in both North and South Rivergate, in the Rivergate Industrial District and at the Port’s newly opened 25-acre Port Center, within the Swan Island Industrial Park.

These sales and a lease will total close to $1 million dollars and, with improvements, will represent more than $10 million in total investment. The four new developments will employ about 150 persons.

The Long Wharf still the Bay area’s largest volume terminal: Port of Richmond

Chevron’s long wharf — built in Richmond at the turn of the century and rebuilt and modernized numerous times since then — retains the position as the Bay Area’s number one terminal, handling a total of 11.8 million long tons of liquid bulk commodities during 1984. Operated by Chevron U.S.A. Inc., a subsidiary of the Chevron Corporation, the Long Wharf is a dynamic operation with berths for tankers ranging up to 150,000-dwt. Currently, crudes for refining at Chevron’s adjacent refinery are being received from the North Slope of Alaska and foreign sources, while refinery products are shipped in Chevron’s tanker fleet to coastal ports as far away as Anchorage. Fuel oils are also exported to Pacific Rim countries.

The Long Wharf, 3396 feet long, is reached by a 4200-foot causeway. Built of concrete and wooden piles with a concrete superstructure, the Long Wharf is 132 feet wide, fender to fender. It has four ship berths on the outside and berthing space for barges on the inside. The current water depth necessitates the lightering of cargo from the largest tankers before they are able to proceed to the wharf. However, the channel is now being dredged to 45 feet, making it possible for tankers up to about 80,000 dwt to dock without first offloading cargo.

Some two miles north of the Long Wharf, Chevron also operates the Point Orient wharf for receiving refinery feedstock and shipping refinery products and petrochemicals. Point Orient is 703 feet long and 60 feet wide, and has a 1200-foot causeway. It can accommodate vessels up to 39,000 dwt.

APL and Port of Seattle plan for growth

When American President Lines (APL) and the Port of Seattle signed a 30-year lease in September 1985, it was an historic agreement made possible through the commitment and cooperation of Port Commissioners and staff, APL and the labor community in Seattle. Their joint objective was to increase the Pacific Northwest’s share of U.S. international trade.

“We are very happy to enter into this new long-term association with the Port of Seattle,” said Gene Petimonti, APL vice president of operations, making the announcement at Port corporate headquarters September 27. “Our continued partnership promises to be mutually beneficial.”

Commission President Jack Block said, “We’re very happy to have come to this outstanding long-term agreement with APL — one of the world’s largest, most well-established steamship lines. By signing this lease, APL has committed to building this area as a gateway to their entire system. The Port is proud to have a part in making that happen.”
APL will move to Terminal 5 next spring, where — after improvements to be made by the Port — it will operate new cranes to computer advancements in the West Coast for efficiency.

"From new cranes to computer advancements in the truck entry and container yard, Terminal 5 will be the most modern container facility on the West Coast," James D. Dwyer, Port executive director, said.

In addition to its 77 acres with a possibility for up to 100 acres, Terminal 5 will have three full containership berths, four new 100-foot-gauge container cranes, an on-dock breakbulk storage shed of 80,000 sq. ft. and a 100,000 sq. ft. container freight station right on the terminal. The new facility will be able to accommodate both all-wheeled and stacked container operations, and breakbulk as well as containerized cargo.

"Terminal 5, which is two-thirds larger than our existing facility, will significantly increase our throughput capacity," said J. (George) Hayashi, executive vice president of APL.

Major advantages for APL will be the capability to centralize operations together with the opportunity to grow and expand, according to Hayashi.

APL is interested not only in expanding its services in the Pacific, but also is looking to expansion and consolidation of its operations into the Middle West, Petimonti said. APL serves the Midwest through its own cross-country, double-stacked container train system. The carrier recently instituted direct sailings from Seattle to East Asia and return.

Petimonti added that recent productivity increases on Seattle's waterfront were a factor in APL's decision.

Ken Gissberg, president of Local 19 of the International Warehousemen and Longshoremen's Union, said, "We are very happy at the accord reached by APL and the Port. It is going to create more jobs in this area, and I am pleased that labor has had a role in making the Port more competitive."

Commissioner Block said the Port and APL will need all of labor's assistance to develop the terminal to its full capacity.

"I also would like to thank Mayor Royer for his part in making this development possible," Block said. The City of Seattle reconfigured streets in the terminal area to give shipside container operations more efficient access to the terminal yard. Automobile and truck traffic will be routed to the perimeter, with easy access to cargo operations.

Modernizing the terminal will cost the Port about $36 million. The long-term expectation is that up to 5,000 additional jobs could be created once APL swings into full operations, and cargo movements could double in the years to come.

"Economic conditions in the industry obviously ultimately dictate how much additional volume we put through the Port of Seattle," Petimonti said. "But this terminal puts us in a prime competitive position."

Mic Dinsmore, director of the Port's Marine Division, and chief Port negotiator, said the lease terms are for $40,000 per acre per year for the first five years, and after that costs could be reviewed. APL has first option on additional acreage that could increase Terminal 5 to nearly 100 acres.

"It took long and careful negotiations on behalf of both the Port and APL to successfully reach concurrence in this significant agreement," Dinsmore said. "We now look forward to moving ahead with APL in the same cooperative spirit," he concluded.

Precision scheduling shaves costs at Charleston

The Port of Charleston is implementing the total scheduling of all phases of breakbulk cargo movement to save shippers and lines time and, therefore, money.

"Scheduling, nitty-gritty, down-to-the-minute scheduling, at the Port of Charleston is now getting trucks and ships in and out, and cargo on and off, with precision unheard of in the past at any port," said Don Welch, executive director at Charleston.

"The steps we are taking now are natural extensions of scheduling plans we've been phasing in over the past several years as our Orion system made such planning possible. Our strategic planning study has indicated that the time is right to implement breakbulk scheduling."

Welch gives as an example of the port's total scheduling package a ship which is scheduled to dock in Charleston at 8:00 a.m. The ship's cargo can be cleared by U.S. Customs through the Orion system at approximately 7:00 a.m., or as soon as the vessel enters the harbor. Cargo to go on the ship will have already been scheduled in by confirmed appointments to the trucking line. The cargo is staged adjacent to the appropriate berth and a crane is waiting to put it on board.

As cargo comes off the vessel, the scheduling network is also in place. Port staff now assigns a truck an exact time and place for cargo pick up. The staff simultaneously appoints the appropriate size work crew, equipment and paperwork to meet and handle each truck.

Documentation instantaneously flows, via Orion, to and from brokers, forwarders, customs, agents, the port and truckers to prevent paper hang ups from slowing smooth cargo movement. The newest step of complete coordination of truck and cargo handling by appointment went into effect this month (January).

"The synchronized handling of ships, cargo, clearance, stuffing and stripping, and truck movements will save shippers and lines money because there is no waiting for cargo or materials," Welch says. "By instituting total port scheduling, Charleston helps lines and manufacturers keep their schedules."

![Truck scheduling at Charleston synchronizes cargo movements on and off ships and in and out of the terminals.](Tradelines)
McCarthy elected president of Port of Tacoma Commission

John McCarthy has been elected by his fellow commissioners to serve as president of the Tacoma Port Commission for 1986. McCarthy was first elected to the Commission in 1983, when Pierce County citizens voted to expand the Commission from three to five members.

“The Port of Tacoma faces many challenges and opportunities in 1986,” McCarthy said, “As the competition for Transpacific cargo increases, we must carefully look at where we want our Port to be ten years from now. One area of special concern is to continue fostering industrial and economic development in Pierce County.”

Advantages of Free Trade Zone: Port of Le Havre

The Free Trade Zone, also known as the Duty Free Storage System, has three main advantages: it is simple, universal and economical.

1) It is Simple because formalities are cut to the bone.
   Applicants are licensed directly by the port authority, with a minimum of delay. Users may be private companies or their representatives (haulier, forwarding, agent, manufacturer, small private company, etc), and once they have been approved they can move goods into the free zone without requiring any further authorisation, and carry out any commercial transaction, provided only that when goods are admitted or withdrawn they at once inform the port authority, as the body responsible to the Customs for seeing that the regulations are properly observed. The owner of the goods or his agent is free to perform such minor operations as labelling, damage repair, sorting, packing and whatever is necessary to keep merchandise in good condition.

2) The system is Universal since it covers all types of goods, with the exception of refined petroleum products, arms and ammunition.
   The scheme is not confined to any one physical “zone” in the port, but is available at many different sites, according to the nature of the goods and the desires of the beneficiary. The whole point is to provide users with the most appropriate sites for their particular purposes.

3) The system is Economical because the cost of renting a site is very low, as are the port dues, which are assessed on a tonnage basis.
   The bond normally required as a pledge for the payment of Customs duty is replaced by a system of collective insurance at very attractive rates.

Value Added during Storage: The protocol of June 8th 1984 setting up the Free Trade Zone in Le Havre has since been completed by an amendment agreed between the French Board of Customs and the Port of Le Havre Authority, dated June 8th 1985.

Its effect is that facilities for processing goods can now be combined with the free storage facilities. In other words, a company or its agent can now stock goods of foreign origin in the free zone and at the same time upgrade their value by processing, or by combining them with French-made components, after applying, with the help of the Port Authority, for special permission from the Customs.

The fact that everything can be done in one and the same place, without the goods having to be moved, is an additional advantage and reduces handling costs.

The Port of Marseilles: Thirty thousand jobs

The docks in Marseilles, Lavera, Caronte, Fos and Port Saint Louis all go to make up the Port of Marseilles Authority that covers a linear stretch of 70 kms of coastline.

In terms of employment, a subject of current interest, it can be noted that the docks provide jobs for about thirty thousand people, through this figure is probably far too low in reality.

If port traffic, freight and business in the industrial and port area fluctuate too long, this source of employment may well go dry and in so doing make its absence felt at home and abroad.

This port, France’s leading port by the way, is not simply a dot on the map, it is one of the nerve centres of our nation’s economy. It also generates business for an entire continent in some instances.

The ones who should know are those who work in the Port (there are thirty thousand of them) and those that depend on it for their living.

* Port Related Jobs

1. Port professions .......................... 14,000
   P.M.A. Customs, shipping Cos., Forwarders, Dockers, etc.
2. Road haulage .............................. 5,000
   31% of the 16,000 local workforce in this sector
3. Ship repairs ............................... 2,700
   Repair workers: 1,500
   Sub contractors: 27% of 4,600 jobs in the area, i.e., 1,200
4. Fos Industrial Area ....................... 9,000
   Subcontractors: 27% of 4,600 jobs in the area, i.e., 1,200
   30,700

(These figures do not include staff working for the Railway Company, SHELL, CFR, BP refineries, and subcontractors that work in Fos in addition to construction site workers, etc.)

(Europort South)

Permanent industrial employment in Fos between 1975 and 1984: Port of Marseilles

1. Jobs in the so-called light industry sector (Feuillane and Ventillon Trade Estates) are not included.
2. The PMA staff employed to run the ZIF (Industrial...
zone of Fos), the oil docks in Fos and Lavera and the public quays (for the containers, ore and general cargo) are included.

The figures are as follows:

<table>
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<th>Year</th>
<th>Total</th>
<th>Workers</th>
<th>Technicians, Foremen &amp; Draughtsmen</th>
<th>Employees (Junior grade)</th>
<th>Executives</th>
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<td>1,108</td>
<td>426</td>
</tr>
</tbody>
</table>

3. Dockers are not included.
4. There has been a very stable level of employment with virtually no changes in the 1980 to 1984 period.
5. Executive and junior grades have stayed the same in respects.
6. The technical grades have specialised a great deal:
   - Figures for Technicians, foremen and draughtsmen rose from 35.3% in 1975 to 49.3% in 1984 of the total staff numbers.
   - Figures for the workers have dropped steadily, from 47.3% in 1975 to 34.6% in 1984.
6.3. Within the category of workers, the following can be noted:
   - Casual labourers disappeared in 1980
   - A smaller proportion of skilled labourers, from 43% in 1975 down to 15% in 1984
   - A higher proportion of highly skilled workers, from 54% in 1975 to 85% in 1984.

NB. These figures are not intended for statistics.

Customs Department and PMA sign protocol conventions

The Regional Director of the Customs Department and the Director of the Port of Marseilles Authority July last signed several conventions governing important items of protocol. The conventions had to do with the following:
   - How the public warehouse is to operate: regulations have been made more flexible (e.g. storage duration, conditions governing the arrival and departure of goods from the warehouse), this regime can be extended to cover all of the Port premises as required, and does not require the payment of a deposit.
   - The Fos Ore Terminal is already operating under such a regime and can now be called a free Ore Terminal where bulk goods can be stored under franchise.
   - How the free stores are to operate: the stores are to be certified, and inward and outward declarations of goods are to be simplified.
   - How the Port of Marseilles Authority can put up guarantees for customers vis-à-vis the Customs Department (in the form of deposit or insurance coverage) when the P.M.A. operates the free store itself or when it decides to back a customer when requested to do by the latter.

From now on all of the above mentioned provisions can be applied and the applications for the opening of free stores can be met.

Favourable economic trends have boosted the total volume of cargo handled in the Port of Hamburg. One is justified in expressing hopes of the total cargo handled in the biggest German port exceeding the 60 million-ton mark for the first time for several years. During the first half of 1985 the figure of 32.6 million tons was achieved. In the same period last year it was only 27.3 millions. A major contribution to this improvement came from bulk cargo, particularly suction goods. During the first six months of 1984 a total of 3.6 million tons was handled but this figure leapt to 7.3 million during the same period this year.

Once again the trend in general and bagged cargo was a favourable one. This year a total of 21.7 million tons is the likely figure. Last year it was 21.1 million. And yet again, containers have led the field this year. By the end of the first half of 1984, 508,692 TEUs had been handled; at the end of the same period this year this had increased to 562,363 TEUs. The proportion of containerized cargo also increased from 45.9% to 49.2%.
Investment millions for the Bremen ports

With purposeful investments, the Bremen ports are in the process of further strengthening their position as an important universal port in Europe. Above all, concentration for this is being placed for Bremen's maritime-port economy on areas characteristic for the modern transportation modes of the future. Thus the operator of Europe's largest automobile-handling centre in Bremerhaven — the Bremer Lagerhaus-Gesellschaft (BLG) — is planning new investments in this field which will have totalled DM 24 millions by the middle of 1986. Thereby the import and export vehicle parking-facilities in the ocean city's port installations will have increased 30 percent, making 40,000 places. Whilst 3,000 of the new parking-places are already in use, a five-story park-house for 7,000 Japan-imported vehicles is still under construction. When this project is complete, the BLG will consider itself well prepared for the future in this sphere also — just as for the container trade. A handling record for 1985 of some 500,000 vehicles is anticipated for the European “car turntable” of Bremerhaven; in the year before, some 425,000 were imported/exported here. (Bremen International)

1985 a better year for Port of Rotterdam

The Port of Rotterdam handled nearly 250 million tonnes of freight in 1985, continuing the growth that had occurred already in 1984.

The good news, based on provisional figures, was revealed by the Port and Economic Affairs Alderman, Mr. Roel den Dunnen, at the traditional New Year's Eve meeting of the Rotterdam Port Association. He recalled that freight handling had shown an upturn in 1984 after a three-year slide.

Overall bulk volume remained virtually unchanged, even though there were some shifts in this trade. Crude-oil handling, for instance, fell by 4% after a 6% increase in 1984. Still, the port handled 76.5 million tonnes more than it did in 1983. The volume of mineral oil products grew by 5.5%. A decline in coal trade failed to wipe out the 30% gain chalked up in 1984. Other bulk, including mainly grains and derivatives, rose by 4.8%, following a 9% drop in 1984.

In the general-cargo trade, the growth in container handling continued, going up by 900,000 tonnes to 27.7 million tonnes.

The drop in traditional general cargo was less pronounced than in 1984. A sharp drop occurred in the handling of Lash ships, due to the U.S. restrictions on imports of European steel products.

Textbook on the modern seaport: Port of Rotterdam

In the past few months a delightful little book about the Port of Rotterdam has been attracting a great deal of interest in educational circles. The booklet has been published jointly by the Port of Rotterdam Authority, the Rijnmond Public Authority and the Prins Hendrik Maritime Museum. This lively and well-designed book is aimed at pupils in the lower classes of secondary education. In six lessons, it aims to explain a number of the economic and technical facets of a modern seaport and also looks at the historical background.

Geography teachers Jan Bakker and Arnold Hewitt, who received a great deal of help from the above-mentioned co-producers in assembling the interesting factual material, tried their book out on a Rotterdam school before it appeared in print.

The booklet not only asks the pupils to answer questions, draw bar graphs and compile tables, it also stimulates them to try out some role-playing exercises. One of these, for example, deals with the case of a fruit transhipment company which has to automate. Problem: a number of workers will become redundant.

The class is asked to discuss the matter. Some pupils become members of the board of directors: they have to defend the automation project as effectively as possible. Others are union officials standing up for the interests of their members, or officials of the City of Rotterdam, who have to mediate. The rest of the pupils are journalists. They are asked to write a report for their newspaper.

(Rotterdam Europoort Delta)

Formidable windbreak along shipping canal in Europoort protects Brittanniëhaven

It is almost certainly the only one of its kind in the world. It is quite definitely the most remarkable structure that the Port of Rotterdam has seen in the last few years. The 'wind wall' is finished.

The dimensions of this far-reaching safety measure are so formidable (1.7 kilometres long and 25 metres high) that it can only be seen in its entirety from the air. The windbreak has been erected on the west bank of the Caland Canal. Wind tunnel trials have shown that it will considerably improve the accessibility of the Brittanniëhaven. High wind speeds and severe gusts will no longer have much effect on the car-carriers, the container ships and the ro-ro vessels which regularly put in at the Brittanniëhaven.

The windbreak — designed by architect Maarten Struijs — is made up of three sections.

First, a 15-metre high dam was built to the north of the road bridge over the Caland Canal. 600,000 tonnes of clinker material from the furnaces of two Rotterdam waste incineration plants were used in its construction. This core was then covered with layers of clean harbour clay, sand and soil, to a total depth of two metres.

A row of concrete slabs was partly incorporated in the dam: they protrude ten metres, thus creating a windbreak 25 metres high. The slabs are 10 metres wide, with a thickness of 300 millimetres above the level of the dam.

No dam was built to the south of the road bridge. Instead, a long row of semi-circular concrete elements — again 25 metres high — was constructed. The wind tunnel trials proved that this arrangement was extremely effective. It was even possible to position the heavy concrete slabs...
several metres apart, which obviously helped to keep construction costs down.

13,000 cubic metres of concrete went into the windbreak. The costs of the project are estimated at well over 14 million guilders. This sum also includes expenditure on an extensive planting programme which has yet to be carried out. It is hoped that the windbreak will become an acceptable feature of the landscape. H.B. (Rotterdam Europoort Delta)

Considerable interest in new signposting system: Port of Rotterdam

Hundreds of Rotterdam port companies have reacted favourably to the Port of Rotterdam Authority's proposal to introduce a new signposting system in the port area. Many port companies have indicated that they would like to take part, and a large number of transport companies have also shown an interest.

From the many letters and phone calls which the Port of Rotterdam Authority has received, it appears that not everyone has understood that the new signposting system is intended only for companies located on the river and in the adjacent dock basins.

The system entails the numbering of the waterfront. Each 100-metre section has been given a number. These numbers run from east to west: from 100 to 999 on the right bank of the Maas, and from 1000 to 8500 on the left bank.

The official direction boards over the major access routes will be adapted, so that international truck-drivers, in particular, will be able to locate their destination in the docks area without difficulty.

The Port of Rotterdam Authority has now informed all the companies concerned in the docks area of the number allotted to them, so that they can make a start on alterations to their letterhead and transport instructions. (Rotterdam Europoort Delta)

Changing ship types lead to change of port’s crane equipment: Port of Gothenburg

The Port of Gothenburg AB has decided to buy two new large container cranes. One of the cranes will be placed at the Skandia harbour, which already has five container cranes, and the other at the Alvsborg harbour.

The two 70-ton cranes will together cost about 50 m SEK (£4.35 million). However, as two multi-purpose cranes and one mobile crane will be sold, it is estimated that the net cost will be about 39 m SEK (£3.4 million).

Large ro-ro ships, which need the aid of cranes to lift on board and pile up containers on the weather-deck or take them ashore, have increased a lot in number. As the pure container cranes have about 65 per cent higher productivity in handling containers and the deep-sea ro-ro’s want the fastest possible service, it is estimated that the investment in the new cranes will pay within a relatively short time.

The cranes will lift 70 tons in hook and 40 tons when using container spreaders. The lifting height above quay will be 28.5 metres. The working span will be 38 m above ship and 41 m above quay, measured from the outer crane rail.

The order has not yet been placed, but tenders are under estimation.

New branch of Gothenburg Free Harbour opened at the Skandia harbour

The Gothenburg Free Harbour, active since 1922 near the centre of Gothenburg, has opened a new branch at the Skandia container harbour close to the mouth of the River Göta. Together with the near-by Alvsborg harbour, Skandia nowadays forms the dominant part of the port. The main stream of goods is to be found here, and by opening a branch here, the free harbour company has complied with requests from many of its clients.

The terminal has a floor space of 5,000 m² under one roof. The spacious building, which is heated, has a roof height of nearly ten metres and is equipped with a railway connection leading directly into the building. The free harbour fence also surrounds 10,000 m² of outdoor space.

The services of the Free Harbour Company include buffer stocking, stuffing and stripping containers and other distribution services such as the co-ordination of joint shipments of export goods delivered by various suppliers.

The activities at the original free harbour will continue. Many importing companies have been established here for many years with their stocks of goods.

Mr. Bo Palmqvist, head of the Gothenburg Free Port Co., Ltd, in front of the company's new "Skandia Free" facility - a 15,000 m² terminal at the heart of Gothenburg's unit load harbour.

New company set up to meet research and consultancy needs for the port industry: ABP

Associated British Ports Holdings PLC has set up a new subsidiary to provide hydraulic research and port consultancy services in the UK and overseas.

The company, ABP Research & Consultancy Ltd., which is based near Heathrow, is made up of two divisions: ABP Research, comprising the existing research facilities and activities of ABP's Research Centre, and ABP Consultancy. The Board of Directors is chaired by Charles Orange, ABP's Finance Director.

ABP Research, as the Research Centre, has been provid-
ing hydraulic civil engineering research services to the ABP ports and other customers for 35 years. It plans to expand the amount and scope of work undertaken for outside customers. The Managing Director (Research) is David Cooper, who has had 25 years experience at the Research Centre.

ABP Consultancy will primarily be engaged in external contracts for a wide range of consultancy work ranging, for example, from advisory work on national port policy and organisation (including privatisation) to project feasibility and port development studies. The Managing Director (Consultancy) is Eric Pollock, who has carried out consultancy work around the world for many years, and who brings 20 years experience as Economist and Marketing Manager with ABP to the job.

**Passenger boom at popular Plymouth: ABP**

Plymouth’s growing popularity as a passenger port was confirmed today by record figures showing a 16% increase in the number of passengers using the port in 1985.

Associated British Ports have announced that 367,000 passengers used Plymouth in 1985 en route for the Continent on Brittany Ferries’ sailings between Plymouth and Roscoff in Brittany and Santander in Spain. There was also a substantial increase in the number of passenger-accompanied vehicles passing through the port.

With the accession of Spain and Portugal to the EEC on 1st January this year, Plymouth’s importance as a link with the Iberian peninsula will continue to grow. The new £5 million roll-on/roll-off terminal currently being constructed by ABP at the port will double Plymouth’s unit load capacity, and is scheduled to come into operation in the summer.

Commenting on the figures, ABP’s Port Manager at Plymouth, Mr. Edward Chapman, said: “The record traffic levels in 1985 fully justify ABP’s heavy investment in Plymouth to handle the continuing growth in trade”.

**Expansion at Goole container terminal: ABP**

The second phase of Goole’s £1 million Boothferry Container Terminal was opened today (17th January) by the Chairman of Associated British Ports, Mr. Keith Stuart.

ABP’s latest investment in the terminal, totalling over £600,000, increases the terminal’s storage area by 11,000 sq. m. to 26,000 sq. m. A new quay has been constructed, enabling the terminal to take vessels of up to 5.5 m. draught, and new cargo handling equipment has also been provided.

Speaking at a ceremony to mark the occasion, Mr. Stuart drew attention to the success of the Boothferry terminal, which has increased the port’s container throughput from under 1,000 units prior to its opening, to 12,000 units in 1985.

“Because we believe that growth will continue, we have invested another £600,000 in Phase 2 of the new terminal,” said Mr. Stuart. “This latest extension of Goole’s container facilities will bring further expansion at the port, for which we have high hopes for the future.”

**Industry Task Force report emphasises potential of waterfront productivity in revitalising Australia’s manufacturing sector: Transport Australia**

The potential for improved efficiency on Australia’s waterfront has been highlighted in a report released today by the Federal Minister for Transport, Mr. Peter Morris.

The second progress report of the Webber Task Force into Shore Based Shipping Costs stresses that opportunities exist to improve productivity, boosting the international competitiveness of Australian exports and assisting the revitalisation of our manufacturing industries.

“One of the aims of the Task Force is to develop a package of recommendations which will build on the steps already taken by the industry in adoption of new technology and improvements in efficiency,” Mr. Morris said.

Mr. Morris explained that the Task Force was an industry-based group, not a government inquiry, with the Federal Department of Transport and Bureau of Transport Economics providing secretariat and research support.

“What happens at the waterfront has repercussions well beyond the terminal gates,” the Minister said.

“It is not widely recognised that more than half the door-to-door costs of transporting our international trade relates to shore-based shipping operations.

“The current productivity level of ports, and associated transport and handling facilities, must be improved to assist the maintenance and growth of Australia’s overseas markets, to reduce domestic costs and prices and to assist in the revitalisation of our manufacturing industries.

“Waterfront productivity improvements are essential in the provision of more land-based jobs.

“Already the Task Force has succeeded in encouraging the shipping industry to focus more attention on its own problems, and the possible solutions.”

The report outlines a number of practical initiatives which the Task Force has fostered. Some of these are already being tried, for example, in tackling the problem of truck queues at container terminals, where savings of up to $20 million a year may be possible.

Electronic communication systems are being investigated by the Task Force to improve access to information on cargo movements by importers, shippers, and their agents.

Terms of reference for the Task Force originally called for a final report by December 1985, but the Minister agreed to an extension of time until June.

Mr. Morris said the release of the Task Force’s final report would come at a time when a broad range of shipping issues will be under closer scrutiny.

“Practical solutions to the industry’s problems will only be found if all groups involved take a responsible, constructive attitude, and continue to give support and assistance to the Task Force.”

“The recommendations of the Task Force’s final report will be carefully considered in the context of how waterfront productivity can best be further improved.”
Maritime Mission report released: Transport Australia

The technological development of the Australian shipping industry compares well with overseas countries, according to the Australian Maritime Industry Mission after its recent international study tour.

Announcing the release of the report today, the Federal Minister for Transport, Mr. Peter Morris, said it was in the area of shipboard organisation and work practices that Australia had failed to keep pace.

The Mission found that if Australia wished to maintain an efficient shipping industry and to further expand into international trade, it would need to adopt the policies of other developed nations. Such policies successfully combine the benefits of high technology, with the employment of better trained and skilled crews.

"It is essential for the Australian shipping industry to be competitive and we can learn a lot from the seven countries visited by the mission," Mr. Morris said.

It visited Japan, the USA, Norway, Denmark, West Germany, the Netherlands and the UK and concluded that to operate a modern ship effectively the crew must operate as an integrated team.

To ensure this, crews must be better trained and the social and operational barriers on board should be reduced.

"What stands out in the report is that unless immediate steps are taken to improve efficiency and productivity in the industry, its long-term viability and participation in international trade will be seriously jeopardised."

The Minister agreed with the Mission’s recommendation that a forum be established, of Government, ship owners and unions to develop the mission’s findings.

He said he had asked the mission leader, Mr. Paul Eccles, from the Federal Department of Transport, to call the group together to begin developing changes to training and management systems.

The conclusions and recommendation are as follows:

Recommendation

It is in the interest of the industry that on-going discussions should continue and so an appropriate forum should be set up as soon as possible, comprising government, owners and unions, to consider and develop all aspects of this Mission’s report which are relevant to Australian circumstances.

Experience has shown that, for change to be successful, consensus between all parties is a pre-requisite.

Conclusions and Findings

1. The Australian Shipping Industry has been involved in a process of continuous change and the use of innovative technology.

2. Over the years, Australian shipping has shown a willingness to adopt and invest in new technology with many of the most recent developments incorporated in the industry’s modern vessels.

3. If Australia wishes, however, to maintain an efficient shipping industry and to further expand into international trade, it will need to adopt the policies of other developed nations which have successfully used the benefits of high technology, together with the employment of better-educated and trained crews.

4. With smaller crews, it was found that new training and retraining programmes for seafarers had become necessary. There are elements of commonality of marine training that can be developed at an early stage, giving all seafarers the opportunity to reach a career level that fulfils the ambition of the individual and provides the ability to progress to the most senior levels on board ship.

5. Indications are that such a course of action could facilitate the removal of social and operational barriers on board ship. With these crews, a balanced workload and integrated team approach is necessary for effective operations and experience has shown that existing seafarers can be retrained to man the ships of the future.

6. A number of countries visited have taken steps to develop education and training systems specific to ratings in order to operate integrated crews or ship mechanic systems to permit progress to officer rank. In some countries, semi-integration of officers has been achieved.

7. In the countries visited, the maintenance of an efficient indigenous industry, able to take an active part in the nation’s commercial life, is seen as a most important principle of the national economy as well as a necessary adjunct to its defence system.

8. In all cases the shipping industries were facing severe problems in maintaining market share, and their governments provide assistance in a number of forms, both direct and indirect.

9. Governments have recognised the need for co-operation with shipowners and unions in bringing about change, and the employment of a consultative process to work towards the improvement of the industry.

10. In all countries visited, it was recognised that catering is an important part of a ship’s operation and the well-being of its crews. Overseas experience confirms that catering in modern vessels needs to be commensurate with the type of ship and standard of living of the country concerned. Catering standards and training should provide for these principles.

11. Results of studies into the incidence of stress in vessels operating with reduced manning were either not available, were inconclusive or were not yet complete.

12. In moving to achieve lower manning it would be necessary to take into account and monitor any effect on crew health.

13. It is now appropriate to take up the Crawford recommendation that taxation of shipping should be reviewed in the event of changes to the tax system.

Coastal guide launching points to book success: Port of Adelaide

"The Waters of South Australia," a unique coastal guide produced by the Department of Marine and Harbors, has become an instant hit since it was launched last November.

After only a week on the book-shelves, nearly 1,000 copies had been sold and demand was growing from around South Australia.

The boating fraternity had hailed the book as spectacular and fishing and boating critics agreed. "The News" boating and fishing writer, Mr. Jack Ryan, said the unique guide would become a "trendsetter for other States" and described it as a "much sought-after bible for boaters."

Written by Capt. Roy Pearson, Director, Ports and Harbors and

Asia Oceania
Marine Operations in SA, “Waters of South Australia” provides the boating public with precise geographical and pictorial details of the State’s coastline.

It has been brought out as a special DMH sesqui-centenary project to coincide with the State’s 150th celebrations.

The major features of the publication are:
- 104 pages specially plastic-coated to endure sea-going weather conditions.
- 46 sectional navigational charts which combine to cover the entire coastline and major islands.
- Large format, full color aerial pictures to complement chart information.
- Regional sailing directions and listing of appropriate shore facilities.
- Additional historical and geographical information highlighting points of interest along the coast.

Marine Minister Mr. Abbott said the navigational charts would also be extremely useful to the growing number of sailors from other States embarking on around-Australia cruises, and who wanted accurate reference material for their trip.

“I can see it being invaluable to the number of crews who will sail their yachts from the Eastern States through SA waters on their way to the America’s Cup defence in Perth,” he added.

Mr. Abbott said South Australia was rich in boating and history traditions, which is why the publication was of extra significance for SA’s 150th celebrations.

“The ideal behind the publication has been to produce an authoritative document which captures the spirit of the State’s coastline while presenting an accurate historical record of the past 150 years,” he said. (SPJ)

Development to change face of the Port of Adelaide

Projects worth millions of dollars are set to change the face of Port Adelaide.

More than $12M worth of development has commenced in two projects alone — the building of a second container crane and a giant new Elders wool store at Gillman.

Site preparation works on the wool store have been completed and construction will soon commence on the 30,000 square metre store on the Grand Trunkway. The store is due for completion in time to handle next season’s clip.

The new Adelaide and Wallaroo premises are nearly complete at Port Adelaide, providing an additional 1,500 square metres of space. The two-storey building, with a low-line steel roof, will be linked to the existing administrative office and laboratory complex built four years ago.

Advantages of the new move include a greater opportunity for direct contact with primary producers, many of whom visited the plant regularly but did not go to headquarters in Ocean Steamers Road.

The Australian Wool Testing Authority is building new premises in Ocean Steamers Road.

The new depot will include office and storage accommodation that will facilitate the testing of locally stored wool fibres, although for more complex testing samples will continue to be sent interstate for detailed laboratory analysis.

The premises are another important step towards establishing Adelaide as a major wool centre.

A new $32M commercial development will also have a major impact on Port Adelaide.

The project includes the building of SA’s new Super K-Mart as well as the new Commonwealth Employment Service Office and the Customs head office.

In line with the new look, a $2M landscaping project is planned for both Port Road and Old Port Road. The project will complement another beautification scheme which is being undertaken by the Department of Marine and Harbors along Ocean Steamers Road at Port Adelaide.

A refreshing new identity is emerging and Port Adelaide is set to become one of the showpieces of South Australia. (SPJ)

Task Force reports increased productivity: Port of Darwin

A cost performance improvement of 30% on a recent sulphur shipment for Ranger Uranium Mines is one of the results of the Darwin Port Efficiency Task Force which was formed earlier this year.

This saving is a tangible and direct result of the performance reviews that are carried out on vessels in port. Instituted as part of the Task Force’s move toward greater efficiency and productivity, performance reviews help pinpoint areas that can be improved in cargo handling during the next voyage of that vessel or a similar one.

The Task Force is made up of two tiers. The First Tier Task Force, which meets on an “as needed” basis, is chaired by the Minister for Ports and Fisheries. It consists of federal representatives of port and maritime unions, stevedores and the Northern Territory Government. The Second Tier Task Force meets on a monthly basis. Its four members are Mike Bartlett, Director of Darwin Port Authority, Mick O’Day, General Manager of Territory Stevedoring Services, Kevin Manski, Secretary of Waterside Workers’ Federation and Brid Lyons of the Department of Industry and Small Business. Representatives of port users, shippers, shipping companies and other port unions participate in the meetings and contribute to the effectiveness of the Task Force. (Darwin)

Cargo throughput for 1985 exceeds 20 million tonnes: Port of Gladstone

The Chairman of the Gladstone Harbour Board, Mr. A.W. O’Rourke, said recently that a massive 22.8 million tonnes of cargo had passed over the Port’s wharves during 1985. This was just 1.9% less than in 1984.

Even though the depressed state of the aluminium industry had caused a major reduction in Queensland and Alumina Limited’s cargo, nearly all other products handled showed significant increases.

Mr. O’Rourke, said the year’s results had been extremely satisfying. Exports totalled 16.6 million tonnes and imports 6.2 million.

Coal exports through the Port continued their upward trend, with 13.2 million tonnes being handled during the year, which represents a 12.9% increase over 1984. Of this, just over 10 million tonnes were handled at the Clinton coal facility.
Grain and oil seed exports increased by 8.7% to 863,000 tonnes. Other important export tonnages were cement clinker at 480,000 tonnes, aluminium at 176,000 tonnes, petroleum products brought in over the Auckland point wharf amounted to 361,000 tonnes. Bauxite imports were 5.2 million tonnes as compared with 6.7 million tonnes last year, and alumina exports were 1.7 million tonnes as compared with 2 million tonnes in 1984.

Mr. O'Rourke said that Gladstone Harbour Board looked forward to another big year for the Port in 1986. Construction of a 50 metre extension to the Clinton coal wharf would commence shortly. Work was nearing completion on the new 1,200 tonne-per-hour grain shiploader, and the Board hoped to see the start of a marina development during 1986. Investigations are currently being carried out into further deepening of the harbor to allow vessels of 220,000 tonnes deadweight to use the port. It is hoped a decision on this project would be made during the year.

$100 million development plan for Walsh Bay: Maritime Services Board of NSW

The Minister for Public Works and Ports, Mr. Laurie Brereton, has announced a $100 million redevelopment of the wharves and waterfront areas at Walsh Bay, just west of the Sydney Harbour Bridge near the historic Rocks area.

"This project will revitalise one of the most historic but neglected areas of Sydney," Mr. Brereton said. "It will also preserve and improve Sydney's waterfront heritage."

"Along with the redevelopment of Circular Quay and Darling Harbour, this project will form an important link in the transformation of Sydney's neglected but magnificent foreshores."

Mr. Brereton said the area involved at Walsh Bay, which was owned by the Maritime Services Board, would be redeveloped entirely by private developers. Taxpayers' money would not be used.

But he said the redevelopment would have to be approved by the State Government and Sydney City Council and must adhere to overall planning guidelines.

Mr. Brereton said he was releasing the proposal to encourage comments from local residents, other sectors of the community and expressions of interest from private developers who may wish to become involved in the scheme.

All views would be taken into account in determining the best means of bringing the proposal to reality as quickly as possible.

Mr. Brereton said the Maritime Services Board would be offering the structures and buildings for long term lease by tender. (MSB News)

Container port to expand: Hong Kong

The Government and Hong Kong International Terminals Limited agreed on 13 December last to develop a three-berth terminal, estimated to cost US$256 million at Kwai Chung container port. The first of the new berths is scheduled for operation in late 1989.

According to Li Ka-shing, chairman of Hutchison Whampoa, of which HIT is a subsidiary, the total investment cost of Kwai Chung's sixth terminal would be around US$256.4 million including reclamation, surfacing, buildings and container handling equipment.

Secretary for Economic Services Piers Jacobs said the signing of the contract was another visible and concrete sign of the commitment of the Government and the business community to invest in HK's long-term future.

No.1 Berth of Aomi Container Terminal starts service: Tokyo Port Terminal Corporation

The No.1 Berth of the Aomi Container Terminal of the Tokyo Port Terminal Corporation (President, Shinichi Nomura) and Aomi Van Pool, built behind the berth by the Bureau of Port and Harbor of the Tokyo Metropolitan Government on the Part 1 Reclaimed Landlot No. 13 of Tokyo Bay, started service on November 1, 1985. On the same day, Aomi Ryutsu Center Co., Ltd., which represents the civil sector in building a large-capacity warehousing complex jointly with the Tokyo Metropolitan Government, was established through its inaugural meeting, attended by 33 terminal operators. The warehousing complex will be located directly behind the Aomi Van Pool.

The Aomi Container Terminal is the third of its kind on the Bay of Tokyo (the other two being located at Ohi and Shinagawa), but is the first to be developed jointly by the Bureau of Port and Harbor of the Tokyo Metropolitan Government, Tokyo Port Terminal Corporation and the civil sector. It is attracting growing attention in relevant circles as the forerunner of the 2nd generation of container terminals to follow dedicated terminal systems, which are said to have come to a turning point due to the spread of containerization in cargo transportation.

The No.1 Berth of the Aomi Container Terminal features a quay length of 300 m, alongside depth of 12 m, 2 sets of gantry cranes, a marshalling yard of 33,000 m^2 (container storage capacity of about 2,300 TEU), etc. Its overall area, including a 40 m wide apron, is 45,131 m^2.

The leases are Mitsui O.S.K. Lines and N.Y.K. Line, who will entrust administration and management of the No.1 Berth to Aomi Terminal Co., Ltd. (President, Shunji Tsutsui), jointly established by six Japanese shipping companies, including Mitsui O.S.K. and N.Y.K. and 14 terminal
operators. As such, the No. 1 Berth is going to operate on the so-called “management company” system.

In addition, starting service simultaneously with it are the public facilities built by the Tokyo Metropolitan Government on the site behind the No. 1 Berth, including the Van Pool of 37,250 m², administration office building, truck scale system, inspection gate, etc.

Put together, these facilities make a container terminal of an overall area of about 82,000 m², measuring 300 m in total quay length and 350 m in width.

Furthermore, the Tokyo Metropolitan Government has decided on building a distribution center jointly with a private operator. As such, the No.1 Berth is going to operate on the so-called “management company” system.

The site will include part of the remaining area, and two buildings will be built. The first floor of these buildings will be a public shed, while leasee cargo sorting and storage facilities will take up the second and third floors. As a result of public invitation, Aomi Ryutsu Center Co., Ltd. (President, Shinichi Nomura) has been selected to represent the civil sector. The three floors of each building will have a space of 11,500 m² each and the overall floor space will be about 38,300 m². Construction is scheduled to be completed in 1987.

The Bureau of Port and Harbor of the Tokyo Metropolitan Government and Tokyo Port Terminal Corporation have already decided on construction of the No. 2 Berth directly adjacent to the No. 1 Berth in the same way as the No. 1 Berth. Construction plans are under study, aiming at the overall quay length of 350 m and alongside depth of 14 m to serve larger container ships. When the No. 2 Berth is completed, Aomi Container Terminal will be typical of the emerging generation of container terminals, having an overall quay length of 650 m, 4 to 5 gantry cranes, and a distribution center of 76,600 m² of floor space in total on a 227,500 m² site.

Computerization and mechanization plan for Korean ports

The Korea Maritime and Port Administration plans to increase the efficiency and the cargo handling capacity of Korean ports by introducing computers into port operations and mechanizing cargo loading and unloading works at major ports.

KMPA said that, to increase port operation efficiency, a 180 million won consultancy project will be effected this year for the preparation of a master plan for computerization, with the target year for the full-fledged use of computers being 1988.

When computerized, all information and data on ship, cargo, and port facilities from a ship’s arrival to its departure, will be fed into and processed by computers. They will also handle all berth requests and assignments, tugboat and pilot appointments, and port charge calculations.

At the same time, to increase the cargo handling capacity of ports, KMPA will start installing at Inchon coal terminal this year two coal unloaders capable of processing 1,000 tons/hour. The completion is scheduled for 1987, and a total of 17 units of cargo handling equipment will be installed at the ports of Pusan, Ulsan, Kwangyang and Kamchon by 1990.

KMPA said that, along with the mechanization program, a training program will be conducted to train excess harbor laborers in other skills to enable them to take up job opportunities.

For cargoes passing through Korean ports, the current figure of 50 percent undergoing mechanized handling will be increased to 60 percent by 1990.

(Korean Maritime News)

Pusan harbor development plan made public

The plan for Pusan harbor’s long-term development was recently finalized and made public.

The plan which will require a total of 281.8 billion won includes the third phase development project for Pusan harbor, the expansion project of the international passenger ship terminal, the construction of a dangerous material handling terminal, the development project for Kamchon port, and the moving of privately-owned facilities on the harbor premise.

The projects are scheduled to start in January, 1986 with completion set for 1990.

The plan which was finally approved by the Korea Maritime and Port Administration, was made on the assumption that cargo traffic through the harbor will increase an annual average of 5 percent for the next five years.

(Korean Maritime News)

Private operator takes over supply of barges: Port of Kelang

A private company, Marine Barge Services Sdn. Bhd., has been licensed by the Kelang Port Authority to supply barges for the transport of containers to and from coastal vessels as well as for the towing of containerised dangerous goods to and from the explosives anchorages.

In order to ensure effective utilization of the flat-top barges, Marine Barge Services is allowed to raise demurrage charges if the barges are delayed for more than two hours.

Marine Barge Services currently has two 100’ x 40’ flat-top barge each with a carrying capacity of 12 boxes.

Under the agreement with the barge operator, the barges are deemed to be extensions to a ship rather than the wharf and the operator has accordingly taken insurance coverage against any loss or damage.

(WARTA LPK)

Qatari ports’ operations during fourth quarter 1985

The total number of vessels called at Doha & Ummsaid Ports for discharging and loading during the fourth quarter of 1985 was 116, against 130 vessels called during the same period of 1984.

The import through the two Qatari Ports shows a decline of 23% from 386,802 tons to 297,418 tons.

Container traffic by sea shows a fair increase during the period under review – 1,078 TEUS imported during fourth quarter 1985, whereas 826 TEUS during the same period of 1984 i.e.; 31% more. When comparing the containerised cargo carried by conventional vessels & feeders, the increase is observed in the feeder service – 901 TEUS for fourth quarter 1985 as against 517 TEUS during the same period of 1984 i.e.; 74% more. On the other hand container carried by conventional vessels decreased from 309 TEUS to 177 TEUS i.e.; 43%.

(Qatar National Navigation & Transport Co. Ltd.)

PORTS and HARBOURS – MARCH 1986 45
Training Courses 1986/87: Port of Singapore Authority

**Training in PSA**

Training activities in the PSA were organised as early as 1959. The emphasis then was on operations training to meet the port's immediate operational needs. With increasing sophistication in port management and operations, the training function was enlarged to include management, supervisory, clerical and technical training.

The PSA's Training Department comprises the Operations, Technical and Management Training Sections. The Department is staffed with competent training personnel and training activities are supported by excellent library and audio-visual facilities.

In 1975, the PSA decided to open some of its courses on port management and operations to participants from the ports of other developing countries in the region. These courses continue to attract participation from some 250 officers annually from the ports in Asean, West Asia, India, Sri Lanka, Africa and the Pacific Islands. The courses serve as a forum for the mutual exchange of ideas and experiences on port management and operations.

**Courses for overseas personnel**

The PSA will be offering the following courses for 1986/1987:

### MANAGEMENT AND ADMINISTRATION COURSES

**Port Management and Operations**

- Role and significance of ports in maritime commerce
- Shipping trends & impact on ports
- Legal liabilities of port operations
- Navigation & traffic control
- Management of container operations
- Management of conventional operations
- Management of warehousing operations
- Labour management
- Port policing & security
- Fire prevention & pollution control
- Port tariff
- Principles & techniques in port planning & development
- Computer applications in port management & operations
- Evaluation of container handling systems
- Marketing of services and customer relations
- Port management game

**Port Policing and Security**

- Port regulations pertaining to security
- Cargo documentation & security
- Law pertaining to theft, pilferage and fraudulent possession
- Security of containerised cargo
- Investigation of cargo losses/claims
- Seaward policing
- Cooperation with customs and immigration authorities

### PORT OPERATIONS COURSES

**Management and Operations of Tanjong Pagar Container Terminal (TPCT)**

- Introduction to TPCT
- Container storage planning
- Container ship operations
- Quay transfer operations
- Yard storage management/operations
- Cargo freight station management/operations
- Container receipt/delivery procedures
- Resource allocation
- Performance indicators

### Cargo Operations at Conventional Wharves

- Classification and characteristics of conventional vessels
- Capabilities and limitations of ship lifting systems
- Efficient use of cargo handling gears and aids
- Cargo handling methods for different types of break bulk cargo
- Resource allocation systems and procedures
- Documentation procedures for break bulk cargo handling operations
- Cargo security measures in Port
- Transit shed and storage operations
- Planning & organising for efficient ship operations (case studies)

### PORT ENGINEERING COURSES

**Management and Maintenance of Port Equipment**

- Equipment procurement and performance evaluation
- Maintenance appraisal and information system
- Workshop maintenance systems and procedures
- Maintenance systems for container handling equipment
- Maintenance of electrical distribution system & installations
- Management of workshop safety
- Training of maintenance personnel
- Incentive schemes for maintenance personnel
- Computerisation of maintenance data

**Civil Engineering and Project Management**

- Port planning & design
- Computer applications in port planning
- Port survey
- Tendering procedures & contract administration
- Engineering research & feasibility studies
- Soil investigation & instrumentation
- Hydraulic model/studies
- Port maintenance
- Maintenance dredging
- Project management
- Land reclamation

### SAFETY COURSES

**Ship Inspection**

- Characteristics and properties of different grades of
petroleum and petroleum products
• Flammability and toxic hazards of petroleum and petroleum products
• Inspection of petroleum tankers
• Inspection of bunkers, double-bottom tanks and engine room of cargo vessels
• Inspection of vessel for oxygen, carbon dioxide and toxic gases
• Legislations governing gas-free inspection of vessels
• Combustible gas indicators, principles of calibration and detection of common faults
• Laboratory work

Shipboard Fire-Fighting & Prevention
Coverage
• Fixed installations
• Fire fighting techniques
• Fire fighting techniques (practical exercise)
• Fire prevention
• Operational use of breathing apparatus
• Basic rescue techniques
• Fire fighting rescue exercises
• Tug/Fireboat equipment
• Fireboat operations

Oil Spill Control
Coverage
• Legislations and enforcement
• Characteristics of spilled oil
• Methods of containment
• Methods of treatment
• Methods of removal
• Dispersal equipment & fixed systems
• Shoreline protection and restoration
• Contingency planning
• Practical exercises

Oil, Chemical and Liquefied Gas Tanker Safety Familiarization
Coverage
• Characteristics of oil, chemical and liquefied gas carried in bulk
• Safety principles in tanker design and operation
• Cargo operations
• Safety equipment and protection of personnel
• Pollution protection
• Visit to a refinery/tanker

Advanced Petroleum Tanker Safety
Coverage
• Principles and theory of tanker operation
• Hazards and dangers on board petroleum tankers and other oil carriers
• Safety equipment on board oil tankers and oil carriers
• Tank cleaning and gas freeing operations
• Maintenance and repair of piping, pumping and other control systems
• Shipboard emergency procedures and operations

General Information
Application Procedures
All applications should be:
• Made on application forms enclosed in the brochure. Application for each course should be on separate forms.
• Supported and sponsored by the relevant Port, Government or International Agency.
• Accompanied by a bank cheque or draft for the total amount of course fees in Singapore dollars.
• Submitted to reach the PSA not less than two months before the commencement date of each course. Participants are advised to take up relevant travel and accident insurance policies to cover them for the duration of training in Singapore.

Course Fees
Fees quoted are only for 1986. Fees for 1987 courses are subject to revision. No official receipt will be issued for the payment of course fees.

Refund of Fees
If notice of withdrawal is given in writing within two weeks preceding commencement of the course, a 80% refund of the course fee will be made. If notice of withdrawal is given in writing after commencement of the course, no refund will be made.

Cancellation
The Authority reserves the right to cancel or postpone any course if necessary.

Sponsorship
Participants are normally sponsored by their ports/organisations for PSA courses. However, some participants have been sponsored to attend PSA courses under the ASEAN and Colombo Plan Training Award Programme, Commonwealth Fund for Technical Cooperation, International Association of Ports and Harbors, International Labour Organisation, United Nations Development Programme and International Maritime Organisation. More information can be obtained from these organisations.

Medium of Instruction
The medium of instruction is English. As such, participants are expected to have a good working knowledge of English.

Certificate of Attendance
Certificates of Attendance will be issued to participants who maintain full attendance at training sessions.

Visas and Travel Arrangement
Participants will be responsible for their own visas and travel arrangements to and from Singapore.

On arrival at Singapore Changi Airport, participants should present their passports or internationally recognised travel documents to the immigration officials and obtain the required approval to stay in Singapore for the duration of the training.

Participants are required to make their own way to their hotels.

Transport will be provided to the PSA Training Department on the first day of the course from designated hotels/hostels.
### PSA TRAINING COURSES 1986/87

<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>FEES SING $</th>
<th>Duration in weeks</th>
<th>1986</th>
<th>1987</th>
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<tbody>
<tr>
<td>Port Management and Operations</td>
<td>1,850</td>
<td>2</td>
<td>MAR 30—11</td>
<td>APR 8—19</td>
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<tr>
<td>Port Policing and Security</td>
<td>950</td>
<td>1</td>
<td>OCT 13—17</td>
<td>Nov 12—16</td>
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<tr>
<td>Management &amp; Operations of Tanjong Pagar Container Terminal (TPCT)</td>
<td>1,850</td>
<td>2</td>
<td>MAY 5—16</td>
<td>AUG 4—15</td>
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<tr>
<td>Cargo Operations at Conventional Wharves</td>
<td>1,500</td>
<td>2</td>
<td>JUN 15—26</td>
<td>OCT 14—25</td>
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<tr>
<td>Management and Maintenance of Port Equipment</td>
<td>800</td>
<td>1</td>
<td>SEP 14—18</td>
<td>OCT 13—17</td>
</tr>
<tr>
<td>Civil Engineering and Project Management</td>
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<td>2</td>
<td>Mar 3—14</td>
<td>Nov 2—13</td>
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<tr>
<td>Ship Inspection</td>
<td>700</td>
<td>1</td>
<td>MAR 6—10</td>
<td>JUL 20—24</td>
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<tr>
<td>Shipboard Fire-Fighting and Prevention</td>
<td>950</td>
<td>1</td>
<td>JUL 13—17</td>
<td>Sep 12—16</td>
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<tr>
<td>Oil Spill Control</td>
<td>950</td>
<td>1</td>
<td>AUG 20—24</td>
<td>Oct 19—23</td>
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<tr>
<td>Oil, Chemical and Liquefied Gas tanker Safety</td>
<td>1,300</td>
<td>2</td>
<td>OCT 19—30</td>
<td>Nov 19—30</td>
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<tr>
<td>Advanced Petroleum Gas Tanker Familiarization</td>
<td>700</td>
<td>1</td>
<td>Nov 26</td>
<td></td>
</tr>
</tbody>
</table>

Note: Dates and fees for 1987 training courses may be subject to revision.

### Accommodation

Singapore has numerous hotels to meet the accommodation requirements of participants. The Authority can assist if required, in booking certain hotels/hostels at concessionary rates for participants.

### Living Allowance

Sponsoring organisations should ensure that their personnel have adequate funds before leaving for Singapore to cover all accommodation, meals, transport, medical and other expenses.

### Climate & Clothing

Singapore is generally sunny with an average temperature of 28°C (82°F) during the day and 25°C (77°F) during the night. Lightweight casual clothing is recommended.

### Further Enquiries

Write or telex to:
Training Manager
Training Department
Port of Singapore Authority
7 Keppel Road
#02-28, Tanjong Pagar Complex
Singapore 0208
Republic of Singapore
Telex: RS 21507
Cable: “TANJONG” Singapore
Telephone: 2217711 Ext. 827
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