

PORTS *and* HARBORS

November, 1981 Vol. 26, No. 11



Charleston

South Carolina
U.S.A.

The Publisher: The International Association of Ports and Harbors

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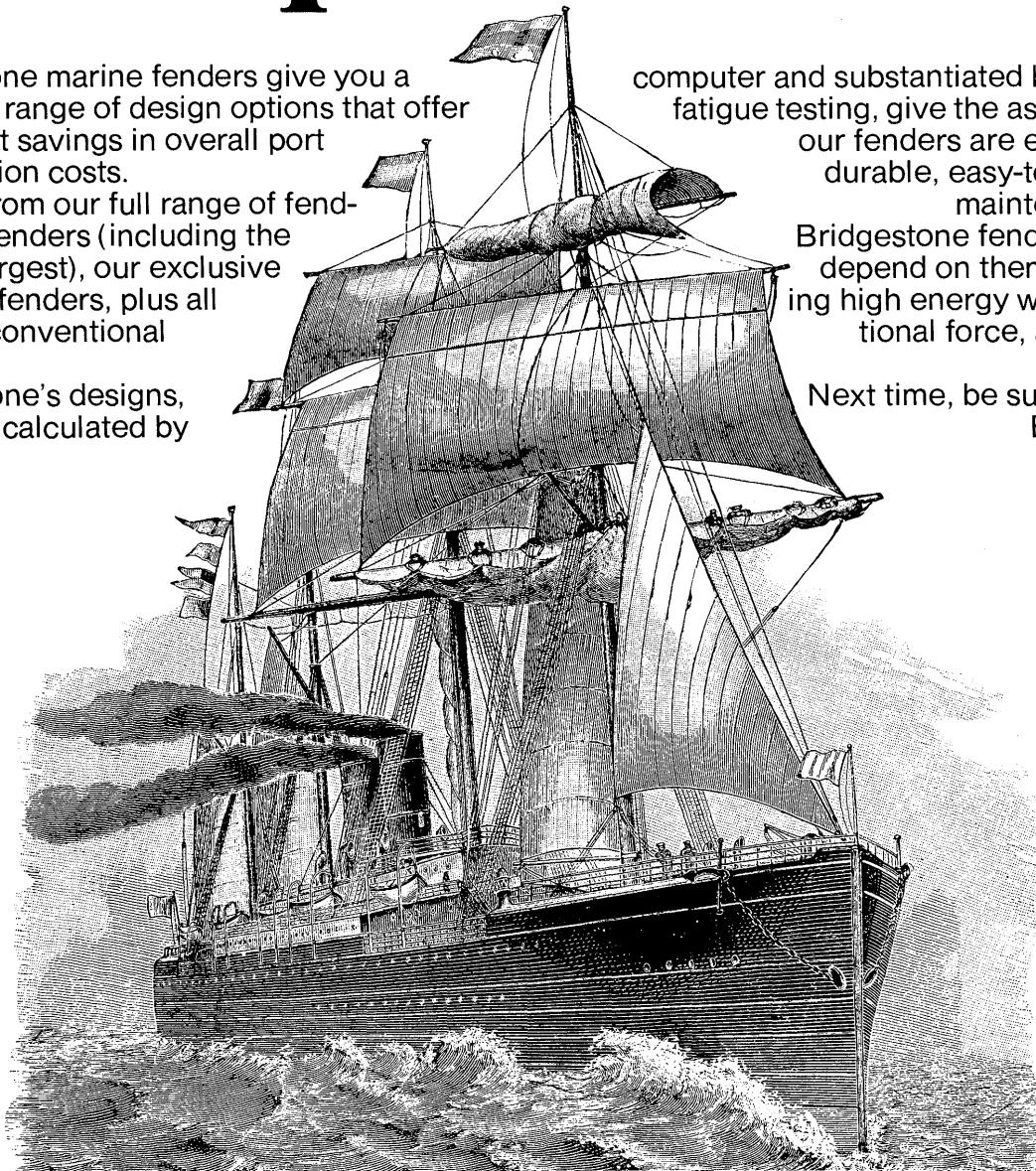
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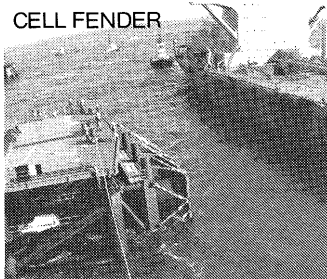
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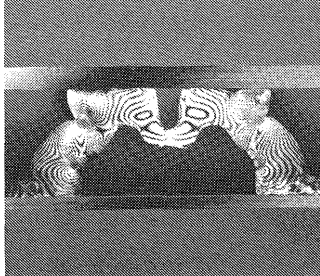
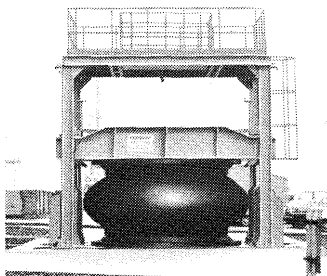
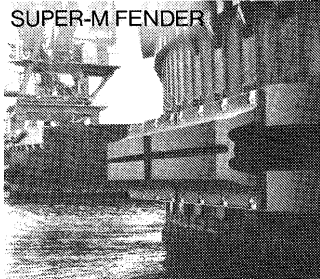
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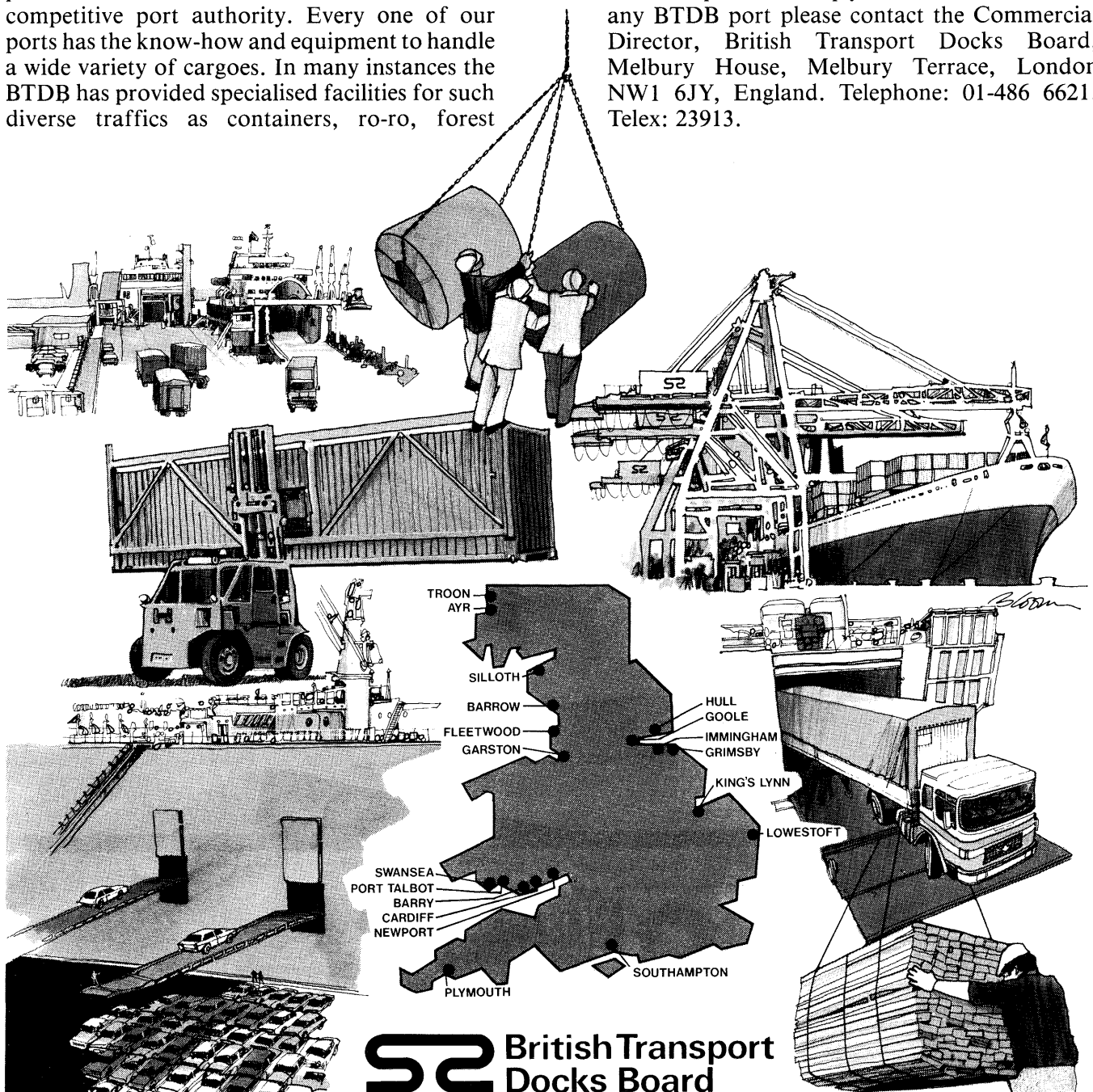
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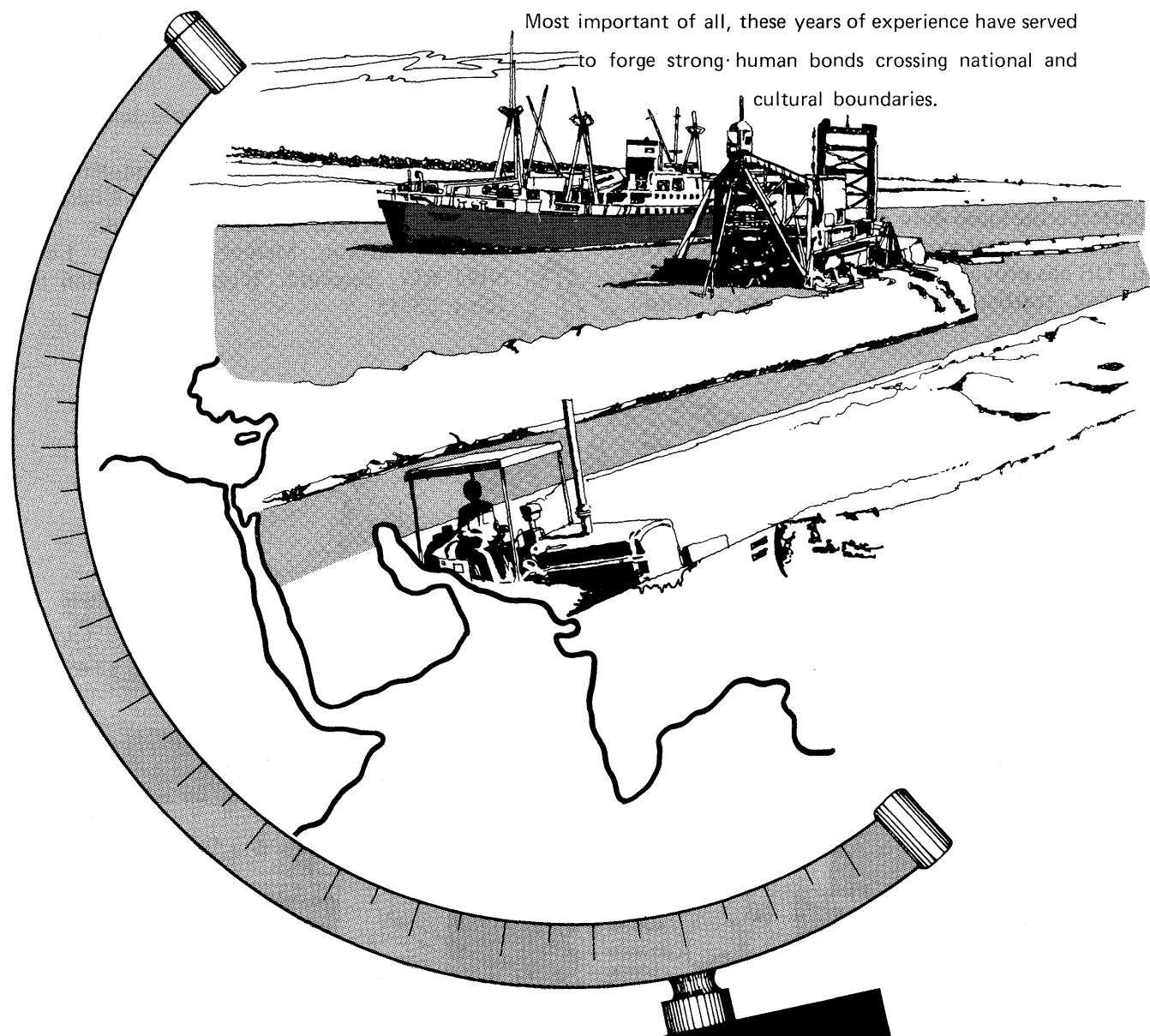


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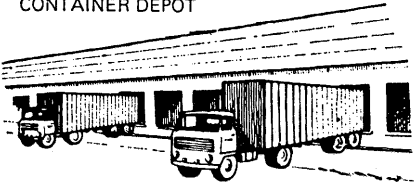


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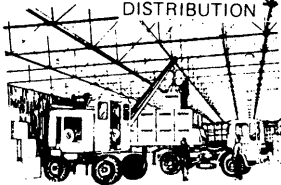
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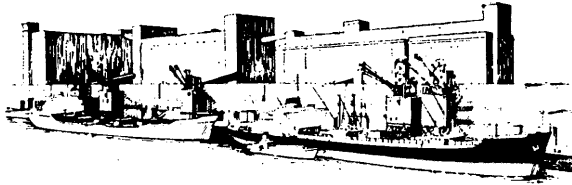


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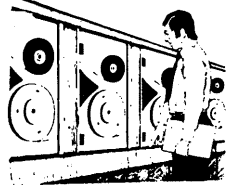
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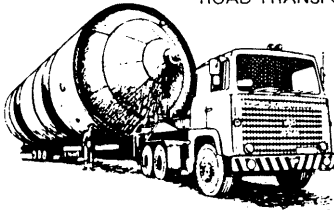
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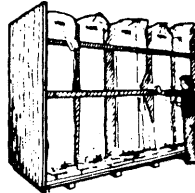
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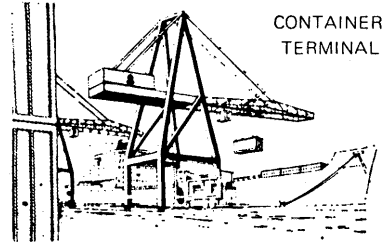
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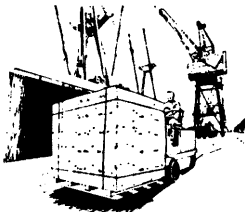
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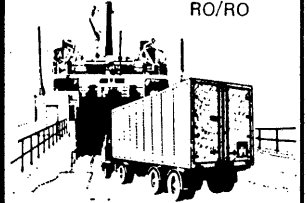
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PORTS *and* HARBORS

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The International Association of Ports and Harbors

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November, 1981 Vol. 26, No. 11

CONTENTS

	Page
IAPH announcements and news:	7~11
Membership campaign is now well advanced—IAPH observes its 26th birthday—IAPH Resolution on IYDP to UN Vienna IYDP Symposium—Contribution to the IAPH Dredging Task Force Fund solicited—President Mayne to attend ICC (Manila) and ESCAP (Bangkok) Meetings—Membership Notes—Invitation to the IAPH Award Scheme 1982—IAPH Document submitted to the 6th Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 5-9 October, 1981, IMCO, London—1982 edition of IAPH Membership Directory completed—Publications—Visitors	
Open forum, Port releases:	
Mr. Spoke, General Manager, Port of Vancouver, amplifies the importance of the Roberts Bank Expansion.	12
Coal Ports in Japan (By Tamotsu Okabe, Director-General, The Japan Port and Harbor Association)	14
Streamlining the Export Process (By John Raven, Vice Chairman and Chief Executive, SITPRO U.K. Board).	18
The Hamilton Harbour Commissioners	23
Fraser River Harbour	24
Activity in the Port of Antwerp in 1980	25
Port of Gothenburg	26
Lyttelton Harbour Board	27
Port of Savannah: Georgia Ports Authority.	29
International maritime information:	
World port news:	
UNCTAD's Trade Facilitation Information.	31
COMMISSION REGULATION (EEC) No. 553/81 of 12 February 1981 on certificates of origin and applications for such certificates.	31
France is host country for UNCTAD's first 'TRAINMAR' seminar for officers in ports and shipping	32
Status of the London Dumping Convention as at 1 September 1981	32
Leaders of the world shipping industry calls for an end to political confrontations on maritime affairs: ICC.	33
A different world (by C. Isabel, Port of Le Havre Authority)	48

The Cover: The Port of Charleston's Columbus Street Terminal was busily engaged last summer. LASH barges are being loaded. A container crane and two gantry cranes are in action. The wide apron serves as open storage for 10 locomotives (in white shrouds) for export.

Price US \$3.50 per copy
US \$35.00 per year

Destination Australia?



A new, container ro-ro terminal is now operational on the Fisherman Islands, at the mouth of the Brisbane River, and catering for vessels up to 60,000 d.w.t. at any stage of the tide. The new port gives ship owners a quick turn around plus extensive road and rail connections to ensure the speedy and trouble-free flow of cargo to and from any point in Australia.

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Brisbane means business

IAPH announcements and news

Membership campaign is now well advanced

President Mayne's campaign letter dated September 7, has been circulated to 189 non-member ports with the revised version of the IAPH brochure and together with application forms (for regular and temporary membership, the latter's continuance having been resolved at the Nagoya Conference).

Since the announcement of the creation of the "temporary member" category following the 1980 meeting of the Executive Committee, 13 new members have applied for such membership of IAPH and several of these members have now joined as regular members when their one-year period as a temporary member expired.

Mr. J.P. Davidson, Chairman of the Membership Committee, drafted this year's campaign letter on behalf of President Mayne and included a letter of his own asking Association members' continued cooperation in inviting as many new members as possible from each region to join IAPH.

President Mayne's letter follows.

7th September, 1981

In July of last year my predecessor, Paul Bastard, wrote to tell you about the new scheme for "temporary membership status" introduced by the Association with a view to encouraging new members to join IAPH. I am truly sorry that you did not feel able at that time to avail yourself of the advantages of the scheme and join us as a temporary member and also at the 12th Conference at Nagoya.

The Nagoya Conference, by unanimous acclaim, was an outstanding success and I am sure you would have found attendance both enjoyable and rewarding. We were pleased to welcome to the Conference 9 new members who joined us through taking advantage of "temporary membership status" and having regard to the success of the scheme the Executive Committee at Nagoya decided that "temporary membership status" should be continued meantime. You can, therefore, still become a temporary member of the Association for the reduced membership due to US \$ 350 for one year and, of course, during the year you will receive all the publications of the Association, similar to a regular member.

With its ever-increasing membership the influence of IAPH as a worldwide Association of Ports and Harbors is becoming greater each year and I do hope you will feel that the time is now appropriate for your port to consider once again the many advantages of membership of IAPH which is, indeed, the only international body which brings together the ports of the world.

I enclose a copy of our latest brochure "Outline of IAPH" and look forward to hearing from you.

Your sincerely,
A.S. MAYNE

IAPH observes its 26th birthday

November the 7th being the date when IAPH was formally established 26 years ago in Los Angeles (Hollywood-Roosevelt Hotel) USA, Ports and Harbors wishes to call the readers attention to the tremendous progress it has made in that space of time.

At the first conference the IAPH Constitution and By-Laws was adopted and the following officers were elected.

President—Mr. Bennett J. Roberts, Chairman, National Harbours Board, Canada

1st Vice-President—Mr. John-Iwar Dahlin Port Director, Port of Helsingborg, Sweden

2nd Vice-President—Mr. C.W. Chen, Advisor, Ministry of Communications, Taiwan

Chief of the Central Secretariat—Mr. Gaku Matsumoto, President of Japan Port and Harbor Association

The Board of Directors was established with members elected from 14 countries (75 countries in 1981), as follows;

Brazil, Canada, China (Taiwan), Germany, Japan, Korea, Liberia, Mexico, Peru, Sweden, Thailand, USA, Venezuela, Viet Nam.

Members of IAPH as of November, 1956, one year later, totalled: Regular Members 44, Supporting Members (Associate Members) 30 covering 15 countries (the numbers as of September 30, 1981, 26 years later, are Regular 219, Associate 152 in 75 countries, almost a 5-fold increase in 26 years.)

IAPH Resolution on IYDP to UN Vienna IYDP Symposium

A World Symposium of Experts on Technical Cooperation among Developing Countries and Technical Assistance in the Field of Disability Prevention and Rehabilitation, according to the Chief of Non-Governmental Organizations Units (NGO/DIESA), United Nations, will be held in Vienna from 12 to 23 October 1981, to be attended by some fifty experts designated by the UN Secretary-General to discuss the priority needs of developing countries, the strategies for rural areas and the technical aids for rehabilitation.

IAPH, in response to the invitation made by Mr. Otto Wandall-Holm, IYDP Secretariat in Vienna, submitted for distribution at the IYDP Symposium the IAPH Resolution in support of IYDP activity, which was adopted by the Association on October 5, 1980. The text was introduced in the September 1980 issue of the journal.

Contribution to the IAPH Dredging Task Force Fund solicited

I. Secretary-General's Letter of September 10:

During the IAPH's 12th Biennial Conference in Nagoya this year, a resolution was passed by the membership to authorize assistance in funding requirements of the IAPH Ad Hoc Dredging Task Force, which now composes a part of the Committee on Port Safety, Environment and Construction.

This funding would be raised by voluntary contribution from IAPH members and would be utilized for the hiring of expert consultants such as oceanographers, environmental lawyers and marine biologists. It would also assist in representation by IAPH at the annual meetings of the Signatory Nations to the London Dumping Convention and the Ad Hoc Scientific Group of that body.

The American Association of Port Authorities (AAPA) in June of 1979 started work in this area with the formation of a Special Dredging Task Force which was funded during the first year by \$60,000 provided by AAPA and the Ports of New York and New Orleans. In the fall of 1980, an appeal was made to the full membership of AAPA and some 30 ports have made contributions ranging from \$250 to \$10,000 each. This funding has been used to attend the London Dumping Convention in 1980, a meeting of Ad Hoc Scientific Group in Canada in May of 1981 and will be used again in October of 1981 to attend the next meeting of the London Dumping Convention plus the payment of fees for various consultants.

The representation that have been made in London and Canada have been on behalf of IAPH and it is felt that it is only appropriate that the IAPH membership should contribute in part to this effort which will probably continue for another 2 or 3 years.

In the circumstances, I invite you to contribute to this IAPH-Dredging Task Force Fund, at your early convenience, though I am not specifying the closing date but leaving it open for at least one year. I would point out that financial participation is voluntary, and this is not to be considered as any sort of special membership dues assessment. These funds will be used solely for the purpose indicated herein.

I would like to mention that the following points have been mutually agreed upon in-between AAPA and IAPH:—

- 1) Funding requests to be on basis of \$500 to \$750 from major ports (over 15 million tons volume per year) and \$100 to \$300 from all other ports. No request to be made from the American Ports as they have already contributed well over \$100,000 for this program during the last year.
 - 2) The IAPH Secretary-General should maintain all funds raised in a special earmarked fund to be used only for the work of the Dredging Task Force of IAPH, and disburse funds based upon a billing to be made by the Executive Vice-President of AAPA who is administering the AAPA funds contributed by American Ports for the world of the AAPA Dredging Task Force.
- II. IAPH Document to be submitted to the 6th Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 5-9 October, 1981, IMCO, London.

III. Notes by the secretariat:

1. Name and Number of Special Bank Account
IAPH-Dredging Task Force Fund
No. 532 - 0633887
The Bank of Tokyo, Uchisaiwai-cho Branch
Office, Tokyo 100, Japan
2. IAPH Letter of Solicitation to the Fund was not sent to the US Regular Members.

Please see page 10.

President Mayne to attend ICC (Manila) and ESCAP (Bangkok) Meetings

Mr. A.S. Mayne, IAPH President, in his September 11 letter stated that he would be prepared to represent the Association at the following meetings:—

ICC: 27th Congress, November 22/26, Manila

ESCAP: Meetings of Chief Executives of Shippers' Organizations, Shipowners' Associations, Port and Customs Authorities, November 30/December 4, ESCAP Headquarters, Bangkok

Membership Notes

New Members:

Regular Members:

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Office Phone: (Mexico) 548.9957 & 548.9793

(Dr. Juan Pablo Antun, Head of Industrial Ports Projects)

CORRECTION

In the October issue of this journal in page 7 on "Membership Notes", to introduce New Members, the words Association Members were erroneously used. It should have read "Associate Members".

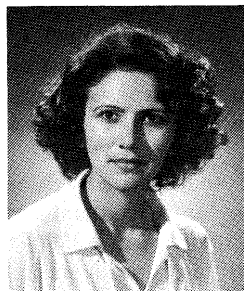
Invitation to the IAPH Award Scheme 1982

**How could the efficiency of your port be improved ?
Your answer could win you US\$750 in cash plus an invitation,
including travelling cost and hotel accommodation to attend the
13th Biennial Conference of IAPH, June, 1983
in Vancouver, Canada.**

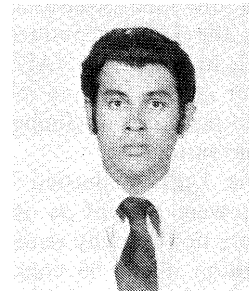
Following the success of the scheme in 1978 and 1980, its continuance every two years was endorsed at the 12th Conference held this year at Nagoya, Japan.

Enclosed in this edition of Ports and Harbors is a poster advertising the scheme and the Conditions of Entry. Chief executives of all developing ports are urged to ensure that this is displayed in a prominent position where it can be seen by all those personnel who may wish to submit entries.

The closing date for receipt of entries has been set for the 1st September 1982. The results of the Competition will be published in Ports and Harbors in an issue before the 13th Conference to be held at Vancouver, Canada, June 3-11, 1983. The decision on the winner of the 1st Prize will be made no later than 1st January 1983 in order that the individual or the leader of a winning group entry can be notified in sufficient time to allow him or her to be able to accept the invitation to attend the Conference. In order to meet this time table all entries must be received by the Secretary General no later than 1st September 1982. Failure to submit entries by this date may render them invalid for consideration.



Mrs. Daphne Phinopoulos, Cyprus Ports Authority, the First Prize winner of the Award Scheme 1978 (invited to the 11th IAPH Conference at Deauville, France, May, 1979)



Mr. Carlos Canamero, ENAPU, Peru, the First Prize winner of the Award Scheme 1980 (invited to the 12th IAPH Conference at Nagoya, Japan, May, 1981)

Conditions for entry

1. Suggestions regarding how the efficiency of your port (or ports in general) could be improved should be presented in English, French or Spanish, typewritten, and submitted to the Secretary General. The International Association of Ports and Harbors, Kotohira-Kaikan Building, 2-8, Toranomon 1-chome, Minato-ku, Tokyo 105, Japan.
2. Suggestions may cover any aspect of the administration, planning or operations of ports, such as improving productivity or the utilization and maintenance of equipment and storage areas, reducing delays and damage to cargo, etc. An attempt should be made to quantify the benefits which would result from the suggested improvement together with the costs (if any) involved.
3. Entries which should be between 10 and 20 pages in length may be made either by individuals or small groups, and should be the original work of the entrant(s). Entries which are the result of official studies or otherwise sponsored projects will not be eligible.
4. Entries will be judged by a panel of experts appointed by the Executive Committee of IAPH. The panel will give greater merit to papers identifying and evaluating specific improvements rather than entries covering a wide range of improvements in general terms.
5. The First Prize for the winning entry will be:
 - (i) A silver medal from the IAPH.
 - (ii) US\$750 (or the equivalent in local currency).
 - (iii) An invitation, including travelling costs and hotel accommodation, to attend the 13th Biennial Conference of IAPH, June 1983 in Vancouver, Canada.
6. In addition to the First Prize, Second, Third and Fourth prizes of US\$500, US\$400, US\$300 will be awarded to the next best entries.
7. Additional prizes of US\$100 each will be awarded to any other entries judged by the panel to be of a sufficiently high standard.
8. A winning entry may be subject to publication in the Ports and Harbors magazine.
9. At the decision of the panel, a bursary may be awarded to any one prize winner (subject to agreement of the employer).
10. The closing date for receipt of entries is 1st September 1982.

IAPH Document submitted to the 6th Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 5-9 October, 1981, IMCO, London

1. The IAPH Presentation at the Fifth Consultative Meeting

1.1 At the Fifth Consultative Meeting (21-25 September 1980), the IAPH introduced information document LDC V/11/2, in which the IAPH invited Contracting Parties to consider certain matters relating to the disposal at sea of dredged material containing substances listed in Annex I to the Convention.

1.2 The IAPH expressed concern that where such substances were present as other than "trace contaminants" and were not "rapidly rendered harmless" Article IV of the Convention might be construed to categorically prohibit the ocean dumping of the dredged material—even if there were no other feasible alternative means of disposal. Such a prohibition, the IAPH noted, could seriously threaten continued port operations, national and international trade and commerce, and the sovereignty of affected States. The IAPH invited Contracting Parties to consider, inter alia, whether existing provisions of the Convention or its Annexes (or guidelines adopted by Contracting Parties) would afford an affected State a means of considering such concerns in a manner consistent with the purposes of the Convention.

1.3 The IAPH also invited Contracting Parties to consider whether dredged material contaminated with Annex I substances might be safely disposed at sea through the use of "special care" in the disposal, in the same manner as substances classified to Annex II. Annex II substances may exhibit all of the Annex I properties of toxicity, persistence, and bio-accumulation, but they are nevertheless allowed to be disposed under a "special permit" if special care is used in the disposal.

1.4 A majority of delegations at the Fifth Meeting agreed that the technical matters raised by the IAPH should be considered by the Ad Hoc Scientific Group in the light of information to be supplied by the IAPH on possible measures to reduce the environmental impact of the disposal of dredged material at sea. LDC V/12/10.4. The Meeting further agreed to consider administrative matters at the Sixth Consultative Meeting. Contracting Parties were invited to study these questions intersessionally and to submit any comments they may have prior to the Sixth Consultative Meeting. LDC V/12/10.5.

2. The IAPH Presentation to the Ad Hoc Scientific Group

2.1 At the Fifth Meeting of the Ad Hoc Scientific Group (Dartmouth/Halifax, Canada, 4-8 May 1981), the IAPH submitted information document LDC/SG.V/10 ("Special Care Measures for Safe Disposal of Polluted Dredged Material in the Marine Environment"), which was presented by Dr. Willis E. Pequegnat, a consultant specially retained by the IAPH.

2.2 Dr. Pequegnat gave a detailed presentation of "special care" methods which could be used in disposing polluted dredged material, including capping with clean material at dumping sites, borrow pit infill with subsequent capping, disposal in submarine canyons, in hypersaline basins, in abiotic regions of the ocean, and deep ocean dumping.

2.3 The Ad Hoc Group agreed that the "special care" techniques proposed by the IAPH should be conducted as field research studies with a view to eventually allowing routine use of these measures. The Ad Hoc Group recommended to the Consultative Meeting that Contracting Parties take note of the possibility of using "special care" measures as suggested by the IAPH, where disposal of dredged spoils contaminated by Annex I substances is being considered. LDC VI/3/10.3, 10.5, 14.1.9.

2.4 The Ad Hoc Group also agreed that the existing regulations of the interpretation of the terms "trace contaminants" or "rapidly rendered harmless", in respect to Annex I contamination of dredged spoils, could be interpreted to allow national authorities to evaluate research results and utilize, as appropriate, "special care" measures in the disposal of dredged spoils. LDC VI/3/10.4.

2.5 The IAPH expressed to the Ad Hoc Group, and wishes to express again to this Consultative Meeting, its appreciation for the consideration given to the IAPH "special care" presentation, and its support for the report and recommendations of the Ad Hoc Group. The IAPH remains ready to offer its continued assistance and expertise to the Ad Hoc Group and to Consultative Meetings of the Convention in the future consideration of experience with the use of "special care" measures.

3. The Administrative Matters to be considered at the Sixth Consultative Meeting

3.1 In addition to the technical matters considered by the Ad Hoc Group, the IAPH raised certain concerns at the Fifth Consultative Meeting which Contracting Parties considered to be primarily "administrative" in nature. These included inquiry as to whether existing provisions of the Convention or its Annexes (or guidelines adopted by Contracting Parties) would allow consideration of the need to dispose dredged material at sea where Annex I substances were present as other than "trace contaminants" and were not "rapidly rendered harmless".

3.2 In connection with Contracting Parties' intersessional study of this issue, the IAPH invites Contracting Parties to give particular consideration to the provisions of Article V(2) of the Convention, which allows the issuance of a special permit for Annex I substances, as an exception to Article IV(1)(a), "... in emergencies, posing unacceptable risks relating to human health and admitting no other

feasible solution. . . .”*/

Under certain circumstances, the need to dispose dredged material contaminated with Annex I substances would appear to be within these “emergency” provisions.

3.3 Under the “Interim Procedures and Criteria for Determining Emergency Situations” (the “Emergency Criteria”) adopted by Contracting Parties (LDC V/12/Annex 5), in order to decide that an emergency exists a Contracting Party must (1) decide whether or not the situation poses an unacceptable risk relating to human health, and (2) consider possible alternative methods of disposal in order to decide that no feasible solution other than dumping at sea can be found. (Emergency Criteria, para. 2.1.1)

3.4 The risk to human health is to be assessed based upon the type of material involved (including chemical composition), its toxicity to human life (by inhalation, ingestion, and skin absorption), the method of contact or exposure (direct contact, water supply, food sources), and the health effects on present and future generations. (Emergency Criteria, para. 3.1.1) The feasibility of disposal at sea is to be determined only after a consideration of alternative methods of disposal (including costs) and an assessment of the environmental impact of each alternative. (Emergency Criteria, para. 3.1.2)

3.5 In the case of dredged material contaminated with Annex I substances, the classification of the substances to Annex I is itself recognition of a risk to human health when the substances are present as other than “trace contaminants” and are not “rapidly rendered harmless”. The extent of the risk from the dredged material to be disposed, and whether it is greater or less in the case of disposal at sea than for other disposal options, is to be assessed, under the Emergency Criteria, based upon the type, toxicity, exposure, and health effects of the Annex I substances present in the dredged material, and the environmental impacts of the Annex I substances under each disposal alternative. Where the risk to human health from alternative means of disposal would be greater than disposal at sea, and where the situation admits of no other feasible solution, the provisions of Article V(2) and the Emergency Criteria would appear to be satisfied.

3.6 The requirement of Article V(2) that there be an “unacceptable risk to human health” and that the situation admit of “no other feasible solution” assures, in the case of dredged material just as for any other substance, that the emergency procedures of the Convention will not be used if there is any feasible alternative means of disposal which presents a lesser risk to human health than disposal at sea.

3.7 The IAPH invites Contracting Parties to express their views at the Sixth Consultative Meeting on the applicability of Article V(2) and the Emergency Criteria to dredged material, as described above.

4. Conclusion

4.1 The IAPH wishes to express again its appreciation at the opportunity to attend this Sixth Consultative Meeting as an Observer. The IAPH remains available to assist Contracting Parties in any manner deemed appropriate in the deliberations upon these matters of such concern to the IAPH and its member ports.

*/ In the more serious situation where “danger to human life” is presented (such as in the case of a *force majeure*) which can be averted only through dumping, Article V(1) provides as exclusion from the permit requirement and prohibitions of Article IV.

1982 edition of IAPH Membership Directory completed

The membership Directory, 1982 was completed and sent to all members from Tokyo at the beginning of November. Regular Members and Associate Members of Grade One, Class A, B and C are entitled to receive 3 copies and other members, one copy per unit.

If members wish to receive additional copies, they are available at US\$10 per copy including surface mailing charge.

The distribution of the Membership Directory is limited to members only.

Publications

1. “Recommendations on the Safe Transport, Handling and Storage of Dangerous Substances in Port Areas”
Sales No. 701.81.01.E, price £2.50 (English);
2. “International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended in 1962 and 1969”
Sales No. 500.81.06.E, price £1.25 (English)
3. “International Conference on Load Lines, 1966”
Sales No. 701.81.01.E, price £2.50 (English); 702.81.01.F, price £3.00 (French); 704.81.01.S, price £3.00 (Spanish)
4. “Supplement relating to the International Convention on Load Lines, 1966”
Sales No. 705.81.02E, price £2.00 (English)
IMCO Secretariat, Publications Section
101-104 Piccadilly, London W1V OAE U.K.

Visitors

— Mr. Hugh Stanton of “Int’l Dredging and Port Construction” and Mrs. Nora Pillay of “Maritime Asia” visited the head office on August 17, after visiting China for three weeks.

— Mr. David Robinson, Managing Editor of “Seatrade”, U.K., visited the head office on September 8. During his stay in Tokyo, he visited the Bureaus of Shipping, Ships, and Ports & Harbours of the Ministry of Transport to study the present situation of Japan’s shipping and shipbuilding industries and port development. Findings of his trip to the South East Asian countries will be published in the 81/82 edition of Seatrade’s “Far East Shipping Guide” to be published in December.

— On September 24 at Hotel Okura, Tokyo, A delegation from Bremer Lagerhaus Gesellschaft (Ports of Bremen/Bremerhaven) and headed by the Hon. Hans Koschnick, Governor of Hansestadt Bremen and Mr. Gerhard Peier, President of the Twin Ports Company, organized a reception for representatives of varied industries connected with their ports. At a press conference, held prior to the reception, it was revealed that Bremen/Bremerhaven had a steady increase in traffic with Japan during 1980 and the past months of 1981.

— On October 6, Mr. S.M. Bhola, Secretary of International Maritime Conference and EXPO 1981, Madras Port Trust, India, visited the head office and discussed the centenary events of Madras Port to be held from 5th to 20th December this year.

Open forum: Port releases:

Mr. F.J.N. Spoke, General Manager, Port of Vancouver, amplifies the Importance of the Roberts Bank Expansion

(At the Ceremony to mark the Start of the Work)

It's customary on occasions such as this to express pleasure at the opportunity of presiding over such an auspicious and important event. But those of you who know me well—and many of you do—I think you realize just how special this day really is for me. It's a day we've been working toward for so long. It's a moment that we at the Port of Vancouver will long remember as a highlight of our professional lives.

The actual start of the work to enlarge the Roberts Bank Outerport is an event of not only local and regional importance, but national importance as well. When this project is completed just two years hence, the Port of Vancouver will have in Roberts Bank one of the greatest coal exporting facilities in the entire world—not just Canada or North America—but the entire world.

Many individuals will, with justification, take great satisfaction and pride in what is happening here today. There are those who recognized, some 12 years ago, that Roberts Bank was needed—not just as it exists today, but that it would require future expansion to meet the response of Canadian producers to world market demand for the products that would be flowing through it.

The Coal Association of Canada has identified the following economic impacts as they relate to coal exports and virtually all through the Canadian West Coast:

- A) Balance of Payments Contribution in 1980 Dollars
 - 1980 — \$ 940 Million
 - 1985 — \$ 2.5 Billion
 - 1990 — \$ 3.3 Billion(figures from Coal Association of Canada)
- B) Jobs in Coal Industry Generated by Export Coal
 - 1980 — 6,900 jobs directly — and
 - 31,050 jobs indirectly
 - TOTAL: 37,950
 - 1990 — OVER 132,000 jobs
- C) Investment in New Mines and Coal Processing Facilities in Decade of the '80s

Plus/Minus — SIX BILLION DOLLARS

At the Port of Vancouver, we see the increasing diversification of markets for Canadian goods. It's a most welcome trend, one that most certainly will continue well into the future.

At one time Japan was the main destination for goods and resources exported from the Port of Vancouver. More recently, Korea has come into the picture in a substantial way, while trade with Japan has continued to grow.

Coal exports to yet other countries is also taking place and will become increasingly more significant.

It is reasonable to expect that new trading links will be developed with other Pacific Rim countries. We have high hopes for expansion of our resource exports to Europe and South America. Indeed, the world is our customer!

All this spells expansion and that assures continued good health for the B.C. and Canadian economy. Expansion and development are great goals in themselves, but they rarely come without a price, and all too often that price is paid at the expense of environmental concerns. I am not going to suggest to you here today that a project of this dimension can be completed with no effect on the local environment around us. What I will assure you — and anyone else who may be concerned — is that we are dedicated to minimizing the negative effect of the Roberts Bank expansion on the environment and on the Social life of our communities.

This project has been the subject of exhaustive environmental study. Few projects in Canada have had more attention paid to preserving our natural environment than has been given Roberts Bank. It is a continuing concern and we shall continue to monitor into the future its effects under the water, on the land, and from the sky.

The logistics of our increasing global trade will impose a further burden on our railways. There are increasing concerns about rail capacity. Railways, and the appropriate government authorities involved, really must come to grips with this problem so that we can achieve the full potential that we have in this great country of ours.

Today we are witnesses to the start of a \$35 Million dredging program that will provide the material for the new dock areas and the enlarged causeway, and at the same time the dredging will create the enlarged turning basin so essential for nautical safety, and therefore also important for the environment.

The day is not far off when Roberts Bank will handle, with ease and efficiency, the arrival and departure of vessels up to 250,000 tonnes. I like to think of them as VLBC's... that stands for VERY LARGE BULK CARRIERS.

I would like to express my appreciation for the solid and very professional work of all those who have helped plan this project. My friends and colleagues on the Port's staff, the engineers of Swan Wooster Engineering Ltd., our own Vancouver firm that has built for itself an outstanding international reputation. And I would also like to congratulate the Dillingham/Sceptre Consortium with the

award of this world-scale project. Their expertise is our assurance that two years from now we shall be able to look back upon a job well done.

ROBERTS BANK

It could be said that the Roberts Bank Outer Port of the Port of Vancouver epitomizes economic development in Western Canada in the past 15 or 20 years.

This 22-hectare facility, now destined for fourfold expansion, was created so that Western Canadian producers of coal could meet the dramatically rising world demand.

As early as the mid-1960s there were indications that this rising global hunger for energy basics such as coal would present unparalleled opportunities for Canada, and the nation responded, for it was well-known that British Columbia and Alberta held a treasure house of coal deposits.

Development of potash and sulphur in Saskatchewan and Alberta followed, and found similar world response. For all three of these commodities the Port of Vancouver was the logical point of export.

Metallurgical coal miners were the first to meet the challenge, and transportation experts quickly realized that the use of unit trains and large dry bulk ships would offer benefits from economies of scale.

It was apparent that the Burrard Inlet inner harbour of the Port of Vancouver could only provide limited opportunities for outward movement of coal on these terms, because of its limited land area, complications associated with rail lines through urban areas, and important navigational and social constraints.

However, the Port's 214 square miles of land and water, and its 130 miles of shoreline stretching south to the U.S. border, offered other possible coal-handling sites. In 1967 engineers began researching the possibilities of establishing a superport at Roberts Bank. They examined a number of other sites along the entire coast and, looking a few years ahead, suggested that when the B.C. northeastern coal deposits were developed they should be exported through Prince Rupert.

The study was completed in 1967 by Swan Wooster Engineering Ltd. and three years later a new facility was operating at Roberts Bank on a 55-acre island connected to the Delta mainland region by a three-mile causeway carrying road and rail links.

The wisdom of this advice was soon obvious as port usage blossomed and it became apparent that expansion would soon become a necessity. Originally designed to ship nine million tonnes of coal annually it was made possible, by special operating devices, to handle a peak of 11.5 million tonnes, which was the case in 1980.

This early realization of the need led to 1973 preliminary studies with respect to expansion but it was not until a major environmental study by Beak Hinton was released in 1977 that activity speeded up. They had been consultants in the original Swan Wooster survey but in 1977, a decade later, they found there had been dramatic changes in the Municipality of Delta. For many years a fishing and farming community, Delta, by 1974, had emerged as a large "bedroom community" for Vancouver. For a number of years its population increased at more than 20% annually, making it the fastest-growing municipality in Canada.

In 10 years the population had tripled, with a corre-

sponding increase in public concern over the possibility of severe environmental impact from the proposed expansion.

Appreciating these concerns Port officials initiated a broad public information program, unique in the story of similar developments in Canada. Through public meetings, advertisements and stories in the media, citizens were kept informed of developments and asked to provide input for the consideration of the project directors. Their role in ensuring a minimum of impact on the environment was stressed and the response was widespread.

A joint federal-provincial environmental assessment review panel was set up to study and collate all the information.

Intensive hydraulic model studies examined wind and tide action, erosion, and the potential on marine habitat are part of ongoing studies.

Consideration is being given to coal dust suppression, noise mitigation, and even to the possibility of providing illumination in airways to ensure safe flight of birds.

An environmental emergency plan is being drafted to contain and neutralize the improbable but possible accidental spills from ships.

Of particular interest is an aerial monitoring program set up to maintain close watch on the area through infrared scanning techniques, and by data obtained by satellite. This and other monitoring continues on a regular basis during the construction period.

The assessment review panel released its recommendations in 1979, clearing the way for a decision to proceed. This was announced in 1980 during the signing of a federal-provincial agreement by which the B.C. government transferred administration and control of an area adequate for major enlargement of the vessel turning basin and the creation of additional terminal pods, each similar in size to the original.

The province retains ownership of the causeway link to the mainland under this agreement.

Project management and design is the responsibility of Swan Wooster Engineering Ltd., a Vancouver-based firm that has won a world-wide reputation for its work.

Early in 1981 a \$35 million dredging contract was let to the Dillingham-Sceptre consortium of North Vancouver to widen and deepen the turning basin for the port, for reclaiming the necessary terminal area and for widening the causeway.

In keeping with recommendations to safeguard marine life the work will only take place in the fall and winter when the minimum damage to the marine environment and its inhabitants is expected. It should be completed by mid-1983.

The material dredged from the sea will be used to reclaim land for the new pods in a program that calls for the transfer of 13 million cubic metres from the ship basin to the new pods.

Depth of water alongside the berths becomes 20.8 metres (68 feet) and in the turning basin it will be deepened to 12.2 metres (40 feet).

Large bulk carriers will be handled at a pier with a water depth of 24.4 metres (80 feet), enough to handle bulk carriers up to 250,000 DWT.

Some of the spoil from the sea bed will be used to enlarge the causeway by 70 metres (230 feet) on its northern side and the three new pods that will emerge from

(Continued on page 14 bottom)

Coal Ports in Japan

**By Tamotsu Okabe
Director-General,
The Japan Port and
Harbor Association**



(Presented to AAPA's 'Coal Ports-West' Seminar, held at Sacramento, California, U.S.A., September 26/18, 1981)

Foreword

The need to develop alternate energy resources to oil has rapidly gathered momentum to become one of the most acutely urgent universal issues, especially since the so called "second oil crisis" in 1979. By international consent, among the various alternatives, coal is being given top priority to replace oil.

In Japan, too, coal has been given the highest priority in the shifting of energy resources, both by the government and private industry as well. The government and its related agencies have thus been working at top speed on how to cope with this situation.

1. Japan's basic position for securing stable imports of overseas coal

As far as coking coal is concerned, Japan has long been importing a substantial volume of such coal from various overseas countries, but on the other hand, Japan, like so many other countries all over the world, has been heavily dependent upon oil for her energy sources.

(Continued from page 13)

the ocean will quadruple the present capacity of Roberts Bank before the end of this decade to more than 50 million tonnes.

The National Harbours Board provides the enlarged turning basin, the new land areas and the necessary services for the terminals. Cargo-handling equipment, docks and ancillary structures are the responsibility of the tenants.

Total economic impact of the expansion is difficult to forecast but the following has been suggested:

An additional \$2 million in taxes annually for Delta; direct port-related job opportunities for 300 workers of whom approximately 100 would be from Delta; an increase of \$2 million in the annual payroll at Roberts Bank, in addition to the \$2.5 million earned by 80 workers at that time; additional expenditures for supplies bought locally of \$1 million; additional payroll in the Greater Vancouver periphery of \$7 million for goods and services supplied to the port.

It is known that in the first decade of its operations as lessee Westshore Terminals paid more than \$3 million in local taxes, and nearly \$2 million was spent annually on operating, maintenance and ship supplies in the Vancouver area.

At the time that Roberts Bank is fully developed and operating at its full capacity, the expanded port will be the largest coal-handling facility in the world, with capacity to handle the largest bulk carriers envisaged, i.e. 250,000 DWT.

Today's situation is that the need to change to coal is not merely a desirable target but an objective and imperative necessity for maintaining and even developing Japan's economic status. Therefore, it is vitally necessary to know how to secure less costly and stable supplies of coal from overseas countries.

To this end, the following points are thought to be of fundamental importance for the coal trade in the future:—

- 1) The improvement/development of engineering techniques and know-how and related transportation systems (ports, railways, ships, etc) should be harmonized by mutual agreement among the countries involved, coal producing and coal consuming countries alike,
- 2) The improvement/development of related systems and facilities should be executed based upon a demand assessment enabling a sort of ex-ante investment decision and not following phenomenal increases in demand,
- 3) Both the coal producing and consuming countries should deepen mutual understanding in every area of concern and try to establish closer co-relationships.

2. To guarantee supplies, Japan must have many coal supplying sources

Currently, Australia is the largest supplier of coal to Japan. However, in order to secure safe and smooth coal imports, Japan must avoid excessive concentration of supply (and risks) by expanding her coal supplying sources.

A country-wise evaluation as seen from the importing country's point of view can be summarised as follows:—

- 1) **Australia:** Excellent mining conditions, coal quality and advantageous with regard to mine-to-port distances. Despite these excellent conditions, there are problems in connection with the transport infrastructure, severe controls over investment by foreign countries, and the labour situation which is prone to disputes, and furthermore, it should be stated that there are many alternative buying countries.
- 2) **Canada:** Noteworthy are those development/improvement projects for export of coal from mines in British Columbia and Alberta, but the distance of inland transport shall have to remain as one of the most problematic points.
- 3) **China:** Excelling in quantity, advantageous distance-wise, as the use of small colliers is quite possible. But, there still are problems with regard to the development of mines and the transport infrastructures.
- 4) **U.S.A.:** Excelling in both an abundant supply from the many mines in Utah, Colorado, Montana, Wyoming and other Western States, and in mining conditions. Disadvantageous distances to exporting ports on the West Coast. Improvement of the transport infrastructures is one of the most critical issues.
- 5) **Others:** In addition to the above four exporting countries, there are the U.S.S.R., South Africa and some others but, considering their social and economic situation, it can be affirmed that the above four countries are the most important major supplying countries.

The establishment of harmonized links with these four countries, therefore, is one of the most important issues for Japan, in order to meet with the increasing demand for steam coal.

3. Japan's imports of coal and future estimates

(Unit: 1,000 tons)

Year	Coking Coal	Steam Coal	Smokeless Coal	Total
1970	48,458	nil	1,440	50,898
1971	45,066	nil	1,276	46,342
1972	49,846	nil	816	50,662
1973	56,866	nil	1,183	58,049
1974	62,709	372	1,495	64,576
1975	60,813	500	1,027	62,340
1976	58,972	862	1,104	60,938
1977	55,918	948	1,423	58,289
1978	50,876	1,010	972	52,858
1979	56,657	1,678	1,051	59,386
1980	58,000	7,000	1,000	66,000
1985	79,000	22,000	*	101,000
1990	90,000	53,500	*	143,500
1995	97,500	80,500	*	178,000

Notes to the Table:

- 1970/1979: Energy Statistics by MITI
- 1980: Estimate — 1985/90/95: Based upon the Comprehensive Energy Report (Aug. 1979) *: Smokeless coal is included in coking coal figure
- There will be about 20 million tons of domestic steam coal produced annually.

The increase in steam coal will be very rapid, while that of coking coal will be gradual and the demand for smokeless coal will be static.

The demand for steam coal in 1990 by purpose

As compared with 1979 (actual) (Unit: 1,000 tons)

Purpose	1979	1990	Ratio (%)
Electric power generation			
— New installations		31,200	58
— Existing and converted	300	8,500	16
Sub total	300	39,700	74
Other than power generation			
— Cement	1,000	11,800	22
— Paper pulp	400	2,000	4
Sub total	1,400	13,000	26
Total	1,700	53,500	100

For the purposes of this paper, the demand for steam for steam coal in 1990 is 53,500 million tons, but, according to other data sources, 53,500 million tons is likely to be a minimum amount and in actual fact will be far bigger.

4. Selection of steam coal importing ports in Japan in 1990

1: Outline of assumptions and demand assessment calculation

i) The demand assessment calculation was made from the 83 selected power generation plants and other factories using steam coal in 1990, to obtain the estimated total demand in 1990, which was adjusted to the aforesaid 53.5 million tons.

Included are, 21 power generation plants (new installations and conversions), 50 cement factories, 10 paper pulp factories and 2 textile factories.

ii) Included in the assessment are 17 ports which have the potential for coal traffic, 10 ports where power generation plants are being projected, 25 ports which are closely located to the coal using industries, 2 ports where so-called "coal center" operations have already started and 8 ports which can receive colliers bigger than

60,000 tons.

The maximum ship size assumed in the calculation is based on the estimated coal handling capability of these ports during the next five years, without major port improvement works such as dredging new channels or the new installation of fundamental equipment.

iii) Supplying countries are classified into two groups based upon the sea transport distance, namely Group A (Australia/Canada/USA) and Group B (China).

iv) For the purposes of the calculation, the following 3 Cases are assumed in respect to the group-wise division of import quantity:—

Case 1: 100% from Group A

Case 2: 100% from Group B

Case 3: 80% from Group A + 20% from Group B

v) Gross Transport Cost (The shipping cost from loading port and unloading port + Port fees and charges in Japanese ports + Shipping cost for the secondary transport in Japan) is applied to each unloading port and the projected quantity therein so that optimum routing to each unloading port with the minimum Gross Transport Cost is obtained. This calculation is used for selecting unloading ports.

These costs generated by the exporting country are not included in the calculation, as such costs are common to all calculations.

vi) For Group A, 100,000, 60,000 and 35,000 ton colliers are assumed, while 60,000, 35,000, 15,000 and 5,000 ton colliers are assumed for Group B, subject to both the maximum size serviceable at each port, as well as the projected import volumes at each unloading port.

2: As the result of calculation which inevitably has included assumed combinations of optimum, costwise, shipping routes, the following findings are thus obtained:—

i) The idea of constructing a certain number of "coal centers" at strategic points to enable the concentrated importation of coal proved to be not economically feasible as the costs for secondary transport would be too great, while at the same time, it also proved uneconomical to bring in coal to each of 61 selected ports directly.

The conclusive recommendation was that it would be economically beneficial to coal users to receive their consignments, according to their needs, from some 20 — 25 coal handling ports located throughout the nation.

ii) To handle the estimated 53.5 million tons of steam coal, it was recommended that the following number of coal handling ports would be sufficient—

Case 1: 3 ports capable of accommodating 100,000 tonners
(100% from Group A) 16 ports capable of accommodating 60,000 tonners
1 port capable of accommodating 35,000 tonners

There would be 13.9 million tons transported to other ports.

Case 2: 19 ports capable of accommodating 60,000 tonners
(100% from Group B) 2 ports capable of accommodating 35,000 tonners
3 ports capable of accommodating 15,000 tonners
3 ports capable of accommodating 5,000 tonners

There would be 9.9 million tons transported to other ports.

- Case 3:**
- (80% from Group A) 3 ports capable of accommodating 100,000 tonners
 - (20% from Group B) 16 ports capable of accommodating 60,000 tonners
 - 2 ports capable of accommodating 35,000 tonners
 - 3 ports capable of accommodating 15,000 tonners
 - 3 ports capable of accommodating 5,000 tonners

There would be 13.1 million tons transported to other ports.

iii) The Case 3 is thought to be the most probable and practical pattern, and of the 53.5 million tons, the division of carriage by ship size will be as follows:—

100,000 tonners: 36%
60,000 tonners: 62%
Others: 2%

iv) Thus, the conclusion is that to handle the estimated 53.5 million tons of steam coal annually by 1990, it will be necessary to provide some 20 coal handling ports throughout Japan with a water depth of 14 meters. It is felt that this target will not be difficult to obtain.

5. Present status and future plans of coal handling ports in Japan

To explain the situation, it will be necessary to classify such ports and facilities into the following three categories:

- i: Private facilities of steel companies (exclusive use)
- ii: Private facilities of electric companies (exclusive use)
- iii: Public or private facilities for general use

1: Private facilities of steel companies

Five major steel companies' factories in Japan are located on waterfronts and have their own ore/coal unloading/handling facilities. Ore and coal carriers used at such facilities are 60,000, 125,000, 150,000 tonners though some are using 200,000 and 250,000 tonners.

The table hereunder shows such facilities with a water depth deeper than 14 meters. At this time, due to the economic situation, those facilities are not fully utilized (60-70%), therefore, it is assumed that there will be no additional harbor work necessary to cater for the increased volume of coal imports.

Port	Waterdepth x Nos. of berth	Steel Company
Muroran	16.5 x 1, 14 x 1	Nippon Steel Corporation
Kamaishi	14 x 1	ditto
Kashima	19 x 2, 16 x 2	Sumitomo Steel
Kisarazu	19 x 2, 17 x 1	Nippon Steel Corporation
Chiba	18 x 1	Kawasaki Steel
Kawasaki	22 x 1, 18 x 1	Nippon Kokan
Nagoya	14 x 1	Nippon Steel Corporation
Wakayama	14 x 2	Sumitomo Steel
Sakai Semboku	14.5 x 1	Nippon Steel Corporation
East Harima	17 x 2, 14.5 x 1, 14 x 1	Kobe Steel
Himeji	17 x 1	Nippon Steel Corporation
Mizushima	17 x 2, 16 x 1	Kawasaki Steel
Fukuyama	17 x 3, 16 x 1	Nippon Kokan
Kitakyushu	17 x 1	Nippon Steel Corporation
Oita	20 - 27 x 4	ditto

2: Private facilities of electric companies

Most of the big thermal power generation plants are located on waterfront areas and fuel (oil) unloading facilities, owned by electric companies, are located in premises immediately connected with the power plants. It is imperative for any newly constructed coal burning power plants to have its own coal unloading facility, the scale of which should be in proportion to the power to be generated. Generally speaking, 14 meter depth is the normal, though some are 17 to 19 meters depth.

Power plants to be converted to coal burning are not always blessed with enough space to construct coal handling berths and storage yards. For such plants, it is inevitable and at the same time logical to utilize coal handling facilities which already exist in adjacent port areas, as it would not be possible to accommodate big colliers at the generating site.

It is estimated that by 1985 there will be 9 new coal burning power plants (5.4 mil. kw/11 generators), and another 19 plants (7.3 mil. kw/32 generators) will be converted to coal burning. Including a few of the COM and domestic coal burning plants, it is estimated that the volume of steam coal for power generation plants will amount to 23.5 million tons in 1985.

3: Public or private facilities for general use

As stated in the above, three-quarters of the coal to be imported to Japan in the near future is to be used for power generation, and only one-quarter is to be consumed by the cement and paper pulp industries. However, the latter users are not big lot users and their factories are not always located immediately close to coal handling ports. Therefore, how to cope with this situation also requires study. Currently, there are some 20 ports with coal handling facilities, but, no port has a water depth deeper than 12 meters and thus they cannot accommodate big colliers. Furthermore, most of such facilities are public facilities operated by public entities, namely port management bodies belonging to the local autonomous body, and therefore, there are some difficulties for these public facilities to serve commercial activities.

Under the circumstances, the idea of establishing "coal centers" to be developed and owned by private enterprises has been promoted. The major objectives of a "coal center" are as follows:—

- i) To act as a relay station in the total coal transport system
- ii) To act as a storage station in the total coal transport system
- iii) To act as a coal mixing station to supply coal of constant quality
- iv) To act as a processing station for COM and other purposes

Currently, three coal centers are operative and another will be in the near future. All of them are equipped with coal handling berths of 13 to 17 meters. It may be said that more of such coal centers may be established in future, but, it may be extremely difficult, economically, if major work like construction of breakwaters or the deepening of channels is involved.

6. Some important points for future estimation

1: The increase in demand for coal

It has to be admitted that energy consumption is positively related to economic development. And,

considering the limitation of oil resources, the demand for coal will doubtless continue to grow. However, the demand for coal cannot be unrelated to oil in terms of cost. Very interesting figures have been introduced by the MITI in November 1980 in regard to the unit costs for electricity generation by different modes of energy sources as follows:—

Hydro	18 yen/kw
Oil	18 yen/kw
Coal	12 yen/kw
Nuclear	8.5 yen/kw

It should be emphasized again, without fear of contradiction, that the demand for coal will grow, though recognizing its disadvantages in terms of per weight efficiency loss, environmental problems and others, so long as the price of coal stays within a reasonable level. However, the staging of a coal version of the OPEC drama would be a catastrophic problem to all concerned.

2: The size of colliers—Future prospects

It goes without saying that the principle of economies of scale is applicable to shipments of coal. A trial calculation shows that the transport cost between Japan and Group A countries (Australia, Canada, USA) by a 100,000 tonner is approximately 25% cheaper per ton than the cost when carried by a 60,000 tonner. However, it must be mentioned that this is meaningless if the port situation both at loading and unloading points is disregarded.

It may be assumed that the ship size for Japan/Canada and USA routes will be within the range of 60,000 to 150,000 tonners for a certain period of time, and this will be beneficial for all the parties involved. Nevertheless, it should be pointed out that this matter is one of the most fundamental issues not only for the importing countries but also for the exporting countries as it is an essential factor in international competitiveness.

3: Modernization of coal ports in Japan—A possibility

Japan, being an island country with very limited natural resources, is heavily dependent upon ocean shipping for transport of commodities, while are transport is neglected for the purposes of this paper. Inevitably, ports handle all types of commodities and their status is very public oriented, when those private facilities which handle specific goods are excluded. Therefore, reflecting this status, the costs necessary for the provision of the basic infrastructure such as breakwaters or channel dredging have been shared by the central government and local autonomous bodies where such works are involved, using income from taxation, one could say. And, the cost of the construction of wharves which are to be publicly used is shared by the central government and the local autonomous bodies concerned, while the superstructures must be funded by the port management body. However, private enterprises can construct their own berths for exclusive use at their own expense, under the technical supervision of the port management body.

No government money nor local authority's fund are involved in the construction of coal handling facilities to be owned by steel companies or electric companies. However, those additional water facilities, such as the deepening of channels or anchorages shall be shared

by the enterprises, beneficiaries, and the central and local governments, though the private enterprises shall be responsible for at least 50% of the cost.

However, for the coal handling facilities for small lot users where the roles to be played by such facilities are more public oriented, the government will deem such to be public facilities and give due aid for such construction works similar to the public berth already mentioned. It is true that the Japanese Government is trying to reduce national expenditures, but the government will have to regard this matter as one of the nation's basic energy policies.

4: Environmental controls over coal transport and burning

Very stringent regulations are imposed on projects which may affect the environment. For example, any port development plan which is subject to the authorization of the Transport Minister must include a 10 year forward plan, and is subject to the screening of local and central councils before it is cleared by the Minister.

For land reclamation within the territory of a port, the Minister shall have to consult with the Chief of the Environmental Protection Agency. As one of the affiliated issues involved in the shifting from the use of oil to coal, the questions of the location of coal power plants vs. environmental controls especially air pollution, and land reclamation and the disposal of waste ash, have to be discussed by the agencies concerned.

A decision by the EPA prohibiting any land reclamation in closed water areas is considered to provoke heated discussions among the people concerned.

However, it is imperative to increase the use of coal as an energy source, and therefore, future studies will concentrate more and more on the ways and means to cope with the situation without causing any imbalance in the overall scene.

Post Script

- A special study team on the transport of coal from overseas countries, including experts from the private sector, has been established within the Ministry of Transport, but the author cannot yet report any findings of the Study Team, as their works have only just been started.
- An assessment on the selection of coal handling ports has been made by the Bureau of Ports and Harbours, Ministry of Transport
- The target amount of 53.5 million tons in 1990 has been adopted for the purposes of this paper, but, further work will be done to introduce a more accurate estimate by using current figures.
- Topics like Japan's international cooperation in coal development and the development of the technologies for the use of coal and transport technologies (slurry/fine powder transport and others) have not been discussed by the author in this paper as they will be the subject of study by the appropriate experts and reported on separately.
- Comments expressed in this paper do not necessarily represent the official position of the Bureau of Ports and Harbours, Ministry of Transport.

Streamlining the Export Process

By John Raven, Vice Chairman and Chief Executive, SITPRO U.K. Board

Developing countries should give serious attention to benefits that can result from simplifying trade procedures and paperwork.

THE MAJOR PROBLEMS of exporting are well known and frequently discussed at marketing seminars, and in a great variety of trade publications. Such subjects as market research, freight costing and cargo insurance give rise to scores of articles, lectures and textbooks. Once embarked on international marketing, however, a businessman in a developing country often finds that, hidden in the unpublicized cracks between these large and obvious factors of export success lurk a whole host of persistent, pervasive and often extremely costly requirements, usually lumped under the general heading of export "documentation and procedures." Anyone undertaking overseas marketing in 1980 will find that these problems are undergoing a systematic review and reform at the international and national levels.

The currently accepted description of this benevolent revolution is "international trade facilitation." Its basic aim is the systematic simplification of procedures and associated information flows related to overseas business transactions. These information flows cover the wide range of data necessary to service the average trade transaction by controlling transit, arranging payment and insurance, securing customs clearance and compliance with other official requirements, and carrying out all the changes of risk and responsibility associated with the movement of goods from seller to buyer and of money in the opposite direction.

Traditionally, this information is presented and exchanged in paper documentary form, but at many points in developed economies—and some developing economies—there is an accelerating shift to automatic data processing and telecommunications.

The main activities carried on by national and international organization specializing in the reform of export and import paperwork and procedures are the simplification and standardization of trade documents, the rationalization and often repositioning of procedures, the application where appropriate of automatic data processing, the promotion of the concept of trade facilitation and provision of training and education in its use, and, finally, an appropriate contribution to the now worldwide network of negotiation, consultation and cooperation in establishing, extending and applying good trade facilitation practices.

How are these sectors of facilitation handled and how can developing countries participate in, and benefit from, them?

Documentation

The simplification and standardization of trade documents are among the most tangible and generally applicable of trade facilitation techniques. The trader exporting to a country which has never taken any steps to unify and

simplify trade documents will have to cope with an array of infinitely varied forms which, though they often seek similar items of information, do so in an irregular and unpredictable pattern and sequence. A vast range of sizes of forms makes sensible and convenient filing, and so record-keeping, an impossibility, and information is often demanded which, though provided at great inconvenience to the trader, is of little, if any real, use to the ultimate recipient of the documents.

In many developed and some developing countries, these problems are now very largely eliminated. All key documents necessary for an export shipment are cast in a standard convenient paper format. All the main items of information, such as the name of consignor and consignee, and description of the goods, appear in invariable, set positions within each document. Only essential information is asked for, so that it can be entered on a single "master" document from which individual forms can be produced by ordinary office copiers or duplicators. A simple "masking" technique ensures that each individual form has reproduced on it only the information necessary for its function.

By using such a national series of documents, designed on the basis of the UN Layout Key, recipients can much more easily check and handle documents because of their common basic format. Where copiers or duplicators are used to run them off from one typing, it is possible to halve the cost of document preparation and greatly reduce the frequency of costly errors. This error reduction is clearly seen when one compares the efficiency of a single copying process from a checked master document with the traditional method of transcribing detailed information—for example, the description of goods—from document to document perhaps 40 times in the course of the average international commercial transaction. (*See UN Layout Key*)

Choosing an effective committee: The ground needs to be well surveyed and prepared for the production of such a national series of aligned documents. The right "mix" of interests must be assembled at the right working level. A combination of civil servants, however liberal and well intentioned, will be quite inadequate. They will not know how the factory and shipping office systems operate, or how transport and financial requirements have to be married in with the timing of production and movement of goods.

On the other hand, businessmen alone will be unable to appreciate the administrative and control needs behind official interventions in the export process and, if they do not understand these needs, will often seek the abolition of such measures, when all that is feasible is some change in the way or time at which they operate. Nor will shippers and officials together be able to cover the overall problem of rationalized documentation unless they bring in the bankers, carriers, forwarders, and sea and airport operators as cooperating partners.

In choosing persons to serve on the committee to revise export and import documentation, prestige is much less important than practical experience. Chairmen of large companies or the heads of government departments may agree to figure on the nominal list of a documentary revision committee, but—although their names undoubtedly add authority to the committee—they cannot be expected

to put in very frequent appearances at the group's meetings. As continuity of attendance and joint working are keys to the success of such efforts, every attempt should be made to attract people who really understand the importance of trade procedures and who can bring personal experience and influence to bear in discussion, negotiation and decision.

Preliminary steps: Once an appropriate committee is assembled, the first task is to assess the benefits of likely improvements in documentation against the position as it appears at the outset. Is there a serious problem of excess documentation; are there particularly onerous official demands which could reasonably be modified in application if not substance; is it likely that clerical expertise and copying devices will be available to a sufficient extent to justify assembling individually simplified standard documents into an aligned system in the full sense? These are some of the most important initial questions.

If the prospects of achievable benefit are encouraging, then the range of required documents must be assembled and checked with similar but aligned and standardized documents in international or other national usage. A consolidated table of the total information content on all documents should be prepared and each individual item checked to see if it is necessary and if it should appear in its current documentary setting, or be transferred to some other document or to a "boiled down" combination of documents. Items which appear on a number of documents that are interchanged between several parties or move overseas will usually be appropriate for inclusion among key elements for grouping into the master document of an aligned series. In most countries, the exporter generates such a high proportion of the key data that it is logical to construct a single "master" document for his use. Sometimes, however, the forwarder occupies such a prominent role in documentation that his preparation processes will justify a separate "master." This important implication of a possible split of responsibilities must be settled at an early stage of the revision work.

Designing new forms: When these preliminary inquiries are complete, a new rationalized set of draft forms, embodying the absolutely essential items of information in the most convenient and logical combination of documents, should be designed to UN standards. Final approval will be needed from all responsible parties, and arrangements must then be made to print the actual documents to correct tolerances on suitable qualities of paper. If these forms are to be exploited in full systems form—that is, if the basic advantages of rationalized standard individual documents are to be extended into the overall benefits of single copying from master documents—plans should be made for an appropriate promotional and training back-up. It is common experience in developed countries that the most useful and fully worked-out documentary reforms may be pretty well ignored unless properly utilized and serviced with advice and educational material. For instance, many firms in the United Kingdom continued to fill in individual aligned forms separately, long after they could have produced these by a copying system, using their existing office copier, because they had not been offered the necessary technical advice and assistance to make the change.

Examples of developing countries: Developing countries applying aligned documentation demonstrate the flexibility of approach inherent in this system. The Kenya Facilitation

Committee (KENPRO) has concentrated successfully on import operations to the extent that 80% of imports are made under aligned documentary systems using cheap spirit duplicators. Export documentation is now being tackled in Kenya, with emphasis on the use of inexpensive equipment available in the country. Major savings have been predicted, and port operations have already been usefully facilitated.

The Philippine Facilitation Committee (PHILPRO) has linked its own aligned system to a radical review of export procedures (*see below*).

In Israel, an aligned system, due to come into operation at the beginning of 1980, is estimated to save at least 50% of traditional documentary preparation costs.

Hong Kong, where an active trade facilitation committee has been at work for almost a decade, has already greatly reduced costs and errors by aligning key documents to the UN standard. It has now developed a one-typing set of documents expected to save up to 75% of remaining documentation costs.

The documents most frequently selected for alignment in these and other developing economies are those for quality control, port operation, customs clearance, exchange control, maritime transport and commercial invoicing. Emphasis and priority vary considerably. Colombia, the Philippines and the Republic of Korea have based rationalization on simplifying and combining documents used in customs and in exchange and quality controls. India, Hong Kong, Singapore and Kenya have extended this administrative "core" into port, transport and insurance requirements.

Procedures

The work of developing and promoting such an aligned series of documents leads naturally—indeed inevitably—into an examination and understanding of the underlying procedures. It is practically impossible to bring about any worthwhile documentary simplification without inquiring into and rationalizing the official or commercial requirements which call for a particular form to be generated, produced or exchanged.

In pursuing rationalization into procedures, the reformer encounters an interlocking network of commercial habit and preference, official inertia and legislative restriction, and even international agreement and convention that greatly increases the need for the skilled across-the-board cooperation between business and government experts, which has already been identified as a primary requirement for success in tackling the relatively superficial problem of irrational and out-of-date documentation.

It is for this reason, rather than any true order of importance, that the subject of rationalized paperwork is treated first in this article. Historically, in Western Europe, where organized trade facilitation work originated, the move towards standardized paper documents began in the early fifties—long before the sudden development of containerization and other through-transport techniques, together with the growth of air freight, stimulated reform of old-fashioned procedures and formalities. Since 1970, the new and broader concept of facilitation has often been grafted onto existing national specialist documentation committees. In some countries, notably the United Kingdom, quite new concepts of rationalization brought a facilitation committee into being, often with substantial funds and a growing resource of technical expertise among staff and supporting interests in business and government.

The starting point: If—as in some developing countries—the general problem of international trade procedures and documentation has to be tackled from the beginning, there may often be a good case for concentrating at the very outset on improved procedures rather than better documents.

A landlocked country served by congested ports in neighbouring states, for example, may have an acute need for simple transit procedures and prompt measures of port decongestion which will far outweigh any early pressure for aligned paperwork. Or cumbersome export control procedures, or import exchange control, may be identified as imposing the greatest cost and delay penalties on a country's economy.

Furthermore, the practical success and benefits of simplifying a single onerous official or commercial procedure will, as a rule, be so self-evident that the facilitation committee, which can claim responsibility for the success, will gain extra credibility that will be most useful in mobilizing business and government support for later work in rationalizing paperwork.

Conversely, the task of retaining initial interest in the activities of a facilitation committee may be very difficult if, for two to three years, the unavoidable preparatory work of assembling, reviewing and redesigning numerous documents takes up all its attention and absorbs all its resources. One or two early procedural successes can make all the difference in the future of a national facilitation programme in such circumstances.

Which procedures to tackle first: It is inevitable that in many countries the most important procedures are those associated with customs and exchange controls.

In developed economies, balance-of-payments problems may be minimal and so exchange controls unnecessary. Similarly, income and sales tax may meet the bulk of national revenue needs and so reduce customs duties to negligible levels. Developing economies, however, are by hypothesis in very different circumstances. Foreign currency may be extremely short for even priority requirements, and customs revenue often amounts to over half the state income.

Commercial interests cannot, in such economies, expect or usefully plan on the assumption that they will receive the same relaxations of official controls that are appropriate elsewhere in the world trading system. At the same time, governments should recognize that onerous controls on exports cut at the very source of extra foreign exchange and that the entire cost of import procedures ultimately falls on the domestic consumer, and so adds to almost universal inflationary pressures.

Some cases: The need here is for a review of the way in which essential controls are implemented. In one developing country, for example, the key export document requires 32 separate signatures. The sheer time-wasting burden of obtaining these signatures, apart from any calculation of cost, means that particular economy is unable to operate any legal system of spare parts supply to back up exports of any type of mechanical equipment. Their competitors in third country markets may be able to supply in 24 hours, but for this country's exporters, the collection of those 32 signatures means a crippling delay of days, if not weeks, of procedural nonsense. Many of these signatures are the emptiest of formalities. It is certain that the necessary controls could be met with a fraction of these individual interventions.

Similarly, a major port in another developing country has to face the strict operational disciplines of a growing container trade against the background of outdated nineteenth-century legislation which requires that, in the event of any dispute as to the quality or state of a consignment, the whole of the ship's cargo must be laid out on the quay side. It is easy to imagine the effect on a large container vessel of the sudden application of this out-of-date procedural requirement.

Commercial participants in container business for their part may not be familiar with the very simplified payment procedures most appropriate to physical transport operations which are so different from the old sailing ship background of the traditional "full dress" negotiable bill of lading. They may not find it at all easy to identify and operate the new concepts of liability for delay and damage which have been developed in business practice to meet the special characteristics of intermodal transport.

High-level representation: The problem of solving such procedural problems goes far deeper than documentary complications. It is not enough to work out the technical details of simpler procedures or to rationalize their application. The participants must all know how to operate in new ways or at new points in space or time better adjusted to new methods of moving goods or money.

This, in turn, means that a national facilitation committee will carry a far greater load of negotiation and promotion in its procedural work than in documentary reform.

In these circumstances, some raising of the level of responsibility and influence in the committee's membership may well be necessary. People who are a first choice for expertise and interest in better paperwork may not be the best agents of improvement in procedures, which may require decisions at board level in business and among departmental heads, if not ministers, in the government.

This may strengthen the case for tackling paper problems before procedures and developing the level of committee members progressively. It could, however, just as easily be an argument for beginning with procedures at a high level of attention and dealing with documentary reforms through a specialist and technical subcommittee.

Organizations involved: Given the range of priorities in procedural reform from country to country, it is not possible to set out a standard sequence of operations in the same way as is possible for the rationalization of paperwork. Nor is there the same focal point for standardization of procedures as there is for paperwork, that is, in the United Nations work in Geneva, based on the exploitation of the UN Layout Key.

Indeed, procedures have tended to become the responsibility of a variety of international institutions. For example, most of the work on standardization of customs procedures on an international basis has been carried out by the Customs Cooperation Council (CCC) in Brussels. The International Air Transport Association (IATA) has played a logically leading part in standardizing air transport procedures, and the Banking Commission of the International Chamber of Commerce (ICC) is acknowledged as the world centre for banking procedure standardization in such key sectors as the use of documentary credits. The International Road Transport Union (IRU) in Geneva services and operates the Customs Convention on the International Transport of Goods Under Cover of TIR Carnets (TIR Convention) for road transport movement, and the Inter-

national Bureau of Chambers of Commerce (IBCC) regulates and controls the ATA Carnet system guarantee chain.

Developing countries seeking to bring about procedural reforms will turn quite naturally to their representatives on these and other organizations for useful background information and eventually assistance in influencing the progress of those particular international organizations in a desired direction.

In any event, these bodies can usually provide excellent guidelines towards acceptable standardization of the procedures for which they are particularly responsible.

An example

Because of the variety in procedural priorities already mentioned no useful generalization can be made about the experience and achievements of developing countries as a whole in trade facilitation. But the work carried out by the Philippine Facilitation Committee (PHILPRO) in the last three or four years is an interesting example of some basic techniques of simplifying trade procedures and documentation.

Set up in 1976 within the Philippine National Export Council, PHILPRO has extended its activities to cover imports as well as exports, given that the cost of import complications and delays ultimately falls on the Philippine economy and that import congestion at ports and airports inevitably clogs physical and administrative facilities for exports also.

In an initial period of eight months of intensive effort, PHILPRO drew up a code for Simplified Export Procedures and Documentation (SEP) which was subsequently brought into effect by presidential decree.

The code's main features of simplification are:

Simultaneous processing of export documents: Before SEP, exporters were obliged to follow each procedural step on a sequential basis. Under SEP, an exporter can simultaneously file the report of foreign sales and the export declaration, and secure sampling inspection to obtain the certified commodity clearance document. This reform considerably reduces clearance time.

Periodic tax and commodity clearance: Under SEP, exporters who previously had to secure a separate tax clearance for each shipment can now obtain periodic clearance.

Reduction and standardization of forms: Before PHILPRO started work, the documents required by the different agencies in export procedures came in a variety of shapes and sizes. Under SEP, the report of foreign sales, the export declaration, the commodity clearance form and the certificate of origin have all been aligned to the UN Layout Key. The central bank declaration and export entry form have been combined into one document, as have also the application for commodity clearance and commodity clearance document.

PHILPRO published *Handbook on Simplified Export Procedures* and devoted the first half of 1978 to an intensive educational programme. PHILPRO also takes up and deals with practical trade facilitation problems including, for example, shut-out cargo, compulsory accreditation and incorrect interpretation of regulations. In May 1978, PHILPRO, supported by the Association of Southeast Asian Nations (ASEAN) and the UN, organized a well attended Facilitation Conference and Workshop in Manila. The most recent PHILPRO achievement has been the

abolition of the consular invoice in October 1979, followed by a very useful arrangement for the continuing consular fee to be payable by the importer in the Philippines.

This outstanding record of rapid improvement has called for substantial activity reflected in regular weekly PHILPRO meetings.

The Philippine experience discussed above suggests that while developing countries can usually expect to get very substantial benefits from drawing on the documentary systems worked out in the last 20 years or so by developed countries cooperating with the UN Facilitation Committee in Geneva, it is not at all certain that procedures taken directly from developed countries will necessarily meet the special needs of developing countries. Special difficulties stemming from tight exchange control, heavy customs revenue contributions, and restricted trade and transport resources often call for quite special techniques of rationalization.

Technical and mutual assistance

It is much more likely that developing countries will be able to get their most useful information and procedural improvements from other developing countries, rather than developed countries. This suggests that one of the most effective instruments for cooperation will be some of the regional groupings, such as ASEAN, which are being created among developing countries. It is hoped that members of these groupings who have had some experience with facilitation work will place that experience at the disposal of other members of the group, as PHILPRO did at their 1978 conference, and will go on to use the administrative and consultative resources of the common organization to develop an overall interest in facilitation as a key management and trade promotion technique.

A very important day-to-day instrument of guidance and assistance in both documentary and procedural improvements has been provided for some years by the UNCTAD Special Programme on Trade Facilitation (FALPRO), which, despite limited staff resources, has played a most formative role in stimulating the formation of trade facilitation committees in a number of developing countries and in helping forward the practical work of such committees when established.

ITC is increasingly including trade facilitation among the subjects covered by its technical cooperation activities. A recent ITC conference on technical cooperation with national chambers of commerce, held in November 1979 in New Delhi with the cooperation of the ICC and chambers of commerce of developing and developed countries, resulted in a consensus that trade facilitation merited the full support of the business community through the chambers of commerce. It was suggested that chambers in developing countries stimulate action on trade facilitation by governments, preferably through an appropriate national facilitation body, and that cooperation between chambers in developed and developing countries be extended where appropriate to include assistance in trade facilitation work. ITC will also play an active role in trade facilitation programmes in cooperation with UNCTAD/FALPRO through chambers of commerce with the help of external consultants from ICC and from national facilitation bodies such as the Simplification of International Trade Procedures Board (SITPRO), and the Comité Français pour la Simplification des Procédures du Commerce International (SIMPROFRANCE).

National facilitation organizations in a number of developed countries have agreed to cooperate with FALPRO to augment the latter's resources of expertise in developing economies where a particularly intensive effort is called for. In addition, one can look, as already mentioned, for a rapid development of cooperation between some of these developed facilitation bodies and ITC. Over a period, therefore, developing countries will have several coordinated sources of advice and assistance in implementing facilitation programmes.

A knowledge of the international cooperating network, and of the points at which such resources are situated and can be drawn upon, will be an essential item of information for the staff of facilitation bodies in developing economies.

FALPRO and some of the other national organization—for example, SITPRO in the United Kingdom—have already been able to help developing countries' facilitation committees by receiving members of their secretariats for special "in-office" training. This facility too is likely to grow in future.

The formal recommendations of the ECE Working Party on International Trade Facilitation of the UN Economic Commission for Europe, backed up by its basic facilitation manual, will be used by FALPRO as an important element in its own programme of facilitation, advice and assistance. In addition, almost every one of the cooperating national facilitation committees and a number of non-governmental international organizations with a special interest in trade facilitation have issued specialist publications on a great many aspects of documentary and procedural reform.

There are, for example, a number of effective handbooks in English, French, Japanese and Chinese on various adaptations and uses of the aligned documentary system. In addition, there is a growing range of standard texts setting out international trade and transport conventions and rules—the publications of the ICC in this field are particularly important. Such information was not available to any country—developed or developing—setting up a facilitation committee ten years ago, and so developing economies are in a fortunate position to benefit from considerable work already carried out, without any serious outlay for original research.

A number of organizations—such as the ICC and SITPRO—have built up special resources of training material including tape-slide shows, lecturers' textbooks and other presentational aids. Not all of these would be directly applicable to the needs of developing countries, but might often service these after relatively modest adaptations.

All these points are made to emphasize how important it is for facilitation committees in developing countries to familiarize themselves with the overall network of interna-

tional cooperation as soon as possible and also to pick out against the background of multilateral cooperation those special possibilities of bilateral assistance and advice which might be particularly helpful to them because of an established trading pattern with other developing or developed economies already carrying out trade facilitation work.

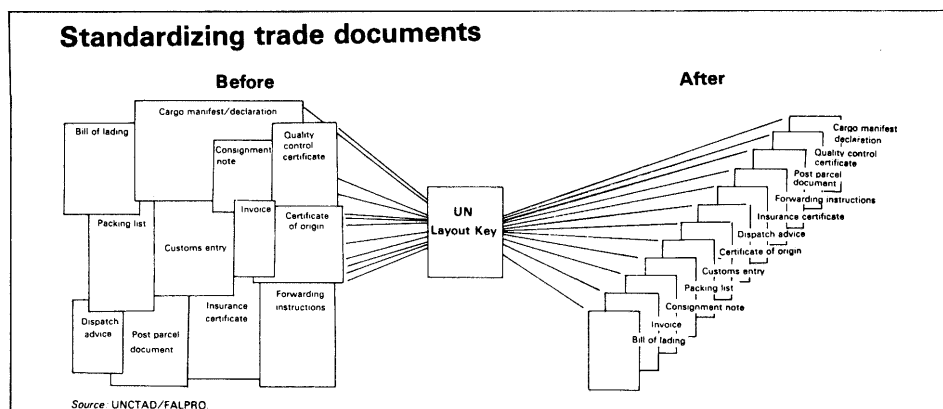
Computers

No account of trade facilitation practices would be complete without some mention of computerization. A complex interactive computerized customs air cargo import clearance system is evidently more suited to Tokyo or London than Jakarta or La Paz for a variety of reasons, including the primary need to maximize employment in many developing countries.

Three factors, however, must be taken into account. First, some sophisticated computer systems will run pretty well worldwide because of the needs of those operating them. Second, the longer developing countries are denied, or deny themselves, the access to advanced methods of handling information, the wider the actual and potential wealth gap becomes. Third, certain computer equipment is likely to become so cheap that developing countries might in some sense gain on more developed economies by exploiting these devices as fully and rapidly as possible, without the constraints of investment losses which have been incurred in developed economies by existing computer systems. Furthermore, because computer systems require standard procedures and enforce certain disciplines, there are a number of developing countries in which the rationalization and simplification necessary for the fully efficient computerization of international trade transactions could well be a most potent reforming agent, clearing up some of the more complicated excesses of bureaucracy in a way which would be very difficult, if not impossible, by traditional discussions designed to harmonize conventional documentary systems.

This is an area where mutual cooperation between national trade facilitation bodies can be of the greatest assistance. By keeping in touch with their colleagues in developed economies, those responsible for running such organization in developing countries can maintain a knowledge of the practical side of computer applications, and can also be sure that they are included as necessary and appropriate in any relevant developments.

Such cooperation is a practical activity and cannot be obtained as a by-product of the more general technical or policy discussions on computerization which have their own valuable part to play in the broad development of trade facilitation techniques.



The Hamilton Harbour Commissioners

(Extracts from the Annual Report 1980)

1. Director's Report

For the Port of Hamilton, 1980 was a year of solid performance, both financially and in cargo handled.

It was a year of financial achievement, with a healthy year-end position resulting from sound management, and a year of total-tonnage stability, with shipments holding close to the record level set in 1979.

Overseas cargo shipped through the port increased sharply in 1980, up 69 per cent to 900,036 metric tons from the 532,595 metric tons recorded a year earlier.

Domestic and U.S. tonnage slipped to 13,444,067 from 14,343,376 metric tons, down 3.5 per cent or 899,309 metric tons, a decrease attributable to adjustments of some bulk material inventories.

Total tonnage of 14,344,103 metric tons was 3.6 per cent shy of the all-time high set the previous year.

The active season of overseas trading, buoyed by the strength of the export market, began with the early-spring arrival of a cargo-laden Welsh vessel and included the May arrival of the first ship from the People's Republic of China ever to call in Hamilton.

The total number of cargo ships entering the harbour, both salties and lakers, was 895.

Helping to support the outlook for another healthy year in 1981 is the prospect of having available more than 800 metres of new Seaway-draft berthage at the rebuilt Pier 12, with room for further expansion of another 200 metres.

The first dock was finished before the end of the 1980 season and dockwall construction on the second was well under way, with roads, sewers, lighting and other site services slated for installation in 1981. Besides offering more dock and cargo-storage space, the redevelopment of the old Piers 12 and 13 will give the port its first berth for ro-ro (roll-on, roll-off) vessels, adding to the versatility and range of services the port offers to the shipping industry.

Looking further ahead, preliminary work continues on the East Port plan for additional piers and a prestigious industrial park served by road, rail and water transport.

One of the highlights of the year past was the opportunity for Hamilton to host the 20th annual meeting of the International Association of Great Lakes Ports. At that meeting the association of Canadian and U.S. ports agreed to continue pressing for an extended season on the St. Lawrence Seaway system, with firm dates for opening and closing. The IAGLP also pledged to continue its opposition to any further Seaway toll increases, a position fully endorsed by the Port of Hamilton which is anxious to remain a competitive centre for international trading.

In addition to the IAGLP, the Hamilton Harbour Commissioners continued active membership in the Canadian Port and Harbour Association, the American Association of Port Authorities and the International Association of Ports and Harbours.

The issues of an extended shipping season and Seaway tolls, along with the need for improved highway access to the harbour, were stressed by the Port of Hamilton in its brief to the Ontario Government's Great Lakes/Seaway Task Force at a hearing held at Hamilton Harbour. The City

of Hamilton and the Regional Municipality of Hamilton-Wentworth, reinforced those submissions, with the mayor of Hamilton reminding members of the task force that the city owes its existence to water transport and remains heavily dependent on shipping.

The success of the port operation results from the combined efforts and cooperation of the many industries in the port community and the Hamilton Harbour Commissioners' dedicated staff, who provide security for commercial activity and promote safety among recreational boaters. The smooth movement of cargo and efficient functioning of the port is also aided by harmonious relations with the International Longshoremen's Association and the Canadian Union of Public Employees.

Recognizing the importance of recreational opportunities within the harbour, we continued to operate the Hamilton Harbour Commissioners Sailing School, the HHC's own marine dockyard and waterfront parks. We also welcomed sailors from throughout the Great Lakes for the Lake Yacht Racing Association regatta, we cooperated with the City of Burlington in planning a new marina at LaSalle Park and we watched with interest as the Royal Hamilton Yacht Club's new building moved toward completion.

In an ongoing demonstration of environmental concern, the Hamilton Harbour Commissioners also continued to administer the Port of Hamilton Spill Control Group, an industry-financed venture that assures specialized equipment and trained personnel are available to deal with any oil-spill emergency in western Lake Ontario.

The year past was a good one for which I want to extend my gratitude to everyone concerned. To assure future progress, it is essential to continue to streamline our operations in order to serve our customers and area citizens and to promote the port's future growth and development.

Earl M. Perkins
Port Director

2. Balance Sheet as at December 31, 1980

ASSETS

CURRENT	1980
Cash	\$ 260,078
Accounts receivable	1,863,580
Accrued interest receivable	57,523
Inventory	48,982
Prepaid expenses	27,365
	<u>2,257,528</u>

INVESTMENTS APPROPRIATED FOR FUTURE HARBOUR

IMPROVEMENTS	4,500,000
DEFERRED ACCOUNTS	
RECEIVABLE	<u>3,109</u>
FIXED	
Land, docks and harbour improvements	17,985,910
Buildings	5,809,736
Equipment and vessels	<u>2,737,332</u>
	26,532,978

(Continued on next page bottom)

Fraser River Harbour

(Extracts from "Statistics and Financial Statement 1980)

1. Port Manager's Report

1980 has been a year of progress and change for Fraser Port. We are in the process of saying goodbye to a fine friend, Pacific Coast Terminals Company, Ltd., which will make way for the downtown redevelopment of New Westminster. While the importing and exporting of goods over docks in New Westminster will cease, the activity will continue at other locations in Fraser Port adjacent to the City, thus the economic benefit of international deep-sea trade will continue to the City as well as the other eight Municipalities that border Fraser Port. Modern facilities, capable of handling the most sophisticated of cargoes, have been constructed by the Commission and are being operated successfully. There has been considerable investment from the private sector as well, and on the river today you can witness this growth by observing the speciality berths that have been constructed.

Fraser Port is also looking to the future and is gradually developing 665 acres in Richmond, which when completed, will not only be the site of modern terminals, but also the site of an industrial park for water oriented industry.

Fraser Port and particularly the Fraser River Harbour Commission, has started a review of its economic importance to the area. This study, which is being done under the guidance of the M.B.A. program at the University of British Columbia, will be available later this year.

Fraser Port is proud of the role it has played in the development of the community, and accordingly has engaged Douglas & Kwantlen Colleges to prepare an historical review of events leading to the development of major port facilities servicing international trade. It is anticipated that a history will be available early in 1982. As it has had a great past, so will it have a great future.

R.C. Pearce
Port Manager

2. Balance Sheet

as at December 31, 1980

ASSETS		1980	1979
CURRENT ASSETS			
Cash	\$	1,462,217	\$ 458,553
Accounts receivable		918,219	548,637
Prepaid expenses		19,505	19,428
		<u>2,399,941</u>	<u>1,026,618</u>
FIXED ASSETS		<u>20,373,962</u>	<u>20,627,766</u>
		<u>\$22,773,903</u>	<u>\$21,654,384</u>
LIABILITIES			
CURRENT LIABILITIES			
Accounts payable and accrued liabilities	\$	321,353	\$ 188,317
Revenue received in advance		549,757	411,022

(Continued on next page bottom)

(Continued from page 23)

Less accumulated depreciation	12,118,337
	<u>14,414,641</u>
CAPITAL DEVELOPMENT IN PROGRESS	<u>4,481,078</u>
	<u>18,895,719</u>
	<u>\$25,656,356</u>
LIABILITIES	
CURRENT	
Accounts payable and accrued liabilities	\$ 1,063,521
Deferred revenue	11,944
Current portion of long-term debt . . .	169,143
	<u>1,244,608</u>
LONG TERM	
Debentures payable	
Government of Canada, 4-1/8%, to be redeemed before the year 2005	975,000
Loan payable	
Government of Canada, due December 31, 1987, semi-annual instalments of blended principal and interest at 5-9/16% . . .	450,231
at 6-1/16%	461,465
Loan payable	
Government of Canada	698,619
	<u>2,585,315</u>
Less current portion shown above . .	169,143
	<u>2,416,172</u>
	<u>3,660,780</u>

CAPITAL	
GENERAL CAPITAL	17,495,576
ALLOCATION FOR FUTURE HARBOUR IMPROVEMENTS	4,500,000
	<u>21,995,576</u>
	<u>\$25,656,356</u>

3. Operating Statement for the year ended December 31, 1980

REVENUE	
Terminal income	\$ 3,579,159
Harbour operations	1,153,024
Marine dockyard income	594,756
Rental income	1,453,601
Other income	585,443
	<u>\$ 7,365,983</u>
EXPENSES	
Operating salaries, wages and direct costs	3,283,992
Insurance—fire and general	121,519
Administration, office and general expenses	840,686
Debenture and loan interest	99,715
Contribution to employees' pension, group and medical insurance	408,057
Depreciation	745,584
	<u>5,499,553</u>
EXCESS OF REVENUE OVER EXPENSES FOR THE YEAR	<u>\$ 1,866,430</u>

Activity in the Port of Antwerp in 1980

On the basis of the final 1980 balances with regard to maritime cargo traffic the twelve seaports of the Le Havre-Hamburg range can be divided into two groups of equal size: on the one hand half of them noted an increase in the amount of cargo handled as opposed to 1979 and on the other the other half recorded a fall in traffic. The General Management of the Port Administration announced the Antwerp figures with a smile, which at once makes it obvious to which half Antwerp belongs.

It is hardly news to state that the economic background to the port's activity in 1980 was anything but rosy. In Belgium industrial production rose only by 1.3% as opposed to 1979 and in the E.E.C. as a whole the increase was even smaller (+0.9%). In this context the development in Antwerp's port activity gives grounds for reasonable satisfaction.

In the first place 17,151 seagoing vessels called at the port, in all a total shipping tonnage of 102.7 million G.R.T. It is true that both the movement of shipping and the tonnage lie slightly under the 1979 level (-1.6% and -0.8% respectively) but this was compensated for by the improvement in the accessibility of the port to large vessels. In 1980 no less than 71 seagoing vessels of over 60,000 G.R.T. (some 100,000 dwt) called at the port. With regard to the overall total of maritime cargo handled 1980 was a record year with 81.9 million tons of traffic, an absolute and relative increase as against 1979 of 1.8 million tons or 2.3%. As opposed to 1974, the record year in the past decade, this means an increase in cargo handled of almost 6 million tons.

The division of the overall amount of maritime cargo into cargo loaded and cargo unloaded gives a clearer picture of the evolution of maritime traffic in 1980.

Cargo loaded and cargo unloaded played unequal roles in the increase in traffic. As opposed to a rise in incoming

traffic of some 400,000 tons (+1%) there was an increase in outgoing traffic of 1.4 million tons (+4.1%).

With regard to the categories of cargo determining this development attention must first be paid to *petroleum traffic*. In a period when a reduction in the consumption to petroleum products is a main issue in Western Europe and when most ports are clearly feeling the results of this policy, the overall amount of petroleum products handled in Antwerp in 1980 rose by 3.6 million tons or 23.1%. To a large extent there is a simple explanation for this remarkable situation. For three quarters of the year 1979 a refinery in the port zone was out of action but resumed production as from 1.9.1979 after having been taken over by a different business group.

The distinctly critical situation in the European steel industry obliged the E.E.C. Commission to impose a production quota on steel producers as from 1.10.1980 with the aim of lowering production by 13 to 20% depending upon the specific type of iron and steel. From this point of view it will be no surprise to learn that the total incoming *traffic of ore* dropped in 1980 from 14.2 to some 11 million tons, especially since the European non-ferrous sector, for which Antwerp acts as the main port for the incoming traffic of lead and zinc ores, is also suffering from the general economic malaise.

The changed role of *coal* as a source of energy, especially in the generation of electricity, enabled the amount handled in the port to be increased from 5.2 to 6.8 million tons, i.e. a rise of over 30 percent.

The amount of *grain and seed* handled in Antwerp also rose. Incoming and outgoing traffic together increased from 5.8 million tons to almost 7.9 million tons, in relative terms an increase of 35%. A factor in this was the considerable amount of American grain bound for Russia which was transhipped in early 1980.

As far as *general cargo*, the port's lifeline, is concerned, there was no improvement in the figures. The total amount handled declined from 29.9 to 28.5 million tons or 4.9%. The decrease was relatively greater with regard to outgoing cargo (-5.8%) than to incoming (-3%). Upon closer examination the entire decline in general cargo can be ascribed to the decrease in the amount of iron and steel products handled. Other types of general cargo other than iron and steel in general maintained in 1980 the 1979 level, in fact a number of sectors in the overall traffic of general cargo showed a lively increase in activity. This applies amongst others to rolling stock, wood cellulose and paper, fertilizers in bags and flour and sugar.

(Continued from page 24)

Principal due within one year on long term debt .	127,823	493,750
	998,933	1,093,089
LONG TERM DEBT	5,010,693	6,863,516

EQUITY

COMMISSIONER'S EQUITY	16,100,640	13,034,142
GOVERNMENT OF CANADA— contributions to harbour developments	663,637	663,637
	16,764,277	13,697,779
	<u>\$22,773,903</u>	<u>\$21,654,384</u>

3. Statement of Income

for the Year ended December 31, 1980

	1980	1979
REVENUE	\$ 5,791,305	\$ 5,257,730
Operating, Maintenance and Administration Costs . .	853,947	646,340
Depreciation	1,005,185	1,022,888
Interest	865,675	1,151,312
	<u>2,724,807</u>	<u>2,820,540</u>
NET INCOME	<u>\$ 3,066,498</u>	<u>\$ 2,437,190</u>

Maritime cargo traffic in 1979 and 1980 (in 1,000 tons)

	1979	1980	Relative difference in %
Overall maritime traffic			
Total	80,098	81,935	+ 2.3
Incoming	46,103	46,549	+ 1.0
Outgoing	33,995	35,386	+ 4.1
Petroleum products			
Total	15,412	18,974	+23.1
Incoming	9,902	11,429	+15.4
Outgoing	5,510	7,545	+36.9
Overall total minus petroleum products			
Total	64,686	62,961	- 2.7
Incoming	36,201	35,120	- 3.0
Outgoing	28,485	27,841	- 2.3

Port of Gothenburg

(Extracts from the Annual Review 1980)

1. The National economy

According to preliminary estimations, the Swedish GNP increased by 1.4% between 1979 and 1980. Between the years 1978 and 1979 the increase was 4.1%.

The following table illustrates Sweden's sea-borne international trade in 1980 as against 1979:

	1980 mill tons	1979 mill tons	Change in %
Exports excl iron ore	31.7	31.7	±0 %
Exports excl iron ore & excl mineral oil	26.1	27.8	-6.1 %
Imports, total	54.9	56.1	-2.1 %
Imports of mineral oil	31.2	32.2	-3.1 %
Other import cargo	23.7	23.9	-0.8 %

The total net register tonnage of foreign trading vessels decreased in 1980 by 5% as against 1979.

The number of passengers arriving by vessels to Swedish ports decreased from 1979 to 1980 by 0.2%.

2. Port trade

The following table illustrates traffic to and from Port of Gothenburg in 1980 as compared with 1979.

	1980 mill tons	1979 mill tons
Throughput of Cargo		
Exports (incl transhipment)		
Mineral oil	1.27	0.73
Other export cargo	3.62	4.22
Total exports	4.89	4.95
Imports (incl transhipment)		
Mineral oil	9.41	9.92
Other import cargo	3.11	3.15
Total imports	12.52	13.07
Domestic trade		
Mineral oil	4.87	4.96
Other domestic cargo	0.054	0.056
Total domestic trade	4.92	5.02
Grand total	22.33	23.04
Shipping	mill NRT	mill NRT
Vessels in foreign trade	58.5	62.1
Vessels in domestic trade	7.1	6.4
Total	65.6	68.5
Ship's Passengers	mill	mill
Number	3.50	3.62
Unit Load Traffic	Number	Number
Containers and flats (20 ft TEU's)	235,000	256,000
Roll on/Roll off vehicles	235,000	256,000
Total (excl palletised cargo and packaged forest products)	470,000	512,000

The total unitised cargo trade represented 81% of Gothenburg's general cargo trade in foreign traffic (as against 78% in 1979).

Gothenburg's share of total Swedish sea-borne exports (excluding oil and iron ore) decreased from 15.2% in 1979 to 13.9% in 1980. A comparison with respect to general cargo only, shows that exports via Gothenburg represented 14.4% of Sweden's total sea-borne exports (in 1979 16.5%). However, Gothenburg would most likely have held its 1979 position, but for the Swedish labour market conflicts in 1980.

The same goes for Gothenburg's position in sea-borne imports of general cargo, where Gothenburg's share decreased from 19.8% in 1979 to 18.8% in 1980. The total sea-borne dry cargo imports via Gothenburg represented the same share of the total Swedish imports of dry cargo in 1980 as in 1979, namely 13.1%.

Out of Sweden's total sea-borne oil import, Gothenburg represented 30% in 1980, as against 31% in 1979.

Out of total Swedish oil export, Gothenburg's share increased from 19% in 1979 to 22% in 1980.

Main composition of traffic over the Port in 1980:

	Imports mill tons	Exports mill tons	Domestic mill tons	Total mill tons
1) Crude oil and oil products				
a) Crude oil	7.6	0.4	—	8.0
b) Oil products	1.8	0.9	4.9	7.6
Total oil traffic	9.4	1.3	4.9	15.6
2) Dry cargo:				
a) General cargo	2.8	3.1	—	5.9
b) Bulk cargo	0.3	0.5	—	0.8
Total dry cargo traffic	3.1	3.6	—	6.7
3) Grand Total	12.5	4.9	4.9	22.3

3. Improved Facilities

The Port Authority's expenditure on fixed capital in 1980 amounted to a total of 59.8 mill SEK.

Works carried out resulted i.a., in the following improvements/additional facilities:

Skandia Harbour

In the Elfsborg Terminal, berth No. 710 has been taken into operation, to be used by shipowners, operating overseas services and connecting feeder services. Berth No. 702 is under construction.

Road and railroad works have been carried out, and the marshalling areas have been extended.

As for the Skandia Terminal, an order has been placed for another container crane, No. 5 Delivery will take place in spring 1982.

Ferry Terminals

On the Southern banks of the Göta River, the two ferry terminals, serving ferrylines to Denmark and the German Federal Republic, have been largely extended and equipped with new ferry-ramps, etc., to be able to receive the new jumbo ferries, ordered by the ferry-line operators.

(Continued on next page bottom)

Lyttelton Harbour Board

(Extracts from the Annual Report 1980)

1. Chairman's review (extract)

Trade

Cargo handled through the Port of Lyttelton during the year ended 30 September 1980 amounted to 1,849,083 tonnes, 1,459 tonnes less than in the previous year.

There was a satisfactory increase in meat and wool exports and the reduction in petroleum products imported was balanced by the first 35,000 tonne shipment of coal to Japan.

New services to Lyttelton during the year included visits by Farrell Lines on the North American east coast service and the National Line of Brazil on the South American east coast service.

Export of West Coast coal: The Board has succeeded in obtaining a minimum of 25,000 tonnes per annum of West Coast coal to be exported through Lyttelton for at least two years, pending investigation into the best method for the long term export of larger quantities. Two 35,000 tonne shipments were handled successfully in the second half of 1980, the second shipment being loaded by existing facilities at a net rate of 577 tonnes an hour.

Lyttelton has all the facilities to handle larger quantities of coal in 55,000 tonne vessels without major capital expenditure. There is an established stockpiling area, with a railway siding alongside, capable of storing more than 100,000 tonnes, an efficient conveyor system with a ship-loader capable of handling coal at a rate of up to 1250

(Continued from page 26)

New Traffic Guidance System

After negotiations between the Port Management and The National Administration of Shipping and Navigation, an agreement has been reached according to which the National Administration — subject to parliamentary approval — will take part in the financing of a new Traffic Guidance System for the Gothenburg port area. The implementation is likely to take place in 1982.

The system will comprise of a Traffic Control Centre near the Elfsborg Bridge, to follow vessels' traffic within the port area by way of radar (three radar stations in the entrance fairway) and VHF-communication.

The agreement with the National Administration also includes transfer of the port pilotage to the National Administration as from 1st January, 1982.

4. Finance

Profit and Loss Account

	1980 kkkr 000 SEK	1979 kkkr 000 SEK
Operating Revenue	117 492	107 213
Works on Contract	24 415	16 794
	141 907	124 007
Operating and General Expenditure	-89 329	-78 576
Operating profit before Depreciation and Interest	52 578	45 431
Depreciation	-17 347	-16 880
Interest on Loans	-29 901	-25 271
Net Profit	5 330	3 280

Balance Sheet as of 31 December

	1980 kkkr 000 SEK	1979 kkkr 000 SEK
Assets		
Current Assets		
City of Gothenburg	110 213	89 477
Cash Balance	20	16
Postal Cheque Acct Balance	—	364
Bank Balance	4 534	6 556
Accrued Income	35 824	28 379
Accounts Receivable	12 594	9 414
Stores and Materials on Hand	441	498
Total	163 626	134 704

Fixed Assets

Long Term Receivables		
City of Gothenburg	543	543
(Net Profits, Amounts, Accrued)		
Gothenburg Free Port Ltd.	1 855	1 855
Facilities		
Land, Buildings, & c.	555 480	528 380
Cranes, Vessels, Dredgers, & c.	47 234	35 674
Total	605 112	566 452
Grand Total	768 738	701 156

Liabilities, Capital Reserves and Net Profit

Current Liabilities		
Accrued Expenses	41 351	33 699
Creditors	34 510	7 053
Reserve for Depreciation of Stores and Materials on Hand	278	285
Total	76 139	41 037
Capital Liabilities		
Share of Municipal Bond Loans	395 640	365 550
Capital Reserves, & c.		
Reserves tied up in Fixed Assets	207 074	198 504
Fixed Capital Expenditure Fund	89 342	95 522
Budget Equalization Fund	543	543
Total	296 959	294 569
Grand Total	768 738	701 156

5. Forecast

The Swedish National Budget anticipates for the year 1981 an increase in exports (volume) by 2.5%, whereas volume of imports is supposed to decrease by 1.5% as against 1980.

As for Port of Gothenburg there is a fear that the economic recession will result in a slight decrease in cargo throughput also in 1981. The prognosis for the following three years indicates an annual increase in dry cargo throughput of about 2.5%. The throughput of mineral oil and oil products will, according to forecasts, remain at its 1980 level during the next five year period.

tonnes an hour and adjacent deep water berthage.

Maintenance of the viability of the West Coast railway line with the consequent safeguarding of employment for railwaymen and associated workers are among the advantages in continuing to use the present method of exporting West Coast coal with existing rail and port facilities.

Finance

Rising costs, particularly those associated with wages and fuel, resulted in an adverse financial position, although the cargo tonnage handled through Lyttelton was virtually the same as that in 1979.

General Port charges were raised by an average of 7½ per cent by the Board on 1 January 1980. Because the inflation rate was about 18 per cent that increase was insufficient. Another factor that has affected the Board's finances is that practically all activities are being financed from revenue because existing loan works have been almost completed.

Although revenue exceeded expenditure by \$761,917, the Board had to withdraw \$362,418 from the general reserve funds to meet necessary appropriations, including to the reserve fund for fluctuations in exchange on the \$8 million Swiss loan.

The Board has been obliged to raise its charges by 15 per cent from 1 January 1981 to counter the adverse trend. On the current level of activities, it is estimated that the increase will result in a break even situation. Any major development work would be financed by loans which would require the approval of the New Zealand Ports' Authority. However, to meet changing shipping requirements, the Board must have the financial capacity to carry out minor improvements and additions to its facilities out of revenue. To achieve this the Board is introducing cost-saving measures in 1981.

Port promotion

Vigorous promotion of the Port continued to be the Board's policy. Regular contacts were maintained with all the shipping lines calling at Lyttelton and with potential callers also. As part of its promotion programme, the Board held an Open Day in Lyttelton at the beginning of March. It was the first occasion on which all the Board's facilities were open for inspection by the public. Despite extremely wet weather, more than 12,000 people visited the Port, many of them travelling on passenger trains which were reintroduced for the occasion.

The Board is indebted to Port staff, who voluntarily helped, and for the support given by many services and organizations involved in the day's activities. All cargo-vessels entered into the spirit of the day. Ships were dressed and open to inspection by the public.

Port development

Redevelopment of No. 7 Jetty to cater for quarter ramp vessels and larger conventional ships is the major work being undertaken at present. It will be completed early in 1981. Realignment of Sutton Quay will provide an additional area for access and storage in relation to the No. 7 Jetty redevelopment.

Long range plans for the redevelopment of the harbour in stages include reclamation of about 7ha in the vicinity of Gladstone Pier and No. 1 Breastwork, extension of the Container Terminal and provision of a bulk berth at the Cashin Quay breakwater.

Small craft facilities: Testing a section of floating breakwater is in progress and there are indications that this will be a satisfactory method of providing sheltered water for a small craft harbour. Meetings have been held with the Lyttelton Borough Council and the small craft organizations involved. There is much interest and good support for this development.

Container Terminal

It is pleasing to report that the number of containers handled through the Terminal rose by 1,084 to 24,087 in the year ended 30 September. The increase, which was in contrast to the national trend, resulted from two new trades being introduced — Farrell Lines and Pacific Forum Line. The 67 vessels handled through the Terminal were given a very satisfactory turnaround.

However, the Board is concerned at the rising cost of operating the Terminal which is caused by relative low utilization and the high rate of inflation. If all containerized cargo to and from Canterbury was handled by the Terminal it would not only improve its viability but also result in overall savings for importers and exporters.

The New Zealand Meat Producers' Board is aware of the rising cost of internal transport and the Board is pleased that the Producers' Board is undertaking an examination of the whole question of transport costs from the farm gate to Port, to determine whether the present centralizing and aggregating arrangement should continue.

The Board is confident that a greater volume of Canterbury imports and exports will be handled in containers through the Terminal in 1981.

Canterbury United Council Regional Planning Committee

An application has been made by the Board to be designated the Maritime Planning Authority for the Lyttelton harbour area at the appropriate time. When it becomes the authority, the Board will have a seat as of right on the Regional Planning Committee of the Canterbury United Council. However, pending designation as the authority, the Board considered it should have representation on the Regional Planning Committee. Following discussions with that committee in June, the Canterbury United Council agreed that:

- A Board representative be invited to attend meetings of the Regional Planning Committee
- Meetings be held with Board representatives on matters of any particular concern
- The Board be represented on the Technical Advisory Committee
- All agendas and minutes of the Regional Planning Committee be sent to the Board.

The Future

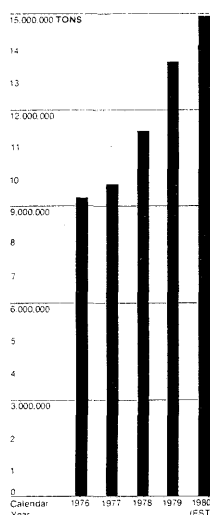
I am confident that the Port of Lyttelton will continue to offer an efficient service for the shipping requirements of Canterbury. The Board has facilities for a wide variety of shipping and handles cargoes as diverse as ISO containers and coal. A specialized berth for quarter ramp vessels will be completed soon. Ever-changing shipping requirements must be met and the Board's longer term developments will cater for the changes as they are needed.

J.E. Mannering, Chairman

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Port of Savannah : Georgia Ports Authority

PORT OF SAVANNAH
5 Year Tonnage
History



Recent months have not been banner ones in terms of international trade. The pervasive economic downturn has had a predictable effect on the water transportation industry. Reduced service, belt tightening, and even business failure have been the rule of the day among manufacturers, carriers, and terminal operators alike.

Despite these factors, the Port of Savannah once again managed to record substantial growth. While 1980 tonnage totals have not been finally calculated, reliable estimates indicate that the numbers will be in the vicinity of 15,000,000 tons. This represents an increase of 11% over 1979.

A number of factors have contributed to Savannah's ability to succeed in the face of generally negative economic circumstances. Savannah's reputation for service excellence has stood it in good stead as corporate traffic officials and carriers attempt to identify the most cost effective ports. Savannah's status as leading international commerce port on the South Atlantic range continued to attract the attention of new shippers. Finally, the diversity of cargoes crossing Savannah's docks helped offset the effect of slowdowns in isolated industries. An examination of each mode details the significant developments of the year.

The addition of eight major full container services helped to guarantee the vitality of CONTAINERPORT Savannah. Increased demand for storage space led to the paving of 20 additional acres, bringing the total to 115 acres backing up the three berths.

Capacity for temperature controlled containers was increased by 52 slots to a total of 182. In addition all units were equipped with a revolutionary, one-of-a-kind, ground fault monitoring system. The outlets serve a twofold purpose. First, they prevent injury by automatically check-

(Continued from page 28)

2. Revenue and Expenses for the year ended 30th September 1980

Port Operations	1980	1979
Revenue	\$	\$
Port installations and services	2,708,662	2,412,751
Wharfage	3,311,375	3,267,691
Harbour Improvement Rates	451,533	444,263
Cargo Services	1,946,797	1,666,205
Container Services	7,062,442	6,293,693
Rents and other income	363,123	399,796
Interest	506,205	265,258
	<u>16,350,137</u>	<u>14,749,657</u>
Less expenses		
Port installations and Services	3,710,768	2,931,507
Cargo Services	2,005,952	1,672,274
Container Services	5,784,362	4,775,114
Depreciation	989,054	964,523
Interest	1,993,036	1,803,834
Administration	1,008,040	867,347
Other	97,008	60,532
	<u>15,588,220</u>	<u>13,075,131</u>
Revenue Before Appropriations to Reserves	<u>\$761,917</u>	<u>\$1,674,526</u>

3. Financial Structure as at 30th September 1980

Funds Employed:

Public Equity	1980	1979
	\$	\$
Capital	10,816,097	10,772,917
Loans Repayment Fund	1,453,515	1,322,599
Exchange Fluctuation Fund	<u>1,995,786</u>	<u>1,220,050</u>
	<u>14,265,398</u>	<u>13,315,567</u>

Revenue Reserves	<u>1,760,025</u>	<u>1,947,939</u>
Total Public Equity	<u>16,025,424</u>	<u>15,263,506</u>

Current Liabilities

Creditors and Accrued Expenses	916,570	1,099,983
Public Debt Repayable within 1 year —		
Net over available Repayment Funds	<u>464,963</u>	<u>800,000</u>
	<u>1,381,533</u>	<u>1,899,983</u>

Term Liabilities

Public Debt — Net over available Repayment Funds	<u>21,192,452</u>	<u>20,548,689</u>
	<u>\$38,599,409</u>	<u>\$37,712,178</u>

These Funds are Represented by:

Current Assets

Cash and Deposits	1,660,740	3,456,156
Debtors and Prepaid Expenses	1,833,129	1,477,788
Stores and Materials	564,170	448,325
	<u>4,058,039</u>	<u>5,382,269</u>

Investments

Government & Local Body Stock,		
Deposits	2,612,485	700,870
Investments in Companies	21,000	21,000
	<u>2,633,485</u>	<u>721,870</u>

Fixed Assets

	<u>31,907,885</u>	<u>31,608,039</u>
	<u>\$38,599,409</u>	<u>\$37,712,178</u>

ing the boxes for ground faults and preventing hookup when they exist. Secondly, they continuously monitor units for electrical failures which exist upon arrival or develop during storage. Upon detection, the unit activates visual and audible alarms to alert maintenance personnel, eliminating loss of reefer cargo.

Recently, much of the attention to bulk cargoes has been focused on coal. The era of Savannah as a coal port was ushered in with Southern Bulk Industries' first handling of the commodity. Corps of Engineers permits were issued for the Savannah Coal Terminal, Inc. facility, to be operational on Hutchinson Island in 1983. In addition, as many as five other groups are reported to be examining coal export alternatives through Savannah.

At Georgia Ports' bulk facility, a disastrous year for soybeans caused volumes for that crop to plummet. Some of the slack was taken up by the meteoric increase in winter wheat shipments, which were up 480% over the previous growing year to a total of 8.7 million bushels. Increasing grain deliveries precipitated the construction of a second truck unloading station. Its addition halved the turnaround times while permitting simultaneous rail/truck discharge for the first time. The year saw the first shipments of mid-western sunflower seeds ever to pass through the facility.

Georgia Ports crane capabilities were given a substantial boost with the erection of a 100 ton gantry at Ocean Terminal. Its addition permitted the refurbishing and upgrading of two existing cranes, and relocation of one of them to berths 1 and 2, where gantry service had previously been unavailable. Ocean Terminal now offers five cranes with individual capacities ranging to 175 tons.

Also at Ocean Terminal, a second 200,000 square foot warehouse was completed. Another significant development in the breakbulk area was the opening of three export packers. First time shipments of several breakbulks signalled regular movements of these cargoes across Savannah's docks. Examples include 50 kilo bags of refined sugar, fruit boxes, and a variety of equipment such as ambulances, used trucks, and refurbished military equipment.

Liquid bulk movements remained level with petrochemicals accounting for the lion's share. One firm which experienced solid growth, particularly in the last six months was Koch Fuels. Their local terminal reported sales increases in the 25-50% range for their leading commodities 2 and 6 oil. Their success has come despite the unavailability of their dock which has been out of commission for some time due to collision damage.

Trade development efforts during the year, in addition to attracting record volumes and diversity of cargo, resulted in the addition of 24 new or expanded steamship services in the last 12 months. The list included 8 full container, 8 breakbulk, 4 breakbulk/container combination, 2 RoRo, and 2 LASH services. The geographic coverage provided by the group included the Middle East, Far East, Northern Europe, Mediterranean, West Africa, North Africa, South Africa, South America, and the Islands of the Atlantic.

GPA trade development efforts were greatly enhanced with the opening of an Asian regional office in Hong Kong. One of its primary areas of responsibility will be mainland China. Since normalization of relations, that country has been widely touted as a trading partner of major potential. Savannah entered the China/U.S. trade era during the year with the first export shipments of wheat and paper products to that nation. More recently, the first Chinese flag vessel to call the Port of Savannah in recent memory

loaded some of this year's wheat crop at GPA's bulk facility.

Current Events

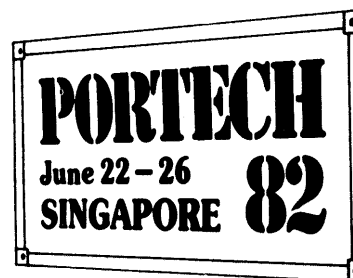
The single most important ongoing project in the Port of Savannah is Georgia Port's construction of a fourth berth at CONTAINERPORT. The \$22.5 million project includes a 1200' berth, 40 acres of paved storage, and 2 - 45 ton cranes. It is scheduled for completion in the Spring of 1982.

Paving of the storage yard will be completed by November 1. The wharf paving is already completed, and this has permitted erection of the replacement for crane 109 to begin. This replacement unit is expected to be ready just before the backup area is completed. The net effect is that all four berths will be operational in November with four cranes. By the Spring, the two new cranes will be completed making a total of six available. The replacement unit and the two new cranes will be equipped with curve-capable trucks enabling them to travel into any of the four berths. This will allow placement of three cranes at any berth, and six cranes on berths 1 - 3.

Additional container parking is also being constructed adjacent to interchange area. This twenty-five acre site, combined with berth 4's forty acres, will bring total storage capacity to 180 acres. This excellent berth/storage ratio provides unrivalled marshalling and distribution capability for CONTAINERPORT.

Immediately adjacent to CONTAINERPORT's berthing, work is proceeding on the enlargement of the King's Island turning basin. The completed basin will boast measurements of 1500 x 1600 feet, and will permit turning of the largest classes of vessels at any tide stage. It is expected to be finished on schedule in September.

**start
planning
now for**



For further information contact:

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International maritime information: World port news:

UNCTAD's Trade Facilitation Information

(Document: TRADE/WP.4/INF.72/TD/B/FAL/INF.72)

Note by the ECE secretariat based on a communication from the European Economic Community

The European Economic Community (EEC) has reported that "Commission Regulation (EEC) No. 553/81 on certificates of origin and applications for such certificates" was adopted on 12 February 1981 and came into force on 1 April 1981.

The Regulation introduces new forms for certificates of origin relating to goods originating in the Community or in one of the Member States thereof, and intended for export from EEC, and for application for such certificates.

The new forms are aligned with the United Nations Layout Key Trade Documents: they replace corresponding forms introduced in 1972. In order that existing stocks of old forms may be used up, the simultaneous use of both old-style and new-style forms is permitted until 31 March 1983.

COMMISSION REGULATION (EEC) No 553/81 of 12 February 1981 on certificates of origin and applications for such certificates

THE COMMISSION OF THE EUROPEAN
COMMUNITIES

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Regulation (EEC) No. 802/68 of 27 June 1968 on the common definition of the concept of the origin of goods, and in particular Article 14 thereof,

Whereas Regulation (EEC) No. 802/68 provides in Article 10 that certificates of origin for goods originating in and exported from the Community must comply with the conditions prescribed by Article 9 of that Regulation;

Whereas, with a view to ensuring that those provisions were respected in a uniform manner, the Commission laid down in Regulation (EEC) No. 582/69 the forms of certificate of origin and application for such certificates; whereas those forms were later modified by Regulation (EEC) No. 518/72; whereas, however, that modified version is no longer in conformity with the most recent international standards; whereas, in particular, it is not in conformity with the layout key recommended by the Economic Commission for Europe in Geneva for documents used in external trade; whereas, in order to take account of that recommendation, it is desirable to adapt the specimen certificate of origin and application for such

certificate to the layout key;

Whereas Regulation (EEC) No. 582/69 furthermore provided that the competent authorities or authorized agencies must retain the original applications for the certificates for a minimum period of three years;

Whereas experience has shown, on the one hand, that a shorter period of retention is sufficient, and on the other hand, that commercial documents are increasingly being kept in the form of copies, which are often reduced-scale copies;

Whereas the present minimum period for the retention of applications should be reduced to two years and at the same time, subject to certain conditions, the retention of applications in the form of copies, which may be reduced-scale copies, should be permitted;

Whereas, as this Regulation replaces Regulations (EEC) No. 582/69 and (EEC) No. 518/72, those Regulations should be repealed;

Whereas, however, in order to allow existing stocks of such forms to be used up, the simultaneous use of old-style and new-style forms should be allowed for a certain period of time;

Whereas this Regulation is in accordance with the opinion of the Committee on Origin,

HAS ADOPTED THIS REGULATION:

Article 1

1. Certificates of origin relating to goods originating in the Community or in one of the Member States thereof and intended for export from the Community, and applications for such certificates, must, under the conditions laid down in Articles 9 and 10 of Regulation (EEC) No. 802/68, be made out on forms conforming to the specimens annexed to this Regulation.

2. Each certificate and the application for such certificate must, for identification purposes, bear the same serial number. When the certificates are issued the competent national authorities may in addition place a number of issue on them. If the needs of the export trade so require, one or more copies of each certificate may be made.

Article 2

The competent national authorities shall determine what additional particulars, if any, are to be given in the application. Such additional particulars must be kept to a strict minimum.

Each Member State shall inform the Commission of the provisions which it adopts in pursuance of the preceding paragraph. The Commission shall immediately communicate this information to the other Member States.

Article 3

The competent authorities or authorized agencies of the Member States which have issued certificates of origin must retain the applications for a minimum of two years.

However, applications may also be retained in the form of copies thereof, provided that they have the same probative value under the law of the Member State concerned.

Article 4

Regulation (EEC) No. 582/69 and (EEC) No. 518/72 are hereby repealed.

Nevertheless, forms which conform to the specimens annexed to Regulation (EEC) No. 518/72 may still be used until 31 March 1983.

Article 5

This Regulation shall enter into force on 1 April 1981.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 12 February 1981.

For the Commission
Karl-Heinz NARJES
Member of the Commission

France is host country for UNCTAD's first 'TRAINMAR' seminar for officers in ports and shipping

UNCTAD's first seminar for training officers in the shipping and ports sector will be organized jointly by the United Nations Conference on Trade and Development (UNCTAD) and the Chamber of Commerce of Sète (France), in co-operation with the Shipping and Navigation Department of Languedoc-Roussillon. This seminar is an activity of the pilot training project 'TRAINMAR' which is financed by the United Nations Development Programme and executed by UNCTAD secretariat. The seminar will be held in the port of Sète (France) from 22 to 30 September 1981.

The aim of the seminar is to present to personnel managers and others responsible for management training in shipping and ports in the developing countries, the TRAINMAR strategy for in-service training and the courses already available. It will also examine how to strengthen training institutions in the regions and promote co-operation and exchange of material between them. During the seminar the activities and methods of management training in the shipping and port sector of the host country will also be presented, together with those of certain developing and developed countries. The training officers present at Sète will examine how to benefit from the project TRAINMAR if they so wish, and what measures they can take to strengthen their national institutions and their regional and international co-operation.

50 participants from 25 developing countries will take part in the seminar which will be conducted in French and English. The Seminar Director will be Mr. M. Couroux, UNCTAD Co-ordinator of the TRAINMAR Project.

The TRAINMAR Project (INT/79/016) was formulated following a survey carried out in 1979 by Professor A. Couper of the University of Wales in Cardiff. This survey,

financed by UNDP and executed by UNCTAD, enabled an evaluation in quantitative and qualitative terms of the management training needs in the shipping and ports sector of the developing countries. It was found that about 60,000 managers needed additional training which the existing institutions could not provide satisfactorily. Following this conclusion, a second UNCTAD consultant proposed a solution consisting of the application of a training approach already used in other sectors. This was based on a systematic analysis of deficiencies and needs; examination of the population to be trained and their tasks; design of courses to remedy the deficiencies; and the training of course developers and instructors. These questions were presented in a report prepared by the consultants which was submitted to the UNCTAD Committee on Shipping in September 1980 (TD/B/C.4/189).

The TRAINMAR Project started in January 1980 as a pilot project for an initial period of two years, to test this approach within a wider strategy of developing local shipping and ports training institutions and promoting co-operation between them. One of the long-term aims of TRAINMAR is to set up the necessary infrastructure which will permit the developing countries themselves to develop modern training courses in shipping and ports.

To date a model course on port planning has been produced, tested and validated. It consists of 20 modules, uses modern teaching methods (audio-visual, games, etc.), and includes an Instructor's Guide for local instructors who will be able to deliver the course without outside help. The course lasts four weeks. Three other courses are nearing completion in the three centres associated with TRAINMAR:

Bombay: The Narottam Morarjee Institute of Shipping
Mombasa: Bandari College
Abidjan: L'Institut de Documentation, de Recherches et d'Etudes Maritimes (IDREM) et le Groupe des Ecoles de la Marine Marchande d'Abidjan (GEMMA), et la future Académie des Sciences et Techniques de la Mer.

These courses are, respectively:

- Port operations
Port operations supervisors—3 weeks—14 modules
- Management of containerized liner shipping
Middle managers—2 weeks—9 modules
- Basic maritime legislation for shipping agents
Middle managers—3 weeks—18 modules

As soon as these courses are finalized they will be passed to the other training centres associated with the TRAINMAR Project for adaptation and delivery. Between June and November 1981 six TRAINMAR courses and seminars will thus be organized, some without outside assistance. During this period more than 100 managers will take part in the programme.

Status of the London Dumping Convention as at 1 September 1981

(Document: LDC VI/2)

List of governments which have implemented articles XVII or XVIII of the Convention

	<u>Date of ratification or accession</u>	<u>Date of entry into force</u>
Afghanistan	2 April 1975	30 August 1975
Argentina	11 September 1979	11 October 1979
Byelorussian SSR	29 January 1976	28 February 1976
Canada	12 November 1975	14 December 1975
Cape Verde	26 May 1977	25 June 1977
Chile	4 August 1977	3 September 1977
Cuba	1 December 1975	1 January 1976
Denmark ¹⁾	23 October 1974	30 August 1975
Dominican Republic	7 December 1973	30 August 1975
Finland	3 May 1979	2 June 1979
France	3 February 1977	3 March 1977
German Democratic Republic	20 August 1976	19 September 1976
Germany, Federal Republic of	8 November 1977	8 December 1977
Greece	10 August 1981	9 September 1981
Guatemala	14 July 1975	30 August 1975
Haiti	28 August 1975	27 September 1975
Hungary	5 February 1976	6 March 1976
Iceland	24 May 1973	30 August 1975
Japan	15 October 1980	14 November 1980
Jordan	11 November 1973	30 August 1975
Kenya	17 December 1975	16 January 1976
Libyan Arab Camahiriya	22 November 1976	22 December 1976
Mexico	7 April 1975	30 August 1975
Monaco	16 May 1977	15 June 1977
Morocco	18 February 1977	20 March 1977
Netherlands ²⁾	2 December 1977	2 January 1978
New Zealand	30 April 1975	30 August 1975
Nigeria	19 March 1976	18 April 1976
Norway	4 April 1974	30 August 1975
Panama	31 July 1975	30 August 1975
Papua New Guinea	10 March 1980	9 April 1980
Philippines	10 August 1973	30 August 1975
Poland	23 January 1979	22 February 1979
Portugal	14 April 1978	14 May 1979
South Africa	7 August 1978	6 September 1978
Spain	31 July 1974	30 August 1975
Suriname	21 October 1980	20 November 1980
Sweden	21 February 1974	30 August 1975
Switzerland	31 July 1979	30 August 1979
Tunisia	13 April 1976	13 May 1976
Ukrainian SSR	5 February 1976	6 March 1976
United Arab Emirates	9 August 1974	30 August 1975
USSR	15 December 1975	14 January 1976
United Kingdom ³⁾	17 November 1975	17 December 1975
United States	29 April 1974	30 August 1975
Yugoslavia	25 June 1976	25 July 1976
Zaire	16 September 1975	16 October 1975
The Convention applies provisionally in respect of the following State: Kiribati		

- 1) Extended to be effective in respect of Faroe Islands from 15 November 1976.
- 2) Ratification by the Netherlands was declared to be effective in respect of the Netherlands Antilles.
- 3) Ratification by the United Kingdom was declared to be effective also in respect of:

	<u>Effective date</u>
Bailiwick of Guernsey)
Isle of Man)
Belize)
Bermuda) 17 November 1975
British Indian Ocean Territory)
British Virgin Islands)
Cayman Islands)
Falkland Islands and Dependencies)
Hong Kong) 17 November 1975

Montserrat)
Pitcairn)
Henderson)
Ducie and Oeno Islands)
Saint Helena and Dependencies) 17 November 1975
[Seychelles] *)
[Solomon Islands] *)
Turks and Caicos Islands)
[Tuvalu] *)
United Kingdom Sovereign Base Areas)
of Akrotiri and Dhekelia in the)
Island of Cyprus)
Bailiwick of Jersey) 4 April 1976

* Now an independent State.

Leaders of the world shipping industry calls for an end to political confrontations on maritime affairs: ICC

The appeal was made at the end of a four-day maritime conference organised by the International Chamber of Commerce (ICC).

The ICC's fourth maritime conference was designed to analyse the intricacies and risks of the shipping business for the benefit of new entrants and countries with growing maritime ambitions.

The ICC statement—"the Caracas declaration"—invited the world business community to initiate a new approach to the development of international shipping.

The statement was approved by 250 delegates from 34 countries including shipowners, charterers, bankers, insurers and shippers as well as government officials and representatives of international organisations.

CARACAS DECLARATION

The Principles

The world business community represented at the 4th International Shipping Conference commits itself to initiate a new approach to international shipping development. It is urgent that the current state of political confrontation in shipping be brought to an end and that a new era of commercial cooperation be opened. Businessmen themselves must rise above narrow interests not only for the future of the international maritime trading system but also if they wish to realise new business opportunities. In this way, the rights of emerging maritime nations to fully develop their resources will be realised.

There must be no protectionism of public or private sector activities at the cost of the public exchequer. The ICC understands the inclination of nations initially to rely on cargo-sharing and market reservation to overcome impediments and secure a place in shipping with fleets of their own.

However, the ICC continues to believe that true economic progress can only be based on the market oriented competitive system and a liberalisation of trade in goods and services.

The Priorities

The commitment to a new framework entails a change in

priorities and attitudes. The emphasis should be on:

- a full examination of the conditions necessary for successful joint ventures
- detailed consideration of the most appropriate methods for the transfer of shipping technology, including the enhancement of technical and management skills
- sustained activity to ensure the existence of viable national maritime codes and supporting legal, tax and labour regimes
- a serious search for innovative financial mechanisms for fleet development.

These items will lead us into areas where concrete and mutually beneficial results are possible and away from frustration. Success depends on a change in attitude.

The Proposal

This new framework should be pursued at three levels:

1. within the international business community
2. between business and government, nationally and internationally
3. between governments.

The international business community recognises the need to assert leadership and not merely to react to proposals made within United Nations bodies. The ICC, through its National Committees, intends to urge governments to find more constructive ways in which to use the forum provided by UNCTAD.

The ICC furthermore calls for an informal meeting between public and private sector representatives from both the developing and the developed countries. The purpose of this meeting would be to expand upon the agenda items referred to above, identify and additional issues and to secure an understanding on a new framework for maritime development. The ICC stands ready to cooperate with any interested party or parties that would wish to co-sponsor this initiative.

Environmental impacts of coal

The Environmental Protection Agency, U.S., has produced a report on The Environmental Impact of Coal Transfer & Terminal Operations.

The purpose was to assess current environmental impacts and to define potential control technology that will minimize the pollution from coal transfer and terminal operations. It discusses the major differences between Western, Eastern and Mid-Western coals, describes transfer operations and terminal facilities, discusses the associated environmental impacts, and reviews and assesses available environmental controls. Specifically it looks at the problems of contaminants resulting from the drainage and runoff of water from coal stockpiles and storage areas, water requirements of coal slurry systems, fugitive dust, noise and aesthetic impacts of terminal construction and the presence of equipment and coal storage piles in the terminal areas. It describes control techniques that are effective in reducing runoff flows and the removal of pollutants from wastewater; air pollution control methods (such as water or chemical sprays, surface coatings, dust control); methods of reducing or controlling noise levels; and procedures such as landscaping, architecture and site selection that can minimize land use impacts. (*AAPA ADVISORY*)

Nine years of labour peace: Port of Montreal

Earlier this year a collective labour agreement was entered into with Local 375 of the International Longshoremen's Association which is one of the most modern agreements covering shore labour to be found at any port in the world. This three year agreement, following two previous three year contracts, assures the Port of Montreal of nine successive years of labour peace.

The agreement was negotiated between the International Longshoremen's Association and the Maritime Employers' Association, commonly known as the M.E.A. The M.E.A is a non profit organization whose membership consists of ship owners, shipping agents, stevedoring contractors, terminal operators and some other companies whose activities are associated with stevedoring. Its purpose is to negotiate and administer all shore labour agreements related to ocean shipping. It maintains a number of contract administrators on the wharves to ensure that the terms of the agreement are adhered to by both parties.

In addition to Montreal, the M.E.A. has similar responsibilities at the ports of Halifax, Saint John, Quebec, Trois Rivières, Toronto and Hamilton.

A unique feature of the previous agreement, which is also a part of the current agreement, is a highly successful method of dispatching longshoremen to their work which has not been used anywhere else in the world. The men are dispatched individually rather than by gangs and the selection of the men for each assignment is made by computer.

All pertinent data for each longshoreman is fed into the computer. This includes, among other information, his name, number, seniority status, his primary skill, such as crane operator, and any secondary skills in which he has received training. Also stored in the electronic memory bank are all provisions of the collective labour agreement relative to the loading and discharge of cargo. These include data such as the number of longshoremen per gang for different types of cargo and the make up of each gang by labour classifications.

Each employer of longshoremen is required to advise the M.E.A. at a specified time each day of its labour requirements for the next day. The information required includes the name and location of the ship, the type of cargo and the holds to be worked. When this data is fed into the computer it assigns men in accordance with the terms of the collective labour agreement.

A similar agreement was entered into with local 1657 of the International Longshoremen's Association which covers the checkers.

With the assurance of labour stability which these agreements provide, the continued steady growth of business at the Port of Montreal is assured.

Coal: A new traffic for the Port of Montreal

Economic, environmental and other considerations occasionally cause major changes, on a national or world-wide scale, in the living pattern. When such changes occur the effects are soon reflected in the operations of a major port. This is amply demonstrated at the Port of Montreal by statistics concerning the movement of coal.

A few decades ago, when coal was our major source of

energy, it was an important item in the volume of cargo handled at the Port of Montreal.

As the shift from coal to oil as an energy source gained momentum, the volume of coal handled at the port steadily diminished until it was negligible.

Now, as a result of the high cost of oil, dwindling reserves and political uncertainties, coal is regaining some of its earlier importance as an energy source and is moving through the port again, this time as export business. Coal from American mines is being shipped to Europe in vast quantities and a portion of it is moving through Canadian St. Lawrence ports. Montreal is sharing in this business.

At the present time practically all coal shipments through Montreal are handled by Cast North America Ltd. Cast is one of the major container lines operating out of the Port of Montreal and coal is carried in its combination container and bulk cargo vessels. The capacity of its present ships is 750 containers and 23,000 tons of coal. New ships which will go into service next year will have a capacity of 1,400 containers and 33,000 tons of coal.

Steam coal from mines in Pennsylvania, West Virginia and Kentucky moves down the St. Lawrence Seaway to Montreal in self unloading vessels. Coal may be transferred directly to an ocean carrier or unloaded to a bulk storage area for later loading on an ocean ship. Coal exported through Montreal is destined for Antwerp.

This coal is relatively free of dust and does not produce environmental problems, which is an important feature for the port and the surrounding area.

The movement of coal through Canadian ports developed due to severe congestion at American Atlantic ports. There are reasons to anticipate that the Canadian share of this business will increase.

The export of American coal to Europe is expected to show a steady annual increase for the foreseeable future. The construction of adequate facilities at American ports to handle this growing tonnage without port congestion will require considerable time. This can only mean more business for Canadian ports.

Shipment of coal via Canadian ports is cost competitive with American ports and there are no costly delays due to congestion. As this becomes better known to European purchasers, who buy coal on a F.O.B. mine basis and, hence, can dictate the shipping route, it can be expected to result in a greater movement through Montreal and other St. Lawrence ports.

Coal is a welcome addition to the diversified commodities which pass through the Port of Montreal.

Beneficial initiative: Henri Allard, General Manager of the Port of Québec

National Transport Week was held this year from May 31st to June 6th. It was organized in order to give Canadians the opportunity to see for themselves the scope as well as the significant role played by the various modes of transportation in this country. It acquaints the public with the related facets of intermodal transport, that is, products transshipped and, in the case of the Port, the contribution made by a large number of craftsmen such as the customers, the longshoremen and the Port personnel as well, whose task is to keep the Québec operation running smoothly.

By way of participation in this Week whose theme was "Keep Canada moving", once again, we extended an invitation to the public to come and visit the Port facilities. The many visitors who accepted this invitation readily appreciated the varied and often complex activities taking place at the Port of Québec. They also discovered a heritage which had before gone unnoticed. Furthermore, they realized the prime importance of the Port's economic influence on the regional, provincial and national level as well.

Some 40 000 Quebecers took up our invitation on the weekend of June 6th and 7th and lived a maritime experience by visiting numerous stands, industries and even a ship. They also participated in guided tours of the Port's facilities. This special weekend devoted to the Port involved the concerted efforts of many people and it is indeed a propos to underline the whole-hearted cooperation given by users of the Port of Québec.

The keen interest shown by Quebecers for their Port indicates to what extent the public and the maritime carriers alike consider the Port as a valuable tool and also as an economic lever whose fall-out benefits the region as a whole. Abounding in historical wealth, the Port of Québec has put to best advantage the latest technological developments in order to capitalize fully on its natural assets, among which are its strategic geographic location and its water depth. On this impetus, it is not utopian to believe that our goal to transship 30 million tonnes annually will be reached before the end of the present decade.

Economical impact of the Port of Québec

(Quotations from the Port of Quebec's brochure)

An Asset for the Region

The Port of Québec provides some 5 400 employments whose aggregate wages total 110 000 000 \$ and generates another 625 000 000 \$ in terms of added value. Such are the findings of a study carried out by the "Bureau de consultation en gestion" of Laval University, on the economic impact within the framework of a financial cooperation between the Port of Québec and the Société Inter-Port of Québec.

Based on the data gathered for the year 1979, this study set out to quantify the primary and secondary impacts of the Port. In the final analysis, this research illustrates clearly that the one hundred firms, more or less closely related to the Port, reached a sales volume of 1,45 billion \$. As far as the provincial and federal governments are concerned, they collected respectively, 24 000 000 \$ and 17 000 000 \$ in income tax and indirect taxes from the business transactions related to the activities in the Port of Québec.

These few statistics denote without a doubt, the role which the Port Québec plays as the driving force behind the regional economy. Moreover, the numerous projects presently under study, will, upon completion, more than confirm the importance of this economic lever for the well-being of the community at large. In fact, by virtue of the projected increases, the added value of the Port of Québec could easily reach some 2 billion \$ before the end of this decade.

Summary

Employment (in men-year)	5 400
Salaries and wages	111 000 000 \$
Added value (direct and indirect impacts)	625 000 000 \$
Sales volume of firms involved	1 450 000 000 \$

U.S. maritime issues

The Maritime Transportation Research Board, an arm of the National Academy of Sciences, has compiled a list of **Critical Issues in Maritime Transportation** it feels are urgently in need of examination. Overall, its concern is the general weakening of the U.S. maritime industry despite Congressional finding dating back at least to the Shipping Act of 1916 that a strong merchant marine is vital to national security and economic well-being. Among the "critical issues" identified by MTRB is "harbor improvements." Specifically, it points to the burden that technical innovations and legislation have placed on seaports. At many ports, according to MTRB, approach channels and facilities are physically obsolete, inadequate or unsafe for handling modern ships. Among the major difficulties that face ports, it identifies capital needs and cost; the disposal of dredge spoils; the weakening of national defense caused by concentrating terminals at few ports; the environmental and siting problems associated with petroleum and hazardous cargo terminals; and the effects on labor and the community of consolidating or relocating ports. Other "critical issues" singled out by MTRB are cargo for U.S. flag vessels; federal aid; national security; federal regulation; shipping industry practices; shipbuilding and repair; maritime safety; and energy transport on inland waterways. (*AAPA ADVISORY*)

U.S. waterborne foreign trade

U.S. waterborne foreign commerce amounted to 900.9 million tons in 1980, valued at \$297 billion, according to the U.S. Bureau of Customs. While volume fell by 18.3 percent below the calendar year 1979, the dollar value rose by 20.2 percent. Much of the drop off occurred in the tanker trades, apparently reflecting the overall decline in petroleum imports. Exports increased both in volume and value. Grain exports on tank vessels amounted to 2.4 million tons. The substantial growth in grain and coal trades apparently was a significant factor in the general increase of U.S. exports overall. (*AAPA ADVISORY*)

Warehouse expansion: Charleston

Commercial Bonded Warehouse now has become the Charleston area's largest business of its type, according to John H. Hardwick, president.

The firm just completed the second 50,000-square-foot expansion undertaken this year, bringing total enclosed storage space to 385,000 square feet. Approximately 88,000 square feet is designed and equipped to handle cargoes under U.S. Customs Service bond.

The modern, concrete-and-steel structures are sprinklered and offer up-to-date security features. All but 110,000 square feet is located in a single complex on Trident St. in North Charleston's Trident Industrial Park.

In the overall total are 40,000 and 20,000-square-foot warehouses nearby and another of 50,000 square feet on Ashley Phosphate Rd. The company, which has 66 years' experience, offers full rail service and also engages in export packing, consolidation, and distribution.

Commercial zone larger: South Carolina State Ports Authority

Designation of area as commercial zones is an important factor in industrial development, principally because of reduced freight rates. The recent expansion of the Charleston zone to include neighboring Dorchester County is a case in point.

A petition to expand the commercial area, which already included Berkeley County, was granted May 12 by the Interstate Commerce Commission (ICC). The request, filed by the Charleston Trident Chamber of Commerce, received strong support from business leaders.

The ICC decision has resulted in substantially lower transportation costs between State Ports Authority terminals and all points in Dorchester County. Previously, cargo shipments to Summerville and the Foreign Trade Zone nearby cost more than to much more distant Charleston and Berkeley County destinations.

Within a commercial zone, the ICC is enabled to establish a more uniform and equitable freight rate structure. This makes areas more attractive to industry and ultimately generates additional jobs and revenues.

The ICC decision concluded a year's effort by the Trident and Summerville chambers, joined by numerous government and industrial officials.

MARAD releases study of effects of using sails

Small-to medium-sized merchant ships fitted with sails to augment their propulsion plants can achieve substantial fuel savings, and attain a competitive advantage on certain trade routes. This was a key finding of a 12-month study released recently by the Maritime Administration.

The study, "Wind Propulsion for Ships of the American Merchant Marine," was prepared by Wind Ship Development Corporation of Norwell, Mass., under a MarAd contract. It was prompted by the escalation of ships' fuel prices, which have multiplied by 15-fold during the past decade and are now the largest component of a ship's operating costs.

Sail-assisted vessels in small to medium-size ranges—of 2,000 to 40,000-dwt cargo capacity—could achieve fuel savings of 15 to 25 percent compared with conventionally powered ships, according to the study.

The type of sail found to have the greatest economic potential is the wing sail rig or rigid airfoil. Resembling rectangular aircraft wings placed in upright position on a ship's deck, the wing sails can be rotated 360.

Port of Los Angeles shows a healthy financial picture

For the fiscal year ending June 30, 1981, Port revenues were \$76.9 million compared to \$68.9 million the previous year.

While gross revenues increased 11.6 percent, net income improved 9.3 percent with a total net income of \$40.9 million compared to \$38.3 million the previous year.

Port expenses were \$30.1 million for 1980-81 versus \$26.4 million for 1979-80.

Port Executive Director E.L. "Roy" Perry noted that the Harbor Department's ability to increase its income during a recessionary period is "significant in that the Port

continues to show a strong financial base for issuing bonds and funding its capital development program."

While revenues increased, total cargo tonnage through the Port declined slightly, primarily due to a reduction in oil shipments. General cargo traffic, however, which excludes petroleum, increased.

Total cargo tonnage was 38,385,854 compared to 40,981,516 the previous year. General cargo amounted to 14.4 million tons versus 14.1 million tons the previous year.

Significant changes in the volume of cargo which passes through the Port were indicated by the quarterly report in the categories of coal, oil and bunker fuel.

In line with the recent upsurge in the use of coal by Asian countries, the Port more than doubled the volume of coal it handled, with 1.9 million tons of coal through the Port compared to 843,000 tons the previous year.

Meanwhile, there was a decline in oil coming through the Port, reflecting the country's efforts to become less dependent on foreign suppliers. Bulk oil shipments dropped to 15.9 million tons (approx. 6 barrels per ton) from 20.3 million tons the previous year.

The Port, however, increased its volume of bunker fuel supplied to ocean vessels to 8 million tons from the previous year's 6.5 million tons.

One of the primary sources of trade through the Port continued to be the Far East. From this region, the Port registered a 23 percent increase in activity during the past year with 10.3 million tons of import/export trade with the Far East.

Bubrig addresses St. Louis traders

During Port of New Orleans Night in St. Louis, co-sponsored by the Dock Board and the St. Louis World Trade Club, Lee Bubrig, president of the Dock Board, saluted close ties of St. Louis with New Orleans and reviewed progress and future of the Port. His speech follows.

New Orleans and St. Louis go back into history together. St. Louis started out as a trading post in 1764, trading for fur with the Indians. In those days keel boats, flat boats, and rafts loaded with furs were moved down the river to New Orleans. New Orleans was already a thriving port. By 1817 steamboats were moving up and down the river, starting a two-way trade that has grown steadily ever since.

The old river-freight boats have long since been replaced by tow boats and barges. But it is nice to know that we still have a few old paddle wheelers like the DELTA QUEEN and the MISSISSIPPI QUEEN, going up and down the river.

The Port of New Orleans first established a trade office in St. Louis in 1949. Since then we feel that through our representative here — Rolf Wisness and Don Hire — we have become a part of your St. Louis business community. It is our intention that our good relationship continue. Our board is dedicated to doing whatever is necessary to see that it does.

In the two years since your last Port of New Orleans night, our port has been very busy expanding and modernizing its facilities. For those of you not familiar with our Port, I should explain that what we have is really two ports. We have the river port stretching along 12 miles of the

Mississippi, and we have an additional five miles of wharves in what is called the tidewater area. That area extends along our Industrial Canal and connects with the tidewater ship channel known as the Mississippi River-Gulf Outlet. This alternate route to the Gulf of Mexico is shorter than the river route by more than 40 miles.

The tidewater port has large land areas that make it ideal for container handling. It is here that we have our France Road Container Terminal. We have four berths already completed, with two container cranes, and wharves for handling Ro/Ro.

In that same area construction has started on our new multi-purpose Jourdan Road Terminal. Here plans call for the building of six berths at a cost of \$100 million; they will be completed by 1991. This facility will handle containers, general cargo, and Ro/Ro vessels. Also planned for this area is an intermodal exchange facility to handle trailer-on-flat-car and container-on-flat car movements.

In the River Port we have just completed a new four berth heavy duty wharf at a cost of \$20.8 million. This new facility can accommodate the largest of Ro/Ro ships as well as container, barge carrying, and conventional breakbulk vessels. We also have a new multipurpose wharf under construction in the downriver area scheduled for completion in 1983. An additional new wharf is also planned for that area as well as another one upriver. All in all, the Port is currently spending \$100,000 each working day on capital improvements. By the year 2000 the Port of New Orleans will have spent more than \$500 million in a 30-year period.

In 1980, New Orleans confirmed its vital role in the world transportation of goods. Our figures for that year show a 30% increase in export tonnage. The biggest increase was in coal which went from 1.3 million tons in 1979 to 3.3 million tons in 1980, a rise of 142%. Grain exports were up 45%, rising from 7.8 to 11.2 million tons.

These increase in coal and grain exports, which we expect to continue, will really soar if Congress approves the proposed deepening of the Mississippi to 55 feet. A bill in Congress right now calls for doing just that, along with dredging the ports of Hampton Roads and Mobile. The bill authorizes the work to be done on a "fast-track" basis, which means that with a little luck we could have a 50-foot channel by 1984 and a 55-foot channel by the end of 1985.

It goes without saying that the Port of New Orleans is strongly supporting the passage of the bill. We feel that it has a good chance in spite of current budget cuts. A recent study indicated the cost-benefit ratio to be 12.6 to 1. That means that the benefits of the project are almost 13 times the cost which is a good argument for going ahead.

What can we expect if we are successful?

Studies tell us that we could be exporting 120 million tons of coal by the year 2000. That's more than 40% of the expected total U.S. exports and 36 times the 3.3 tons that passed through the Port in 1980.

At present the largest load that can pass through the River is about 65,000 dwt. After the deepening, the River would be opened to 150,000-dwt vessels. Instead of a rate to Europe of \$17 a ton, coal could move through New Orleans to Europe for \$10 a ton. That is a 40% savings in shipping costs.

South Louisiana is gearing up to handle the sharp increases in coal shipments that are expected. The Board of

Commissioners' own bulk terminal, recently leased to Ryan-Walsh Stevedoring, will soon have the capability to handle 4 million tons per year.

Two large terminals south of New Orleans are increasing their capacity from the existing 10 million tons per year to a total of over 50 million tons. Six other terminals are in the design stage. Their combined capacity will be very close to 75 million tons by 1990. Others are investigating. Every day we hear of new companies interested in coal movements in South Louisiana.

Railroads and barge lines are not being left out. Illinois Central Gulf Railroad has begun investing in new equipment to move coal between the Illinois basin and Louisiana river ports. The American Barge Lines and Federal Barge Lines have invested over \$55 million in modern facilities capable of handling 30 million tons of coal each year.

I have been talking about the impact of the 55-foot channel on coal shipments, but not only coal will be affected by the deeper river.

Bulk carriers of 150,000 dwt serving the ten grain elevators on the lower river could substantially reduce the cost of shipping grain through the Port. Right now 41% of all grain exports for the U.S. are handled in South Louisiana. Grain exporters say that by 1990, 96-million tons of grain per year will be shipped from the U.S. New Orleans will get the lion's share of that movement.

Agricultural commodities have always played a large part in the development of the Port of New Orleans. Last month the New Orleans Commodity Exchange opened its doors for business. Now they are trading only in milled and rough rice. Other products like cotton and soybeans will be added later.

The Port of New Orleans is aggressively seeking to expand and improve its role in world trade. I have just returned from Munich, West Germany, where I officially opened a new office there to serve not only all of Europe but also Africa and the Mideast. The Port also has offices in Panama, Tokyo, Hong Kong, and Australia as well as regional offices in this country.

Our board is a policy-making body that has supervised the operation of the public wharves of the Port since 1896. We are selected by business organizations and appointed by the governor. Our only pay is the satisfaction we get out of making our port grow and prosper.

The Port of New Orleans has for a long time played a major role in trade in the U.S. and abroad. We will continue to improve our facilities and services.

Tug moves record 72 barges

A towboat owned by Flowers Transportation, Inc., of Greenville, Mississippi, the M/V MISS KAE-D, has set an inland waterway record with a flotilla of 72 jumbo barges lashed together in one unit, traveling to Hickman, Kentucky, from mile 304, near Baton Rouge.

Bob Gardner, vice president of operations for Flowers Transportation, said the record tow was 9 barges wide and 8 barges long and occupied a space in the river equivalent to 12.72 acres. If they were placed end to end, he said, the string would be approximately 2½ miles long.

Gardner said the tow was the largest ever moved on the inland waterway system in terms of physical dimensions and with the awesome loading capacity of 113,400 net tons. Only two of the barges were laden with cargo. Both

carried loads of manganese, metallic elements, weighing 1,550 net tons each. Seventy of the barges were empty.

The M/V MISS KAE-D is one of the largest towboats plying the inland waterway system. It has several sister ships the same size, but none any larger. The vessel was built in 1977 by Nashville Bridge, of Nashville, Tennessee. The triple-screw crafts' engines are rated at 10,500 total horsepower. (*Port Record: New Orleans*)

Ceremonies mark official opening of Foreign Trade Zone 49: Port of New York-New Jersey

A ribbon cutting ceremony marked the official opening of Foreign Trade Zone 49 at the Port Newark/Elizabeth marine terminal complex. Attended by over 200 leaders of the bi-state port community, the opening focused new attention on the many advantages the zone affords the bi-state port business and shipping community.

Established by the Port Authority in 1979, the zone comprises two warehouses, each 104,000 square feet. Building 2280 is now in operation at Elizabeth. The other structure, Building 200 at Port Newark, will be activated when operations so require.

Foreign trade zones do much to spur the movement of goods in international trade. Foreign-Trade Zone 49's two enclosed structures are considered outside United States Customs territory, thus duties on imported merchandise can be deferred, reduced, or in some cases eliminated. Foreign goods can be brought to the trade zone for numerous purposes including storage, manufacturing, assembly, salvage, repacking, repairing, re-exporting, trans-shipping and product exhibition.

Inquiries from potential zone users have been so numerous and their total space requirements so great, that the Port Authority's Board of Commissioners has authorized the filing of an application with the U.S. Department of Commerce to have all of the Port Newark/Elizabeth marine terminal complex designated as Foreign Trade Zone 49. By designating the entire area as a foreign trade zone, the Port Authority would have the flexibility to activate or deactivate individual buildings and sites as required.

Three NY-NJ sites tagged for development

Three sites in the New York-New Jersey Port region—Kaplowski Road in Elizabeth, New Jersey; the Bathgate area of the Bronx; and Howland Hook on Staten Island—have been authorized for industrial development projects by The Port Authority of New York and New Jersey. All such undertakings of the Port Authority are carried out in cooperation with the local municipalities involved.

In announcing the authorization by the Port Authority's Board of Commissioners, the bi-state agency's chairman, Alan Sagner, revealed that the Port Authority would invest a total of \$33.6 million in site acquisition, preparation and construction of the basic industrial space that would be sold or leased to future site occupants.

To attract manufacturing tenants to the sites, agreements are being worked out with Mayors Thomas Dunn of Elizabeth and Edward I. Koch of New York City that would, in certain cases, involve property tax incentives for

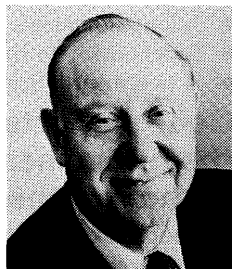
the sites and improvements to water and sewage systems serving both the surrounding areas and the sites themselves.

Elizabeth's Kaplowski Road, located on the west side of the Elizabeth-Port Authority Marine Terminal, is expected to require a Port Authority investment of some \$16.8 million. Under terms of an agreement with Mayor Dunn, the bi-state agency will make annual \$750,000 in-lieu-of-tax payments to the City of Elizabeth until such time as an equal amount in taxes is paid by private owner/developers in the industrial park. Upon its completion, the site is expected to generate up to 3,000 permanent manufacturing jobs.

Plans for the Bathgate industrial park project in the Bronx call for joint efforts by the Port Authority and the New York City Public Development Corporation, which is currently utilizing a \$4.3 million federal grant for work on the site that is part of the city's overall South Bronx rehabilitation. The Port Authority intends to provide about \$15.6 million of the projected \$26 million cost, with the PDC supplying the rest. Between 500 and 1,500 permanent jobs are expected to be granted through development of this site.

On Staten Island, the Port Authority is expected to provide up to 750,000 square feet of a 35-acre site at the New York City-owned Howland Hook Marine Terminal. Under terms of an agreement made last fall, the city and the bi-state agency will also jointly develop a Foreign Trade Zone and distribution facilities on a large 100-acre area at a total on a larger 100-acre area at a total cost of approximately \$21 million. The City will invest some \$11 million in basic site construction, and the Port Authority will build 300,000 square feet of distribution space at an estimated cost of \$10 million. Upon full development of the site, the additional facilities at Howland Hook may generate between 500 and 875 permanent jobs.

Lyle King and NY & NJ Port Authority honored for pioneering efforts



The late A. Lyle King, former Director of the Marine Terminal Department (now Port Dept.) of The Port Authority of New York and New Jersey, has been honored by the Containerization and Intermodal Institute as a leader and pioneer in the development of facilities to handle containerized cargo and containerships. At the same time, the Institute honored The Port Authority of New York and New Jersey, which in 1956, at Mr. King's urging, acquired 700 acres of marshland at Elizabeth, New Jersey for development into a facility that today ranks as leader among the world's intermodal terminals.

Citing Mr. King for his prophetic vision, the Institute noted in presenting the award that, "Mr. King's leadership and experience, along with the Port Authority's investment and vision, have made them true pioneers in this industry. This expertise has been shared generously with port repre-

sentatives around the world, encouraging them to go forward with the development of modern facilities in their own areas."

Mr. King, who died in 1973, was a past president of both the American Association of Port Authorities and the International Association of Ports and Harbors. In recognition of his many contributions to ocean transport, the main street at the Elizabeth-Port Authority Marine Terminal has been renamed "Lyle King Street."

Port Labor fund awards first scholarships to longshoremen dependents: NYSA-ILA

A newly created labor-management fund that finances four-year college scholarships for dependents of union longshoremen in the Port of New York and New Jersey today announced that the first group of eight students has been selected for its \$4,000 annual awards. They include residents of Northern New Jersey, New York City and Suffolk County on Long Island.

The action by the Teddy Gleason Scholarship Program of the NYSA-ILA Scholarship Fund marks the initial grant by the waterfront industry plan. It was developed under the present three-year collective bargaining agreement between the International Longshoremen's Association, AFL-CIO and employers represented here by New York Shipping Association, Inc. and is the only one of its kind in the port industry.

When fully implemented in 1984, the fund will annually assist a total of 32 children of ILA members from the bi-state port region in achieving a college level education at a total outlay of \$128,000 with eight new high school graduates becoming eligible for each of the \$4,000 awards yearly.

The award of scholarships by a fund supported by industry contributions and negotiated through a labor contract is a pioneering event in longshore employer-union relations in the port here. However, it's a program that is a likely forerunner for similar development in other Atlantic and Gulf Coast harbors in later years, according to labor and management sources.

Open to dependents of more than 10,000 ILA members in the New York port area on the basis of academic performance and aptitude tests among other determinations, it is available to qualified applicants who wish to continue education in undergraduate, apprentice or training programs in accredited colleges, universities and other institutions.

The union is the largest waterfront organization in the United States. In addition to members in the Port of New York and New Jersey, ILA represents some 40,000 longshoremen in other ports from Canada to Mexico, and upwards of 50,000 additional waterfront workers in the U.S. Great Lakes, eastern Canada and Puerto Rico.

New York Shipping Association is also the largest waterfront management organization in the United States. It represents approximately 135 companies including many of the largest ocean carriers and stevedoring and marine terminal operating companies in the nation.

The activities of the union and NYSA in the bi-state Port of New York and New Jersey involve handling by workers and employers of more than 24 million tons of high value general cargo yearly through company operated facilities.

The port is the nation's largest harbor and the 10,000 active longshoremen in the work force here is the largest such group by far in any American port.

The bi-state port covers pier areas in Brooklyn, Manhattan and Staten Island within the five boroughs of New York City, and the New Jersey waterfront communities of Newark, Elizabeth, Jersey City, Hoboken, Bayonne, Weehawken and Perth Amboy.

New president delineates an overall goal: Port of Oakland

Norvel Smith, newly elected President of the Oakland Board of Port Commissioners, has outlined an overall goal and series of objectives to be followed during his one-year term presiding over the seven-member Port Board.

Smith, a well-known educator who serves as Vice-Chancellor for Student Services at the University of California, set as a priority the strengthening of the Port's relationship with the City of Oakland government. "It will be our aim to reinforce the image of the Port as a part of the City family, and to be responsive to the economic development needs of the City and its citizens," he said.

To achieve the goal, Smith said, the following objectives have been established:

- Maintenance of the Port's competitive relationship with other West Coast enterprises, both in the Marine Terminal activity and at Oakland International Airport and the North Field general aviation airport.
- Achievement of an overall increase in the productivity of the Port in order to produce higher revenues, essential to providing for the capital improvement program of the Port, as well as the reimbursement of the City for all direct services provided by the City to support Port functions.
- Facilitation of joint planning between the City government and the Port in connection with a variety of economic development and redevelopment projects within the Port areas.
- Improvement of communication between the Port Commission and the City Council, and between the Executive Director of the Port and the City Manager.

Port of Oakland completes massive conversion program

Marking the final phase of a massive six-year redevelopment program, the Port of Oakland recently completed the conversion of the Outer Harbor Berth 5 and 6 complex into full container facilities.

The two berths encompass an area of 60 acres, bringing the total area of the Port's container facilities to 475 acres. Oakland's container capacity, including its arsenal of 18 container cranes, is the largest in the United States West Coast.

To commemorate the completion of the project, the Port held a reception and dedication ceremony at the Berth 5 and 6 complex, presided over by Ted Connolly, President of the Oakland Board of Port Commissioners, and attended by 600 people from the shipping, business and government sectors.

Under the Port's redevelopment program, which started in 1975, five berths stretching for almost a mile in the Outer Harbor were converted into full container terminals. Outer Harbor Berths 2, 3 and 4 had been converted into full container facilities and dedicated in 1977.

The facilities in the area were first developed in 1920 and were designed to handle break-bulk cargo and petroleum distribution, with Oakland then, as it is now, a major center for the global export of cotton and agricultural products.

The conversion of the facilities into full container terminals was carried out to meet the growing demand for containerized cargo. More than 80 percent of Oakland's annual tonnage now consists of container cargo. A total of 11 million revenue tons of cargo was handled by the Port in 1980, of which 9.3 million revenue tons consisted of container cargo.

Redeveloped at a total cost of \$28 million, the new Berth 5 and 6 complex is designed to provide efficient handling of larger vessels with plans to deepen the channel to 42 feet from its present 35 feet depth.

The complex contains two large berths—one 939 feet and the other 900 feet—and is equipped with high capacity container handling equipment, top loaders, transtainers and three container cranes, with a fourth available if required.

A feature that has gained attention in maritime circles is the unique crane transfer system that operates in the terminal complex.

Berth 6 has the service of one container crane moved from adjacent Berth 8 by means of the ingenious crane transfer system, devised by Port of Oakland engineers, that enables a 600-ton gantry crane to move 60 degrees to an adjoining berth. And when necessary to speed up handling of container cargo, a second crane may be transferred to Berth 6 from the three additional cranes positioned at Berth 8, operated by Sea-Land Service Container Terminal.

Other features of the terminal Complex include:

- Heavy duty pavement of the terminal yards designed to carry container handling equipment with maximum wheel load of 100,000 lbs. such as transtainers and Portpackers.
- Direct rail access onto the Berth 5 wharf.
- A longshoremen's building at each berth.
- Gatehouse with truck weighing scales.
- A two-story office building.

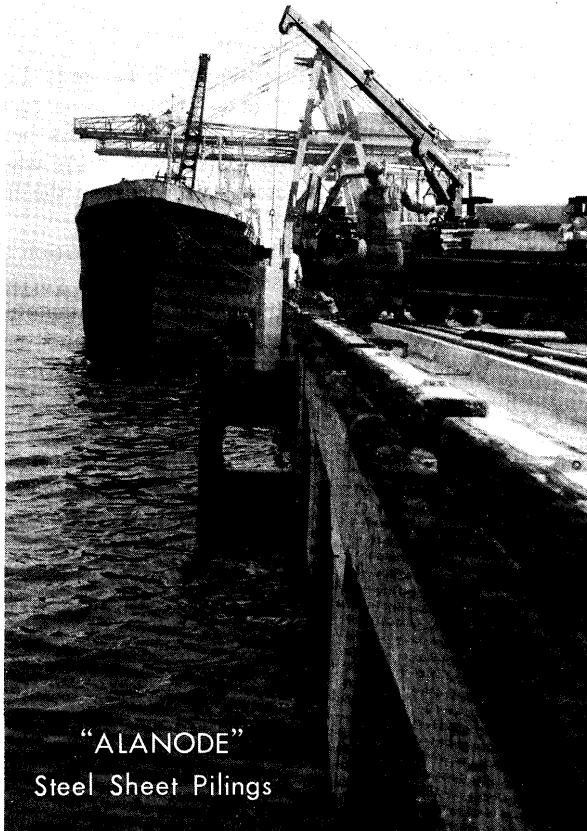
Georgia Ports to make Brunswick the preeminent bulk port in the Southeast

Georgia Ports Authority has placed in operation a newly erected ship unloader at its Brunswick Terminal. The versatile piece of gear will be utilized primarily to handle dry bulk cargoes. Utilizing its 7-3/4 yard bucket, it can feed the dockside conveyor leg at rates up to 700 tons per hour depending on commodity density. The \$2.1 million unit possesses an individual lift capacity of 15 tons. It can also handle breakbulk lifts of 15 tons at outreaches up to 73 feet.

The unloader is the latest addition to Brunswick's burgeoning dry bulk complex. It now includes two covered storage buildings totalling 110,000 square feet with a combined capacity of 60,000 tons. They are connected to the unloader by a 500 ton per hour conveyor system. Additional dry bulk warehousing is on the drawing board for construction in the near future.

Transit shed I has been refurbished to handle export shipments of animal feeds and minerals. It is serviced by a hopper car unloading station and conveyor. Both transit

(Continued on page 42 bottom)



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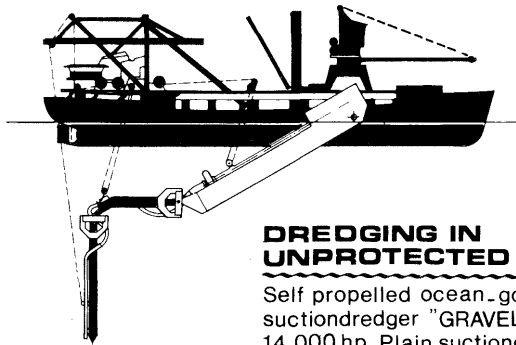
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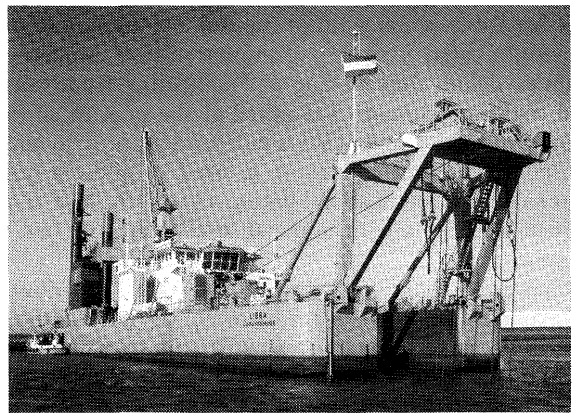
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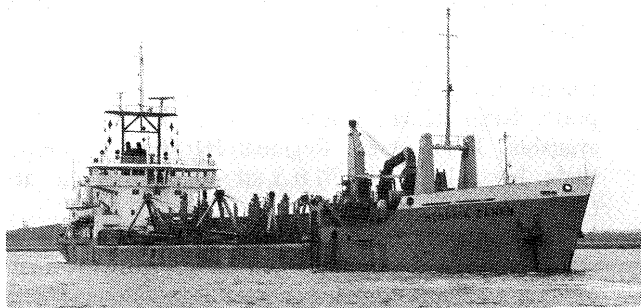
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Port Development — A Process of Evolution

(Extracts from "NEWSLETTER from Swan Wooster Engineering"*)

* Associate Member of IAPH

Modern ports represent the current stage in a process of evolution as old as shipping itself. Ports have developed as a place to transfer goods and people between ship and shore. As shipping and land transportation technologies have changed, ports have evolved in response. This process has been gradual over long periods, punctuated by sudden spurts of change when new technologies were introduced.

The past 20 years have been a period of unusually rapid change and exciting development in both transportation and ports. Major areas of change have included a rapid increase in ship size, especially for bulk cargoes. This has generated a worldwide need for deeper draft ports. There has been a major shift from traditional break bulk cargo to unitization, containerization and single commodity bulk cargoes.

With this has come a spectacular growth in the number of specialized ships built for specific cargoes. Examples include containers, ore, dry bulk materials, crude oil, petroleum products, forest products, LNG, automobiles and refrigerated cargo. In response, there has been a surge in the development of specialized port facilities to accommodate these ships. Cargo handling rates for port equipment have increased dramatically and berth occupancy levels have tended to drop. With their great capital and operating costs, the specialized ships are not to be kept waiting.

The economic pressure to turn ships around in minimum time has led to phasing out of traditional method of direct transfer of cargo from ship to shore transport. Modern port facilities delink ship loading and unloading from rail and road transport. Storage is required at the port to allow for loading and unloading of ships independent of road and rail transport. This buffer storage is sized to allow a normal degree of variation in arrival patterns for both ships and rail or road shipments with minimal interference of one with the other.

Changes in on-shore transportation also contribute to the evolution of ports. A major recent advance is the unit train. Bulk cargo ports must now be able to accommodate full train loads of a single commodity and load or unload such trains at increasingly higher rates. Rail and truck loading is being shifted further from its traditional location on the berth apron leaving that area clear for high speed

ship loading and unloading operations.

The requirements of deeper water depth for large ships, large land areas for buffer storage and uncongested access for land transport results in many new terminals being located some distance from long established ports where past urban development, attracted by the port in the first place, has tended to choke off expansion.

A number of these recent trends in port evolution are reflected in current Swan Wooster projects at the ports of Tanjung Priok, near Jakarta, Indonesia; Port Muhammad Bin Qasim, near Karachi, Pakistan; and Duke Point, near Nanaimo in western Canada.

Port of Tanjung Priok

The port of Tanjung Priok is Indonesia's largest and busiest port. It handles impressive quantities of international general cargo, bulk cargo and inter-island traffic.

Swan Wooster Engineering was engaged by the Government of Indonesia to prepare a long-term master plan for the port and to prepare a detailed development plan for the first ten year period.

As primary input to the study, trade forecasts were prepared taking into account expected population growth rates, planned industrial development and other factors. Since the study was carried out during a period of rapid conversion to containerization, evaluating the extent and rate of this trend was an important part of the study.

The work culminated in a comprehensive development plan involving the construction of new container berths, improved general cargo berths and reconstruction of an obsolete portion of the port as a modern regional harbour for the growing inter-island trades. In addition, long-term plans were proposed for transfer of bulk liquid facilities to new areas of the port and for the improvement of surface transportation links with the hinterland area.

Port Expansion

Following Swan Wooster's preparation of a long-term master plan for the Port of Tanjung Priok, Jakarta, the Government of Indonesia initiated a port expansion program with financial assistance from the World Bank. The first phase of this expansion, encompassing about 26 hectares (64 acres), comprises three facilities—a container terminal, a general cargo facility and a new general cargo installation for inter-island trade.

Together, the container terminal and general cargo facility occupy 920m (3,020ft.) of wharf frontage in the port's Basin Three, where 11 m (36 ft.) water depth is available. The separate Regional Harbour for inter-island trade has 540 m (1,770 ft.) of wharf frontage at 6 m (20 ft.) draft.

The container terminal is equipped with mobile gantry cranes and other equipment, in addition to the first two modern 40 tonne container cranes in Indonesia. The cranes were barged from Japan in large sections and all structural erection was completed in just 13 days using a 300 tonne floating derrick.

The two new general cargo facilities will provide the port with an additional 20 hectares (50 acres) of cargo handling

(Continued from page 40)

shed I and the bulk storage building are equipped with bagging equipment.

On nearby Colonel's Island, Georgia Ports Authority will begin construction of a \$22 million dry bulk facility in 1982. Phase I of this project will accommodate a 1.5 million ton annual throughput. Phase II planning incorporates expansion of covered storage and siloage to bring annual capacity to 3 million tons. In addition, open storage is located immediately adjacent to these structures.

area, six new transit sheds totalling approximately 35 000 m² (375,000 sq.ft.) a terminal office, maintenance workshops and ancillary structures. Swan Wooster is responsible for detailed design and field supervision of construction on the first phase of this expansion.

Studies are currently underway to review the proposed Phase II (1980-85) development of the port to meet the needs up to the year 2000.

Port Muhammad Bin Qasim

The Port of Karachi has developed over the past century and has handled virtually all of Pakistan's seaborne trade. The port is oriented to traditional breakbulk handling methods and water depth at most berths is less than 10 m (33 ft.). A considerable amount of cargo is handled directly from ship to rail wagons on the wharf apron. In the early 1970's, the Government of Pakistan decided to establish a second deep-sea port to supplement the Port of Karachi and to provide deeper draft berths with specialized cargo handling facilities for bulk and semi bulk cargoes. The Port Qasim authority was established to construct and administer the new port. In 1974-75 Swan Wooster participated in master planning for the port, in association with National Engineering Services (Pakistan) Ltd.

The new port is located 40 km. (25 miles) east of Karachi, adjacent to the Pakistan Steel Mill. The berths are located on a tidal 'creek', a former mouth of the Indus River. The navigation channel is 45 km (27 miles) long, a long portion of which is naturally deep enough for ships up to 75 000 DWT. Hydraulic studies for the port have been carried out by the Hydraulic Research Station, Wallingford, U.K.

In addition to the ability to accommodate larger ships, Port Qasim has substantial adjacent land available for port oriented industries and direct rail and road access to the interior of Pakistan, avoiding the congestion of downtown Karachi.

First Phase Development

The first phase includes development of the Navigation Channel for 50 000 DWT ships, an iron ore/coal import berth to supply the Pakistan Steel Mill, seven multi-purpose berths intended primarily for bagged cargo such as fertilizer, rice and cement and all necessary infrastructure to create an operational port. The second phase will see deepening of the channel and coal berth for 75 000 DWT ships, bulk wheat handling facilities added to one of the general purpose berths and a separate 50 000 DWT berth for bulk fertilizer, phosphate rock and sulphur.

Swan Wooster is involved in the first phased development at Port Qasim, in association with NESPAK. The work includes updating of the port's long range master plan; planning, design and construction supervision for marginal berths; small craft harbour; transit sheds; maintenance shops; roads; utilities and other facilities. The work also encompasses feasibility studies for the bulk fertilizer and grain terminals to be developed in the second phase. Swan Wooster has also been involved in the preparation of general arrangements and bid documents for twin 1200 tph clamshell ship unloaders and twin belt conveyors, 4.5 km (2.7 miles) long, designed to carry coal and iron ore from the berth to the mill storage. This facility is now in operation.

Duke Point Deep Water Port, Nanaimo

Nanaimo has traditionally been the transportation hub for Vancouver Island off the west coast of Canada. Industrially, Nanaimo developed as a coal mining and shipping terminal in the mid 19th century. As the coal supply was depleted, the logging and saw mill industry expanded, leading to the establishment of the pulp and paper industry in the area in 1950.

The forest products industry, British Columbia's largest, exports 80% of its annual production of lumber and pulp and paper. The developing industry on Vancouver Island has created a need for new and modern port facilities for exporting forest products from the Nanaimo area.

Environmental assessment studies indicated that new developments in the inner harbour of Nanaimo would adversely affect the Nanaimo River estuary, the largest estuary on Vancouver Island and a valuable fisheries and aquatic birds resource.

To protect the estuary a new deep-sea port at Duke Point, about 9 km (5.5 miles) by land from the Nanaimo Inner Harbour was proposed. The site is located on the foreshore along the Northumberland Channel between Gabriola and Vancouver Islands. A water depth of 13.5 m (44 ft.) below low water level is available at the site to allow unrestricted berthing for ships up to 50 000 DWT.

The new port is part of a proposed industrial park which would include pulp mills, saw mills, a petroleum tank farm and related light industries. Swan Wooster carried out a feasibility study for the new port in 1978 and followed with a detailed design for the development.

Work is now underway on the first phase of the development which will include one deep-sea berth and one barge berth incorporating a barge ramp.

The site has been prepared by blasting sandstone ridges on the 25 hectare (62 acre) site, creating a level back up area, as well as rock fill for the reclamation of the offshore area.

The second phase of the development will add an additional deep-sea berth and another barge berth.

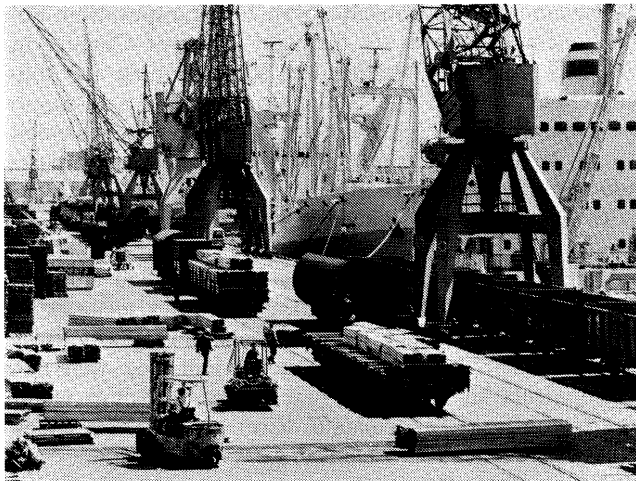
Construction works of Berendrecht Lock starts: Port of Antwerp

Some while ago the preliminary works for the construction of the Berendrecht Lock were started. The Berendrecht Lock, situated south of and parallel to the Zandvliet Lock, will become the largest sealock in the world, measuring 500 m in length and 68 m in width.

Aim of the construction is a more smoothly and safer ships' traffic by means of a largely increased lock capacity. The lock had also become a necessity in view of the growing number of vessels measuring 100,000 tdw and over which call at Antwerp since great progress was made in deepening the fairway channel of the river Scheldt.

Moreover the flow of cargo and vessels is expected further to increase when the Delwaide Dock will be gradually put into operating with terminals for the handling of ores, coal, conventional general cargo and containers.

Remarkable Growth Rates in Export : Port of Hamburg



31.6 million tons of cargo of all kinds were handled at the quays of the all-round Port of Hamburg in the first half of 1981; this is 4.3 per cent less than in the comparable period of the preceding year. However, the losses were exclusively on the import side, while exports scored increases of about 24 per cent. Now, as in the past, a steady growth factor is general and bagged cargo handling, which on the export side marked up the biggest rise in terms of quantity.

Hamburg's position in container traffic continues positive

In the first three months of 1981 the Port of Hamburg succeeded in building up its competitive position in container traffic. Despite declines in various cargo sectors due to the general business recession, the growth in container traffic amounted to 16.6 per cent. Altogether 210,000 TEU were loaded and discharged.

The port economy sees this positive trend as an important indication that Hamburg, with its successful adaptation to the new transport and handling technologies, has succeeded not only in maintaining its position in the hard fought for market for maritime cargo, but also step by step strengthened it and even expanded it compared to the competing European seaports.

As The Representative Helmut F.H. Hansen told trade journalists, within the port this adaptation has led to a situation where it was possible to cope with the additional work resulting from the continuing increase in cargo volume without employing more workers. The new technologies helped more cargo to be handled with less operatives.

On the other hand no need arose to discharge workers. This was due to the fact that the introduction of container traffic brought with it creation of new workplaces in the port, for instance in the loading and unloading of port to port containers, or in the container depots with their maintenance and repair facilities.

In this connection it is becoming apparent that the term "dock worker" must have a wider meaning than was customary in former times. The major increase in mechanisation of handling processes calls for expert, craft-trained operatives not only in the container depots, but also at the

terminals, where the expensive equipment has constantly to be looked after and kept in order.

The port is encouraging this restructuring of the dock labour force with wide-ranging training and further education courses. All of these instruction measures aim at improving the quality standards of the port operatives and to put them in a position to deal with rising demands at their workplaces. Seen as a whole, these training and further education measures are an inevitable correlate to the technical adaptation of the handling terminals, which incidentally makes considerable demands upon the innovation and investment readiness of the port enterprises.

At Tollerort Terminal nearly 100,000 TEU were already handled in 1980 with two cranes. After the third crane becomes operational, a further rise in container handling is expected in 1981. At present the container storage space amounts to 80,000 square metres.

Port of Hamburg celebrates 792nd anniversary

The annual custom of festively celebrating the Port of Hamburg's birthday in the first days of May is admittedly still comparatively new, having been introduced after the Second World War. But in the meantime it has already become such a firm tradition that nobody would willingly renounce it. The port birthday recalls that on 7th May, 1189, German Emperor Frederick Barbarossa granted the Hamburgians in a "charter" special trading and shipping privileges, and thus laid the foundation stone for Hamburg's development into a world port.

This year the 792nd port birthday was favoured by radiant summer weather. Over a million people — mainly Hamburgians but also many out-of-town visitors—watched the manoeuvres of large and small, old and new ships, or took helicopter trips over the Elbe and the port installations.

Within the Federal Republic, heads of port representation bureaus invited business partners and friends of the port to even more birthday parties. Everywhere the port birthday was a welcome occasion to mark the bonds between the biggest German maritime cargo handling centre and the economy.

New tugs inaugurated officially: Port of Amsterdam

Amsterdam-IJmuiden now have a new fleet of the most modern and advanced harbour tugs in Western Europe.

Named GRONINGEN, GELDERLAND, OVERIJSEL and UTRECHT (all Dutch provinces and traditional Wijsmuller names), the tugs have twin propellers aft capable of rotating the vessels 360°.

Designed by Wijsmuller's own engineering department, each tug is equipped with Z-peller, type Zp2a propellers. These are unique in Europe. The new vessels have a bollard pull of 30 tons forward and 27 tons in reverse and are ideally suited to handle the ever larger vessels—especially dry bulk carriers—which will serve the new IJmuiden terminal.

The tugs are powered by two Bolnes 8 DLN diesel engines giving a total of 2400 BHP. Speed is put at 12 knots forward and 11 knots free running astern.

ROTTERDAM



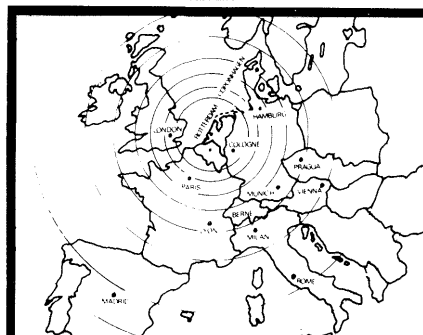
The biggest-but you're No.1

Rotterdam is the world's largest port because we know our business. But all our business comes from you, so when you talk, we listen.

Rotterdam isn't designed to suit us – it's designed to suit you. It's big, it's reliable and, above all, it's productive – a user-oriented port system geared

to moving goods fast and safely; by sea-going ship, inland barge, train, truck and pipeline. And as for the future, we're planning the rest of the 80's – and the 90's – and we're still listening...

That's why the Port of Rotterdam works, and grows



Market of 160 million people

Rotterdam is located at the center of one of the most populous and prosperous areas in the world. A circle with a 500 kilometer radius drawn around New York would encompass about 50 million people; around Tokyo, 65 million; around Rotterdam, 160 million people.

In 1980 Rotterdam handled nearly 300 million tons of international sea-going goods traffic.



Port of Rotterdam

With us-you're No.1

Shore-based radar project gets go-ahead: Port of Rotterdam

Following approval by the minister of transport and waterways a few months ago, the Rotterdam city council has now given the go-ahead for the construction of a vessel traffic management system covering the New Waterway area and the roads off the Hook of Holland.

The proposals for the New Waterway traffic management system are the fruit of five years of preparation. By far the larger part of the investment will benefit Dutch firms and especially Hollandse Signaal-apparaten BV. For the firm's Apeldoorn plant this means 400 man-years of innovative work, spread over four years. Orders to other suppliers provide another 250 man-years. The project is meeting with keen interest abroad.

The new system, which will become operational in 1985, is a big improvement on the present radar chain. It covers a wider area, stretching from the beginning of the extended Euro Channel in the North Sea to beyond the Van Brienenoord and Spijkenisse bridges to the east of Rotterdam. Where the old system dealt mainly with seagoing ships, the new one will treat inland shipping as an equal partner in vessel traffic. Through computerisation of data files which today are still operating independently, the new system will produce a rapid flow of full and reliable information. Contacts with shipping will go through one channel instead of via the radar department and the port services individually. The vessel traffic management system (VTMS) will involve an operational integration of the radar department, the pilotage service, port services, patrol vessels, hawsermen, towage services, etc. making it possible for the fairway authorities to issue directives through the VTMS.

This option will be used only in exceptional circumstances, e.g., when the fairway is blocked. Normally these authorities will stick to giving advice and information.

The vessel traffic management system has had a long prehistory. Plans were made as early as 1975 when the State and the City of Rotterdam made an agreement to replace the shore-based radar chain dating from 1956. Sharp changes in fringe conditions, however, made it clear meanwhile that the original plans would no longer do. For one thing, a spectacular growth in the transport of dangerous cargoes through the densely populated Rijnmond (the industrialised region between Rotterdam and the sea) made demands which exceeded the mere supply of navigational information. An inventory of requirements was compiled through an extensive survey of what port users and authorities thought desirable. The results of the survey, which met with a huge response, and of several technological studies, were laid down in so-called Basic Requirements. The respondents to the survey—comprising the hawsermen's association, the towage services, inland shipping organisations, the shipowners' association, shipping agents, police, fire brigade and representatives of radar operators, pilots, ships' masters, hazardous-cargo inspectors and port service staff—were asked for comment in two rounds. As a result the original draft of the Basic Requirements underwent considerable change.

The system now approved provides for a central traffic management to coordinate general fairway policies, such as admission rules, to mention one example. The central

traffic management will be housed in a modified Port Coordination Centre. Contacts with shipping will be maintained through three regional traffic centres, planned at the Hook of Holland (in the present signal station), at the entrance to the Botlek port complex and opposite the Waalhaven port close to the heart of Rotterdam. The centres will be supported by two outposts at the upstream entrances to the port region—at the beginning of Hartel Canal and on Maas.

Meeting the needs of the world's shipowners : Port of Melbourne Quarterly

Ports are the focal point of a nation's trade. Across their wharves flow the raw materials, agricultural products, machinery and manufactured goods which, to reduce trading economics to the lowest denominator, constitute the currency of world trade.

Steadily over the years the volume of cargoes, both bulk and general, have increased world wide. Population growth; the requirements of emerging countries, particularly in Asia and Africa; new technologies calling for a variety of raw materials and the demands of affluent societies for consumer goods, have all contributed to this growth in world trade.

To carry the wide diversity of cargoes throughout the world fleets of specialised ships have been developed. Bulk carriers which can carry both dry and liquid cargoes, roll-on roll-off ships, LASH ships, pure container vessels, car carriers and livestock ships, to name a few, are the now familiar ship types on the world's sea lanes. In addition there are the general cargo ships equipped with highly sophisticated cargo handling gear designed to make the task of discharging and loading cargo as quick as possible with the minimum of labour.

All these developments in trading needs and ship design have dramatically brought about changes in the types of facilities provided by world-class ports. No longer will wharves with a relatively low weight bearing factor be sufficient. Instead, capital intensive weight carrying wharves, serviced by sophisticated cranes, fork lifts and straddle carriers, with ample ground for storage of containers, have to be provided. Also required are specialised loading ramps to service roll-on roll-off ships, again sited adjacent to large storage areas for both containers and wheeled cargo.

Extensive modern road and rail systems capable of moving cargoes quickly and in complete safety are another essential prerequisite for a world-standard port. Without these arteries of trade a port, no matter how advanced its facilities or how safe its waters, cannot expect to attract shipping.

Geographic considerations, particularly close proximity to shipping lanes, have a major bearing on the contribution a port can make to a nation's economic well being.

The escalating price of fuel and other rising costs loom large in a shipowner's planning of services. To offset these costs as much as possible he must be satisfied a port can meet his requirements. Does the port offer the shortest diversion from the main shipping lane? Has it the facilities to accommodate the type of vessel to be used in the trades in which his ships will be engaged? Can cargoes be central-

ised, thereby reducing ports of call from two or three to one? Will sufficient cargo, both export and import, be available to warrant a regular service? What is the growth potential of trade through the port? Are port charges competitive and has the port a good record for quick turn-round of shipping?

But it is not only the shipowner who has to take these points into consideration. The port authority, too, has to be aware of the requirements of the shipowner.

Developments in trade and shipping trends have to be assessed to enable forward planning for the provision of new or expanded facilities to be undertaken. Also liaison with Government departments responsible for road and rail services to ensure co-ordinated forward planning for the efficient movement of cargoes to and from the port is an important part of port development.

The Port of Melbourne can meet all the requirements of the shipowner. Recognised as Australia's major general cargo port, it has for long been a leader in port developments. Forward planning is an important aspect of the Authority's activities. New container berths have been planned for progressive development or reconstruction up to the year 2000; capital works to cater for anticipated increases in cargo and to service the needs of the trading community are in progress and investigations into the development of bulk loading facilities at Appleton Dock are in advanced stage.

Rail services linked with other capital cities and a network of modern highways provide fast and efficient access to the industrial centres and agricultural areas located in the vast hinterland serviced by the Port.

Geographically Melbourne is in a most advantageous position. The Port, which provides sheltered berthage at the northern end of Port Phillip Bay, is just a few hours steaming distance from the major shipping lanes which pass through Bass Strait. It is also the transshipment port for the island state of Tasmania and is a major terminal for the New Zealand trade. In addition, considerable tonnages of cargo to and from Adelaide are centralised in Melbourne.

Each year in excess of 2400 ships berth in the Port of Melbourne. In 1979-80 the flags of 35 nations were seen in the Port, the total gross tonnage of all ships being a record 26,137,000. Overseas cargo moved in the same period totalled a record 12,451,000 tonnes and total throughput of overseas and coastal cargo was a record 18.8 million tonnes. In the same period capital expenditure in the Port was \$32,117,000 and assets of the Port were valued at \$278,458,000.

From these figures it is clear the Port of Melbourne is a truly international port through which the trade of the nation will continue to flow in an increasing volume.

Record rate of handling containers at Fergusson: Port of Auckland

The highest handling rate yet recorded at Fergusson Container Terminal was achieved during the two days the ship Remuera Bay was on the berth.

The total exchange was 1,099 containers, of which 311 full import boxes contained around 4,500 tonnes of cargo and 275 full export containers carried about 4,200 tonnes for overseas markets. Empty containers discharged totalled

365 and 45 empty containers were loaded.

For a considerable part of the ship's Auckland programme the average handling rate was 56.01 containers an hour.

'This is one of the highest handling rates recorded at our terminal,' said Mr. R.T. Lorimer, General Manager of the Auckland Harbour Board.

Overall, the handling rate was 49.06 containers an hour, which is the second highest yet achieved. The highest was in January when the rate for the Australian Explorer was 52.01 boxes an hour.

Exports lifted by the Remuera Bay included 56 containers carrying butter and cream, 32 with pears, 117 with meat, fish and game, 45 with wool and 25 with general cargo.

'This shows once again that, given the flow of trade for which the terminal was planned, we have the plant and, with co-operation, we can move cargo faster than ever before,' said Mr. Lorimer.

Port trade, finances at half year: Port of Auckland

At the halfway mark of the Board's trading year, March showed a surplus of nearly \$108,000 dollars on port operations, the first time in 1980-81 that the monthly port working account has been out of the red.

Overall trade through the Port of Auckland in March was 88,630 tonnes or 20.6 per cent better than in the corresponding month of the previous year.

However, the deficit on the port working account was still approximately \$2.75 million for the six months ended 31 March.

In this period total trade through Auckland and Onehunga was down by 199,166 tonnes or 6.8 per cent.

Of cargo types, coastal and overseas liquid and dry cargoes were down by 10.2 per cent, roll-on roll-off cargoes up by 8 per cent, and other cargoes down by 25.2 per cent.

Trade through Onehunga held up well in the six months to March, being within 1.0 per cent of the 1979-80 total.

The six-monthly surplus of nearly \$1.49 million in the property accounts reduced the Board's overall deficit for the period to \$1.16 million which was further reduced to \$942,000 by interest earned on reserves.

Wages, salaries and related expenditure for the six months amounted to \$17.47 million, absorbing 76 per cent of operating revenue.

Fewer industrial stoppages before 1 March cut expenditure for the period by nearly 4.7 per cent of the total originally estimated but less trade than expected meant a corresponding drop of 8.78 per cent on the total estimated for the six months.

Import and export containers handled at Fergusson during the six months numbered 40,148.

It was stated, trade tonnages through Auckland in April were 12.8 per cent down on the same month of the previous year. At Onehunga the decrease for the months exceeded 23 per cent.

I was reported that trends continued to indicate total trade volumes would approximate those in the final quarters of 1979-80.

A different world — Impressions of Japan —

by C. Isabel (Port of Le Havre Authority)

(This was made at the request of my friends of the IAPH Head Office team, who last May welcomed me and guided me through the ins and outs of Japanese life. They wanted me to describe "Japanese life as seen by a young French lady" which I have tried to do as best as I could.)

"They are millions, most of them incredibly young or ageless and yet they meet and pass without touching one another, without looking at all other people. They live in huge cities, designed more for masses and cars than for individuals and pedestrians, yet in some districts at nightfall it is good to walk down the streets and guided me through the ins and outs of Japanese life. European usually do, yet they look happy. Dynamism is reflected on their face, Europe in comparison seems so sad. They lack space, streets are crowded, yet they look so quiet, even when they play Pachinko, that noisy game that attracts so many people at any time of the day, traditionally-dressed women being next to clerical staff wearing suits and flaming red and yellow neon signs flashing light all day long.

Coming from France where dressing still takes the lead in international fashion, one is astonished to see so much elegance, such tidiness; any young French lady would envy any young Japanese lady her way of dressing.

And what could we say about Japanese cookery? From a French point of view, this is quite an important point to consider when one considers going abroad for some time. In Japan, the look seems to be more important than the taste, for dishes may taste a bit flavourless for non Japanese people. Yet, once you have tried one of those *sushi* or *tempura* displayed at the restaurant-window, you want to try everything. And once you do it, you must admit that your eyes and your stomach are both contented with Japanese food. There can be only one exception in that Japanese vegetarian dishes just like those you can get at Ryoan-ji temple's restaurant may not be exactly what you would call "a meal to the taste of a gourmet". Anyway it is good to try, even Japanese breakfast which is not so easy to eat when you are used to eating continental breakfast! If you are lucky, you will go to restaurant at night with some Japanese friends who will at the end of the meal stand up and sing sad and melancholic songs, which they seem to enjoy very much. Once you have experience such evenings, you never forget them.

Nor can you forget the taste of *sake* once you have tried it. Whether you drink it warm or cold, you have to try it several times before you like it for it is really



Catherine (left) arrives in Nagoya with officers on May 22, 1981.

an acquired taste. Anyway if you just can't acquire it, Japanese people produce wine just as good as those you can find in France.

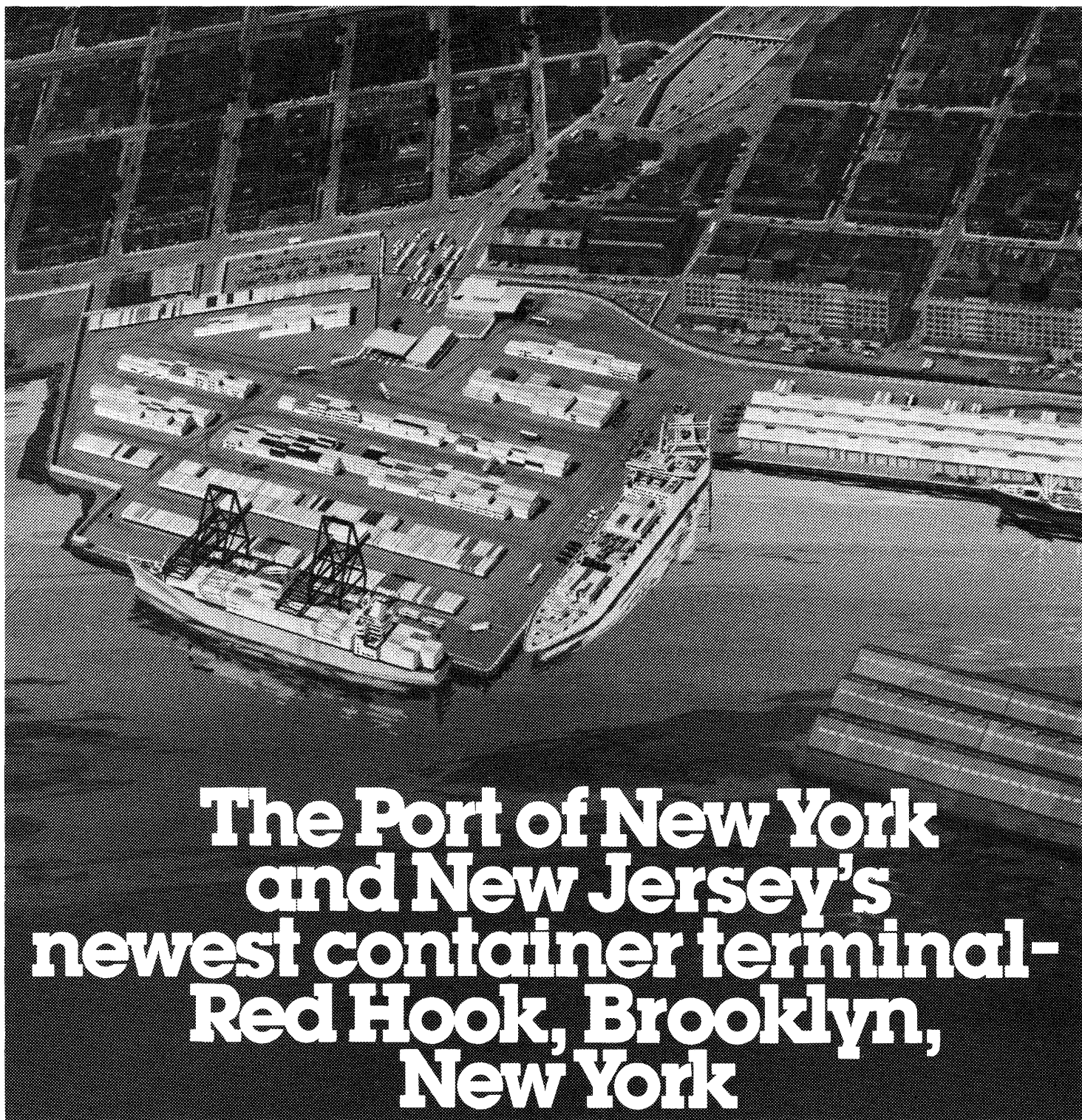
I was once told by a Japanese friend of mine that I had a "langue de chat", which in Japan means that you can't eat or drink too hot dishes or drinks, which Japanese people commonly do. In France "langue de chat" is a finger biscuit, somewhat sweet. And in Japan, if you want to eat sweets, don't expect to find some at the restaurant, for Japanese are not much fond of sweets, only kids eat them, but go to a café and you'll get some.

If you go to Japan for the first time, don't forget to plan a visit to Kyoto, for Tokyo may seem a bit inhuman with its large avenues, its oversaturated traffic and its sky-scrapers and millions of inhabitants. Kyoto, old city is so nice with mountains on the outskirts, and ancient temples. When you have seen both cities, you can't help wondering how people can live in Tokyo, anyway they do it. Another characteristics fact about Japan is that if you come from abroad, you will soon get lost in the streets unless you are accompanied by some Japanese people, for everything is written in Japanese characters and the man-in-the-street hardly knows nothing about English.

And if you choose to hire a taxi, well you'd better know some Japanese words just to tell the driver not only where you want to go but also how he can take you there.

There are so many things to say about Japan, about the young girls and boys dressed in white and blue wearing yellow caps who go to school, about Nô play so strange to European thinking, about public baths with the ritual of washing and relaxing, about women who can no longer work once they get married, about the lack of baby sitting which implies that you often see kids asleep carried by their parents in the subway, in the temple or simply when doing some shopping, about Kyoto with a whole district in which every house has a small rag doll hanging on the door, about modernism and traditions so much alive in the day to day life of Japan. So many things to wonder about, that you just can't explain or understand for it is deeply Japanese and you are from another world.

Note: Except those who work for the Head Office Secretariat, not many port staff have experienced two consecutive IAPH conferences. Miss Catherine Isabel is one of the few such staff who firstly organized the 11th Conference at Deauville, France, two years ago and again the 12th Conference held at Nagoya, May, this year, as President Bastard's secretary. I hope that our members who have already been to Japan and those who are planning to visit our country in the future will find our French friend's impressions interesting. —Kimiko Takeda, IAPH Head Office.



The Port of New York and New Jersey's newest container terminal— Red Hook, Brooklyn, New York

Through the combined efforts of the State of New York, the City of New York and The Port Authority of New York and New Jersey, construction is now nearing completion on the new 1,000,000-ton capacity Red Hook Container Terminal in Brooklyn, New York, which has been leased to Universal Maritime Service Corp. This new container terminal, capable of handling Ro/Ro, as well as container and breakbulk vessels, is being completed at a cost of \$20,000,000. It will have a 1,000-foot-long container berth supported by two cranes and

40 acres of upland area. Approximately 30,000 containers are expected to move via Red Hook each year and the facility will have the capability of handling trucks on a 100 percent appointment system. The site enjoys exceptional navigational advantages since it is located along Buttermilk Channel where the Corps of Engineers maintains a depth of 40 feet.

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