

# PORTS *and* HARBORS

January, 1978 Vol. 23, No. 1



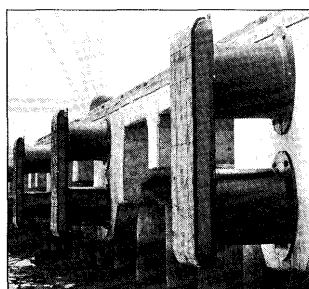
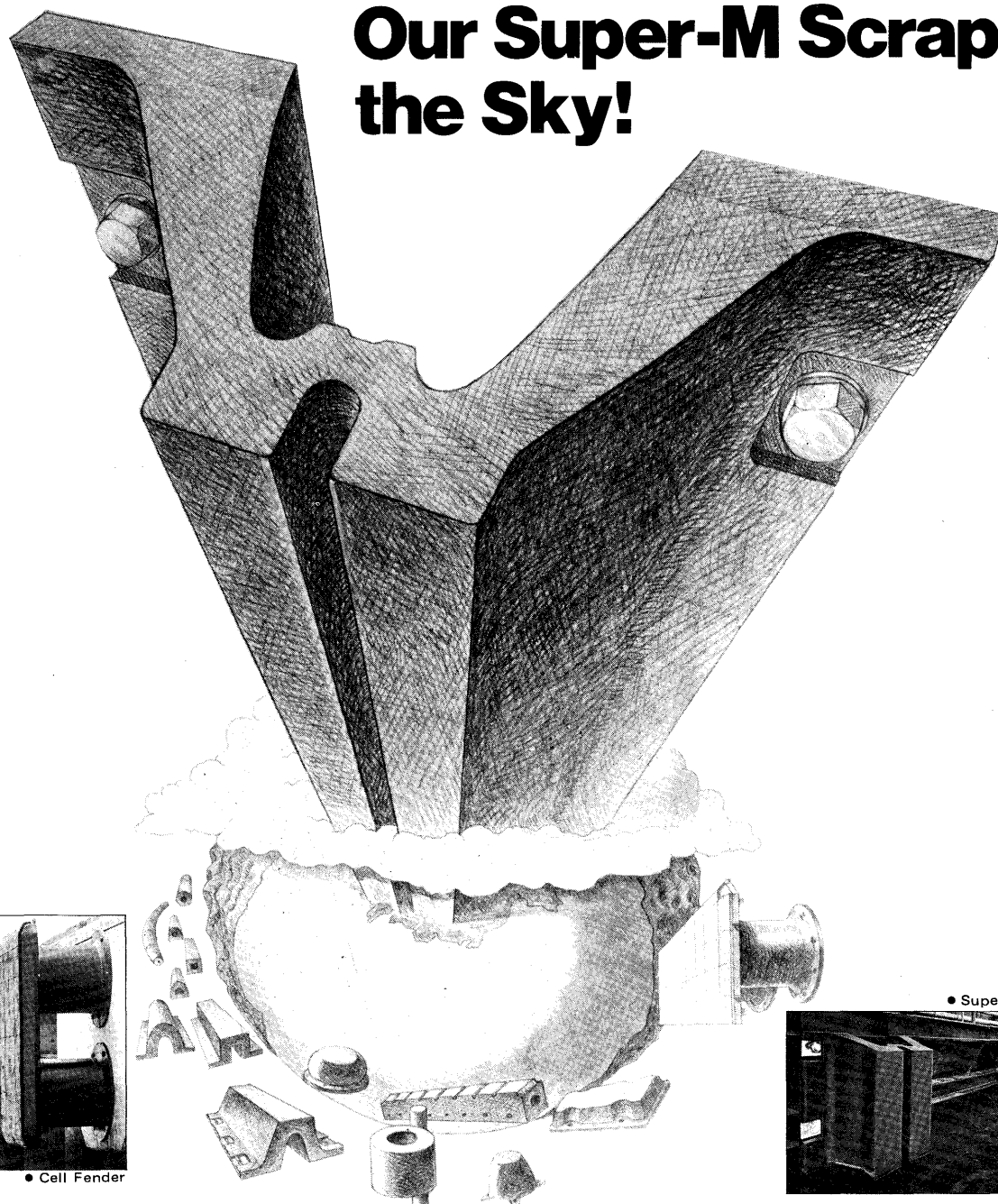
Port of Le Havre

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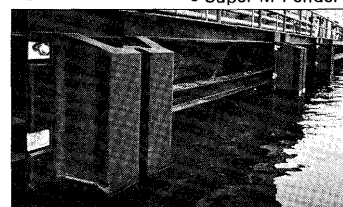
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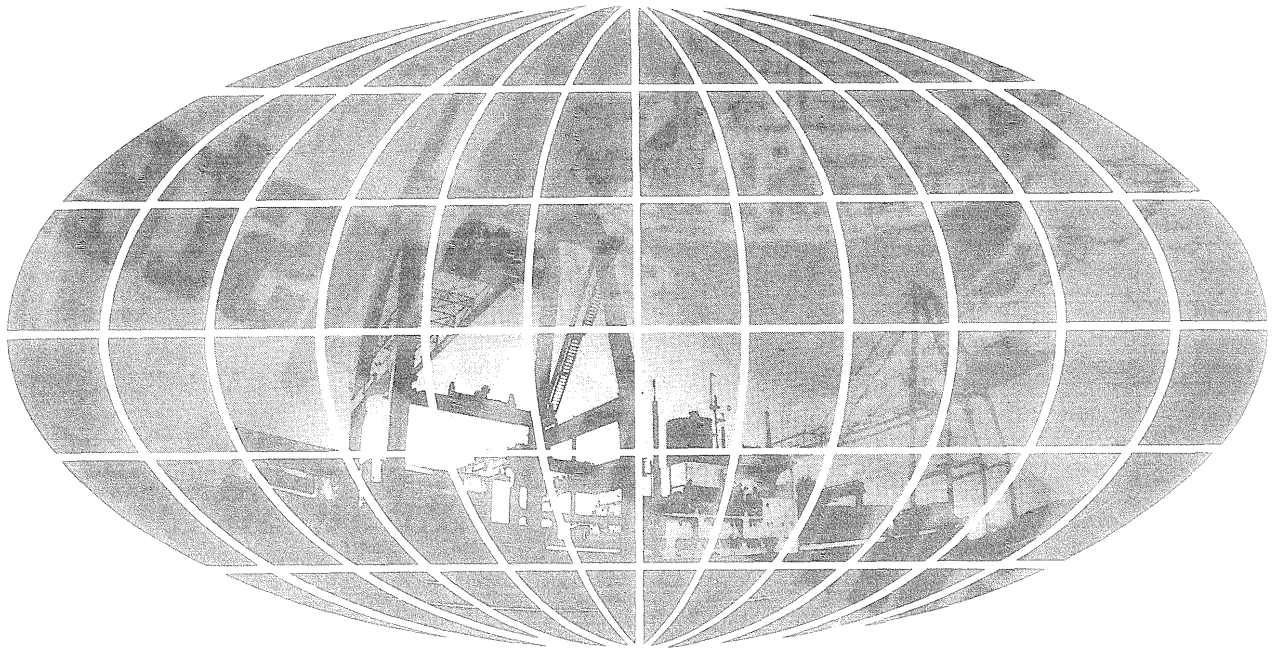
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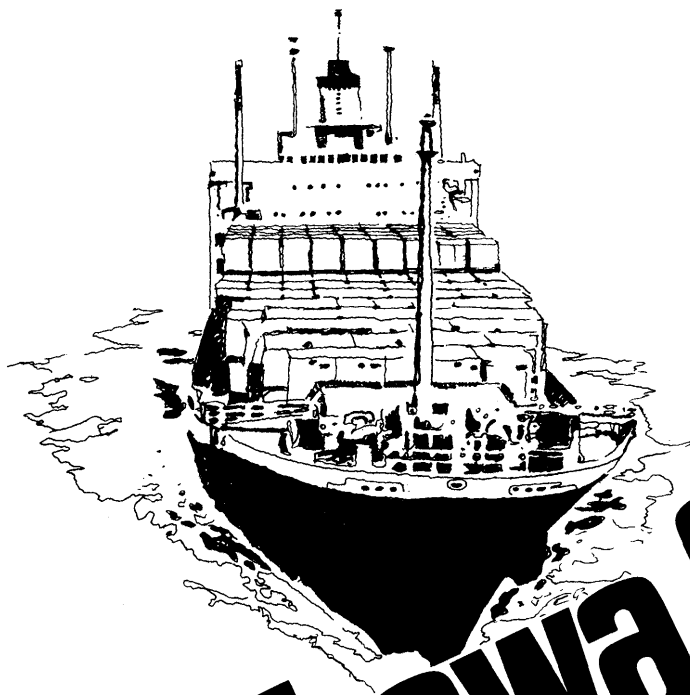
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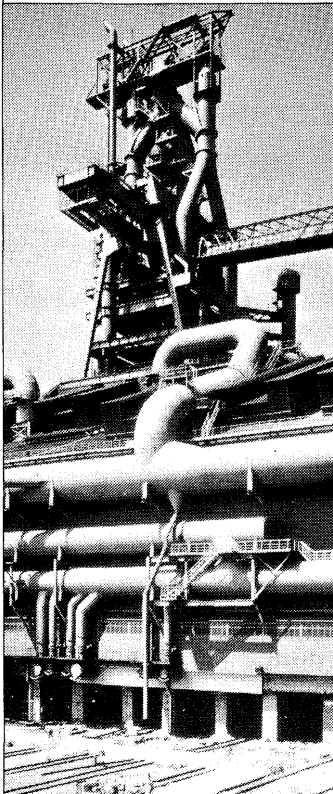
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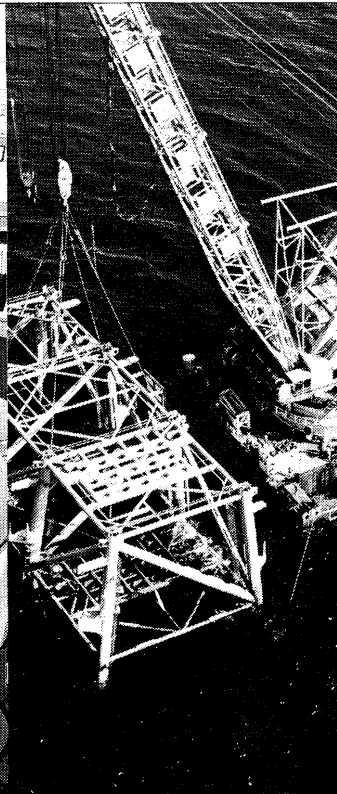
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# PORTS *and* HARBORS

**IAPH Head Office Announcements :** Pages 7~13

## NEW YEAR'S MESSAGES



**From  
Mr. George W. Altvater  
President**

The beginning of a new year always holds a promise of the future, but at this time I also find myself looking back over 1977 to reflect on the progress made by IAPH during the year. The Convention held in Houston last Spring was an experience I will never forget. The record-breaking attendance of more than 550 delegates from ports in every part of the world proved that our organization is growing in strength and that it offers an effective forum for sharing problems and working together on solutions.

The participation by port delegates from emerging nations was especially gratifying as one of our prime goals is to attract members from these developing areas. We will continue to stress the importance of increased membership and to enlarge the activities of IAPH so that the Association will be of maximum benefit to the entire family of world ports.

Again, I would like to express my deep appreciation to the Membership Committee and all Committees for their efforts in making the Convention such a success. I certainly must add a special note of recognition to the Head Office staff for their hard work and dedication, not only during the Convention but throughout the years.

Now we must look ahead to a brand new year. The World economy is recovering slowly from widespread recession which has affected ports and maritime industries across the globe, and we must examine our role in

*(Continued on next column)*



**From  
Dr. Hajime Sato  
Secretary General**

A Happy New Year! I extended to you all my very very best wishes of the season and wish that 1978 will bring forth to you happiness and prosperity.

I am particularly happy and grateful for the support by our members toward the development of this Association and for the extraordinary leadership and guidances illustrated by President, Vice-Presidents, Board and Executive members, chairmen of committees and Liaison officers. It is their achievement that the Association has gradually, if not dramatically, grown attaining membership from all corner of the world during the last twenty-three years.

*(Continued on next page bottom)*

stimulating vital international trade. We also face the challenge of meeting the needs of rapidly changing shipping technology. Just keeping abreast of these changes and planning facilities to match the technology will keep us busy for years to come. But by working together and sharing information we can be truly confident that we WILL meet the challenge.

Preparations are underway for the Executive Committee meeting to be held in Mombasa in April when we will review our progress and set future goals.

To all members of IAPH I wish a joyous and successful New Year and look forward to making new friendships and strengthening old ones when we meet in Mombasa and again when we gather in Le Havre in 1979.

# IMCO Reports by Mr. Smith

Mr. A.J. Smith, IAPH Liaison Officer with IMCO, reported on the meetings of the following two IMCO Committees:

1. Legal Committee (33rd session, September 12–16, 1977, London)
2. Sub-Committee on Safety of Navigation (20th session, September 5–9, 1977, London)

He advises that a number of matters arising from these reports which call for action by IAPH's committees and/or members, stipulating followingly:

## Legal Committee

- (a) The Legal Protection of Navigable Waterways Standing Committee should examine the draft Articles of the Proposed Protocol and I am (reporter), therefore sending copies to Committee members for their attention.
- (b) IAPH members are invited in the report to comment on aspects of a proposal to draw up a Convention providing a liability and compensation system for noxious and hazardous substances other than oil which appear to them to have relevance.

## Sub-Committee on Safety of Navigation

- (a) IAPH members should be asked to let express through a questionnaire or some other means of communication to the head office of any errors or ambiguities which have become apparent concerning the application of the 1972 Collision Regulations.
- (b) It would be helpful to assemble data on the nature and extent of marine meteorological services provided by IAPH members together with their views as to the liabilities of port authorities incurred in providing such information.
- (c) IAPH members should request sight of the report on radar beacons and transponders from their respective Governments.
- (d) IAPH members should request copies of the draft text of the "Guidance on the use of VHF at sea" from their respective Governments.

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## Dr. Sato (Continued from page 7)

I am also happy to say that the development of the Association as well as the increase of international friendship have greatly been advanced as backed up with such facts that the Houston Conference was another epoch making step in any standard or that number of our people who visited the Head-Office is gradually increasing, if a few examples are picked up.

It is obvious from the discussions of the working sessions at the Houston Conference that the roles of ports and harbours for the rehabilitation of the world economy are immensely great and significant. It should be emphatically stressed that the Association should link all the ports of the world with firm ties of friendship and information. In this context, the promotion of international assistance scheme for developing ports should be counted in our minds as one of very essential tasks of the Association.

Let us work for our mutual benefits hand in hand, and make this Association a truly international and friendly gathering of the Ports of the World.

His reports covering the above follow:

## 1. Legal Committee

The Legal Committee held its 33rd session in London from 12th to 16th September, 1977 under the chairmanship of Mr. G.A. Maslov (USSR).

The session was devoted entirely to a consideration of the extension of the 1969 International Convention on Civil Liability for Oil Pollution Damage and possible extension of the 1971 International Convention on the Establishment of an International Fund for Oil Pollution Damage. The extensions were envisaged in terms of a protocol to the 1969 Convention and also possibly to the 1971 Convention.

After detailed discussion the Committee concluded that notwithstanding the fact that substantial costs might result from extension of the 1969 Convention no experience was yet available of the implementation of the 1971 Convention and, in the event, no statistical reasons were apparent to anticipate serious consequences if that Convention were not extended. No changes could therefore be recommended to the 1971 Convention at this time.

With regard to the 1969 Convention, the Committee elaborated draft Articles of a Proposed Protocol to extend it. These refer, specifically, to the definition of "ship" and "oil" and to whether or not there should be provision for compulsory insurance.

The Draft Articles will be examined by the Association's Special Committee on Legal Protection of Navigable Waterways for preliminary assessment of their implications for ports.

The Legal Committee, in preparing for its work in 1978, gave highest priority to work on a new and comprehensive convention to provide a liability and compensation system for noxious and hazardous substances other than oil.

Clearly this is a matter of particular significance from a port point of view and it will therefore be subject to close review. The views of IAPH members, however, on aspects of this work would be welcomed.

## 2. Sub-Committee on Safety of Navigation

The 20th Session of the Sub-Committee was held in London from 5th–9th September 1977 under the Chairmanship of Captain E.J. Salveson (Norway).

Matters of particular interest to the international port community which were discussed included:

- (i) Matters Related to the 1972 Collision Regulations

The Sub-Committee has recognised the urgent need for an authoritative opinion capable of universal application as to the intended meaning of certain Collision Regulations. The next session will therefore give priority consideration to this matter based on a comprehensive document prepared by the Netherlands delegation. This document seeks to classify errors, inaccuracies and inconsistencies in the texts of certain Rules as requiring textual correction, improvement or amendment. The document, and discussion of it, is of particular importance because the Sub-Committee has generally agreed that amendments would only be justified in cases of

(Continued on next page bottom)

# Automatic Shutdown System — Joint Report to IMCO

Having been represented by Mr. A.J. Smith, IAPH Liaison Officer with IMCO, the Association has been working on the international study on the Automatic Shutdown Systems, in connection with IMCO Chemical Code (4.14.2) and Gas Code (5.3). The following is the extract of the joint report submitted to IMCO:

## AUTOMATIC SHUTDOWN SYSTEMS REPORT TO IMCO

1. As reported to BCH 2, the International Chamber of Shipping (ICS) convened an international study group in early 1976 to investigate the question of how to interpret the requirements for automatic shutdown systems in the IMCO Chemical Code (4.14.2) and Gas Code (5.3). In particular, the intention was to clarify the implementation of the requirement that the valve should close "in the minimum time consistent with the avoidance of excessive pressure surges in the attached piping, both on the ship and in the shore system". (Gas Code 5.3.4).
2. The group met 12 times between February 1976 and September 1977. A number of task teams were formed to investigate specific aspects of the work; these met a total of 8 times. Representatives from the following interested parties contributed to the report:

Federation of European Chemical Manufacturers Association (CEFIC)

International Association of Classification Societies (IACS)

International Association of Ports and Harbors (IAPH)

International Chamber of Shipping (ICS)

Independent Storage

Shipbuilders

Oil Companies International Marine Forum (OCIMF)

The BCH Vice Chairman also attended as an observer on behalf of IMCO.

3. An initial report of the group's work was submitted to BCH 2. The Sub-Committee noted its contents and agreed to consider the groups full report when reconsidering the requirements for automatic valves. It was also agreed that the group should co-ordinate the efforts by other authorities/working groups on these requirements that were known to be underway; this has been done.

4. It was agreed to investigate the problem in three phases and report as follows:

- (1) preparation of an introductory guide to the pressure surge problem;
- (2) preparation of guidance notes on operational constraints for existing systems, and desirable characteristics/closure periods for shutdown valves;
- (3) preparation of guidance notes on linked ship-shore systems.

5. The group's report is attached. As will be seen, a potential hazard exists and a number of ways are proposed to overcome the problems created by the current requirements.

6. It is suggested that IMCO should carefully reconsider the present automatic shutdown requirements in the light of these new findings, as well as using the results in considera-

(Continued from page 8)

serious errors and ambiguities which should be assessed in the light of information from users concerning the application of the 1972 Collision Regulations.

IAPH members should therefore give urgent attention to this matter and advise the Secretariat of any errors or ambiguities which have become apparent to them concerning the application of the 1972 Collision Regulations.

### (ii) Marine Meteorological Services

It was noted that the World Meteorological Organisation, (WMO) in co-ordinating the international aspects of marine meteorological services, attached great importance to developing international regulations for those which related to harbour marine activities. IMCO has been asked to help in identifying regions or major port locations where extended meteorological and related facilities should be introduced in priority order.

The parameters and phenomena included in requirements of marine user groups for marine meteorological and sub-surface information so far as coastal, off-shore and harbour activities are concerned are surface winds; sea and swell; surface visibility; ice accretion; sea ice; icebergs; precipitation and cloud cover; air temperature; humidity; sea

surface temperature; surface currents; atmospheric pressure; mixed layer deposits; water density; tsunami; water-level anomalies; tidal current deviations; harbour seiche; bar conditions; surf and breakers; storm surge; and sea sub-surface temperature.

### (iii) Radar Beacons and Transponders

The draft report on radar beacons and transponders was finalised and it was recommended that the text should be circulated for information and guidance.

### (iv) Navigational Aids and Equipment

The Sub-Committee has left it to the next session to develop further, draft requirements on the carriage of navigational aids and related equipment incorporating the existing requirements of Chapter V of the 1974 Safety Convention; a draft recommendation on the carriage of navigational aids and related equipment; and a draft resolution on the carriage and harmonisation of electronic position-fixing systems.

### (v) Guidance on the use of VHF at Sea

The Sub-Committee has prepared a draft text of the "Guidance on the use of VHF at sea" for circulation to and comment by Member Governments in the light of experience gained in its use.

The next session of the Sub-Committee is tentatively scheduled from 31st July to 4th August, 1978.

tion of any new requirements.

7. Particular attention is drawn to the conclusion that the only short-term solution to the problem is an immediate reduction in typical product flow rates where necessary, dependent on the specific ship-shore combination. It is clear that careful thought will have to be given to the closure period of automatic emergency shutdown valves: the majority of those currently fitted (by ships and terminals) close far too quickly for safety and, unless the situation is changed this may necessitate uneconomic flow rate reductions until the fundamentally safer solutions detailed in the report are developed.

## **AUTOMATIC SHUTDOWN SYSTEMS REPORT OF THE INTER-INDUSTRY INVESTIGATION**

### **1. PREAMBLE**

- 1.1. Automatic emergency shutdown (ESD) valves have been required by various national regulations for some time. These requirements were also included in the IMCO Codes for chemical and gas carriers. However, it became apparent that these valves could create unacceptably high surge pressures in pipelines and in early 1976 the International Chamber of Shipping (ICS) convened an inter-industry group to study the subject in depth.
- 1.2. The study group's terms of reference were:
  - (a) to review the requirements of automatic ESD systems as contained in the IMCO chemical and gas carrier codes;
  - (b) to develop a system of tank overflow control for potentially hazardous cargoes that did not create a hazard in one part of the cargo transfer system while ensuring safety in another part;
  - (c) in developing such systems, to ensure that dangerous pollution is avoided, full account is taken of the necessity for ship-shore compatibility of equipment, and that no additional safety hazards are introduced.

### **2. CONCLUSIONS**

- 2.1. The results of the investigations are presented below. The surge pressure phenomenon is explained in section 4. It was found that the problem could be resolved in three ways. These are set out in section 5, 6 and 7 respectively and the methods are:
  - (a) to reduce flow velocity during cargo transfer;
  - (b) to change valve characteristics/closure periods;
  - (c) to link ship and shore shutdown systems.
- 2.2. These methods of resolving the problem are not necessarily complete in themselves. It may be necessary to reduce flow velocities even if ship and shore shutdown system are linked or if the characteristics/closure period of the automatic ESD valve have been altered, depending on the particular cargo transfer system concerned.
- 2.3. The only immediate remedy to the pressure surge problem in the world wide trades is to reduce flow velocities. This could increase typical loading/discharge times considerably (up to a factor of 5) depending on the particular ship-shore combination. The extended closure periods necessary to satisfy the requirement not to exceed safe pressures in the line (up to 5 minutes) would probably be unacceptably long. Special valves/actuators for marine use are not available and it would take some time to produce them.

Development and installation of linked ship-shore shutdown systems may take a considerable time; a requirement for the ship to provide a standard signal and connection could be incorporated into the relevant Codes, but a specific Recommendation would be necessary to legislate for such equipment ashore.

- 2.4. A fundamental purpose of the ship's automatic ESD system is to prevent overfilling (and consequent damage and pollution) in the absence of proper operational human intervention. The basic system has been adapted to stop the flow in the event of other failures.

### **3. OBSERVATIONS**

The Group drew particular attention to the following:

- (i) A good contact between ship and shore is necessary throughout all cargo transfer operations to reduce the possibility of an emergency occurring: there is a need for an agreed communication code to reduce the possibility of misunderstanding.
- (ii) From the research it is apparent that normal manual or remote-control valves can be closed faster than is safe, thereby creating a dangerous pressure surge. This finding emphasises the need to rely on good operational practice at all time. It has been the "golden rule" since tanker operation began that those receiving cargo should never control the flow by closing a valve against it, and this has been covered extensively in industry Safety Guides. The IMCO requirements go against this principle.
- (iii) If an automatic ESD valve is fitted to a ship's cargo system so that a particular cargo can be carried, it is operative whatever cargo is carried in that tank, even if the cargo itself does not require such a valve. This is particularly relevant for chemical tankers.
- (iv) Automatic ESD valves are usually designed to close not only because of high liquid level, but also due to control system failure (i.e. they fail to closed). This valve closure can occur at any time during transfer and precautions have to be taken at all times, not only during the final stages of topping off.
- (v) Industry experience is that both tank overfilling and hose bursting are rare, but that hose bursts are more common.
- (vi) It is desirable to achieve design compatibility between ship and shore, especially in relation to the pressure capabilities of piping systems including hoses or loading arms.
- (vii) The possible effect of surge should be considered when new ships, jetties and terminals are designed.

### **4. PRESSURE SURGE**

- 4.1. A surge of pressure is generated in a pipeline when a change occurs in the flow rate of liquid in the line. The surge can be dangerous if the change of flow rate is too rapid. Dangerous pressure surges can be caused in a number of ways, especially by the over-rapid closure of a valve. The surge pressure builds up as soon as the valve begins to reduce the flow rate through it.
- 4.2. The surge created travels up the pipeline and this



increase in pressure is continuously reflected back to the valve. These pressure waves travel at the velocity of sound in the liquid concerned (which is reduced by the elasticity of the pipeline walls). The time taken for the given pressure wave to travel from the closing valve up the line and back again is called the "pipeline period". If the valve is closed or almost closed by the time the peak pressure wave has returned the maximum surge pressure is felt at the valve; if the valve is still open the magnitude of the surge pressure is reduced.

- 4.3. An explanation of the pressure surge phenomenon is given in Appendix 1.

## 5. FLOW VELOCITY CONTROL

- 5.1. It is possible to reduce pressure surge to a safe level by reducing the velocity of the flow to be arrested; this lessens the kinetic energy involved in the process. Calculation of the safe flow velocity involves a complex computation and it is not feasible for most terminals to make calculations for the individual line and automatic ESD valve combinations that arise during each cargo transfer operation.
- 5.2. It was therefore agreed that a survey should be made of the closure times of ships valves, and the line lengths of terminals; this information was gathered through ICS, CEFIC and OCIMF. From the replies it was possible to build up a representative range of line lengths and closure times. The survey also gathered information on pump pressures and the types of automatic ESD valve fitted.
- 5.3. The results of the survey were built up into a matrix and surge calculations were made for this matrix by Shell Petroleum in the Hague. Calculations independently carried out by Dow Chemicals (Terneuzen), Phillips Petroleum (Oklahoma) and the US Coast Guard (Washington) gave identical results with the same input. The Group agreed that the Shell work can be taken for guidance for the operation of unlinked systems in the absence of special computations for the particular ship-shore combination.
- 5.4. Guidance is given in Appendix 2 on the limitation of pressure surge to a safe level by reduction of the velocity of the flow to be arrested.

## 6. VALVE CHARACTERISTICS/CLOSURE PERIODS

- 6.1. Automatic ESD valves normally fitted have linear port closure characteristics i.e. the actuator moves at the same rate throughout. As the valve begins to close from fully open, the upstream pressure increases and the flow velocity increases through the restricted port. Thus the total flow through the valve may not be reduced significantly until the final portion of port closure.
- 6.2. The actual "effective" portion of valve closure depends on the total system, and in particular the size and type of valve (ratios of valve to pipeline diameter and port closure to spindle movement), initial flow velocity and upstream pipe length. The "total valve closure time" is the period taken for the valve to move from fully open to fully shut; the "effective valve closure time" is the period during which the flow is reduced effectively from full to zero at the maximum rate of flow reduction achieved during closure. In general, the total valve closure time considerably exceeds the effective valve closure time. The "total

closure time" is the period from the activation of the automatic ESD signal to ESD valve closure, and includes any signal delays.

- 6.3. The automatic ESD valve is intended to stop the flow as quickly as possible consistent with safety when a specified cargo emergency occurs. It is possible to design a valve for a given system in which the effective valve closure time is nearly the same as the total valve closure time. This can be achieved by the use of an actuator which completes the majority of the valve port closure quickly and the remainder at a controlled slow rate. Alternatively a standard valve with the bore smaller than that of the line could be used, or the combination of a linear actuator with a specially shaped valve port.
- 6.4. A further explanation on the significance of valve characteristics and closure periods is given in Appendix 3.

## 7. LINKED SHIP SHORE SHUTDOWN

- 7.1. The pressure rise in the line can be reduced if the automatic ESD system is arranged to activate valves and stop the relevant pump in a controlled sequence, so that the pump is stopped before the surge from the valve reaches it. This reduction in the line pressure gives a greater margin for the surge pressure rise and may permit higher initial flow velocity.
- 7.2. A number of systems are in operation whereby the ship and shore automatic ESD systems are linked. These have been designed for specific ship-shore combinations, usually where the ship is intended to trade on a particular route between specific terminals for its entire lifetime. In such cases the linking of ship and shore systems is an engineering matter.
- 7.3. The problem of linking terminals with a variety of different ships is a greater problem, as it entails standardisation on both sides before the engineering problems can be approached. The standardisation becomes more difficult as the ship and shore systems increase in complexity.
- 7.4. A number of "ad hoc" linked systems were reviewed, as was a proposed special design. Standard connecting components specified in the Rhine Barge Code were also taken into account.
- 7.5. The results of the study of linked ship-shore systems are put forward for information and are set out in Appendix 4; further consideration is required before a standard for a world-wide linked system can be completed.

# Introducing IAPH Award Scheme

Mr. Ullman, Chairman of IAPH Special Committee on International Port Development, in accordance with the decision reached at the Board and Executive joint meeting at Houston, introduced the Award Scheme as the extension of the bursary scheme utilizing the IAPH's Special Port Development Technical Assistance Fund, which was established in 1967 by the Association for the purpose of providing financial assistance to those developing member port, either for an adviser or for a developed port to provide training for staff members of the developing port.

Terms and conditions for the Award Scheme are as

follows:

1. Suggestions regarding how the efficiency of one's port (or ports in general) could be improved, should be presented, typewritten (IN ENGLISH), and submitted to the Secretary-General of the International Association of Ports and Harbors (Kotohira-Kaikan Building, 2-8, Toranomon 1-chome, Minato-ku, Tokyo, Japan 105).
2. Suggestions may cover any aspect of the administration, planning or operations of ports, such as improving productivity or the utilization 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 may be submitted either by individuals or small groups.
4. Entries will be judged by a panel of experts appointed by the Executive Committee of IAPH.
5. The First Prize for the winning entry will be:
  - (i) A silver medal from IAPH
  - (ii) US\$500.00 (or the equivalent in local currency)
  - (iii) An invitation, including travelling costs up to maximum of US\$2,000, to attend the 11th Biennial Conference of IAPH in Le Havre in 1979
6. In addition to the First Prize, Second, Third and Fourth prizes of US\$400.00, US\$300.00 and US\$200.00 will be offered to the next best entries.
7. An additional prizes of US\$100.00 will be offered 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. The closing date for receipt of entries is July 31, 1978. (And, to be announced by the end of December 1978.)

Based upon the contents in the above, a promotional poster is now being prepared by the head-office for distribution among member ports so that their constituents get acquainted with the scheme.

## IMCO Programme on Meetings, 1978

IMCO (Inter-Governmental Maritime Consultative Organization) discloses the provisional programme of meetings for 1978 as follows.

|  |                            |  |
|--|----------------------------|--|
| 9-13 January   |                            |  |
| LEGAL COMMITTEE-34th session                                       | IMCO                       |  |
| 16-20 January  |                            |  |
| SUB-COMMITTEE ON THE CARRIAGE OF DANGEROUS GOODS-28th session      | IMCO                       |  |
| 23-27 January  |                            |  |
| SUB-COMMITTEE OF FIRE PROTECTION-21st session                      | IMCO                       |  |
| 6-17 February  |                            |  |
| INTERNATIONAL CONFERENCE ON TANKER SAFETY AND POLLUTION PREVENTION | Cunard International Hotel |  |
| 27 February-3 March  |                            |  |
| SUB-COMMITTEE ON SHIP DESIGN AND EQUIPMENT-18th session            | IMCO                       |  |

|                                  |  |                            |
|----------------------------------|--|----------------------------|
| 6-10 March                       | SUB-COMMITTEE ON LIFE-SAVING APPLIANCES-12th session                   | IMCO                       |
| 15 March-4 April and 10-11 April | PREPARATORY COMMITTEE OF THE ADMINISTRATIVE COMMITTEE ON CO-ORDINATION | IMCO                       |
| 5-7 April                        | ADMINISTRATIVE COMMITTEE ON CO-ORDINATION                              | IMCO                       |
| 17-21 April                      | MARITIME SAFETY COMMITTEE-38th session                                 | IMCO                       |
| 24-28 April                      | FACILITATION COMMITTEE-12th session                                    | IMCO                       |
| 1-5 May                          | MARINE ENVIRONMENT PROTECTION COMMITTEE-9th session                    | IMCO                       |
| 8-12 May                         | SUB-COMMITTEE ON BULK CHEMICALS-4th session                            | IMCO                       |
| 18-19 May                        | COMMITTEE ON TECHNICAL CO-OPERATION-15th session                       | IMCO                       |
| 22-26 May                        | COUNCIL-40th session   | IMCO                       |
| 30 May-2 June                    | LEGAL COMMITTEE-35th session   | IMCO                       |
| 5-9 June                         | LEGAL COMMITTEE-36th session   | IMCO                       |
| 14 June-7 July                   | INTERNATIONAL CONFERENCE ON TRAINING AND CERTIFICATION OF SEAFARERS    | Cunard International Hotel |
| 19-21 July                       | INMARSAT PREPARATORY COMMITTEE-3rd session                             | IMCO                       |
| 24-28 July                       | SUB-COMMITTEE ON CONTAINERS AND CARGOES-19th session                   | IMCO                       |
| 31 July-4 August                 | SUB-COMMITTEE ON SAFETY OF NAVIGATION-21st session                     | IMCO                       |
| 4-8 September                    | *SUB-COMMITTEE ON RADIOCOMMUNICATIONS-19th session                     | IMCO                       |
| 11-15 September                  | *SUB-COMMITTEE ON THE CARRIAGE OF DANGEROUS GOODS-29th session         | IMCO                       |
| 18-22 September                  | *SUB-COMMITTEE ON SAFETY OF FISHING VESSELS-21st session               | IMCO                       |
| 25-29 September                  | *MARITIME SAFETY COMMITTEE-39th session                                | IMCO                       |
| 2-6 October                      | *SUB-COMMITTEE ON SUBDIVISION, STABILITY AND LOAD LINES-               | IMCO                       |

|   |      |
|---|------|
| 22nd session  |      |
| 9-13 October  |      |
| *THIRD CONSULTATIVE MEETING OF CONTRACTING PARTIES TO THE LONDON DUMPING CONVENTION | IMCO |
| 19-20 October   |      |
| *COMMITTEE ON TECHNICAL CO-OPERATION-16th session                                   | IMCO |
| 23-27 October   |      |
| *COUNCIL-41st session   | IMCO |
| 30 October-3 November   |      |
| *SUB-COMMITTEE ON FIRE PROTECTION-22nd session                                      | IMCO |
| 6-10 November   |      |
| *INMARSAT PREPARATORY COMMITTEE-4th session   | IMCO |
| 13-17 November  |      |
| *SUB-COMMITTEE ON SHIP DESIGN AND EQUIPMENT-19th session                            | IMCO |
| 20-24 November  |      |
| *LEGAL COMMITTEE-37th session   | IMCO |
| 27 November-1 December  |      |
| *SUB-COMMITTEE ON BULK CHEMICALS-5th session  | IMCO |
| 4-8 December  |      |
| *MARINE ENVIRONMENT PROTECTION COMMITTEE-10th session                               | IMCO |
| 11-15 December  |      |
| *SUB-COMMITTEE ON STANDARDS OF TRAINING AND WATCHKEEPING-11th session               | IMCO |

\* Tentative.

## IAPH Meetings in Mombasa

As reported in the conference issue (Jun-Jul joint issue) of the journal, the meeting of the Executive Committee, together with special and standing committees, will be held at Mombasa from April 3-7, 1978, under the good sponsorship of Mr. P.K. Kinyanjui.

The over-all schedule of the interim gathering is as follows:

- April 03, 1978 (Monday)
  - Finance Committee
  - Membership Committee
- April 04, 1978 (Tuesday)
  - Constitution & By-Laws Committee
  - Containerization, Barge Carriers & Ro-Ro Vessels
  - International Port Development
- April 05, 1978 (Wednesday)
  - Trade Facilitation
  - Community Relations
- April 06, 1978 (Thursday)
  - Executive Committee
- April 07, 1978 (Friday)
  - Executive Committee

This office extends its thanks and appreciation for the good support extended for the preparation of the meetings by Mr. P.K. Kinyanjui and his Mombasa Port (Mr. John Syuki Kyandih, Commercial Officer of the Mombasa Port is

acting as the coordination officer.), and also to Kenya Shipping Agency Limited (Mr. J.D. Morgan-Davies, General Manager) for their cooperation as the relaying station for the communications by telex. (rin)

## Delegate of Panama Port Authority visited Tokyo

On November 9, 1977, Ing. Arnaldo Cano Arosemena, Director-General of Autoridad Portuaria Nacional of the Republic of Panama, visited Keihin (Tokyo Bay) Port Development Authority and container terminal at Ohi, during his business trip to Japan.

He visited the Port Development Authority to meet Mr. Nakamura, chief of research section to study about the financial arrangement and construction of the container terminal followed by the field observation of the terminal at Ohi.

According to Ing. Arosemena's information, his Authority is now working on the construction of two berths of container facilities at Port of Panama and his mission to Japan was to observe the container handling systems at terminal, in addition to conduct business discussions with manufacturers of handling equipment in this country.

He also disclosed that he was aware of IAPH through his association with AAPA and he was considering to join IAPH in a near future. (rin)

## Delegates of Sabah Ports Authority visited Japan

Mr. James B. Willie, Chairman of Sabah Ports Authority, Malaysia, accompanied by his nine Board members and two port officials including Mr. Abdul Samad Mohamed, General Manager, visited Japan in the middle of November to observe major ports as well as shipbuilding industry in this country. Visitors were:

|                             |                       |
|-----------------------------|-----------------------|
| Mr. James B. Willie         | Chairman of the Board |
| Mr. Abdul Ghapur Hj. Salleh | Deputy Chairman       |
| Mr. Lee On Yin              | Board Member          |
| Mr. Joseph Siguty           | Board Member          |
| Mr. Hassan Lagiman          | Board Member          |
| Dr. Harban Singh Praser     | Board Member          |
| Mr. Mohamed Zifli           | Board Member          |
| Mr. Yap Chun Khi            | Board Member          |
| Mr. Richard Wong Maning     | Board Member          |
| Mr. Monggoh Orow            | Board Member          |
| Mr. Abdul Samad Mohamed     | General Manager       |

On November 10, the delegates visited Ohi Container Terminal in Tokyo and were received by Mr. Eiichi Yamazoe, Director of Keihin Port Development Authority who had lectured the history of containerization in Japan. During the following week they visited Ports of Yokohama, Kawasaki, Nagoya, Osaka and Kobe and shipbuilding yards in Tokyo and Kobe.

Mr. Willie and Mr. Samad Mohamed participated in the Houston Conference representing the Sabah Ports Authority. (rin)

## Mr. Bose of Richmond Port Commission visited Tokyo

On November 28, 1978, Mr. Sailendra N. Bose, Assistant Port Director of Richmond Port Commission (Richmond Calif., U.S.A.) visited the head-office and met Dr. Hajime, Sato, Secretary-General, and his staff. Along with

(Continued on next page bottom)

# Mr. Lorimer's Paper for the Ports Authority of Fiji Container Seminar November/December 1977

In a paper entitled "The Impact of Containerisation" which he is presenting to the Ports Authority of Fiji Container Seminar Mr. R.T. Lorimer, Chairman of the International Association of Ports and Harbors Special Committee on Containerization, Barge Carriers and Ro/Ro Vessels and General Manager of the Auckland Harbour Board, says:

"Your Mr. Loh was recently in Auckland and we were glad to hear at first hand the arrangements he was making to host this seminar and the two days of conference to follow.

"I was certainly honoured when invited as Chairman of one of the International Association of Ports and Harbor's principal committees—that on Containerization, Barge Carriers and Ro-Ro vessels—to address you. I bring you greetings and best wishes from our members.

"I was privileged to have been appointed to head this committee following the retirement of Mr. Ben Nutter, Executive Director of the Port of Oakland, United States of America (not to be confused with Auckland, New Zealand!)

"In this function I am supported by 19 distinguished managers and directors from world ports such as London, New Orleans, Vancouver, Le Havre, Hamburg, Zaire, Manila, Sydney, just to mention a few. In addition the committee has technical strength by the presence in its membership of top executives in shipping, engineering and public works.

"I also would like to extend greetings from New Zealand, and particularly from the Port of Auckland which I presently manage. From my recent discussion with Mr. Loh I saw a significant mutual advantage accruing if I attended and was able to participate in your working sessions.

"I thank you gentlemen for extending these courtesies and trust that, in the deliberations to follow, I may be of some assistance and, perhaps more important, learn something of your problems.

"The Port of Auckland needs these occasions to be reminded of its responsibilities and of the role it can play in relation to the welfare and efficiency of the South Pacific community. It has quite a range of technical resources, will consider any plan which would permit it to extend our experience, and give technical assistance wherever this is needed.

"It is appropriate that I refer briefly to the activities of this global body known as the International Association of Ports and Harbors, and to the work and programme of

research and information being undertaken by the committee I chair.

"Membership of the Association is open to public and private corporations, individuals, boards, commissions, organisations, associations and other bodies (whether governmental, public or private, and whether incorporated or not) which are interested in supporting and promoting the objects and purposes of the Association.

"The object of the Association is to increase the efficiency of ports and harbors through the development and dissemination of information useful to port and harbor administrations and through providing them with an opportunity of meeting and exchanging information on port organisation, management, administration, operation, development and promotion. The aim is to advance international friendship and understanding and the growth of waterborne commerce.

"IAPH, the short name commonly used for the Association, has five special committees assigned to work in specified areas. These committees, whose titles indicate their specialities, are:

1. International Port Development
2. Large Ships
3. Containerisation and Barge Carriers
4. Legal Protection of Navigable Waterways
5. Community Relations

"In addition are the legal counsellors, who deal with legal aspects of the Association's domestic problems, and the following three committees which handle Association affairs:

1. Finance
2. Constitution
3. Membership

"At the 1977 Conference it was agreed the Special Committee on Containerization, Barge Carriers and Ro-Ro Vessels, in terms of its order of reference should continue to study and make available to members of the Association information on the operation, planning and development of facilities and systems as applicable to the three forms of transportation.

"In particular the Committee will endeavour to:

1. Ensure that the information derived from the statistical returns on container operations is evaluated and disseminated as required.
2. Finalise and promulgate the reports on
  - (a) Standard Glossary of Maritime Terms
  - (b) Standardisation of Ro-Ro Ramps
3. Update the survey of facilities and operations of terminals providing for containers, Ro-Ro and LASH systems.
4. Evaluate the different types of equipment and methods of operation adopted by ports.
5. Render assistance and advice as necessary to ports on experience gained from established operators.
6. Liaise with the Large Ships Committee to obtain regular up-to-date information on trends in ship size and design.

"The Committee is to co-ordinate and co-operate with other committees established by the Association and with

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(Continued from page 13)

the discussions with the secretariat, Mr. Bose disclosed that the activity of the Association was attracting keen attention of officials of his port, and appraised the coverage of the diversified information carried in the journal.

Mr. Bose was in Tokyo on a business negotiation with a manufacturer of container handling equipment in Tokyo.  
(rin)



other international organisations such as ICHCA, UNCTAD, PIANC and the proposed International Container Terminal Operators Association.

"I had the pleasure of attending earlier this year the 10th Biennial Conference of the Association hosted by the Port of Houston in Texas. The Conference was a great success, attended by some 500 delegates and their wives. Like so many conferences involving goods handling, shipping, and the like, the subject of containerisation was uppermost in most of the sessions and naturally was the most popular and best attended part of the working sessions.

"This is because everywhere in the world, port management is or has been confronted with solving the problems brought about by the evolution and change in the technology of goods handling and transport in all its forms, but more markedly by the advent of the container.

"At the conference we have people who have already felt the winds of change and in many cases weathered the storm. On the other hand there are those, normally in the majority, whose thirst for knowledge and guidance in these matters is yet to be satisfied.

"It is well therefore that we have these international organisations and men in them, with the vision and leadership qualities to organise and provide a forum of this kind, where we can describe our experiences, record our mistakes, and, as an outcome, formulate policies which will make our chain of Pacific ports more efficient and co-existent.

"I note in the promotion of this Seminar, the fundamental importance of involving other people—those who have to use or work the system and those who will prove vital to the operation and planning of modern cargo handling systems—has been recognised.

"It is essential that we consult and seek to merge the resources of Government, of the business community, of transport technology, of labour, and of education, at an early stage in the planning and development of any new port system.

"I believe Seminars of this kind should place emphasis on working sessions, where port problems are discussed and resolved. These working sessions should involve people with practical experience in such matters. The end result should form a sound basis for your individual port decision-making processes.

"In yester-year the port was regarded as an area enclosed by dock fences where the terminal functions of the various modes of transportation occurred. Thus they were easily defined as fixed facilities with permanence in sub- and super-structures.

"Today, and in the future, the contrary must apply. The port must be a flexible entity having a sound sub-structure with sufficient water depth, safe channels and adequate transfer areas.

"But it must have flexibility in its super-structures, and these must be capable of adaption to meet trading changes and the special demands of unitisation in all its forms.

"Port interface activities are now more inclined towards the role of transfer, they become the interchange, or switching operation, and thus they must cater for the demands of the "through movement" system from point of origin to inland point of destination and vice versa.

"These are the changes occurring in the handling of general cargo which have so influenced the shipping and ports scene in the United States of America, in Canada,

Europe, Japan and Australia, in the past 10 years. These are the changes now quickly spreading to all corners of the globe and to all ports large and small on our international shipping links.

"Unlike the larger and more industrialised nations, the bulk of New Zealand's export trade consists of farm products, which must be transported in refrigerated containers. This commits our container ports to substantial investment in special facilities for holding refrigerated containers until ships take them on board for the voyage overseas.

"It has also involved the terminals in stringent washing procedures required by New Zealand law in order to safeguard our livestock, horticulture, and forests, against the accidental introduction of diseases which could ravage them and thus destroy the foundation of New Zealand prosperity.

"Parallel with the rush development of terminals to cope with cellular container ships, which incidentally have increased rapidly and beyond even the forecasts of the shipping lines, we have had to maintain conventional facilities and services for the residual break bulk vessels which are still carrying heavy proportions of our import and export cargoes. Whilst the volume of conventional cargo is now starting to drop, our ports must still be geared to cope with the dual system.

"Wharf and back-up facilities designed for break-bulk ships and their cargoes are generally unsuitable for sustained container operations. For successful operation, container ships require specialised berths for quick turn-round: they require portainer cranes, straddle carriers, and other heavy mobile plant, as well as ample stacking and unpacking areas.

"It is here that the port authority encounters the first major obstacle of meeting the high and climbing costs of providing adequate facilities. Initially, when the throughputs are small, difficulty may be found in attracting ship operators or stevedoring companies to provide the shore exchange facilities. In such cases, and to cater with a multi-user situation, the port authority may be well advised to protect its position by providing sufficient facilities on a public berth basis.

"If it proceeds in this manner then its planning must take into account the many forms of unitisation that are available to the shipowner. It would be fair to say that whilst the container system is the most widely used method, it is clear that the decision on the method, size of ship, frequency of calls, rests with the shipowner.

"He has the all-important investment decision to take and has a vast range of unit services from which to choose.

"Of some significance, therefore, are my earlier remarks on the need to adopt a flexible planning policy when considering new and additional port facilities.

"Nonetheless the march of progress continues to be felt and ports must ensure that, at a minimum, basic facilities are provided to ensure that they can handle the traffic offering in whatever form. That form, if it involves containers, may well be unconventional ships, or in sophisticated cellular vessels.

"In the case of the former, the adaption of existing facilities may be possible and the provision of heavy-lift mobile cranes appears to offer an answer for loading and unloading. Depending on the point loadings on the quays, other general purpose plant can be substituted for the comparatively expensive special purpose machines like

straddle carriers.

"The conversion of existing wharf sheds for unpacking and packing of containers may also provide a cheaper solution than constructing a purpose-built freight station.

"The introduction of about 16 self-sustaining container ships into the New Zealand trade gave Auckland the opportunity to devise a system in consultation with the unions, which would permit us to load and unload this class of vessel at conventional berths.

"The type of agreement, and the actual port policy for dealing with these ships, has been well documented and can be made available to anyone interested.

"It certainly minimises queueing time when ships bunch, and leaves the fully cellular ships to work at the container terminals to the best advantage.

"I am aware that many ports in what are termed the "developing countries" have closely followed the patterns set by the so-called "developed countries" and, notwithstanding the economic burden, have built sophisticated and specialised terminals.

"In the long term those ports may prove their viability, but in the short term there may have been more acceptable economic ways of tackling the first wave of this internationally popular system.

"At Auckland we are having a struggle to cope adequately with the rapid and unpredicted growth of container shipping. Although the first container ship arrived at Auckland only in June 1971 we have been obliged to undertake extensions which will double the capacity of our container wharf and complex.

"Our container terminal at present comprises some 23 hectares of land including the quay itself. The third stage now well advanced will provide an additional 4 hectares of berth and land. It is scheduled for completion at the end of 1978 when the total area of the portside container complex will be 26.50 hectares of 65 acres.

"Fergusson Wharf itself provides 457 metres of berthage at present. This is currently being extended to 610 metres which will permit us to work two of the largest container vessels simultaneously.

"By December 1978 we will have a third portainer crane in operation, also 17 straddle carriers as well as other heavy mobile plant. With a complementary inland terminal we expect these facilities will carry us through to the 1990s.

"I give these Auckland details only because they serve to illustrate points that I will make.

"What we already have, and the extensions now so well advanced, have not been easily achieved. Today all sorts of problems have to be overcome before port works can proceed—as those of you with development plans will find out for yourselves. Later on I will refer to some of these problems.

"Always, of course, the first problem is finding the money. Apart from finance, my own Board had to obtain other Government approvals for the additional port facilities required at Auckland to cope with the onrush of the container age.

"Today most of these additional problems—that is, apart from the millions of dollars required—relate in one way or another to environmental issues surrounding any port project or development. Generally speaking, my own Board has conservation ideals similar to those of the environmentalists.

"The differences that occur result mainly from contrary views on how to preserve all that is best in our harbours

and foreshores—and at the same time adapt existing port facilities to meet as rapidly as possible the urgent and growing requirements of container shipping.

"In New Zealand we first have to satisfy the Commission for the Environment, a government body, that port works are essential. We have to show port works are planned in such a way as to cause minimal interference with the ecology of the harbour. We have to show the work can be done without distressing public sensitivities as regards noise, pollution and views.

"This means we have to prepare an environmental impact report on each port project. The Commission for the Environment audits this impact report. If in doubt on certain points, the Commission may call for further information or suggest another line of approach.

"Public submissions are called for and considered by the Commission for the Environment. These may raise points requiring presentation of supplementary information to the environmental impact report.

"When the Commission for the Environment is finally satisfied the Minister of Transport approves the project. At this stage we are able to start actual construction work.

"You can see this procedure, desirable as it may be, causes delay in completing works essential for the successful operation of a port in the years ahead. Under our accepted system some delay is unavoidable even when the health of the national economy may depend to large degree on the efficiency of a port like Auckland.

"From the many studies necessary to obtain approval for port works we found other ports were facing similar problems and situations on different development aspects including harbour encroachment, feeder roads and communications.

"In our own case we decided to minimise some of these problems by decentralising our operations to the extent of establishing a 20 hectare inland terminal at Wiri in South Auckland some 17 kilometres by rail from the port and readily accessible by a modern motorway.

"The first construction stage will be completed by mid-1978 with the second stage scheduled for completion by late 1978 or early 1979.

"When completed this inland terminal will provide all those services already operating at our portside container terminal. These include road/rail exchange, storage and unpacking of containers, reefer areas, washing and pre-trip checking of containers, H.M. Customs and Department of Agriculture inspection facilities, also dangerous goods storage.

"The initial concept of decentralising at Auckland arose from a requirement to provide additional facilities for handling LCL cargo. Upon examination it became abundantly clear that, because of the southern orientation of cargo distribution and the particular requirements of our trade, there were many additional advantages to be gained from the establishment of a combined terminal/base operation at an inland location.

"Those immediately apparent were:

- (a) Opportunity to decentralise at any time and avert possible port congestion:
- (b) Reduction in unnecessary cartage of empty containers:
- (c) Easement of road congestion by use of rail to and from inland terminal:

"The minimisation of vehicle movement and the transport costs were not the sole factors governing the location of inland facilities. Numerous other issues were involved,

among them being the availability of land and labour, town planning controls, environmental and social factors, the functions to be performed by the new operating centre and its ease of internal and external operation.

"As with the expansion of our container wharf and complex on the waterfront, consultants were retained to study and report on all aspects of establishing the inland base to complement portside container operations.

"Their recommendations covered:

1. The need for the additional facilities
2. Site requirements
3. Facilities for composite terminal/base operations
4. Division of container traffic between portside and inland bases
5. Transport of containers to and from the inland terminal

"The exhaustive studies carried out by the consultants assisted my Board in successfully completing the procedures I have already mentioned as being necessary to gain statutory approval for such projects.

"I mention these matters in some detail because we found a number of the problems involved are problems which also confront ports far beyond New Zealand. But, whether a port is large or comparatively small on a world scale, no development problem is beyond the ingenuity of the experienced transport operator, the professional engineer or the computer.

"What must be remembered, however, is that the success of port operations still rests with the work force. No matter what degree of sophistication is introduced, the success of your operation depends on the men who work your machines.

"Labour problems are not new. In one form or another they have existed ever since man began to live as a society. But labour problems are not insoluble. They can be resolved by an honest, rational approach—if this comes from both workers and employers.

"True, just settlements must be facilitated by sensible conciliation and arbitration laws framed to meet the needs of the times and flexible enough to meet the special needs of particular industries.

"Changes in waterfront work methods present their own industrial complexities. Job overlapping can occur between groups of workers for whom a fairly clear line of work demarcation existed in the past. As ever, reasonable conciliation can resolve such complexities.

"Indeed, a disturbing feature of waterfront labour is the fragmentation of labour unions. In the port industry alone we deal with a multiplicity of unions, each of which has its own outlook and sometimes quite parochial outlook, on the relative importance of its own members in the waterfront work force.

"I believe that as far as possible all port workers should be in the one union and be bound by the same award. Only in this way will it be possible to reach that necessary common understanding of the labour problems of the waterfront.

"Such unity is essential if the problems arising from changes in shipping and cargo-handling are to be resolved. Simplicity, honesty, common sense and human understanding must be the basis of all negotiations to achieve a desirable composite structure of waterfront labour.

"In New Zealand the importance of waterside workers in the economy of the country has long been recognised by the setting up of a tribunal to deal exclusively with their labour problems. In my view the importance of the

waterfront industry as a whole should now be realised by bringing all workers in this industry under one special authority.

"Some progress towards this ideal has been achieved by amendments to our Waterfront Industries Commission Act (1976). Under these the reconstituted WIC Tribunal is empowered to finally determine, as necessary, inter-union job conflicts, incentive bonus payments and participation therein, conditions of work and rates of pay.

"Before I leave the question of labour I want to stress the importance of training waterfront workers in the special skills of the port industry.

"With the multiplicity of machines and new work methods the people who are employed on the wharves should not only have a thorough knowledge of their own jobs—they should also have a sound understanding of the functions and responsibilities of those other sections of people with whom they work.

"Some years ago the New Zealand Port Employers Association, with the assistance of my own Board, established a central training organisation on the Auckland waterfront. Workers from all New Zealand ports are benefiting from practical training on machines and techniques in daily waterfront use, and the industry as a whole is the better for it.

"I have given you a mixture based on experience gained in a working lifetime at the Port of Auckland, and on knowledge gained from firsthand study of many overseas ports. I hope this will be of some assistance to those of you who must anticipate tomorrow's problems.

"Successful forward thinking today, the basic ingredient for business survival, will pay handsome dividends tomorrow.

"There is a rich reservoir of energy and talent available in the world today to help us shape the systems most suitable for our own transport industries. Access to this talent is made easier through personal contacts established at seminars of this kind, so let us take full advantage of the opportunities offering.

"By doing so it should be possible for us to exert greater influence on future trends and not just accept without question the suggestions of the crystal-gazers, the people who haven't thought things through to logical conclusions.

"For our part let me say this: the emergence of the port of Auckland into the container age has not been easy and we carry scars to prove this point.

"But if, by our personal experience, we can assist our sister ports of the South Pacific we will certainly be happy to do what we can.

"Again, let me remind you the activities and co-operation of IAPH provide an excellent medium for worthwhile technical advice."

# The Variable Role of Planning for Ports From Normative Planning to Functional Planning

**Herbert R. Haar, Jr.**  
**Associate Port Director**  
**Port of New Orleans**

**Paper Submitted at**  
**The 66th Annual Convention of**  
**The American Association**  
**of Port Authorities**  
**Mexico City, Mexico**  
**Tuesday, October 25, 1977**

## I. INTRODUCTION

The purpose of this paper is to explore the variable role of planning from normative planning to functional planning and to arrive at a recommended typical plan for a seaport. In accomplishing the study the writings of a number of well known authorities in the planning and related fields have been researched and used in the material that follows.

An important question of "why" have planning might be asked. It is generally recognized that the facilities in many of our larger ports are in need of replacement or major modifications without the availability of the required funds. Additional problem areas include traffic congestion when facilities are located adjacent to urban areas; obsolete cargo handling facilities; wharves and warehouses; and excessive maintenance costs of older facilities. Planning if accepted and supported by local port authorities can go far in solving many of the problems that we are now faced with in these areas.

Luther Gilick in his book<sup>1</sup> entitled, "The Metropolitan Problem and American Cities" states, "What we are short of is organized management, the right governmental setup, practical dreams, and the drive to go ahead together". John D. Millett in his book entitled, "Management in the Public Service" has the following to say about planning.<sup>2</sup> "There cannot be any effective management in the public service without planning. The alternative is improvisation in administrative behavior and the wasteful use of personnel and material resources."

## II. DEFINITIONS

A number of definitions will be outlined before continuing further.

"**Planning** is that activity that concerns itself with proposals for the future, with the evaluation of alternative proposals, and with the methods by which these proposals may be achieved. Planning is rational, adaptive thought applied to the future, and to matters over which the planners, or the administrative organizations with which they are associated, have some degree of control."<sup>3</sup>

**Normative Planning** is that planning concerned with certain standards of behavior or general standards that are desirable, such as "Thou shall not kill" or based on values that ought to be obtained.

**Functional Planning** is that planning in which the planner assumes the goals to be given and is rational with respect to the means—this normally involves the execution of a one year annual program and a  $\pm$  five year capital improvement program or a five year development program.

**Policies** are consciously derived guides that governing bodies, commissions, or administrative officials develop to achieve consistency of action in pursuit of public purposes or in the administration of particular public responsibilities.

**Goals** are the objectives, the end product or are what we are striving to reach over time. They may represent large open spaces, good housing for all members of society, an efficient economical mass transportation system. Short term goals—to complete three new schools, are easier to define and achieve than long term goals—large open spaces, for example. The problem of long term goals has been the difficulty in defining them in a realistic manner—they should always represent something that is to be actually realized in a given time period and should not be empty statements like—the good life for everyone.

**Planning horizon** The length of time during which a plan is to be effectuated—the course of action is to be accomplished by the year specified.

**Utopian planning** Martin Meyerson is an article entitled, "Utopian Traditions and the Planning of Cities" published in the Winter 1961 issue of *Daedalus* has summed up utopian planning very well in the following. "It is the utopian process—the sketching out of the implications of altering certain fundamental features of society and environment that should be emulated, rather than the utopian product. Planning like utopia, depicts a desirable future state of affairs, but unlike utopia, specifies the means of achieving it."

## III. JOHN FRIEDMANN'S<sup>4</sup> CONCEPT OF PLANNING'S CONCERN WITH THE "IDEAL" VERSUS "REALITY"

John Friedmann in his paper,<sup>5</sup> "Planning as a Vocation" states that planning is a process used for the "definition and clarification of organizational goals and their reduction to specific programs and courses of action—in its second and ideological sense, planning may be seen as a means for achieving a measure of self direction in the evolution of a social system: it is a means for gaining a substantial measure of mastery over man's destiny."

Normative and functional planning have been previously defined in this paper. Friedmann further defines normative planning as "rational process leading only to the formulation and clarification of goals".<sup>6</sup> He further takes the position that a decision in order to be substantially rational must have the application of normative and functional planning to any given situation. Friedmann believes that in this level of substantial rationality a goal reduction process is obtained by a linking of normative and functional planning. In the goal reduction process the planner will have to combine the normative with the technical, utilize something from the politician and the bureaucrat, and also



not fail to identify the public interest. In the final analysis, according to Friedmann, the planner will have to maintain independent judgment while staying aloof from political debate as "it is not he who has to make the binding decisions—he may inform, propose, suggest, exhort—he will take part in the decision process—but the final choice is never his."<sup>7</sup> The comprehensive thinking process as envisioned by Friedmann is attached as Annex A.

The first chart that follows show Friedmann's concept of the combination of normative-functional planning in the overall planning-decision process. The second chart shows an example of end or goal reduction.

#### Overall planning—decision making process<sup>8</sup>

| Planning Horizon (yrs) | Type of Planning       | Type of End-in-View | Main Purpose   |
|------------------------|------------------------|---------------------|----------------|
|                        | <u>Normative</u>       |                     |                |
| 25—40                  | Goal Planning          | Goals               | Direction      |
| 10—20                  | Developmental Planning | Objectives          | Strategy       |
|                        | <u>Functional</u>      |                     |                |
| 3—7                    | Comprehensive Planning | Targets             | Conjunction    |
| 1                      | Annual Programming     | Tasks               | Program budget |

#### Example of end or goal reduction<sup>9</sup>

| Time Horizon                     | Goal Statement  |
|----------------------------------|---|
| 1. Long-range goal plan (35 yrs) | "----to minimize total travel time----"   |
| 2. Development plan (15 yrs)     | "----a transport system which is based on clear priority for means of public mass transportation----" |
| 3. Comprehensive plan (5 yrs)    | "----to divert private automobile traffic from A to B, substituting at A with a trolley system----"   |
| 4. Annual program (1 yr)         | "----to purchase X number of trolley cars for the purpose of expanding----"                           |

Friedmann<sup>10</sup> says that on the one hand planning is theoretically attractive as a profession because of its concern for: practical social reform; utopian thinking, norm setting; widening the scope of rationality and order in society; and for sharing in the exercise of power. This is at odds with actual planning practice which is often more concerned with the short range view, and major changes in policy are considered to be the responsibility of the political leadership. Planners therefore often tend to work in a piece-meal fashion and meet each problem as it arises. They are preoccupied with their career and future advancement, to the detriment of the aims of the planning profession.

#### IV. FEDERAL PORT PLANNING

The federal government has supported port development for almost two hundred years and has had a policy of prohibiting discrimination among ports either by governmental or private actions that has resulted generally in not effecting the competitive relationships among ports. The federal involvement in port matters is fragmented among more than forty federal organizations and in the Congress there is a similar fragmentation of power among many Congressional Committees and Subcommittees. In summary there is no one organization coordinating the federal activities related to port development. However, the port

industry is probably, in terms of planning, most involved with the Corps of Engineers, the Department of Commerce and the Congressional Committees on Appropriations, Public Works and Merchant Marine and Fisheries. The involvement of these several entities in channel maintenance, new channels, funding of new projects, funding of on-going projects, funding conventional studies, and the new regional port studies are, I am sure, well known by all of you. It is worth noting that renewed major EDA funding opportunities for ports, the Maritime Administration's regional port studies and new proposed Congressional legislation on Federal Aid for Federal mandated costs to ports, all present major current opportunity areas for the port industry. One additional opportunity area is the Permanent International Association of Navigation Congresses which provides an international forum for the exchange of information on port planning and inland waterway development.

#### V. STATE PORT PLANNING

State governments roles in planning vary from state to state and run the range from no involvement to a full fledged state authority for ports. State Departments of Transportations in a number of states have been given the responsibility for ports in their states and have started in several instances to develop state wide port development plans. In a number of cases states provide financial support to their ports, either on request or on an on-going basis for planning and capital improvements. Recently in the Mid-America area the American Association of State Highway and Transportation Officials made an offer to 17 states involved to become their spokesman at the national level in fostering the development, operation and maintenance of a nationwide integrated transportation system, and to cooperate with other appropriate agencies in considering matters of mutual interest in serving the public need. From all of the foregoing it is apparent that the states are moving to take a stronger and more active role in port planning.

#### VI. LOCAL PORT PLANNING

In the final analysis most of us are primarily concerned with our own local port planning. A basic guide on this subject is an AAPA publication entitled "Port Planning, Design and Construction" which was last updated in 1973. Three other good references that I have encountered are "Port Development in the United States" published in 1976 by the National Academy of Sciences, "Port Administration in the United States" by Marvin L. Fair (1954) of Tulane University, and "Mission: Port Development" by Walter P. Hedden (1967), the former Director of Port Development for the Port of New York Authority.

The basic goal in any port development is to maximize the possibilities of the port or area with respect to waterborne commerce. The tributary area of a port falls into three segments—(1) the local area or the port city proper and its immediate area usually within a radius of 25 miles of the port, (2) the port's own natural hinterland in which it enjoys a natural advantage with respect to rates and services, and (3) the competitive hinterland which can be serviced on a equal basis by two or more competing ports. The four interdependent elements in the development of a port are—(1) the steamship services available, (2) the traffic or trade flowing through the port, (3) the physical facilities at the port to accommodate the ships and the trade, and (4) the selling of the port.

The requirements of a development program are three fold: (1) a realistic estimate of the port's potential trade, (2) a study of the strength and the weakness of the principal competitive ports as to facilities, waterfront service, trade promotion, rates and even their selling methods and (3) an orderly development of facilities according to a long range plan adjusted periodically based on changing conditions.

## VII. STRUCTURE OF A PLAN FOR A SEAPORT

The development of new modes of transportation, such as container and lighter aboard ships (LASH), require large land and water marshalling areas. New port facilities must be located where the necessary land is available and away from urban congestion.

Careful consideration of new port facility layouts and siting must be given to the requirements of modern modes of transportation. Siting of new facilities must take into consideration security, proximity of highways and rail connections, environmental constraints, future planned urban development, national defense and navigational safety.

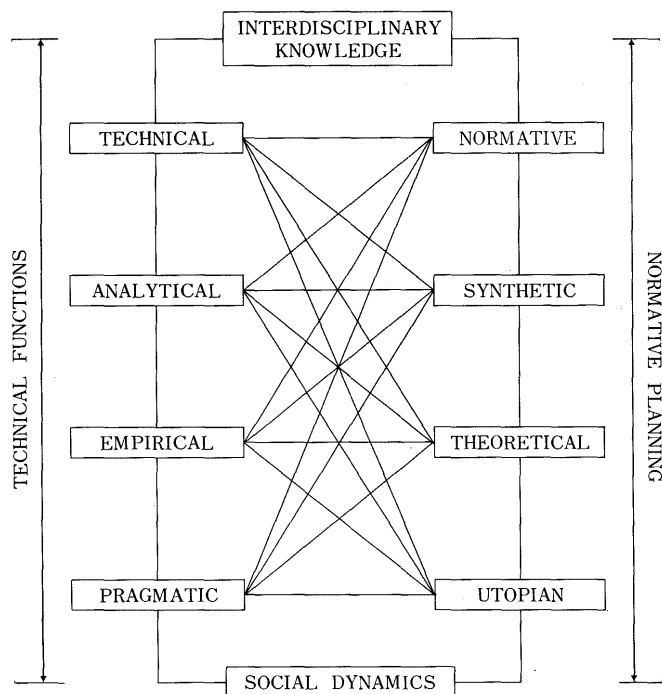
A long range phased development plan is the first requirement for orderly port development. This long range plan should be supplemented and updated with short range implementation plans for 5 and 10 years. It is generally advisable to obtain the assistance of consultants with a worldwide knowledge of ports in the preparation of a long range plan. The short range plans are more appropriately prepared in-house (staff permitting) with the close coordination of local, municipal, state and federal agencies.

Long range planning requires coordination with the National Government so that necessary access channels, locks interstate waterways, roads and railroad connecting to the port's planned facilities can be funded in part where appropriate by the Nation. Close coordination is required with the state and the adjacent municipalities for the promotion of port oriented industry, secondary highway development, and for utilities and municipal services required for the operation of the port and the associated industries.

Having reflected on the material presented in this paper I am inclined to assign the pivotal role of "prime activator" to a long term development (goal) plan. Because goals and related policies are the initial derivative of the port's economic values, they establish the range for public action. They are, therefore, not merely guides to action at more specific levels, but the basic framework within which all other components are developed. Therefore, this plan serves as the coalescing agent for the port management, port commissioners, community, and state political leadership to set the goals for the future.

What the horizon of a long range development or general plan should be is somewhat indefinite, since particular policies should permeate only the time during which particular economic and social values are prevalent. As value-shifts occur, the policy statement of goals—i.e., objectives which will maximize values, are restated in light of these shifts. Therefore, all of our various plans must be flexible and subject to change and reevaluation over time based on changed conditions and circumstances. Recognizing the foregoing, I would recommend the following structure of a plan for a seaport.

## ANNEX A COMPREHENSIVE THINKING IN PLANNING



### STRUCTURE OF A PLAN FOR A SEAPORT

| Planning Horizon | Type of Planning         | Component of Plan  |
|------------------|--------------------------|--|
| 20 to 30 years   | Normative                | Long term development goals and plan.  |
| 10 years         | Normative/<br>Functional | a. A general plan<br>b. A capital improvement program.<br>c. An educational program. |
| 5 years          | Functional               | a. A capital budget.<br>b. Specific physical details of development.                 |
| 1 year           | Functional               | An annual budget for maintenance, operation, and new construction.                   |

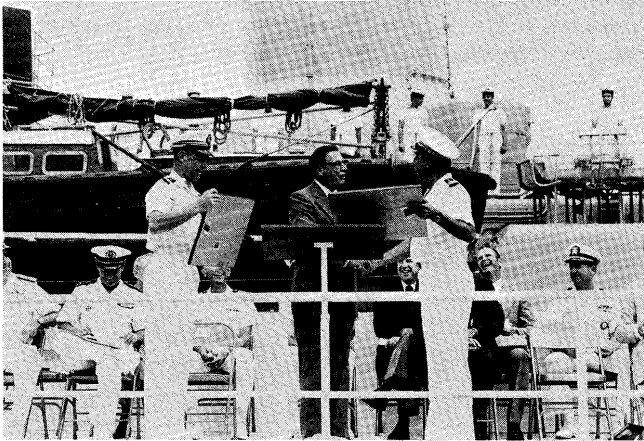
In order for the port to react to rapid changes in technological improvements and to the demands of commerce, adequate financing for the new facilities and modifications of the existing facilities is essential. To obtain this financing, the port must sell to their municipalities and state legislatures the benefits to be derived from port operations and encourage the national development of waterways so that the Nation can continue to benefit from this cost effective means of transportation. Good planning puts it all together and enables the port director to sell his program and move his port forward.

### SUMMARY OF FOOTNOTES

<sup>1</sup>Luther Gulick, *The Metropolitan Problem and American Cities* (New York: Alfred A. Knopp, Publishers, 1962) p. 9.

(Continued on next page bottom)

# Port of Houston News



**PORT OF HOUSTON**—The French Navy made a friendly invasion of the Port of Houston recently when two French naval vessels sailed up the Houston Ship Channel to pay a courtesy visit to the third largest port in the United States. The destroyer GUEPRATTE and frigate LE NORMAND brought 26 French officers and more than 500 seamen to Houston. They had a full schedule planned for them so they could see as much of the city as possible in a short time. In return, the captains of the ships opened them to the public for tours to give Houstonians a view of life at sea—French style. During welcoming ceremonies at the docks, the captains of both vessels were presented color plaques of the Port of Houston and were personally greeted by George W. Altvater, Executive Director of the Port of Houston Authority and President of IAPH. In this photo, Altvater is shown at center handing the plaque to Capt. C. Jammayrac, commanding officer of the GUEPRATTE. Cmdr. P. de La Rochebrochard, commanding officer of LE NORMAND is examining his plaque at left.



**PORT OF HOUSTON**—The newest ship of the Venezuelan Line to be put into service between the U.S. Gulf ports and Venezuela made her first call at Houston recently and her master was presented a color plaque of the Port of Houston to commemorate the event. Shown from left to right during welcoming ceremonies aboard the M/V TRUJILLO are Mario Medina, T.T.T. Ship Agencies; Capt. Luis E. Rojas, Venezuelan Line Port Captain; Capt. Manuel Vasquez, Master of the vessel; George W. Altvater, President of IAPH and Executive Director of the Port of Houston Authority; and Capt. K.F. Jensen, Vice President of T.T.T. Ship Agencies.

## New Appointments

### • Market Analyst

Houston, Texas, October 27, 1977:—A. Frederick Dinges, Jr. has joined the Port of Houston Authority's Trade Development staff as Market Analyst.

In this newly-created position, Dinges' duties will include assimilation and analysis of data on origin and destination of cargoes, future trade patterns and new markets.

Dinges previously had worked as a Research Associate in the Port's Engineering Department, where he also served as a graduate intern during the summer of 1975.

He received his Master of Science degree from Texas A & M University, and also is a graduate of the University of Kansas at Lawrence, and Donnelly Community College in Kansas City.

Dinges served four years in the U.S. Navy.

### • Eastern Sales Manager

Houston, Texas, October 27, 1977:—Leon Utterback has been named Eastern Sales Manager of the Port of Houston Authority effective November 1, C.A. Rousser, Port Director of Trade Development has announced.

Utterback joined the staff of the Port of Houston's New York field office in April, 1977, and has been Acting Eastern Sales Manager since May, 1977.

His duties include heading the trade development efforts for the Port of Houston along the Eastern seaboard. He is the senior salesman in the Port of Houston's field office at 60 East 42nd Street in New York.

(Continued on page 32)

<sup>2</sup>John D. Millet, *Management in the Public Service* (New York: McGraw-Hill Book Company, Inc., Publishers, 1954) p. 80.

<sup>3</sup>Herbert A. Simon, Donald W. Smithburg, and Victor A. Thompson, *Public Administration* (New York: Alfred A. Knopp, Publishers, 1959), p. 423.

<sup>4</sup>John Friedmann, *Planning as a Vocation*, An unpublished paper—Massachusetts Institute of Technology.

<sup>5</sup>Ibid., p. 3

<sup>8</sup>Ibid., p. 13

<sup>6</sup>Ibid., p. 10

<sup>9</sup>Ibid., p. 63

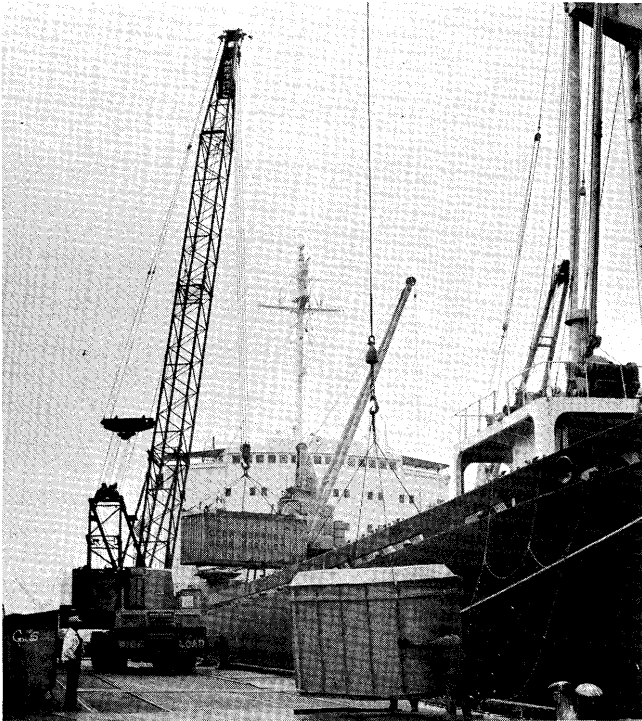
<sup>7</sup>Ibid., p. 18

<sup>10</sup>Ibid., p. 23

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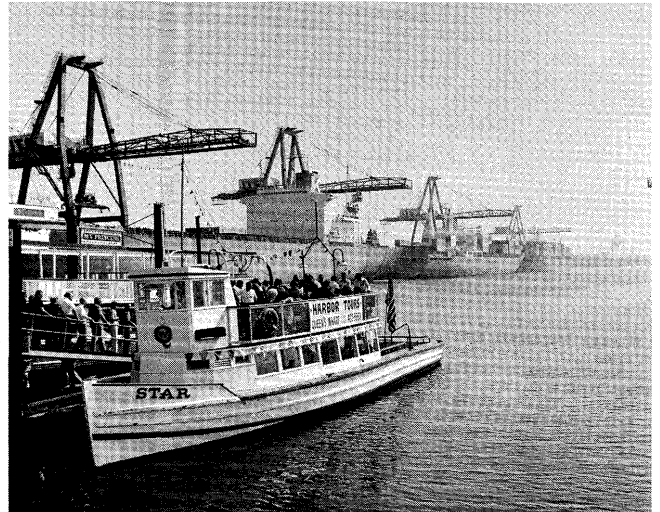
- 1-4. Same as above
5. Brant, Austin E., et al, "Port Development in the United States" (National Academy of Sciences, 1976)
6. Fair, Marvin L., "Port Administration in the United States" (Cornell Maritime Press, 1954)
7. Hedden, Walter P., "Mission: Port Development" (American Association of Port Authorities, 1976)
8. Whiteneck, Lawrence, et al, "Port Planning, Design and Construction" (American Association of Port Authorities, 1973)

# Port of Long Beach Photo News



**1 & 2) SOVIET NATIONAL EXHIBITION ARRIVES AT PORT OF LONG BEACH:** An entire shipload of exhibits comprising the Soviet National Exhibition being held in Los Angeles arrived recently at the Port of Long Beach direct from Leningrad aboard the Fesco Lines ship Orekhov. Photo 1 shows the multi-million dollar displays being offloaded at the Salen Agency terminal. In second photo, Captain Vladimir Y. Konchenko, left, is presented with an Apollon-eye photograph of Southern California by Harbor Commissioner James H. Gray. The Soviet exhibit is attracting record crowds to the Los Angeles Convention

Center during its 18-day run. The Orekhov is believed to be the first Soviet cargo vessel to arrive in Long Beach direct from Western Russia since World War II. (112177)



**3) PHYSICAL DISTRIBUTION MANAGEMENT DELEGATES TOUR THROUGH LOS ANGELES—LONG BEACH HARBORS** More than 300 delegates to the Physical Distribution Management Association Annual Conference in Los Angeles were guests recently of the Port of Los Angeles and the Port of Long Beach. They are shown boarding harbor cruise boats in Long Beach Harbor. Pictured in the background is the largest container complex in the Pacific, which encompasses 225 acres. (112377)



**4) MAYOR KOYUO YOKOYAMA VISITS PORT OF LONG BEACH** Among recent distinguished visitors to the Port of Long Beach, California, was Mayor Koyuo Yokoyama, of Yokosuka, Japan, Sister Port of Long Beach. He is pictured second from the left as he was presented a porthole plaque from Harbor Commissioner H.E. Ridings, Jr. Enjoying the ceremony are Harbor Commissioner John Hanna, left, and Mrs. Yokoyama. Mayor Yokoyama was visiting the City of Long Beach and furthering the bonds of friendship between the people of Long Beach and the Sister City of Yokosuka. (112377)

(Continued on page 32)

# Port of Los Angeles News

## Film Wins Award

October 25, 1977:—A new motion picture "Assignment: Port of Los Angeles" has won the bi-annual film competition of the American Association of Port Authorities and is now available for public viewing on request.

The award winning film will be shown to members of the Association at their 66th annual convention in Mexico City this week. Fred Crawford, general manager of the Port of Los Angeles, will be presented with the trophy for the film's excellence at the meeting. The Association is made up of 131 member ports from North and South America.

The 28-minute documentary film shows the beauty and excitement of the port and its shipping activities as seen through the eyes of a photographer and his granddaughter. Designed for viewing before civic groups and organizations and for public service television, the award winning film was produced by Richard J. Soltys Productions. The film won out in a competition open to all member ports for films completed in the past two years.

"Assignment: Port of Los Angeles" is now available for free public screenings. Contact the Public Relations office of the Port of Los Angeles by calling 833-7525, or write to P.O. Box 151, San Pedro, CA 90733 to make arrangements.

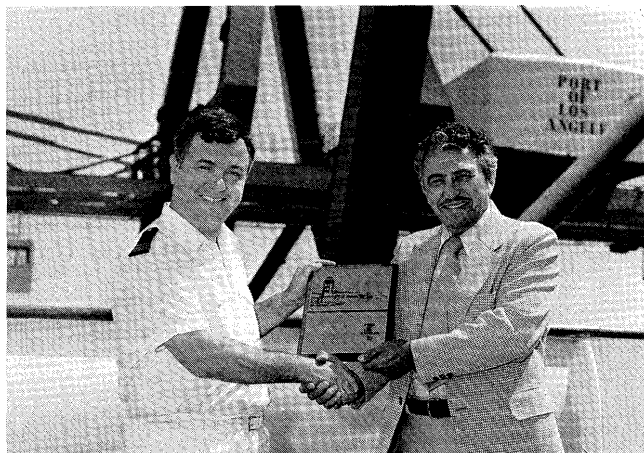
## "Risk Manager", A New Position

October 26, 1977:—The Los Angeles Board of Harbor Commissioners today (Wednesday, October 26) initiated a formal series of requests to establish a salary for a new civil service position of Risk Manager for the Harbor Department. The action recommends a salary range of \$21,840–27,144, a figure based on a survey of comparable positions in other city agencies.

Board decision last February had recommended that the Harbor Department set up a Risk Management Program and create a position to administer the program. In September, at the request of the Personnel and Harbor Departments, the Civil Service Commission adopted the new class of Risk Manager. However, the matter of a salary range had not yet been determined.

A Harbor Department Risk Manager would be responsible for reducing loss due to accidents and theft. As such, the Manager would administer a program to identify and measure risk exposure; develop methods to control risks and prevent loss; provide data to develop safety training programs; and recommend and negotiate for insurance coverage, as well as other related duties.

Today's action was in the form of an amended resolution authorizing the new position. It accompanied a request to the Mayor's Office that the Mayor ask the City Administrative Officer to request that the City Council establish the salary. This procedure is the result of a recently-enacted charter amendment establishing the City Council as the City's single salary setting authority.



Los Angeles, Calif., September 29, 1977 (Port of Los Angeles):—Traditional First Arrival plaque is presented by Los Angeles Harbor Commissioner Nate DiBiasi to Captain Jean Louis Doucet, master of the MV Medariana on that container ship's recent initial call at the Port of Los Angeles. The Seatrain vessel's name has since been changed to Seatrain Bunker Hill.

## Container Tax Exemption Needed

October 26, 1977:—The Los Angeles Board of Harbor Commissioners today (Wednesday, October 26) voiced concern that impending resumption of state personal property tax assessments on cargo containers would endanger the economic viability of the Port of Los Angeles.

In a formal resolution to Governor Jerry Brown and the State Legislature, the Board requested that a temporary four-year Harbor Department exemption to the California Revenue and Taxation Code be made permanent before it expires next year. Its expiration would subject containerized cargo in the Harbor to tax assessments. This, the Board fears, would place Los Angeles Harbor in a competitively disadvantaged position as other seaboard states either do not tax personal property or already exempt all ship operators from payment of personal property taxes on cargo containers.

## Water Conservation Efforts

November 2, 1977:—Water conservation efforts by the Port of Los Angeles will result in an estimated 240,000-gallon annual saving, reports Bill Clocksin, Harbor Department assistant general manager.

A 20 percent reduction over previous water usage, this savings by the Port's Maintenance Division will reflect the implementation of strict curtailment guidelines recently initiated by department management.

"Measures taken by our Maintenance Division to effect the reduction," Clocksin explains, "took the form of a seven-point program. Included among these are strict enforcement of minimum landscape watering requirements; reduced lawn fertilization and mowing to lessen watering requirements, and a survey and expeditious repair, where needed, of all water distribution equipment and systems, including drinking fountains, sprinklers and public rest-



rooms.

"We have also sent our key gardening personnel to water conservation seminars presented by various agencies."

The Department's number two administrator estimated the monetary savings will be over \$9,000 annually.



Los Angeles, Calif., October 31, 1977 (Port of Los Angeles):—Traditional Port of Los Angeles First Arrival Plaque is presented by Fred Crawford, Harbor General Manager to Capt. A. Nakamura, master of the newly launched container ship MV Five Star on the vessel's recent initial call at Los Angeles Harbor. Joining in the ceremony is Harvey Hayes, Vice President of Transpacific Transportation Company, agent for the Sankyo Line vessel.

## Tonnage and Revenue Increases

November 9, 1977:—Gains in revenue totalling more than \$2 million and tonnage increases of approximately 700,000 were reported by the Los Angeles Harbor Department for the first quarter of fiscal 1977/78.

The increases in revenue and tonnage were highlighted in the Department's First Quarter Report, presented today (Wed., 11/9) to the Board of Harbor Commissioners.

Harbor operations brought an overall rise of \$2.4 million over the prior year's first quarter, to a total of \$9.2 million. The high growth rate was led by an increase of \$1.9 million in wharfage, followed by increases of \$.3 million in both dockage and rentals.

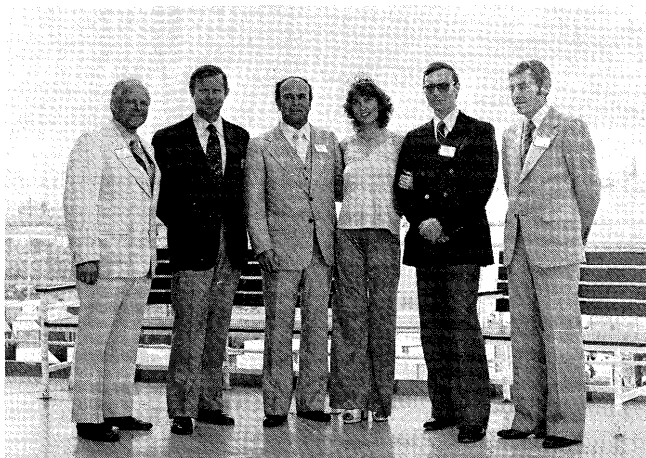
Net income for the period increased \$1.9 million to a new high of \$4.8 million. This was due largely to Harbor management's ability to hold operating and administrative expenses to only a modest rise.

Total revenue tons for the quarter amounted to 8.8 million, as opposed to 8.1 million for the prior reporting period. The total tonnage was divided between bulk oil of 6.6 million tons and general cargo of 2.2 million tons, while the 700,000 tons increase reflected a 454,541-ton rise in petroleum and 256,969 tons in general cargo.

Based on the first-quarter figures, Harbor officials projected a record annual gross income of \$40.4 million, as compared with this past year's \$34.7 million, and based on expected tonnage of 37 million. Net income is expected to equal \$20.8 million, an anticipated increase of \$6.5 million.



Los Angeles, Calif., October 31, 1977 (Port of Los Angeles):—Traditional Port of Los Angeles First Arrival Plaque is presented by Bill Clocksin, Harbor Department Assistant General Manager, to Capt. Enno Busching, master of the newly-launched Seatrain Valley Forge on the container ship's recent initial call at the Wilmington Container Terminal, Los Angeles Harbor. Joining in the ceremony is Pete Kirkegaard of Seatrain Line.



Los Angeles, Calif., November 21, 1977 (Port of Los Angeles):—First Arrival festivities at Los Angeles Harbor's Wilmington Container Terminal, including an official greeting by the 1978 Miss Port of Los Angeles, were held recently for the Hoegh Musketeer. Here Fred Crawford, Harbor General Manager, left welcomes the agent and representatives of Hoegh Container Line, the Port's newest tenant. Others pictured are: Hans W. Mauritzen, Line rep; Joe Berru, of Norton, Lilly & Co., agents; Miss Port of Los Angeles, Heather Suzanne Brittain, Johan Lyng Olsen, Hoegh Director, and Capt. Gunnar Odde Hauge, Line rep.



# Port of Dunkirk, September 1977

## Service de Presse Port Authority of Dunkirk

### BOARD MEETING SEPTEMBER 1977

The Board of the Dunkerque Port Authority resumed its monthly meetings on Friday 2nd September. Mr. Jean LEFOL took the chair, assisted by the director Mr. Michel PECHERE.

### TRAFFIC DURING THE SUMMER OF 1977

During the month of July 1977 over 3.1 million tons of cargo passed through the port. However, in spite of this recovery, the overall tonnage during the first 7 months of 1977 showed a loss of 1.8 million tons compared to the same period last year, i.e. 9%.

Petroleum products still prove profitable mainly due to local refining facilities used for direct export. A noteworthy event has been the arrival in the Western port of the 280,000 DWT tanker "SAPHIR" which discharged 270,000 tons of crude oil. The ship drew a draught of 21.10 m, and the channel is now ready to accommodate ships drawing a maximum draught of 21.7 m.

In spite of a recovery in imports of iron ore the loss of traffic has now reached a figure of 14% compared with 1976. On the contrary, the development of coal imports and a more rapid recovery has brought traffic in coal to a level equal to that of 1976.

The level of activity in 1976 has not been equalled in all other areas, except for the import of general cargo particularly by tramps. There has been outstanding activity in some special lines of traffic, such as forest products which the Port of Dunkerque has shown its traditional ability to handle. A noteworthy achievement was the dispatch by tugs from the Western port of the column base of a North Sea crude transfer terminal weighing 1,000 tons. Cross-Channel passenger traffic has shown a remarkable increase with a total of 276,000 passengers for the first seven months of 1977 compared with 175,000 in 1976. But the Board has noted the decision of the Danish company OLAU LINE to suspend its daily crossings from 4th September, since the freight traffic has not fulfilled its expectations.

### PROVISIONAL PLAN FOR THE FINANCIAL YEAR 1978

The Board has outlined a provisional plan for the financial year 1978 which will be submitted to the appropriate ministerial departments. This plan may be summarized as follows: with a total foreseeable traffic of 36.8 MT of cargo the Running Budget will be balanced rising to approximately 360 million francs which implies an average increase in port users' tax, port dues, by 15%. The section headed "CAPITAL OPERATIONS" foresees an investment of about 250 million francs of which approximately 16% will be self-financed. Prominent among these investments would be the construction of a western iron ore terminal for iron ore carriers of 175,000 DWT as a first phase of development and an initial move to acquire land to the south of the R.N. 40 which formed part of the D.P.U. (declaration for public use) of 2.07.1976.

### CONTINUATION OF PROJECT TO WIDEN THE CHANNEL IN FRONT OF N°4 MOLE AND THE CONSTRUCTION OF A SHIP REPAIR QUAY

The Board has taken into consideration preliminary planning work for these two proposals intended to increase the size of ships which can have access to n°s 3 and 4 berths by providing a turning circle of about 200 m in diameter and also to allow naval repair companies the facility of a new quay for repairs, suitable for ships of 170,000 DWT which will be able to make use of the new dry dock near by from 6th April 1978.

### BERTH PRIORITIES AT FREYCINET XIII QUAY FOR THE C.G.M.

As part of the general rearrangement of the operations of the Compagnie Générale Maritime at Dunkerque, the Board has granted a regular user contract involving the hire of a new 4,890 m<sup>3</sup> warehouse on Freycinet XIII quay. Henceforth, the C.G.M. will concentrate its activities on this quay as well as in the rapid transit container port (Dunkerque West) for its full container shipping lines to the French West Indies.

### WOOD CHIPS ON THE MOVE

The M.S. "TAIKAI MARU" was the first self-unloading bulk cargo ship which made use of the new terminal for wood chips at the eastern port of Dunkerque. 26,000 tons of wood chips having a cubic capacity of 80,000 m<sup>3</sup> in transit from the U.S.A. were unloaded by means of boardgrabs, conveyor belts and bulldozers at the Grande-Synthe quay where the DOUAISIS company had built for BEGHIN SAY a completely new wood chips terminal. These wood chips which have already acquired the name of "plaquettes" will be used to make wood pulp at Corbehem (Pas-de-Calais) and will be transported by rail trucks. This new specialised terminal which has been designed for an output of 2,200 m<sup>3</sup> per hour, completes the 2 other forest product terminals at Dunkerque. Apart from the terminal for logs imported from the U.S.S.R. and from Canada, to Freycinet 3 quay for BEGHIN SAY, the western rapid transit port is also equipped with two warehouses for utilised forest products (Kraft paper, newsprint, wood pulp and wood) arriving from Sweden on self-unloading ships of the Combi-Shipping Company. The traditional activity of the Port of Dunkerque is again in evidence in handling a new raw material wood chips.

### COMPETITION BETWEEN CRUDE OIL PORTS

In the world of sea transport, the struggle to meet the requirements of the super tankers for sufficient draught intensifies almost daily. For instance, the Port of Dunkerque has henceforth imposed a maximum permissible draught of 21.70 m and the operating limit of 21 metres draught has already been exceeded at the beginning of August by the tanker "SAPHIR" with 21.08 metres. This super tanker is 343 m long and 51.8 m wide. It belongs to the Compagnie Navale des Petroles and has unloaded 270,564 tons of crude oil from Dubai and Kirkuk (Persian Gulf). This cargo for the Flanders Refinery of the TOTAL

group has given Dunkerque the opportunity to overtake Rotterdam in the draught hitparade by 36 centimetres with hopes that this will in future increase to about another 60 centimetres. The difference between such monsters is measured only in centimetres. Finally, we should remember that the first super tanker which will supply the BP refinery by using the new buffer-depot now approaching completion will arrive at Dunkerque West in the autumn. She will be the "CHENONCEAU" carrying over 260,000 metric tons of crude calling at Dunkerque-West oil pier on October 12, 1977.

#### **AFTER THE WATER-CUSHION TECHNIQUE THE "CRAWL-ON/CRAWL-OFF" METHOD**

The transport of indivisible structures called heavy loads presents a number of technical problems and demands the application of handling methods appropriate to each individual case. At the port of embarkation, one must include among these methods, sliding on rails, lifting, roll-on/roll-off, sliding on a cushion of water, floating and "crawling".

All these have been used at the Port of Dunkerque during the last few months: after sliding a 2,700 tons gas exploration platform at the beginning of the year from the Constructions Métalliques de Provence assembly yard on the Mardyck Basin, there was the launch by sliding on a cushion of water of a roll-on/roll-off linkspan of 340 tons for the Port of Boulogne by Beliard Crighton and Cie; at almost the same time, the dredger "Jean Rigal" was floated onto a barge before dispatch to Suez; during August there were 18 pieces of equipment with a total weight of 1,800 tons which were hoisted by derricks or rolled aboard ships. Finally at the end of August, at Dunkerque West, a "crawl-on/crawl-off" operation enabled the embarkation of an indivisible weight of 1,000 tons on a barge.

These techniques have been brought into being by industrial developments in pre-fabrication which have extended the sizes and weights of structures to ever-widening limits. It has therefore been necessary for ships to adapt their facilities to the same extent for the transport of heavy loads. In the space of a few months specialised ships such as the "Gloria Virentium", the "Internavis I" and several barges have called at Dunkerque. These ships are equipped with their own lifting tackle and have derricks which can handle up to 800 tons. Some ports are equipped with land based lifting tackle which can also handle lifts up to 800 tons. Dunkerque uses its 250 tons floating crane. Other more powerful derricks are sometimes hired as circumstances require, from specialist organisations.

To end this report we append technical notes on the recent export of heavy loads from Dunkerque.

In February 1977, large boiler components with a total weight of 1,284 tons were dispatched from the works of CMP in Petite-Synthe destined for Mexico.

Again, in the last month of August, 18 pieces of equipment having a total weight of about 1,800 tons all for export, were loaded at the Port of Dunkerque. The destinations were as follows:

- 8 components for Mexico: total 535 tons, on 11th and 12th August, which was a continuation of the contract of February 1977.
- 5 pieces of equipment for Kuwait, dispatched on 19th and 20th August, total weight 284 tons.
- 4 pieces of equipment for the U.S.S.R. dispatched on 11th and 12th August, total 674 tons.

- 2 pieces of equipment for Algeria dispatched 16th August completing dispatch of February 1977, total weight 196 tons.

From the beginning of the present year, up to the end of August, 37 pieces of equipment have been built at Petite-Synthe for dispatch overseas of which the most important weighed 340 tons. The majority of these dispatches have been made from the Port of Dunkerque.

#### **MEXICO**

Transit by : DAHER

Ship : M.S. HANNOVER (German)

Consignor : HERPIN

Load :

- 2 hydrodesulphuration reactors  
diameter: 5.75 m—overall length: 9.79 m  
unit weight: 84.8 tons
- 3 hydrodesulphuration reactors  
diameter: 3.23 m—overall length: 14.73 m  
unit weight: 91.4 tons
- 2 sulphur production drums  
diameter: 3.05 m—overall length: 10.31 m  
unit weight: 45.5 tons
- 1 separator  
diameter: 3.05 m—overall length: 14.51 m  
weight: 80 tons.

#### **KUWAIT**

Transit by : LEMAIRE

Ship : IBN BAJJAH

Load :

- 3 separators  
diameter: 3.95 m—overall length: 11.23 m  
unit weight: 62 tons
- 2 separators  
diameter: 3.19 m—overall length: 9.67 m  
unit weight: 44.5 tons

#### **U.S.S.R. (Orenbourg)**

Transit by : JOKELSON

Ship : M.S. SADONSK

Consigned by LEMAIRE

Load :

- 4 driers  
diameter: 3.82 m—overall length: 22.93 m  
thickness: 7.9 cm—unit weight: 168.5 tons.

#### **ALGERIA (Annaba)**

Transit by : ORGANITRANS

Ship : INTERNAVIS 1 (French)

Load :

- 1 stage converter  
diameter: 4.30 m—overall length: 22.02 m  
weight: 140 tons
- 1 separator  
diameter: 2.21 m—overall length: 10.11 m

(Continued on page 29)

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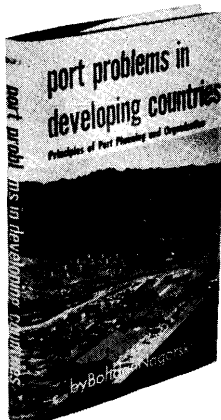
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—**Assistant Secretary General, ICHCA**

## ANNOUNCING !!

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# Orbiter Probe

## Papers for ICHCA 1979 Meeting

London, 3rd November 1977 (ICHCA Press Information):—The XIVth Conference of ICHCA will take place in Helsinki from May 26th to June 1st 1979 under the theme 'From Raw Material To Finished Product'. Mr. R.P. Holubowicz, the Chairman of the Council and Executive Board of the Association, on making this announcement in London today, stated that conference delegates will be stimulated by the approach of ICHCA Finland to the way in which the Conference was being organised. Delegates would be spending about a day and a half of the Conference in technical visits, where they would have the opportunity of seeing at first hand various aspects of Finnish industry related to Cargo Handling. Specialised papers related to the visits will be presented during the course of these tours as a means of giving more "life" to the technical papers presented and more substance to the technical visits.

The remainder of the time would be taken up by discussing international subjects related to the theme at the Finlandia Conference Hall in Helsinki. At the same time, the Chairman issued a call for papers, from members of ICHCA and others, covering the handling and movement of general cargo (to include aspects of container, RO/RO and breakbulk operations), bulk solids, liquids and specialised cargo by land, sea and air.

Mr. Holubowicz emphasised the need for authors to cover these subjects from practical experience, setting out the problems met and overcome together with the method-

ology used. He stressed that the 1979 Conference would concentrate mainly on aspects of practical cargo handling as, from a survey of delegates attending the Melbourne Conference this year, it was quite clear that this was the area which interested most members. Prospective authors were asked to provide an outline of their proposed paper to ICHCA Central Office as a first step.

Further information from those wishing to submit papers may be obtained from: ICHCA, Abford House, 15 Wilton Road, London SW1 1LX.

## "Portos e Navios" August '77

Rio de Janeiro, Brazil:—

### Ports & Waterways

#### JULY

- A special governmental Committee of Rio Grande do Sul State started its activity on June, studying the Export Corridors, the channeling of cargo and the reduction of freight rates.
- Congressman Jorge Arbage presented a Law Draft at the Federal Chamber for the establishment of a free fishing port at Belém, State of Pará.
- Conclusions of the Working Group for the River São Francisco.
- Nine ports are going to receive equipment, on October, for the discharge of bulk grain: Belém, Itaqui, Mucuripe, Natal, Cabedelo, Recife, Maceió, Salvador and Vitória.

#### AUGUST

- Captain Fernando Frota, President of the Brazilian Association of Shipowners for Overseas Trade, presented the second of a series of articles for the Press, discussing the problems of the Brazilian Shipowners.
- Aratu's bulk handling terminal started on the first days of August its commercial operations, with the discharge of 11,000 tons of coal from the Indian ship Jagat Swamimi, for Eletro-Siderúrgica Brasileira S/A—Sibra; three more ships are scheduled for operation in August.
- The Presidents of Cesp and Portobrás met in Brasília on July 20 to discuss the project of the first stretch of the Waterway for the Alcohol, 60 km of River Piracicaba and 290 km of River Tietê, respectively the Artemis and the Anhembi, up to the dam of Ibitinga at the Tietê.
- The Port of Rio de Janeiro finishes the construction of a modern and large warehouse for cargo, the first one to be built these last 25 years, with an area of 7,190 m<sup>2</sup>.

## Auto Carrier's Maiden Call

Halifax, Nova Scotia, Canada, October 1977 (Port of Halifax Bulletin):—(from "Port Highlights) The biggest carrier to call at Autoport, the Jinyu Maru, brought a cargo of 775 Volkswagen cars on September 8, her first visit to the Port of Halifax. The huge vessel, which has a capacity of 6,000 cars, is 738 feet long, 103 feet beam, and had a

### Dunkirk (Continued from page 26)

thickness: 10.8 cm—weight: 56 tons

#### NOTE :

A number of crates containing spares and general items were dispatched in addition to these large and heavy loads.

An exceptional load was dispatched from CFEM/COMENORD, West Port to EGGERSUND (Norway). It consisted of the base of a crude transfer terminal made up of a caisson surrounded by 6 floating units. The total weight was 1,000 tons.

The whole operation was planned and controlled by TRANSLIFT INTERNATIONAL, Bremen, whose agent in Dunkerque is L. DEWULF-CAILLERET and Sons, and whose operations cover the area of transport of indivisible loads from works to the site and also their setting up and their pre-assembly.

Transport from COMENORD works was carried out by three crawlers (2 × 80 T. and 1 × 113 tons respectively) capable of carrying 400 T. (× 2) and 500 T. which ensured loading onto barge "P.9". After securing the load, the total assembly was towed by the German tug "EXACT" OF 4100 H.P.—with a tractive effort of 44 tons.

draft of 28 feet on arrival at the Autoport dock, where she was easily accommodated. Local agents for the vessel were Pickford & Black Ltd.

## Ports Need Subsidies to Grow

Nanaimo, B.C., Canada, November 1977 ("Nanaimo Harbour News"):-The three Vancouver Island 'collector' ports—Nanaimo, Cowichan Bay and Victoria—operate on a user-pay basis but they have to compete with the heavily subsidized ports on the mainland.

Nanaimo Port Manager Lloyd Bingham made this point in a paper on "Island Ports, some problems and solutions", presented to a Western Canadian Ports Symposium held in Vancouver.

Of the nine ports on Vancouver Island six, he said, are company ports, the other three 'collect' their business from a number of companies and mills.

Mr. Bingham said all the nine island ports were self-sufficient but that mainland ports received both direct and indirect subsidies.

"There is a solution," he said, "a great improvement in both the road and rail network feeding ports on the lower part of Vancouver Island.

"The present rail system on the island is run down and in mediocre condition. With an efficient road and rail system, greater tonnages could be moved at lower costs and the total shipping costs per ton would come down. At the same time such a system would undoubtedly encourage more sawmills to be located on the island."

"He noted that the B.C. government, through the B.C. Harbours Board, became involved in rail access to Roberts Bank coal loading terminal and suggested that there was no reason why a similar development should not be undertaken on Vancouver Island.

After some four years, said Mr. Bingham, a proposed new port at Duke Point, in Nanaimo, was actively underway with the provincial and federal governments co-operating at all levels.

In all the studies made the costs of building these new facilities came out to around \$50 million. To borrow that money, even at favourable rates, debt repayments would be around \$5 million a year.

"There is no way in which we can increase volume and raise rates to meet those payments. If the proposal goes through," he said, "we will have a modern port with highly efficient handling between the assembly area and the docks. But to make it work, economically, there has to be some form of subsidy."

Mr. Bingham also said there would appear to be a need for some overall guidelines for port development. No one port operated in a vacuum and the need for more central and efficient handling and shipping facilities on Vancouver Island was becoming pressing.

## Island Ports—4.5 Million Tons

Nanaimo, B.C., Canada, November 1977 ("Nanaimo Harbour News"):-On Vancouver Island there are nine ports shipping forest products. Their total volume in 1976 was about 4.5 million tons with lumber accounting for 2,389,000 tons and pulp 1,346,000 tons.

These facts were given by Nanaimo Port Manager Lloyd

Bingham at a Western Canadian Ports Symposium in Vancouver. He was presenting a paper on "The Island ports, some problems and solutions."

Mr. Bingham listed the ports, in order from the north end of the Island as Port Alice, Tahsis, Gold River, Elk Falls, Port Alberni, Nanaimo, Crofton, Cowichan Bay and Victoria. Of these, only Port Alberni and Nanaimo are Commission Ports. It was pointed out that the highest tonnage volume went through Crofton, with 960,000 tons follows by Nanaimo with 832,000 tons and Port Alberni 691,000 tons.

An impressive volume of forest products is moved by barge, commented Mr. Bingham. For instance, 130,000 tons of pulp and chemical cellulose was moved by barge from Port Alice to Victoria and Vancouver. At Tahsis, 60 barges moved lumber to the west coast U.S. ports. Pulp from Gold River went in 53 ships and 30 barges.

From Elk Falls the following tonnages were moved by barge to Vancouver, in addition to ship loadings: 65,000 tons of newsprint, 99,000 tons of pulp and 76,000 tons of kraft. In Cowichan Bay 900 rail cars were loaded with lumber.

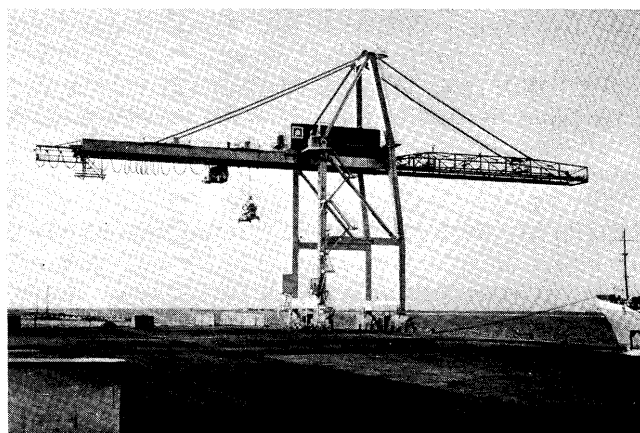
Also at Cowichan Bay, there is regular loading of lumber onto barges carrying 4,500 tons which are towed directly to California. Mr. Bingham pointed out that the majority of the parts were tied in with company mills and for some of them access by road was either impossible or very difficult.

The three 'collector' type ports—Nanaimo, Cowichan Bay and Victoria—were the only Island ports that were truly competitive with each other, although there were obvious restrictions caused by geography and poor road communications.

## First Container Crane Aids Honduras Economy

Alameda, Calif., November 11, 1977 (Paceco News):-A 40 Long Ton capacity Portainer® crane by Paceco Inc., A Subsidiary of Fruehauf Corporation, Alameda, California, is being erected for Empresa Nacional Portuaria, Puerto Cortes, Honduras, Central America.

The gigantic Portainer crane, a modified 'A' frame design, features a 115 ft. outreach and an extended 115 ft.



New Honduras Portainer crane to be similar to Paceco Portainer shown at the Port of Marseilles, France.



long backreach for servicing the container terminal. Independent spreaders will handle 20'/35'/40' containers during loading, unloading and stacking operations.

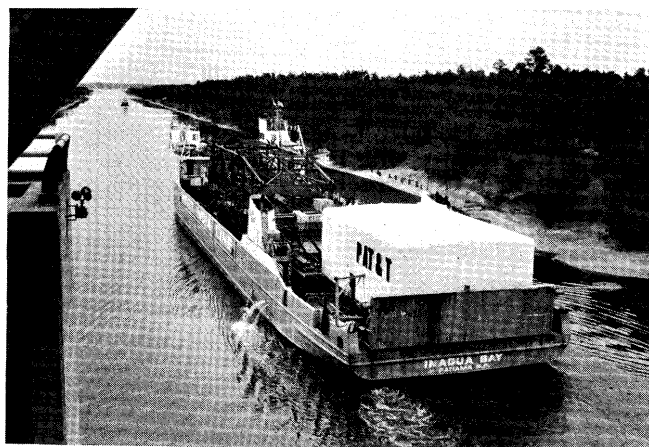
The first Latin American container handling crane for Honduras will stimulate new business and boost the economy for merchants and small growers, according to General Manager, Antonio J. Coello. Local merchants, food producers, and other businesses will now be able to move more competitively into the international markets. When operational, the crane will handle newly containerized products formerly 'considered' too small in quantity to ship or highly vulnerable to damage. Thus, a positive economical effect on Honduras and Latin American trade and business will take place.

The crane was fabricated at Paceco's Gulfport, Mississippi plant before being transported to the Central American port. Commissioning ceremonies will be announced within a few weeks.

## Trinidad Gets Second Portainer Crane



2nd crane at Port of Spain, Trinidad will be twin to Paceco Portainer shown here which was erected earlier this year.



'Inagua Bay' transports second Paceco Portainer crane to Trinidad.

Alameda, Calif., October 25, 1977 (Paceco News):—Paceco Inc., A Subsidiary of Fruehauf Corporation, recently shipped a second Portainer crane to the Port of Spain, Trinidad. The 40 Long Ton 'A' frame crane was fabricated at Paceco's Gulfport plant and will be erected soon at the Port site. The Port Authority of Trinidad and Tobago dedicated its first Paceco 40 Long Ton Portainer crane at key handing over ceremonies at the Port of Spain some months ago. These two Portainers will make the port one of the most modern in the Caribbean.

For the second time West India Line's 'Inagua Bay' navigated the Harrison County Industrial Seaway to load and transport the giant crane components. To date it is the largest vessel to have navigated the narrow waterway. The 'Inagua Bay' was built for West India Line by Bellinger Shipyard, a Division of Jacksonville Shipyards, Inc., also a Subsidiary of Fruehauf Corporation.

## Is The Panama Canal Worth Fighting Over?

(Editorial in "Distribution Worldwide", September 1977):—Early this month, President Carter signed a new treaty with the government of Panama, in which the United States agrees to gradually phase out its control over the Canal in favor of full Panamanian ownership. The treaty was signed with full pomp and ceremony, and attended by a number of South American heads of state.

Of course, it's just a paper treaty, and it will have no binding effect on the course of U.S. actions until—and unless—it is ratified by the Congress.

At this writing, it looks as if it may be an extremely cold day in July before Congress does, in fact, ratify the treaty.

President Carter, with his power and prestige on the line, has pulled out all stops in his efforts to convince Congress and the U.S. electorate that this is a good treaty, and one that is in the best interests of the United States.

The facts, it seems to me, are on his side.

From a military point of view, the Joint Chiefs of Staff are in full agreement with the President that the Canal no longer is an important factor for our defense. From a commercial shipping and international trade point of view, the Canal is lessening in importance every year. Thanks to the steady growth of containerization in the past decade, and the emergence of true intermodality in the form of the mini-landbridge, the pattern of import-export has shifted to where the Canal is no longer a necessity.

Sure, the Canal is still a convenience, particularly for the Gulf ports offering service to the Far East and the western side of South America. And it will probably still continue to be used long into the 21st century. But, as President Carter points out, there are safeguards built into the treaty that will insure the continuing viability of the Canal.

Where the President is having his problems with both the Congress and the American people is not with his facts or the logic of the treaty. No, the problem is one of emotion.

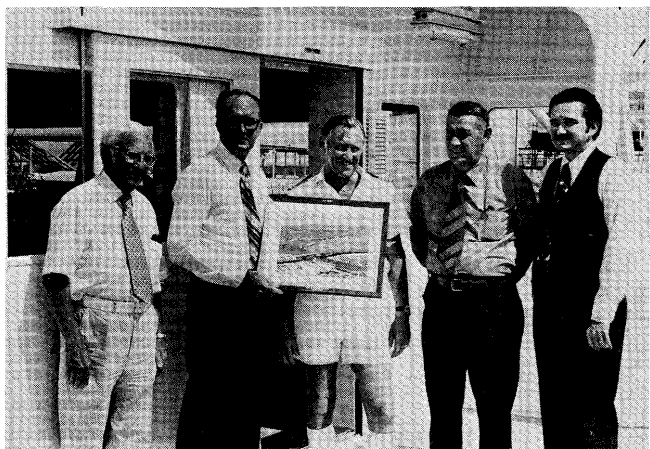
A lot of U.S. citizens—and I must confess I'm one—don't want to see us, in effect, hand over "our" Canal to a left-wing dictator in order to placate him. That's the emotional issue. And all the facts and logic and pragmatism that President Carter brings to bear are not going to change it.

It's sort of ironic, at that. You might say that Jimmy

## Houston (Continued from page 21)



**PORT OF HOUSTON**—The Bank Line vessel M/V RIVER-BANK made her maiden voyage to Houston recently and a reception was held aboard to welcome her captain and his family to port. Shown from left during the ceremonies are Mrs. Betty McGregor and Lynsey McGregor, wife and daughter of the captain; F. William Colburn, Counsel for the Port of Houston; Capt. Allan McGregor, Master of the vessel; Ben Hanson, Strachan Shipping Co.; and George Fosdik, Line Manager for Bank Line in Houston.

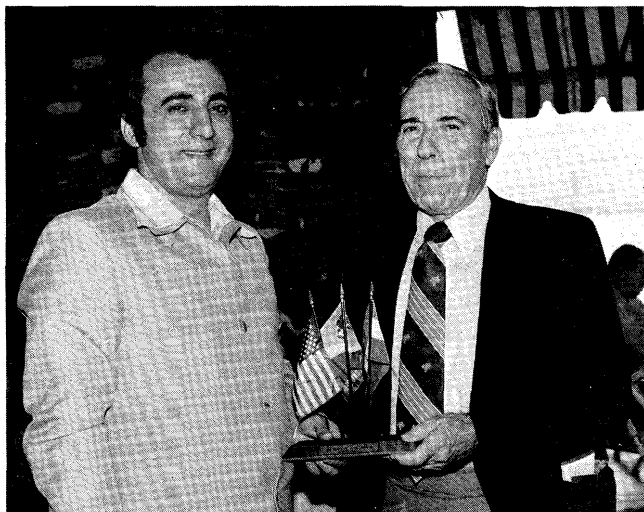


**PORT OF HOUSTON**—The M/V TERRIER, second vessel in the Barber Middle East Line's new service from Houston to the Middle East, made her maiden voyage to Houston recently. The vessel is known as a combo ship and has heavy on-board cranes for loading and discharging cargo in ports where suitable ground cranes are not available. Shown during welcoming ceremonies on the flying bridge are, from left, Ted Dugey, Biehl and Co.; J.R. Curtis, Director of Port Operations for the Port of Houston; Capt. B. Valstad, Master of the vessel; Tom Pryor, Barber-Biehl Inc., and Tom C. Kiger, Barber-Biehl Inc.

Carter is being hoist on his own petard—because many of the voters who elected him voted on emotion rather than logic.

All things considered, though, it might be a lot better in both the long and short run if we swallow our own pride and let the President have his Panama Canal treaty. There are some far more important issues that need resolving, and

## Long Beach (Continued from page 22)



**5) IRAN PORT AUTHORITY VISITS PORT OF LONG BEACH** Mr. H. Paivandi, left, Director General of Ports for Abadan, Iran, toured the Port of Long Beach recently and was presented with a Port flag set at a luncheon in his honor by Long Beach Harbor Commissioner H.E. Ridings, Jr. Iran ranked seventh in total foreign tonnage with the Port of Long Beach in 1976-77 with \$164 million worth of commodities exchanged. (112377)

we're not going to get anything done if the governmental mechanism is snarled in bitter debate over the Canal.

John T. McCullough  
EDITOR-IN-CHIEF

## The Best Port Magazine

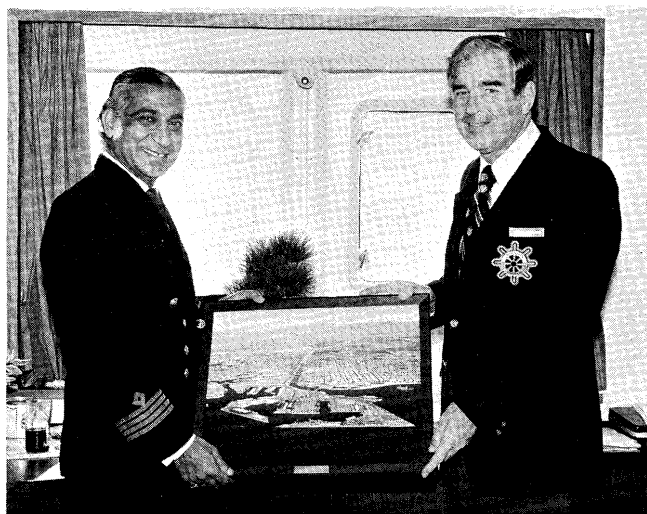
Baltimore, Md., November 3, 1977 (News From Maryland Port Administration):—The PORT OF BALTIMORE BULLETIN, the monthly magazine published by the Maryland Port Administration, has been judged best among port magazines entered in the Eleventh Annual American Association of Port Authorities Communications Competition.

The first place award was announced at the 66th Annual Convention of the AAPA held in Mexico City, October 24-27, 1977.

Competing with over 100 entries in the periodical category of the competition, the BULLETIN was judged outstanding on the basis of aptness of purpose, overall effectiveness and creative design. The competition was open to all AAPA corporate members. Entries were accepted in Spanish, Portuguese, French and English.

The Maryland Port Administration also placed third in the "advertising series" category of this year's competition for a series of four ads placed in international shipping and commerce publication. The advertising campaigns for the port of Baltimore are created by W.B. Doner and Co., the organization's advertising agency. This is the third year in a row the MPA's advertising program has won awards in the AAPA competition.

The American Association of Port Authorities is the largest organization of port authorities in the world, comprised of both public and private port authorities



6) Captain B.B. Dehadrai of the MV Jalayamini, operated by Scindia Steam Navigation Co. of Bombay, is pictured at left as he was presented with aerial view of the Port of Long Beach by Port Ambassador George McKeehan. The Jalayamini, which means "Water on a dark night", is one of a fleet of Indian-flag cargo vessels which link West Coast ports with the Far East, Bangladesh and India. Long Beach Port Ambassadors are local businessmen who as members of the Chamber of Commerce visit ships and assist harbor officials in many ways. (112377)

throughout the Western Hemisphere. Since its founding in 1912, the association has fostered exchange of mutually beneficial information regarding innovative port technology, strengthened bonds of friendship between its members located in the U.S., South America and Canada, and worked to increase public awareness of its organization.

In addition to publishing the PORT OF BALTIMORE BULLETIN, which has a worldwide circulation of more than 12,000 and carrying on an extensive overseas advertising program, the Maryland Port Administration publishes a biennial handbook, special brochures, directories and pamphlets aimed at keeping the international maritime community informed on developments in the port of Baltimore.

The BULLETIN is published under the direction of Donald Klein, director of port promotion. Lynne C. Troup is the magazine's editor.

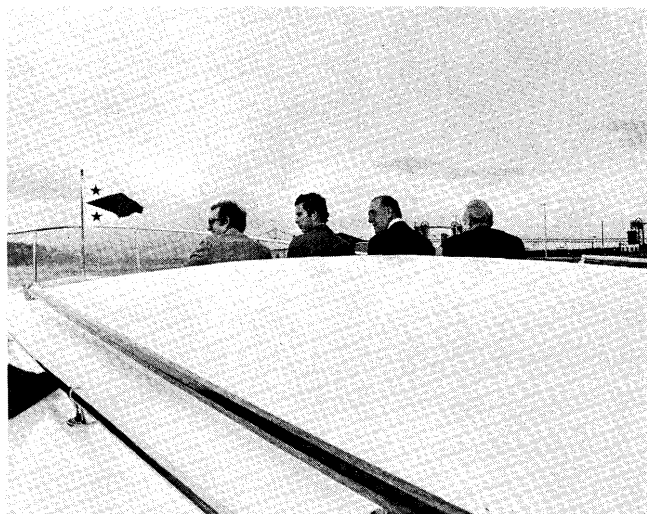
## JAXPORT '78 Trade Conference

Jacksonville, Florida, November 7, 1977:—James J. Kilpatrick, one of the nation's most respected newspaper columnists and television commentators, will be the principal speaker at the JAXPORT '78 trade conference to be held in Jacksonville March 12-14.

Kilpatrick, a critic, author, editor and observer of the times, will join several national and local speakers who will address a selected list of top management business leaders invited here to take part in the two-day program.

Patterned after this spring's very successful JAXPORT '77, the conference will concentrate on promoting Jacksonville as "The Port City With All The Right Connections," according to conference General Chairman Thomas L. Mainwaring.

Mainwaring, executive vice president of Ryder Truck



Oakland, Calif., November 4, 1977 (Port of Oakland):—HRH Prince Charles visited the Port of Oakland during his recent tour of the United States. Viewing the modern container facilities from the bow of a luxury power cruise, the Prince of Wales is shown (second from left) with Walter A. Abernathy (left), Executive Director of the Port of Oakland; Y. Charles Soda, President of the Oakland Board of Port Commissioners; and, Donald Mulford, Chief of Protocol for the City of Oakland.

Lines, said JAXPORT '77 attracted more than 40 leading U.S. corporate officers and traffic executive here for a one-on-one confrontation with local business leaders.

"That personal dialogue," said Mainwaring, "influenced a number of favorable decisions which have brought good new business both to the City and to the Port of Jacksonville."

JAXPORT '78 is sponsored by the Jacksonville Area Chamber of Commerce and the port community. Financial support comes from a wide spectrum of the city's business, maritime and financial interests, Mainwaring said.

The conference will be held at the oceanfront Turtle Inn complex in Atlantic Beach immediately prior to the prestigious Tournament Players Championship golf tournament which opens March 15 at nearby Sawgrass Club. The program will include guest golf and tennis tournaments at Deerwood Club, a boat tour of Jacksonville Harbor and a special program for guests' wives.

Kilpatrick will speak at the closing banquet Tuesday, March 14.

## Houston Bulk Terminal

New York, N.Y., November 16, 1977:—The Port of Houston Authority and Soros Associates of New York are finalizing an agreement for the development of a high capacity coal terminal on the Houston Ship Channel. Soros Associates, an international engineering firm specializing in port design as well as the financing and operation of bulk terminals will own and operate the facility.

Soros Associates will take a long term lease on a 32 acre site with 800 ft. frontage on the channel, with an option for an additional 82 acres plus channel frontage for a second ship berth.



Oakland, Calif., November 10, 1977 (Port of Oakland):—**HOEGH LAUNCHES OAKLAND SERVICE**—Hoegh Container Lines inaugurated Northern California-Northern Europe operations recently with the maiden voyage to the Port of Oakland of the newly built 44,000-ton Hoegh Musketeer. Welcoming Captain Bjarne Holen was Oakland Board of Port Commissioners president Y. Charles Soda. Hoegh Container Lines offer sailings every three weeks from Oakland on all-water service to Antwerp, Tilbury, Bremen, Hamburg and Rotterdam.

The facility will include a loop track to unload and load unit trains, coal storage, ship and barge loading facilities and provision for a ship unloading berth.

The facility can be constructed quickly and economically because the proposed site is adjacent to the main railroad lines presently utilized for unit train operations.

The site is also unique in that it is directly accessible to the Burlington Northern, Missouri Pacific, Santa Fe, Southern Pacific, Rock Island and MKT Railroads eliminating the need for additional switching charges.

The terminal is planned to serve coal users in the Houston area and to export western coal to South America and Europe as well as to receive coal from Columbia and other foreign sources for distribution by unit trains to users in the Southwest.

The terminal will incorporate advanced concepts in environmental control developed by Soros Associates.

Soros Associates also owns and operates Cleancoal Terminals on the Ohio River at Ghent near Louisville, Kentucky. They also are developing a bulk terminal in San Francisco for the export of western coal.

## Far East Offices Provide Effective Sales Branches

Portland, Oregon, 5 October 1977 ("Portside", News from the Port of Portland):—Representative offices throughout the Far East have historically provided marketing staff at the Port of Portland with vital information and offered shippers and consignees on-the-spot customer service. Today, the Port can count the largest number of actual customers in the history of the overseas operation.



Oakland, Calif., November 10, 1977 (Port of Oakland):—**Tokai Maru 1st call Port of Oakland:** A View From the Bridge - Toko Line's new break-bulk freighter Tokai Maru paid her first visit to the Port of Oakland recently, off-loading a hefty cargo of steel. To mark the occasion Captain Kazuo Yamada, left, was presented with a specially-inscribed painting by Robert Middleton, right, of the Port. The Tokai Maru, or "Eastern Sea", tips the scales at 26,000 tons, dead weight, and has been in service just 5 months since sliding down the ways at Kurushima Shipyards, Ehime, Japan. Her home port is Kobe.

Even in the early days of its development, the Port recognized the value of establishing strong ties with its principal trading partners. A 1920 memorandum from the traffic department of the Port of Portland/Commission of Public Docks reminded the shipping public of its representatives in Kobe and Singapore and reminded shippers, "Our Ocean Terminals are equipped with the most modern facilities . . ."

The responsibility for creating and maintaining a strong awareness of the Port of Portland in Asia now rests with six offices located throughout the Far East.

Along with a staffed office in Tokyo, the Port has representative agreements with Orient Shipping Co. Ltd. in Seoul, Korea; Dodwell Shipping Ltd. in Hong Kong; Ocean Pioneer Shipping Co. Ltd. in Taipei, Taiwan; The Borneo Company Private Ltd. in Singapore, and Delbros Transport Corp. in Manila, The Philippines.

Portland is one of the few world ports that established office liaison in the Far East prior to the 1950s. All six locations were chosen because of proximity to shippers and consignees. Although the representative system has been modified somewhat during the past 57 years, the objective remains the same: The 1920 memo called the overseas marketing function an attempt to "solicit your Export and Import traffic via the Port of Portland, Oregon." The Tokyo operation is staffed by Hideo Watanabe and Chie Hayashi. Watanabe, who succeeded Port marketing personnel Francois Elmaleh and Vernon W. Chase as director, Japan, is a 30-year veteran of Mitsui OSK Line and has been executive managing director of Act Maritime Co., a joint venture steamship line of Mitsui OSK and Honda Motor Co.





San Francisco, Calif., 9/23/77 (San Francisco Customs Brokers and Freight Forwarders Association):—Reasons for excessive delays in issuance of Customs rulings were sought in recent San Francisco discussions. Responsive to a Senate request, Customs Service representatives from Washington, D.C. asked the San Francisco Customs Brokers and Freight Forwarders Association for comments and suggestions on reported holdups of responses from the Office of Regulations and Rulings. Participants included (from left) John Sundfelt, former association president and vice president, Frank P. Dow Co.; Bonnie Beijen, association vice president and Customs committee chairman, and vice president, W.J. Byrnes & Co., and Ted Rausch, president of Ted L. Rausch Co. and association vice president. Government officials included I. Jay Weaver, Helen L. Marlowe and H. Robert Blikirch. The headquarters team will respond to the Congressional inquiry within two months, and specifically as to degree of inconvenience suffered by importers and brokers with delays of up to two years in issuance of rulings, and if “increased resources” (appropriations and staffing) would alleviate the condition.

As a result of that former affiliation, Watanabe has maintained a close relationship with Honda, Portland's second largest auto import customer, on behalf of the Port.

Watanabe's responsibilities include a heavy emphasis on cargo development. That goal is achieved through personal contact with key personnel in major Japanese trading companies and governmental agencies controlling the flow of foreign commerce, and through marketing the Port of Portland as a team of transportation specialists expert in designing packaged marketing programs specifically tailored to customer requirements.

Carrier liaison also is a function of the Tokyo office, and Watanabe maintains contact with the Port's transportation customers, keeping them informed of Portland's developments and opportunities and in turn advising the Port of carrier trends and possibilities for service and facility improvements. Watanabe stays in close contact with the Japanese consortium of six container lines that call Portland.

All representative assist key visitors from Portland's business community, the Port's headquarters office and government-or industry-sponsored trade missions.

In many cases, representatives have put Oregon shippers in contact with potential markets in the Far East, and the overseas representatives frequently are brought in as part of the Portland-based marketing team to work with a major customer.

One of the benefits Watanabe stresses in Japan is the availability of Port property for expansion of facilities to meet future demand. This bonus—uncommon among U.S.



San Francisco, Calif., 11/11/77 (San Francisco Customs Brokers and Freight Forwarders Association):—While his advice to industry was not optimistic, R. Frederic Fisher (right) still received a warm welcome from Bill Bosque (left), president of the San Francisco Customs Brokers and Freight Forwarders Association, and the organization's vice president, Jean Cordoba. The partner of Lillick, McHose and Charles addressed the meeting on “Shipping Act of 1916—Bury, Amend or Replace?”. The Stanford Law School graduate specializes in Federal Maritime Commission and related anti-trust and transportation practices and is active in litigation involving intermodal issues and ocean carriers. “Despite major accomplishments and innovations, the U.S. maritime industry is in trouble today. Lacking are clear federal policies on the relationships of ocean carriers, NVOCC's and Customs brokers and freight forwarders. Resulting regulatory compromises are troubling, since they are not based on legislative intent.” Fisher cited Congressman Paul McCloskey's call for investigation of massive ocean freight payments' rebating, and declared “if true, it reflects a very ailing conference system.” With no serious proposals offered to remedy major overtonnaging on many routes—such as closed conferences—harassment of industry under anti-trust statutes “is going awry” and only “patchwork policymaking” is being applied. But he offered little current hope for major changes, stating that basic reform of the 1916 law is unlikely for some time.

ports—is particularly important to the import automobile trade, where Portland ranks as the Northwest leader.

## Sea Trade Increase in 1976

Seattle, September 1977 (“Tradelines” Port of Seattle):—Seattle's domestic and foreign waterborne trade reached 16,777,890 short tons in 1976, according to the U.S. Army Corps of Engineers.

The figure represents a 1,769,495 short-ton increase over that in 1975. Last year's volume was surpassed only twice. In 1969 the Corps included in the 18,353,074 short-ton total an estimated 2,300,000 short tons of waterborne fill for Terminal 18. In 1973 extraordinarily strong grain exports swelled that year's traffic to 17,000,178 short tons.

The harbor posted one historical record in 1976: its foreign imports rose to 3,827,263 short tons, compared to the previous high of 3,713,071 short tons in 1973.



San Francisco, Calif., 11/19/77 (Marine Exchange of the San Francisco Bay Region):—"The Cowboy and the Farmer Must be Friends"—and deep draft commercial shipping and recreational boating must be compatible, was the conclusion reached at the recent meeting of a small craft task force of the San Francisco Harbor Safety Committee. Chairman Marin Matosich (left), representing the California Marine Parks and Harbors Association, led the discussion which included San Francisco Bar Pilots President Don Grant, and Bruce Block of the Pacific Interclub Yacht Association. More than ten organizations participated. One of seven task forces of the Marine Exchange's program to improve navigation safety and to minimize adverse environmental effects on Bay waters, the boating group found that conflicts of right-of-way between deep draft, commercial shipping, and recreational users, was the center of discussion. Remedial steps are being considered.



San Francisco, Calif., 11/21/77 (California Marine Affairs and Navigation Conference):—CARMEL-BY-THE-SEA—Congratulations were received by Victor Adorian (left), newly-elected president of the California Marine Affairs and Navigation Conference, from his predecessor, Capt. Thomas Eddy, director of the Port of Richmond. The new chief of the statewide port representation body is director of the department of small craft harbors for Los Angeles County.

Also elected to offices during the two-day meetings in Carmel, which featured a project development workshop, were William L. Dick, Port of San Diego director of community and government affairs, vice president, and reelected to office as treasurer, Frank C. Boerger, engineering consultant, and Robert H. Langner, C-MANC executive director, as secretary. New directors elected include Rodney P. Lundin, president of Rod Lundin & Associates; Vernon Cline, Contra Costa County public works director, and the harbor engineers of four ports: John Christian (Sacramento), Charles Vickers (San Francisco), Cort Johnson (Long Beach) and Leonard Schneider (Los Angeles).



San Francisco, Calif., 11/22/77 (California Marine Affairs and Navigation Conference):—CARMEL-BY-THE-SEA—"The Whys and Wherefores" were considered by those responsible for the "Wheres and Whens" of California port development at recent Carmel meetings. Participants included Victor Adorian (left), newly-elected president of the sponsoring California Marine Affairs and Navigation Conference (C-MANC), top Congressional staffer Richard Sullivan, chief counsel of the House Public Works Committee, who was featured speaker at the two-day event, and Frank Boerger, C-MANC dredging chairman and re-elected treasurer. "Water programs in this country have some real serious problems" Sullivan told the assembled port, public works and industry officials, with "killer red tape" heading the list. Noting that five California Congressmen sit on the powerful authorizing committee, headed by one of their members, the veteran staff chief opined that if Congressional efforts to cut through bureaucratic tangle fail, "we'll be strangled". The event was preceded by a project development workshop presented by federal and state officials responsible for review and approval of navigation and beach erosion projects.

Also at the meeting were election of other officers including C-MANC vice president William L. Dick, Port of San Diego director of community and government affairs, and reelected to office as treasurer, Frank C. Boerger, engineering consultant, and Robert H. Langner, C-MANC executive director, as secretary. New directors elected include Rodney P. Lundin, president of Rod Lundin & Associates; Vernon Cline, Contra Costa County public works director, and the harbor engineers of four ports: John Christian (Sacramento), Charles Vickers (San Francisco), Cort Johnson (Long Beach) and Leonard Schneider (Los Angeles).



# Hitachi container terminals.

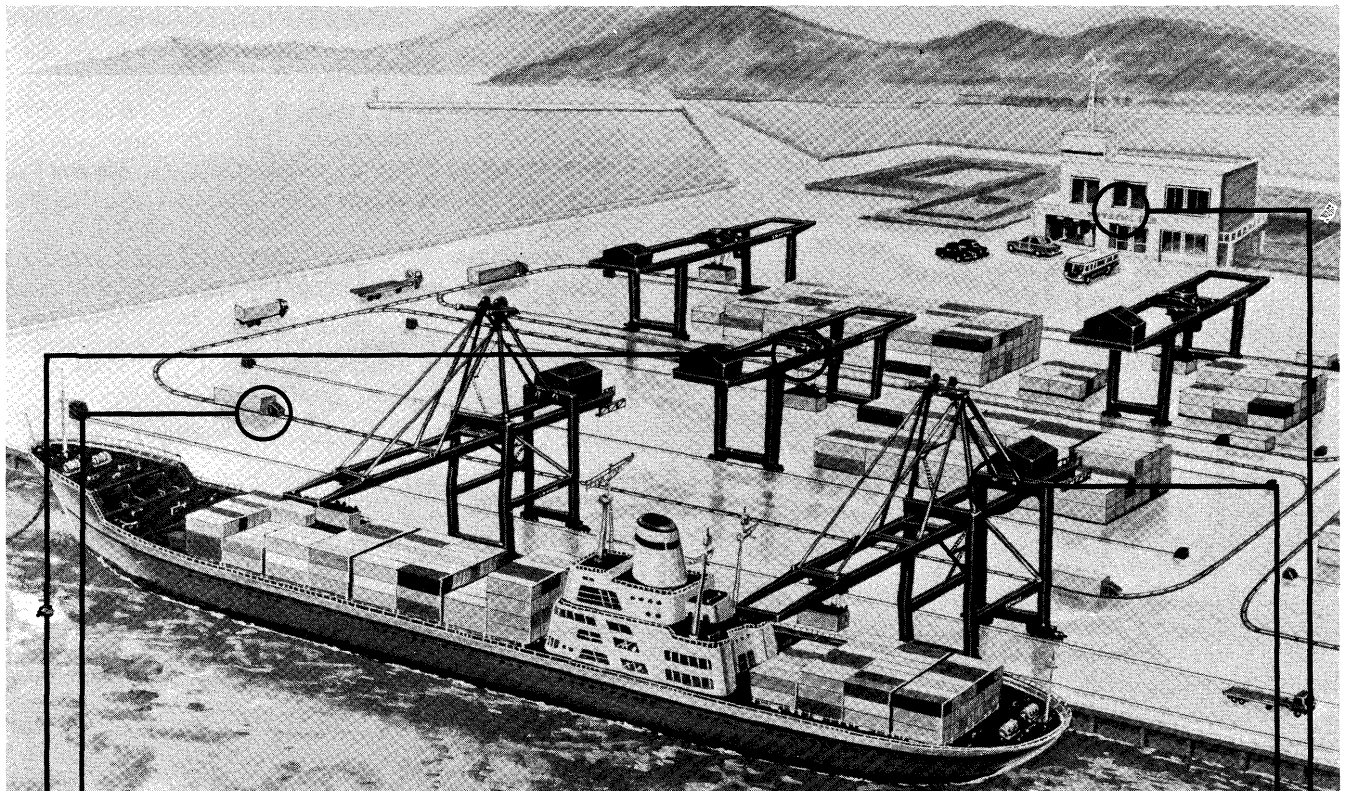
## Computer designed. Computer controlled.

### Efficiency oriented.

Computerization is the key to utmost container terminal efficiency. Hitachi achieves it. In design, with computer simulation analyses to develop the optimum layout and equipment capacities. In operation, with computer control of all terminal functions and equipment to minimize manpower requirements, speed handling and

increase accuracy.

Hitachi achieves container terminal efficiency like this through its experience as a leading maker of cranes and handling systems. Computers and computer systems. And electrical machinery and equipment. So we supply everything. And that's about as efficient a system as you can find.



#### Unmanned marshalling equipment

Intra-yard transport can be accomplished by automatically controlled linear motor cars in place of conventional chassis units or straddle carriers to reduce manpower requirements.

#### Completely automated yard cranes

Cranes are rail-mounted for easy positioning for gantry and trolley travel, and equipped with sensors on the spreaders to allow unmanned operation. Multi-stage stacking greatly improves stacking efficiency.

#### 60% increase in handling efficiency, container sway reduced to $\pm 5$ cm in 5 seconds

Quay cranes are equipped with Hitachi's exclusive Sway Stop System which dampens container sway to  $\pm 5$  cm in 5 seconds, a Memory System for high-speed cell guide positioning and an Independent Loading/Unloading System for ships and trucks which increases handling efficiency of container buffers by 60%.

#### Centralized computer control

Used to monitor and control all yard and equipment operations, prepare lists for ship loading and unloading, manage containers in the yard, and handle clerical operations for optimum terminal efficiency.



Hitachi, Ltd. Industrial Machinery Dept. International Sales Div. No. 6-2, Otemachi 2-chome, Chiyoda-ku, Tokyo 100, Japan  
Phone: Tokyo (03) 270-2111 Telex: J22395, J22432, J24491, J26375

# Port of Bristol News

From "Portfolio, A Newspaper for the Port of Bristol", November 2, 1977

## There isn't an awful lot of coffee in Brazil

Coffee, worth at current prices approximately £4 million, is loading at Avonmouth for Brazil.

The British owned m.v. Deseado is currently loading 2,000 tonnes of African coffee from local warehouses which it is understood is the first consignment of 450,000 bags bought on the London market this year. Further shipments are due to be made from other British and continental ports shortly, with Avonmouth handling the first shipment simply because the coffee in local warehouses was immediately available.

Interbras—the state Brazilian trading company—announced recently that it would begin the shipping home of this coffee amid rumour and speculation as to the reasons. There had been a suspicion in the trade that the company might have reoffered this coffee to the market later in the year but this was denied by a spokesman for Interbras, who pointed out that they would not be shipping the coffee out if that was their intention. The spokesman added, "We are buying as much coffee as possible because there is no coffee in Brazil."

Recent speculation in the British press based on reports in the Brazilian newspapers suggests that the Brazilians may be buying and shipping coffee simply to stimulate the market to provide a reason for lowering their minimum selling price of \$3.20 a pound.

This minimum price, set earlier this year, effectively priced Brazilian coffee out of the market and since then reports of discount schemes designed to permit exporters to sell at lower prices although maintaining the minimum price publicly have been rife.

Certainly there has been a slump in demand for all coffees as a result of rising prices which were triggered when a disastrous frost in 1975 ruined more than half the Brazilian crop.

The m.v. Deseado is due to sail on Friday 4th November.

## New report could cause major storm

A report compiled by the National Ports Council over a period of two years, aided by the British Ports Association and the General Council of British Shipowners is, it is understood, likely to cause a major storm within the port industry.

For the report claims that the productivity of Britain's ports falls short of its European rivals.

Of eleven ports compared for productivity, seven in the U.K. and four broad, Antwerp comes out best.

The report has been drawn up against a background of opposition from ports and dock unions—both of whom consider that it is impossible to make fair comparisons on productivity in one port as against another.

This is because there are so many variables; weather,

state and availability of labour and equipment, strength of gangs, hold ups due to circumstances outside the men's control, hours of work, state of the stowage of cargo, different incentive bonuses, and even the order of ports of call, can give one port an advantage over another.

There is also the question of the massive Government subsidies to continental ports which enables them not only to offer a cheaper service to shipowners, but allows them to replace worn out equipment much quicker.

The opposition to the report does not end there however.

The figures in the report are based only on conventional general cargo which accounts for only a small proportion of the total tonnage now being handled in many of the major ports.

The shipowners are reported to be in favour of the report being published because they claim that what they have been saying for years is that there is a big need for British ports to become more efficient and speed up their turnaround times.

It is understood, however, that the Ports Council has decided that for the time being at least the full details should not be released.

## New Docks Managers for Lowestoft and Ayr

London, 27 October 1977 (British Transport Docks Board):—The British Transport Docks Board have appointed Mr. Robin J. Nicholls to be docks manager at the port of Lowestoft from 1 January 1978. He will be succeeded as docks manager, Ayr and Troon, by Mr. Thomas L. Kenny, managing director of the Board's Ayr subsidiary, Kenny Stevedores Ltd.

Mr. Nicholls takes over at Lowestoft from Mr. Stuart Bradley, whose appointment as docks manager for the South Wales port of Barry was announced by the Board recently.

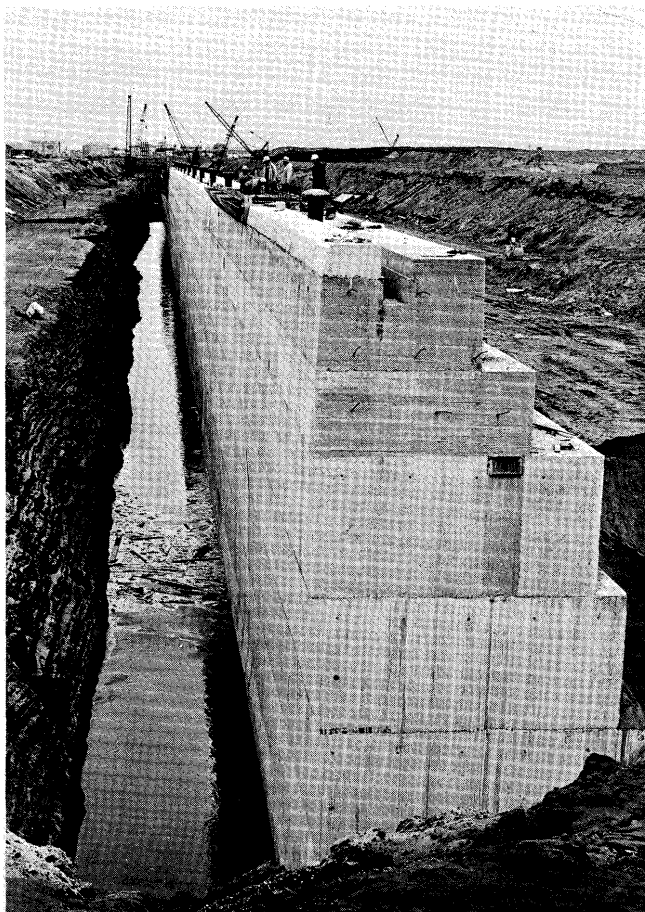
Mr. Nicholls' move to Lowestoft after six years at Ayr comes at a time when the Suffolk port, best known as a major fishing port, is experiencing considerable expansion in its general cargo activities, with an increasing range of services for conventional and container traffic to Europe, the Middle East, and North Africa. It is also actively involved in offshore oil operations.

A Southampton man and a master mariner, Mr. Nicholls joined the Docks Board at Southampton in 1962 after 10 years at sea. He was appointed dock and harbour master at the Cumbrian port of Silloth in 1964 and was subsequently assistant docks manager at Goole from 1968 to 1971.

Mr. Kenny has been closely associated with the ports of Ayr and Troon for many years through Kenny Stevedores, the family stevedoring business founded by his grandfather after the first world war. He joined the company in 1946 after war service and became a director four years later.

He was appointed managing director of Kenny Stevedores Ltd. in 1960, and retained his position after the company's acquisition by BTDB in 1975.

In recent years the port of Ayr has successfully



**Port of Antwerp:** Section of the quaywall of the new harbour dock under construction. The new dock will have a length of over 2,000 meters and a width of over 300 meters. The total length of its quaywalls will be 4,700 meters and the water depth of the dock 16.75 meters. For each berth (quaylength 150 to 200 meters) the land area available will be 120,000 to 160,000 square meters. Completion of the dock is planned for 1980.

diversified beyond its traditional role as a terminal for coal shipments to Ireland and has handled a variety of traffics, including phosphates, seaweed, meal and grain imports and exports of aggregates, scrap and whisky. This involved an extensive re-cranage programme. Last month (September) the port dealt with its largest ship ever, an 11,500 dwt packaged timber vessel from North America. At Troon, for which Mr. Kenny also takes over responsibility, a major marina development is due for completion next year.

## Docks Board Publish New Fleetwood Brochure

London, 3 November, 1977 (British Transport Docks Board):—The British Transport Docks Board have published a new colour brochure describing in detail the facilities offered by the Lancashire port of Fleetwood, one of the Board's fastest growing ports.

In the last five years the port has achieved a fivefold expansion of its trade, and the brochure shows how it is catering for new business such as roll-on/roll-off and grain

traffic, as well as for the traditionally important fishing industry for which a new fish market has been built by the Docks Board.

Details of service facilities such as ship repairing, bunkering, cold storage, timber processing and grain silos are given, as well as a plan of the layout of the entire docks system. There is also a map showing Fleetwood's excellent road connections with virtually the whole country, but especially the industrial areas of Lancashire, Yorkshire and the Midlands.

Copies of the new brochure are available free of charge from the British Transport Docks Board, Dock Office, Fleetwood FY7 6PP, Tel. 039 17 2323/6.

## First Sailing for Lowestoft's New Nigeria Service

London, 21 November 1977 (British Transport Docks Board):—The West German motorship "Stollhammersand", 3,500 tons deadweight, sails from Lowestoft tomorrow (Tuesday, 22 November) to inaugurate the UK link in the new Med-Africa Line/Blue Sky Line joint service between Northern Europe and Port Harcourt, Nigeria.

Lowestoft is the only UK port of call for the new conventional/container service, which will operate initially on a fortnightly basis but is expected to become weekly. The first vessel has loaded some 500 tonnes of containers and conventional general cargo, including heavy lift items such as earth moving equipment, and cargo is being received at Lowestoft's No. 2 Shed, North Quay, for a second ship, the "Annette Bentsen", loading in the first week of December.

BTDB's manager at Lowestoft, Stuart Bradley, welcomed the new service, which he felt had "great potential". "This is exactly the sort of thing we are good at," he said. "We have a good labour force, the necessary cranes, shed space, and open storage. And most important of all we have the right location in relation to Continental ports."

UK general agents for the new service are United States Lines, London, and East Anglian Shipping Company are Lowestoft port agents and stevedores.

## Bremen News

### Bremen International

#### • New General-Cargo Record in Bremen

Bremen, 17.10.77 (BremIn). Bremen, in the first 8 months of 1977, showed an increase in general-cargo handling (9.8 million tons) of 13.2% over the first 8 months of 1976 (8.65 million tons). Bremen/Bremerhaven are anticipating a year-record of some 15 million tons of general-cargo.

#### • Containers below Deck

Bremen, 17.10.77 (BremIn). The AG WESER launched the container-giant, "City of Durban" for the Ellerman Harrison Line of London: 258.5-m long, 32.26-m beam, moulded-depth 24.15 m, draught 13 m, diesel 2 x 25,680 h.p. Trial-speed 23 knots. Thanks to the particular design of the ship's hull containers can also be stacked in 10 rows under deck. Capacity: 2,436 20'-containers, 886 of which are reefer and deep-freeze. Maiden-voyage is expected to be

made at the beginning of 1978.

#### ● No Strike for 26 Years

Bremen, 31.10.77 (BremIn). Apart from a small warning-strike, of general nature, there have been no other strikes in the Bremen ports since 1951, i.e., for over a quarter of a century. The Senator for Ports, Shipping and Traffic, Oswald Brinkmann, attributes this good co-operation between port-economy and port-labour, among other things, to the guarantee wage-fund, which operates in the event of shortage of work, and the legal and social equalization of the Bremen and Bremerhaven dock-worker to the industrial expert labour. Brinkmann, who is, himself, a trade-unionist and years-long works-council chairman of the largest undertaking in the Bremen port-economy: The quality of the port-worker is just as decisive for the development and progress of the Bremen ports, as is technical investment.

Bremen was one of the first ports, some time ago now, to train its port-labour in a technical port-school, to become port-worker experts.

#### ● Foreign-Trade Stimulous: Bremen/Southeast Asia

Bremen, 31.10.77 (BremIn). Numerous agreements, considerations and firm contracts were brought back from Southeast-Asia (Malaysia, Singapore and Indonesia) by a delegation under the leadership of the Bremen Senator for Economy and External Trade, Dieter Tiedemann—including new foreign-trade financing arrangements, additional shipping lines to Bremerhaven and co-operation in both the constitution of a fisheries-fleet and augmentation of frost-fish marketing.

#### ● Fruitful Port-Experience-Exchange: Bremen/Djakarta/Alexandria

Bremen, 31.10.77 (BremIn). A 'highly fruitful exchange of experience' has now been reported in a Bremen-Indonesian communiqué concerning the first Port Management Seminar of the Bremen Institute of Shipping Economics, in Djakarta and Tanjung Priok. This exchange will already be followed up in a further seminar in 1978 in Bremen. Simultaneously the Arab Maritime Transport Academy in Alexandria, consequent upon the first Bremen Port Seminar in Egypt, has proposed a repetition for the coming year.

#### ● Bremen-China Trade in the Ascent

Bremen, 14.11.77 (BremIn). Bremen has for some months been registering an increase in the number of ships and a welcome animation in commerce with China. In recent weeks, according to port-economy circles, the resuscitation has attained "a concentration of hitherto unexperienced extent". In 1975 goods were exchanged between the Peoples' Republic of China and the Federal Republic of Germany to the value of DM2 milliards—in 1976; of DM2.4 milliards. Imports through Bremen consisted of: unmanufactured leaf tobacco, honey, vegetables, preserved fruit, leathersgoods and chemical products, whilst exports were steel pipes, synthetics and machinery.

#### ● Multi-Purpose Freighters ranking even in front of Container Ships

Bremen, 14.11.77 (BremIn). Whilst true that, as before,

general-cargo liners were internationally dominant in trans-ocean general-cargo transportaion, their growth-rate (in newbuilding orders), with 13.3%, was nevertheless below the average growth-rate for all types of general-cargo carriers (17.3%), although still being ahead of the roll-on-roll-off growth-rate of only 12.4%. Against this, the current position of container-ship orders was 32.3%, whilst orders for multi-purpose freighters had advanced to even 47 percent—which information is to be gathered from the 1977 annual ("Jahrbuch 1977") of the Institute of Shipping Economics, Bremen (address: D-2800 Bremen. Tel: 0421/341511).

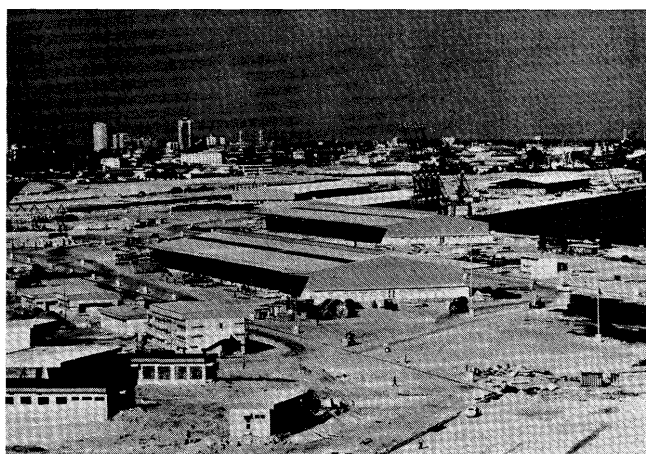
#### ● Transit Traffic Increased by 38 Percent

Bremen, 14.11.77 (BremIn). Transit trade through the Bremen ports increased in the first half of 1977 by 38 percent, to some 800,000 tons. 154 nations from all continents participated, the main transit partners being the USA, Sweden/Austria and Switzerland.

## Hamburg Port Consulting GmbH to Assist in Organizing and Operating Lagos Terminal

Tokyo, October 28, 1977 (News Release from The Representative of the Free and Hanseatic City of Hamburg):—Hamburg Port Consulting GmbH (HPC), a subsidiary of HHLA, has concluded a contract for providing consultant services concerning the organizing and operation of the new marine terminal on Tin Can Island at the Port of Lagos in Nigeria. The services are being in cooperation with PCO Alexander Dreisow Consulting GmbH of Hamburg. HPC despatched 16 consultants to the new terminal on Oct. 1.

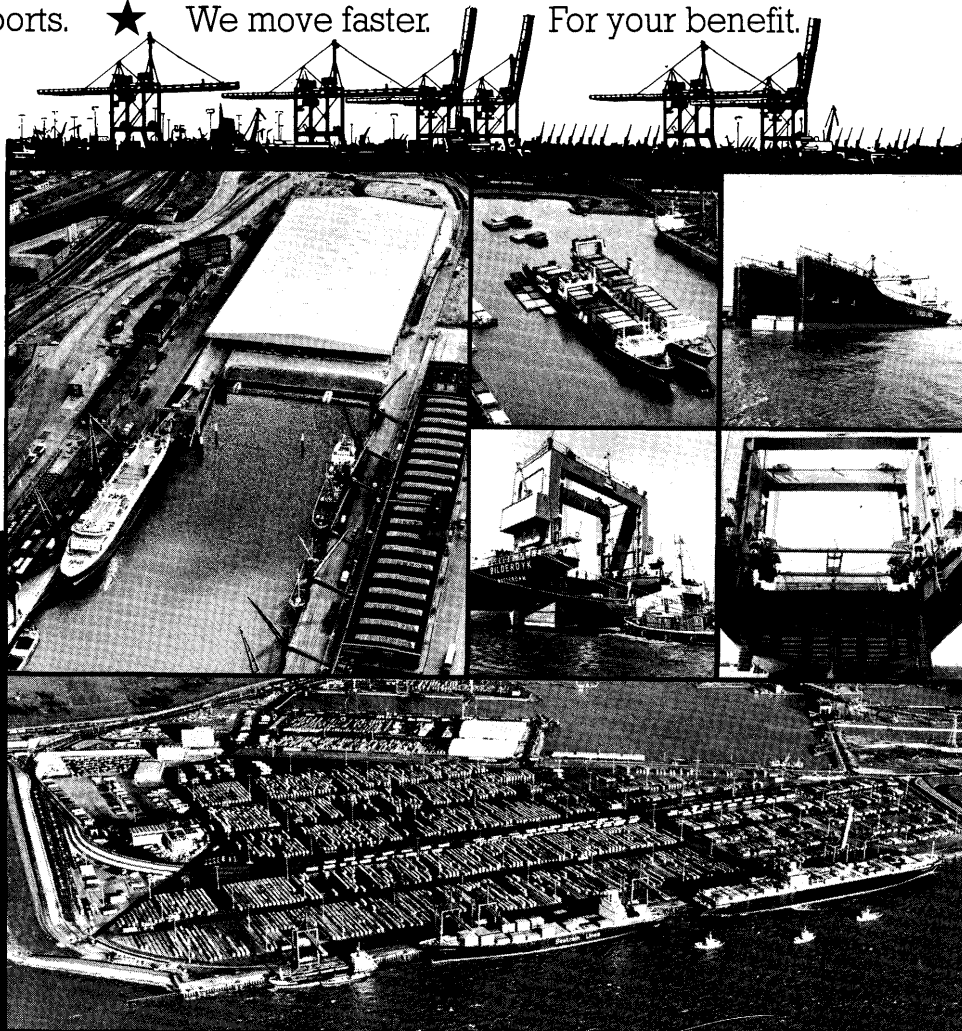
The new terminal on Tin Can Island is expected to help relieve the congestion at the Lagos port complex. It was completed 18 months ago by the West German construction firm of Julius Berger Nigeria Ltd. The new terminal has 10 piers including two for handling Ro/Ro cargo. The total  
(Continued on page 42)



New marine cargo terminal on Tin Can Island at the Port of Lagos in Nigeria has total pier length of some 2.5 kilometers. Hamburg Port Consulting GmbH, a subsidiary of HHLA, is providing consultant services concerning organization and operation of the terminal in cooperation with another West German consulting firm.

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(Continued from page 40)

length of the piers is some 2.5 kilometers. The terminal is to be operated basically as a self-sufficient center and even has its on-site power generation plant having a capacity of 5,000 kilowatts.

In addition to providing consultant services, Nigerian personnel are to be trained in both Hamburg and Lagos. A special training school has been established on the island for training pier operating personnel.

## Nearly One-half of Containers Owned by W. German Leasing Firms Are Special Types

Tokyo, November 10, 1977 (News Release from The Representative of the Free and Hanseatic City of Hamburg):—Some 45 percent of the containers owned by West German's four container leasing firms, all based at the Port of Hamburg, are of the special-purpose types, according to a Port spokesman. The four firms own a combined total of some 37,000 20-ft units. Thus the total of special-purpose containers comes to about 16,650 units.

The ratio of specialized containers owned by the West German firms is claimed to be far higher than that of container leasing firms of other countries. This factor contributes greatly to better meeting the specific needs of clients, the spokesman said.

Among the special type containers are the following: open-top, open-side, insulated, refrigerated, heavy duty flats, containers for dangerous and non-dangerous liquids, containers for break bulk cargoes and "mini-boxes" consisting of three separate small containers on a 20-ft frame for small and high-grade cargo.

The number of containers owned by the world's container leasing firms is growing at a faster rate than the number owned by other firms such as shipping companies, according to the Port of Hamburg spokesman. As of the beginning of the year, the leasing firms owned approximately 48% of the world total of about 1.4 million in terms of 20-ft units. Over the past years, the number of containers

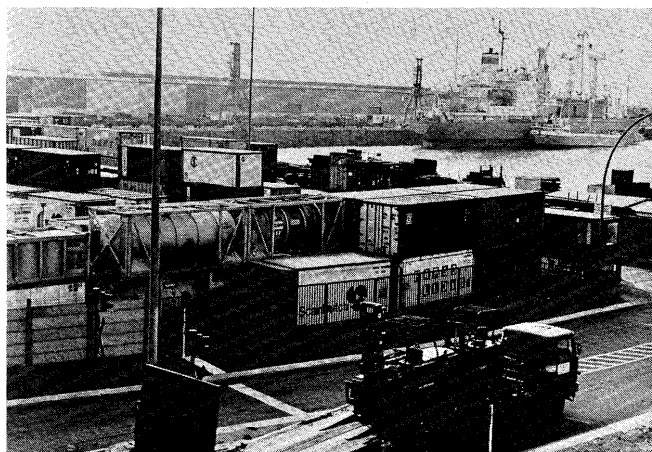


Photo shows a variety of types of containers at the Port of Hamburg. The port has one of the largest facilities in Europe for handling containers. All of West Germany's four container leasing firms are based at this port.

owned by the leasing companies has recorded a growth rate of 29% compared with the about 11% of the shipping companies and forwarding firms.

## Full-Container Ship Thames Maru Completes Return Maiden Voyage From Hamburg

Tokyo, November 16, 1977 (News Release from The Representative of the Free and Hanseatic City of Hamburg):—The full-container ship Thames Maru, 50,722-gt, arrived back at Tokyo Port on Tuesday (Nov. 15) on her return maiden voyage from Hamburg, it was announced by the Tokyo Representative Office of Hamburg. She carried 554 containers weighing a total of 5,000 tons.

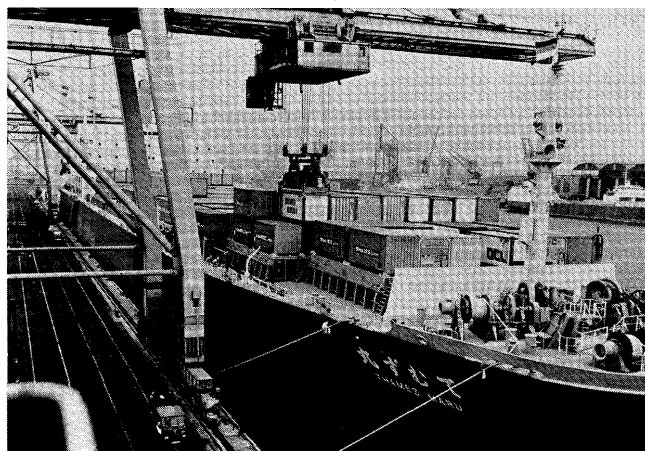
On her outbound maiden voyage, the vessel carried 992 containers (TEU) weighing a total of 8,000 tons. Unloading at Hamburg Port was completed in only 20 hours with the use of two large-capacity gantry cranes.

To commemorate the maiden voyage, Thames Maru's Captain Kaneko was presented a silver plate by Captain Walter, assistant manager of Hamburg Port's Burchardkai Container Terminal.

Thames Maru is the thirteenth full-container vessel owned by Mitsui O.S.K. Lines. The firm is a member of the Trio Group consisting of five firms of three countries. Thames Maru is the nineteenth third-generation, full-container vessel of the group.

The vessel was built by Mitsubishi Heavy Industries. She has a main engine rated at 84,000 HP and a speed of 27 knots. Loading capacity is 2,364 containers (TEU).

The Port of Hamburg's container business is increasing rapidly, says the representative office. In 1976, of the 1,600,000 tons of general cargo from the Far East which transited the port, some 65 percent were containerized. Of the estimated 1,100,000 tons of cargo shipped from the port and destined for the Far East, some 35 percent were in containers.



Two large-capacity gantry cranes are used to unload Thames Maru at the Port of Hamburg.



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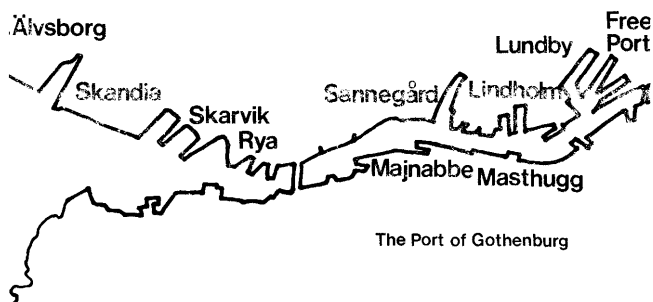
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# The Port of Gothenburg: New Projects



## ● Revised plan for Port of Gothenburg's dry cargo harbours will cost £52 million

The project group of harbour and cargo handling specialists set up by the Port of Gothenburg and the Gothenburg Stevedoring Co. has now delivered a revised plan. In 1976, the group recommended a concentration of almost all the dry cargo handling in the port to the Skandia

and Älvsborg harbours at the mouth of the river Göta.

The new plan is estimated to cost around 445 m. Swedish Kronor (£52 m), compared with 370 m. Kronor for the 1976 plan. However, it is thought to be materialized step by step and to take a longer time to fulfil than was foreseen in the former plan. Some of the changes will thus not take place until the 1980's and this, it is hoped, will help to solve the financial problems connected to the remodelling of the port's dry cargo harbours.

According to the new plan the conventional dry cargo traffic which still takes place at some berths in the Majnabbe harbour on the south side of the river and also in part of the Sannegård harbour's berths on the north bank will be transmitted to the Lundby harbour and to the Skandia harbour. This point on the program will be fulfilled before January 1979.

The Lundby harbour and the Free harbour, which are situated close to each other in the inner harbour, will for some years ahead serve as the main centre for the conventional dry cargo traffic. The idea is to concentrate



This is where almost all of Gothenburg's dry cargo traffic will concentrate in the future. The twin harbours Skandia and Älvsborg (under construction in background) are located on the north bank of the River Göta estuary.

Skandia will cater for containers, while Älvsborg will be used for other types of unit-loads and certain conventional cargo.



The Lundby (foreground) and Free harbours. This system of berths in Gothenburg's inner harbour will be the centre for conventional traffic for some years to come. As old liners are replaced by new ones with a modern cargo-handling philosophy, traffic will move from this area to the unitload harbours in the river mouth.

most of the conventional dry cargo to these two harbours with exception for the new ro-ro and container tonnage which successively is coming into the picture. This tonnage will be directed to the Skandia container harbour with its special cargo handling facilities. Thus will, for example, the Swedish shipping company Transatlantic (now using the Lundby harbour for its Africa and New Zealand lines) within a few years switch over to new ro-ro ships now on order, and these new ships will be served at the Skandia harbour, when they replace the ships now used on the said lines.

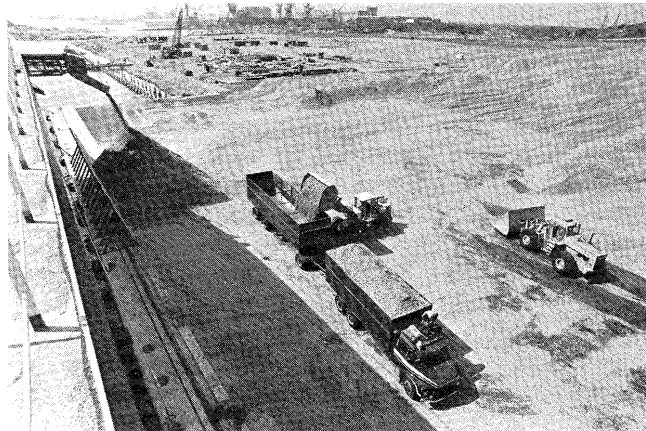
The concentration within the inner harbour district of all conventional dry cargo traffic to the Lundby and Free harbours—instead of the four or five harbours hitherto used—will facilitate the cargo handling and also give other advantages. In connection with the concentration to the two harbours, some rebuilding jobs will be carried out there in order to make them more suitable for their new enlarged tasks. During the years 1979–1981 this part of the plan is expected to be fulfilled.

In the beginning of the 1980's the new Älvsborg harbour west of the Skandia harbour near the mouth of the river will be fully finished. Some berths at this harbour are already taken in use, but there remains a lot to be done before this new large harbour is totally clear and equipped with cranes, ware-houses etc.

In the long run it is planned to concentrate almost all the port's dry cargo activities to the Skandia and Älvsborg harbours but it will take a longer time to fulfil this idea than was expected in the 1976 plan.

Also the internal transport system in the last-mentioned two harbours has had to be revised. The 1976 report suggested an internal transport system with very big terminal tractors and very large flats or pallets taking no less than six containers at a time.

Trials carried out showed that the surface of the asphalt bed at the harbours was damaged by the wheels of the heavy carrying units. According to the new plan containers



Part of the new Älvsborg Harbour development in Gothenburg is used for the import of wood-chips. The harbour is intended to be a general cargo facility, though, and from next summer and through the four remaining years of the import contract, the wood-chips will be unloaded at special facility. This facility occupies part of a shipyard no longer needed for its original purpose.

as well as goods on pallets will be handled on smaller transport units until the system originally thought of has been further developed.

### ● Gothenburg refineries use more and more North Sea oil

The two oil refineries in Gothenburg, operated by Shell and BP respectively, are slowly turning to North Sea crude oil as their raw material.

From a zero start a couple of years ago, North Sea oil now accounts for a considerable percentage of the refineries' crude oil consumption.

A Shell spokesman states that his refinery is now relying on North Sea crude to ab. 25 per cent, and that there is a tendency for that percentage to increase.

The BP refinery in Gothenburg is planning to let North Sea oil cover more than half of its demand for crude oil.

Forties-field crude, pumped to the Scottish coast, is loaded onto both medium-sized and very large crude carriers for the transport to Gothenburg. In the Swedish port, there is a 20-metre (65 ft) crude oil jetty at the disposal of the refineries. The depth allows fully-laden 225,000-tonners to berth at the jetty, the name of which is Torshamnen.

Each of the Gothenburg refineries has a 5-million-tons-a-year output capacity, which is not used to full extent under the present circumstances. About 8 million tons of crude oil were imported via Gothenburg in 1976. The BP and Shell refineries, together with other oil companies, play a vital role in the Gothenburg port traffic. All in all—crude, products, import, export—oil accounted for about three fourths of the port's 22,5 million-ton cargo turnover last year.

## ● 2,5 million cubic metres of wood-chips to be imported to Sweden via the Port of Gothenburg

The Port of Gothenburg has together with the Gothenburg Stevedoring Co. signed an agreement with two of Sweden's largest wood pulp companies on the import of 0,5 m.m<sup>3</sup> of wood-chips per year during five years, commencing mid-year 1977.

The background is that the Swedish paper and pulp industry has grown to such an extent that a considerable import of raw material is necessary—although Sweden has very large supplies herself. Twelve of Sweden's paper and pulp companies have got together and formed a joint wood-importing company, the Massaindustrins Virkesimport AB (MVA) which will supply the Swedish mills with imported raw material.

During a five-year period, 2,5 m. cubic metres of wood-chips will thus be imported via the Port of Gothenburg. The total quantity which MVA has contracted for delivery is 7,5 m. cubic metres. While the Gothenburg-imported wood-chips will go to mills situated within easy reach for lorries from this port at Sweden's West coast, the remaining quantity will be addressed to mills in the North of Sweden and will be imported via harbours at the North of the Baltic on Sweden's East coast.

Two Japan-owned ships especially built for chip-carrying will deliver the wood-chips at Gothenburg. It is estimated that some 20 lorries a day will leave Gothenburg with wood-chips to the mills.

To begin with, the wood-chips will be unloaded at the new Gothenburg Älvsborg harbour under construction at the mouth of the Göta river. The first part of this harbour, with a water depth of 11 metres, is now ready for use, and here the wood-chips are being laid up before the lorries take over the transport to the mills.

During 1978, a part of the Eriksberg shipyard's area at Färjenäs will be taken over by the port and will be especially arranged for the landing of the wood-chips.

## Amsterdam News Letter

Selected from "Amsterdam News Letter", September 1977:

### ● Joint European Feeder Service Operates into Dutch Capital

The Joint European Feeder Service (JEF), a Scandinavian line, which became active at the beginning of this year, now has one of its newest container carriers, M.S. ELSE-BETH, operating weekly service into the Port of Amsterdam.

The 72 meter-long vessel, which features the latest technical advances in capacity, automation, and stability, is to function both as an independent feeder vessel for ocean-going ships calling at continental ports, and as a coastal vessel moving cargoes between Scandinavia and the Bénelux-northern France area.

JEF is primarily a Swedish-owned company headquartered in Gothenburg.

In Amsterdam, the M.S. ELSE-BETH calls at the CTA Terminal in the Westhaven. Ruys & Co. serve as agents.

### ● Trial Run on Amsterdam-Rhine Canal Successful

The work of widening and deepening the Amsterdam-Rhine Canal is well advanced.

In a trial run recently sponsored by the Rijkswaterstaat (Dutch Waterway Authority) and Overslagbedrijf Amsterdam (OBA-Amsterdam Transshipment Company), it was concluded by the European Waterway Transportation (EWT) group that a unit of four fully-loaded 1600-ton push barges can easily transit the canal. Loaded barges of the small type do not require a tugboat in front, however, empty barges making the trip do.

The voyage from Amsterdam to Tiel lasted 10 hours, averaging nine kilometers per hour. With the completion of improvements on the Marijkesluis locks at the end of 1978, eliminating the necessity for coupling and uncoupling the barges, journey time should be reduced even more. The Amsterdam-Rhine Canal forms an important link between the Dutch capital and the Rhine River, thus tying in with the Rhine-Main-Danube Canal which is slated to be operational by the early 1980's. Barge traffic will then be able to travel from the North Sea to the Black Sea, via Holland, Germany, Austria, Hungary, Yugoslavia and Romania.

## Gray Mackenzie Monthly Bulletin

### SEPTEMBER 1977

#### ● Bahrain

65 vessels called at Bahrain during September 1977 to discharge 45,455 tons and load 552 tons. In the same month last year 44 vessels discharged 61,564 tons and loaded 313 tons. There were no berthing delays throughout the month.

During the first six months of 1976 the United Kingdom maintained its lead as Bahrain's biggest supplier with 17.9% of the Islands imports BD. 43.5 million. Japan provided 16.5% BD. 40 million and the U.S.A. 12.6% BD. 29.5 million.

The Bahrain Government will now allow offshore companies operating from the Island to establish a local office without Bahraini sponsorship or local participation.

A joint venture cement works, planned by the Bahraini and Saudi Arabian governments at Hofuf in Saudi Arabia with a capacity of 1.8 million tons a year and 6,000 tons of clinker will cost between \$424 million and \$509 million.

52 Tankers called at Sitra during the month as compared with 67 in September 1976.

#### ● Abu Dhabi

70 vessels discharged at Mina Zayed during the month of September 1977.

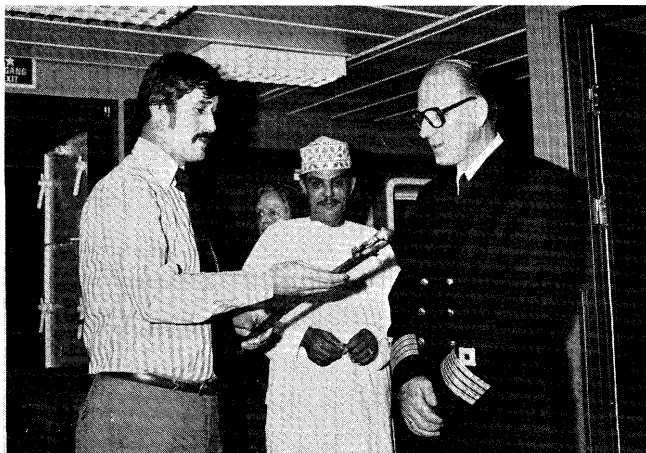
Additionally, 4 tankers called and discharged a total of 34,835 tons of gas oil and 2,100 tons of Kerosene.

Also, 2 tankers berthed for purposes of loading 8,600 tons of gas oil and 1,500 tons of fuel.

There has been appreciable improvement in the berthing position and delays during the month varied between 15 to 3 days. We do not anticipate any appreciable delays during the remainder of the year.

With the significant improvement in the turnround of vessels in the Port, congestion surcharges have been reduced or abolished.

#### ● Khorramshahr



Mina Qaboos, Sultanate of Oman, November 9, 1977 (Port Services Corporation Ltd.):—A presentation was held on board m.v. CONCORDIA STAR on 30th October, 1977 commemorating her maiden voyage to Mina Qaboos. The Port presented an Omani sword to the vessel. In the photograph is Capt. Hans Dommersnes, B.G. Metcalfe, General Manager Mina Qaboos. A similar presentation was also held on the maiden voyage of the Hansa Line vessel REICHENFELS which berthed on 7th November.

During September 1977, 67 vessels discharged a total of 205,259 tons of import cargo.

Berthing delays varied from nil to 4 days.

#### ● Bandar Abbas

26 vessels called at this port during September 1977 and discharged 95,671 tons grain, 63,400 tons cement, 25,944 tons rice, 7,988 tons sugar, 16,821 tons fishmeal and 10,000 tons steel. In addition, 5 vessels discharged 82 containers and 1,400 units of Japanese cars.

3 vessels loaded 17,210 tons chrome ore.

5 tankers discharged 122,985 tons refined oil products.

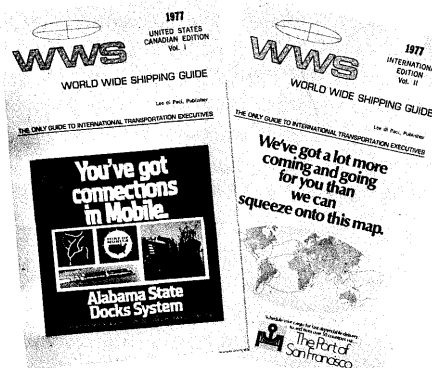
Berthing delays varied from 5 to 15 days for general vessels and 15 to 45 days for Bulk/charters.

#### ● Kuwait

During September 1977, 155 vessels called at Kuwait port discharging 215,035 tons cargo inclusive of 140,715 tons cement discharged ex: 11 vessels.

The total cargo exported during September was 263 tons deadweight.

Berthing delays at Kuwait port varied from 4 to 20 days for Conference vessels and 30 to 55 days for non-Conference vessels. During the second half of September, berthing delays for Conference line vessels have been considerably reduced, and new arrivals are now facing a berthing delay of two to four days only. Berthing delays for non-Conference vessels have also been dropped from 55 to 25/30 days. The port authorities estimate that by mid-November the port congestion will be cleared for both Conference and non-Conference vessels.



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## Chairman's Statement

Brisbane, Australia (Port of Brisbane Authority News Bulletin):—The following is a statement issued on November 7, 1977 by the chairman of the Port of Brisbane Authority (Sir Charles Barton):—

"It is now almost 11 months to the day (December 6, 1976) since the Port of Brisbane Authority was constituted.

In this time, we have made tremendous strides towards implementing proposals which will transform the Port of Brisbane.

Our plan is to develop new port facilities on the Fisherman Islands, which are located right at the mouth of the river.

Today, the authority is pleased to announce that a well known Queensland firm, The Hornibrook Group, has been awarded the contract, worth about \$6.6 million, to build 552 metres of reinforced concrete wharf on the Fisherman Islands.

The wharves will be built parallel to the port's main entrance channel and are intended to serve container and roll-on, roll-off ships up to 60,000 d.w.t.

The works schedule provides that the first section of the wharves will be operational in March/April, 1979.

With the signing of today's agreement, the Authority will have awarded contracts totalling about \$20 million for development of the Fisherman Islands."

The other contracts were:—

- construction of 5 k.m. of access causeway and bridges to link the mainland at Lytton to the Fisherman Islands (Thiess Bros. Pty Ltd.) — \$4,250,000
- supply and instal two single lift container cranes (Evans Deakin Industries Pty Ltd.) — \$5,000,000
- dredge the container terminal berths and approaches to 12 metres (low water) and pump 1,070,000 cubic metres of fill onto the islands to reclaim 20 ha. of land for shore installations. (Dredco Pty Ltd.) — \$4,179,300

## Minister's Press Statement

Brisbane, Australia, 2.11.77:—The Queensland Pacific 1000 powerboat race from Cairns to Southport will definitely be staged again next year.

The Tourist Minister, Mr. Hodges, said today the 1978 Pacific 1000 would be run over eight days—from October 14 to 21.

Mr. Hodges said the firm decision to restage the race—the longest of its kind in the world—had been made following an enthusiastic de-briefing in Brisbane.

Competitors and officials who took part in the 1977 race travelled to Brisbane from as far away as North Queensland and Sydney to take part in the race de-briefing.

Mr. Hodges said that in the light of experiences gained during the running of the first race it had been decided to extend the race period from six to eight days, and some of the longer legs had been reduced.

Overnight stops would be scheduled for Townsville, Bowen, Mackay, Rosslyn Bay, Bundaberg, Tin Can Bay and Redcliffe.

Mr. Hodges said that next year Brisbane people would be given a chance to view part of the race.

The course on the final day (October 21) from Redcliffe

to Southport, would include a section involving the Brisbane River.

Mr. Hodges said that following the success of the first Queensland Pacific 1000 it was hoped to attract a greater level of commercial involvement by way of increased sponsorship.

He would be pleased to discuss sponsorship proposals with interested organisations.

He said that with a full year to organise, he was confident the Pacific 1000 would be a world racing classic.

## Bulk Cargo Jetty Extensions Contract Let

Fremantle, Western Australia (Fremantle Port Authority News Release):—The Fremantle Port Authority has awarded a contract valued at \$1.79 million to John Holland (Constructions) Pty. Ltd. for the construction of a new berth at Kwinana in the Port of Fremantle Outer Harbour.

The berth will be a 230 m extension to the Authority's Bulk Cargo Jetty built along the lines of the existing structure which has steel piles and concrete decking.

The Bulk Cargo Jetty now provides primarily for the importation of phosphatic rock and sulphur used in the manufacture of super-phosphate at the nearby C.S.B.P. works.

Ultimately, the new facility will enable the separation of loading and unloading operations and provide additional berthage for deep draft ships using Cockburn Sound.

Work will start immediately on the project and the construction programme is expected to last nine months.

## Approval Given

Melbourne, Australia (Editorial in "Port of Melbourne Quarterly" July-September 1977):—**The basic function of a Port Authority is to provide adequate facilities for all port users at a reasonable cost.**

In its 100 years of service the Port of Melbourne has fulfilled these requirements by initiating planned development projects that have enabled it to keep abreast of the varied demands of the maritime industry.

The Port of Melbourne in 1977 is a major focus for national and international cargoes, not only for Victoria, but southern New South Wales, Tasmania and South Australia.

Adhering to its policy, the Trust has completed plans for the construction of a fifth roll-on roll-off berth at Webb Dock for the Australian National Line, and is also investigating the need for the development of a sixth berth at the complex.

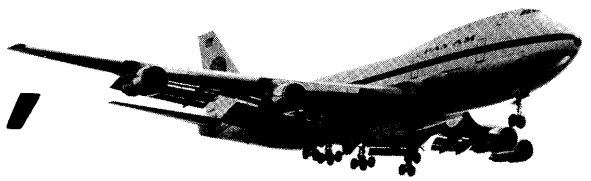
However, this particular exercise to improve the roll-on roll-off facilities at Webb Dock has been delayed pending a Victorian Government review of a report prepared by the University of Melbourne Centre for Environmental Studies.

Reclamation of 5 Webb Dock began in 1974 when approval was first given to construct 305 metres of frontage, but reclamation of the additional 76 metres required to complete the berth, has been delayed awaiting Government decision.

The Trust will now complete the 76 metres, as the study found that there will not be any significant environment effects and that the works will not adversely affect sand

(Continued on page 50)

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(Continued from page 48)

movement or biological conditions in the Bay.

The Centre for Environmental Studies is carrying out further studies into the proposal to construct the sixth berth at Webb Dock.

The study has been conducted in two phases, the first phase was completed in January this year, and phase two commenced in March. Field studies are expected to continue until June 1978, and will be followed by a three month analysis and a report in September 1978. On completion the study will have cost the Trust at least \$500,000.

A Port is an integral part of the community it serves and its development projects must be considered in the light of their basic value to the well being and development of the whole community.

## Tonnage at Port of Penang

Penang, Malaysia, July, 1977 (The Penang Port Commission):—The Port of Penang handled 2,184,612 tonnes of cargo during the first half of 1977 as compared to 2,100,311 tonnes for the same period last year. This represents a rise of 4%.

Total general cargo handled for the period January to June 1977 was 1,397,152 tonnes, 51,706 tonnes less than that handled for the same period last year.

Exports for the period was 932,593 tonnes as compared

Wellington Harbour Board: An aerial photograph of the cellular Containership "Columbus Wellington" arriving in the Port of Wellington, New Zealand on her maiden voyage. The vessel is the eleventh vessel of the Columbus Line's container fleet to regularly serve this port. Built in Bremerhaven, West Germany the Hamburg-Sud vessel was launched by Mrs. R.D. Muldoon, wife of the Prime Minister of New Zealand. The 16,000 TDW vessel has a container capacity of 750 TEU's. From 1971 to six years on the Port of Wellington has handled more than 500 cellular container-ships, and forty vessels now regularly serve the Capital Port of New Zealand.

to 844,723 tonnes in 1976. Commodities which showed significant increases were bulk palm oil, ilmenite ore, animal feed, molasses and wearing apparel. The export of bulk palm oil rose to 146,626 tonnes as compared to 74,583 tonnes, an increase of 72,043 tonnes, while the export of ilmenite ore, animal feed, molasses and wearing apparel increased by 45,915 tonnes, 9,337 tonnes, 13,039 tonnes and 6,149 tonnes respectively.

Imports for the period was 1,252,019 tonnes, a drop of 3,569 tonnes as compared to that handled in 1976. Increases were recorded for coal and coke, fertilizers, iron and steel products, acids and fibres while commodities such as machinery parts, chemicals and provisions recorded small decreases.

During the second half of 1977, Penang Port handled 8,241 T.E.U.s as compared to 6,647 T.E.U.s during the same period. This represents a rise of 24%. The volume of cargo handled through containers during this period was 119,408 tonnes. This was 36,829 tonnes more than that handled during the corresponding period in 1976.

The tonnage of rubber shipped through containers during this period was 11,936 tonnes, a slight decrease as compared to 13,781 tonnes exported during the same period in 1976. However, the export of tapioca, wearing apparel and textiles and rubber goods recorded increases of 932 tonnes, 3,759 tonnes, 3,043 tonnes and 2,889 tonnes respectively.

Significant increases were recorded in import commodities such as tin ore, machinery and parts, cotton yarn and thread and plastic materials.

## "Asian Pallas" on Maiden Trip

Singapore, 25 October 1977 (PSA Press Release):—Interasia Lines' third new container ship m.s. "Asian Pallas" called at the Port of Singapore on 10 Oct 77 while on her maiden voyage from Kurushima Dockyard in Japan.



The 6,350 DWT vessel with a capacity of 310 TEUs, joins her sister ships "Asian Pegasus" & "Asian Princess" on the Japan/Far East trade route. Interasia Lines has also introduced cargo connections to U.S.A. ports at Japan with the addition of "Asian Pallas".

The 119.3 m long vessel built in September this year, was accorded a special welcome ceremony when she was in port.

Mr. Phang Sing Eng, Assistant Director (Scientific Services), PSA presented commemorative gifts to the Master, Capt Hiroshi Matsumoto during this ceremony.

Picture shows, Mr. Phang (left) presenting a special pewter tray to Capt Matsumoto. In the background, the container cranes continue operations to turnround the vessel in the shortest time possible.

## Australia/Singapore Ro-Ro Service Inaugurated

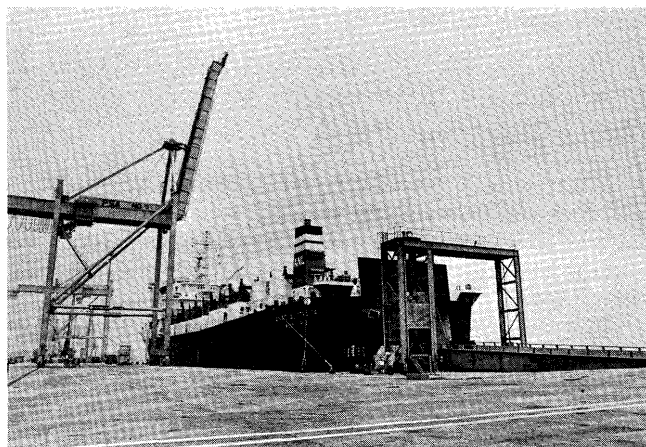
Singapore, 11 November 1977 (PSA Press Release):—The first of the three new hybrid roll-on/roll-off, lift-on/lift-off ships serving the Australia trade arrived in Singapore late last month to begin a 11-day frequency sailing between Australia and Southeast Asia.

The 15,000 tonne "Anro Australia" of ANRO Consortium comprising Australian National Line, Australia Straits Container Line, Nedlloyd Lines and Singapore's Neptune Orient Lines, berthed at the PSA's new container berth at East Lagoon.

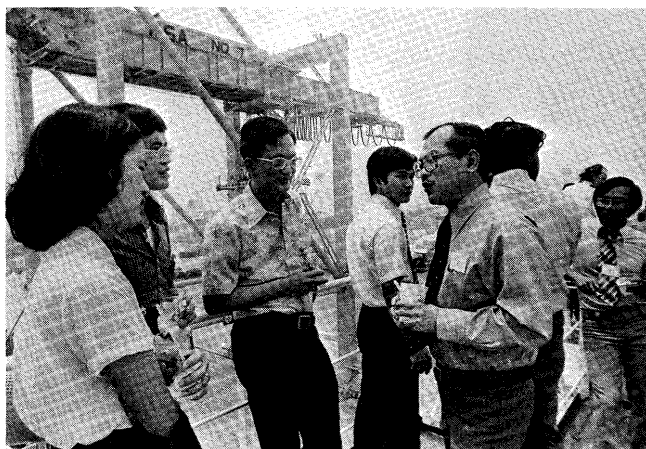
The new wharf which has shore based ramp facilities to service ro-ro vessels and two 35-tonne quay cranes for lift-on/lift-off service, is part of a S\$66 million extension programme for container handling facilities in Singapore.

The ANRO vessels will call at Brisbane, Sydney, Melbourne, Tasmania, Adelaide, Fremantle, Jakarta, Singapore, Port Kelang and Penang. They are also accepting cargo from Bangkok. Designed to carry all types of cargo, these vessels have provision for 800 20-ft containers including 150 reefers.

To commemorate the inauguration of the new service the local agents, Jardine Shipping Agencies Pte Ltd., held a reception on board the vessel. At this function gifts were exchanged between the owners and the PSA.



The ANRO AUSTRALIA working at the PSA Container berth.



Mr. Lua Cheng Eng, General Manager, Neptune Orient Lines (4th from right) discussing some points with (from left) Mrs. Boon Gek-Mudeliar, Asst Director (Operations), Messrs Tan Hock Lye, Secretary (Administration) and Lim Tian Leong, Deputy Director (Finance), all of PSA, at the function on board "Anro Australia".



Picture shows Mr. Chung Kek Choo, Director (Management & General Services), PSA handing over a special pewter tray to Captain George Hunt, the Master of "ANRO AUSTRALIA". Looking on is Mr. Herbert Teo, Public Relations Officer, PSA.

## New Tug for PSA

Singapore, 11 November 1977 (PSA Press Release):— The PSA will take delivery of the first of another four new harbour tugs from Pan Asia Shipyard & Engineering Co. Pte Ltd. at Jurong tomorrow morning according to schedule. With this tug, the PSA's tug fleet will increase to 17.

The new tug "VST 1" measuring 28.2 metres in length and 8.5 metres wide is capable of doing 12 knots. Its maximum draft of 4.5 metres makes it ideal for harbour operations. The tug has a 2,500 BHP capacity and develops a 23-tonne bollard pull.



### NEW HARBOUR TUG FOR PSA:

Picture shows the new PSA Voith Tractor tug undergoing sea trials before the delivery.

#### Specifications

Length Overall: 28.225 m

Length between Perpendiculars: 27.0 m

Breadth Moulded: 8.5 m

Depth Moulded (Hull): 3.63 m

Maximum Draft (to underside of guard): 4.462 m

Main Engines: Twin Deutz SBA 8M 528

Propellers: Twin Voith Schneider 24 GII propellers

Capacity: 2,500 BHP

Speed: 12.3 knots

Bollard Pull: 23.3 tonnes

Fuel Oil Capacity: 66 tonnes

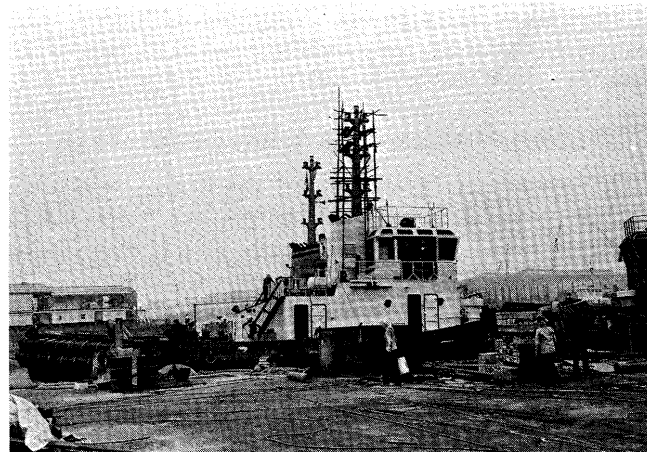
Fresh Water Capacity: 13 tonnes

Dispersant Capacity: 7 cub. metres

Foam Capacity: 9 cub. metres

Classification: Lloyds' Register of Shipping +  
100A1 + LMC Harbour Tug

Builder: Pan Asia Shipyard & Engineering Co. Pte. Ltd.,  
Singapore



### NEW HARBOUR TUG FOR PSA:

Picture shows two of the other tugs under various stages of construction at the builder's yard at Jurong, Singapore. The remaining three tugs are expected to be delivered within the next three months at regular intervals.

It is fitted with Voith Schneider propulsion unit and is highly manoeuvrable and efficient in pulling or pushing by the bow or stern. It is capable of steaming astern for long distances with equal ease as forward movements.

Costing some S\$13.2 million, the four new tugs will have similar features including special oil dispersant systems for anti-oil pollution operations.

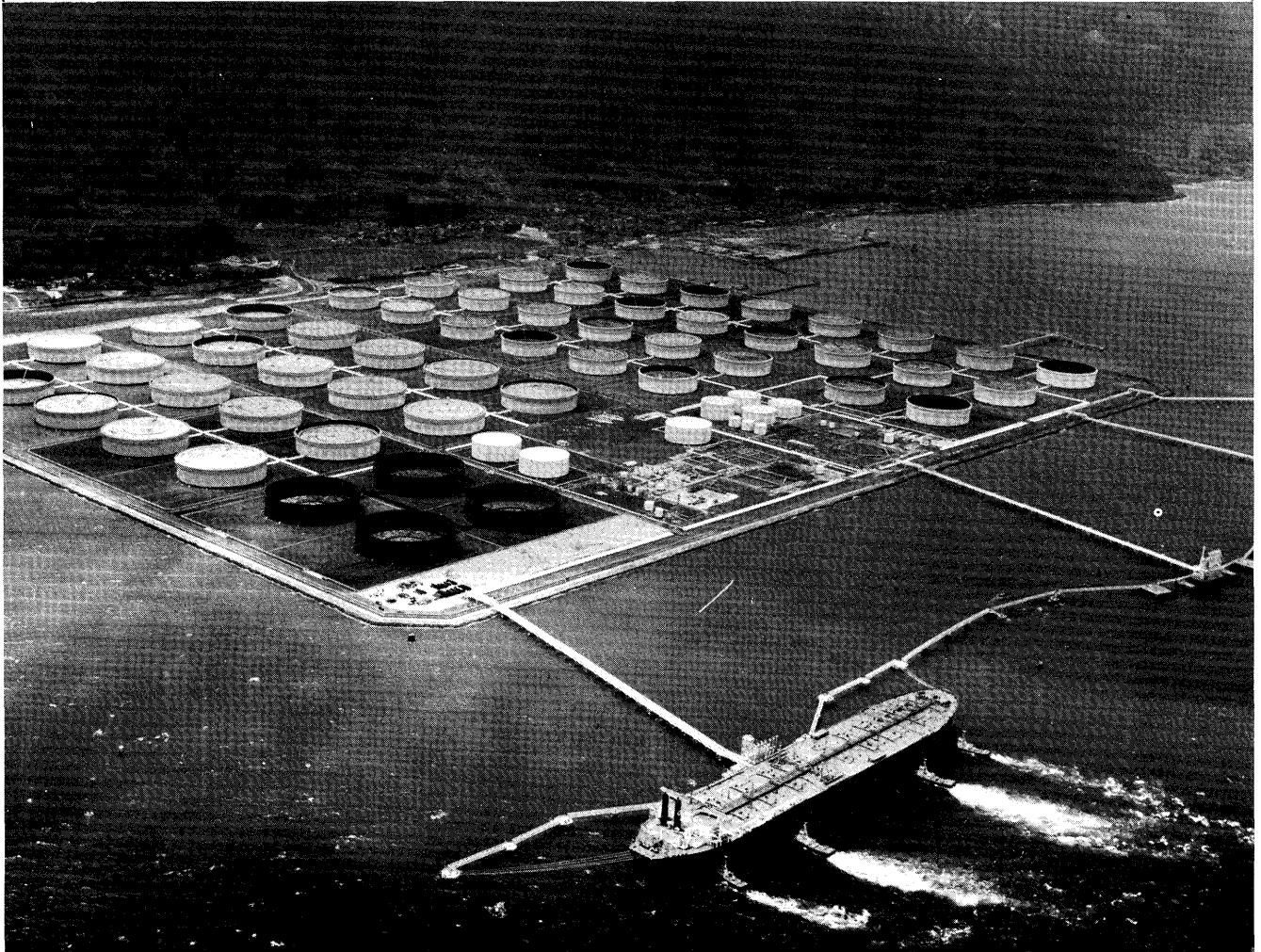
Two of the four tugs are being fitted with telescopic firefighting monitors capable of delivering 4,000 litres per min. at a height of 21 metres above sea level. This will enable them for use to fight fires on supertankers and other vessels with high free board.

The addition of the new tugs will allow the PSA to provide better service to the numerous vessels calling at the Port of Singapore daily where an average of 2,400 vessels require PSA tug assistance per month. Special and more efficient tugs are required as more sophisticated and larger vessels are coming into the port daily.

The remaining three tugs are expected to be delivered within the next three months at monthly intervals.



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# MITSUI Computer Control System for Container Terminals

**Huge piles of data!  
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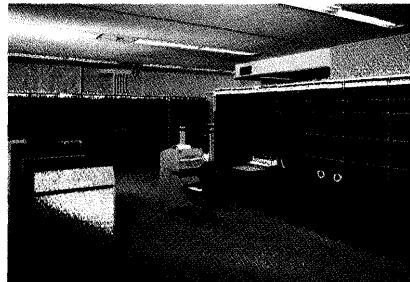
Our System can help solve your problems and enable you to reap the true benefits of container transportation.

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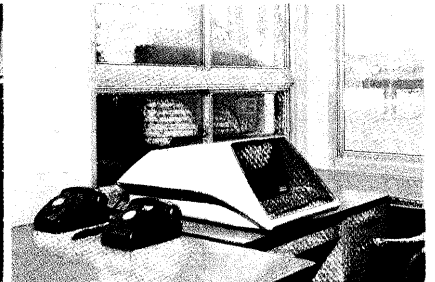
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1. Planning Support & Management System
2. Receiving/Delivery Operations System
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COMPUTER ROOM



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