

PORTS *and* HARBORS

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San Francisco

IAPH Conference Houston April 1977

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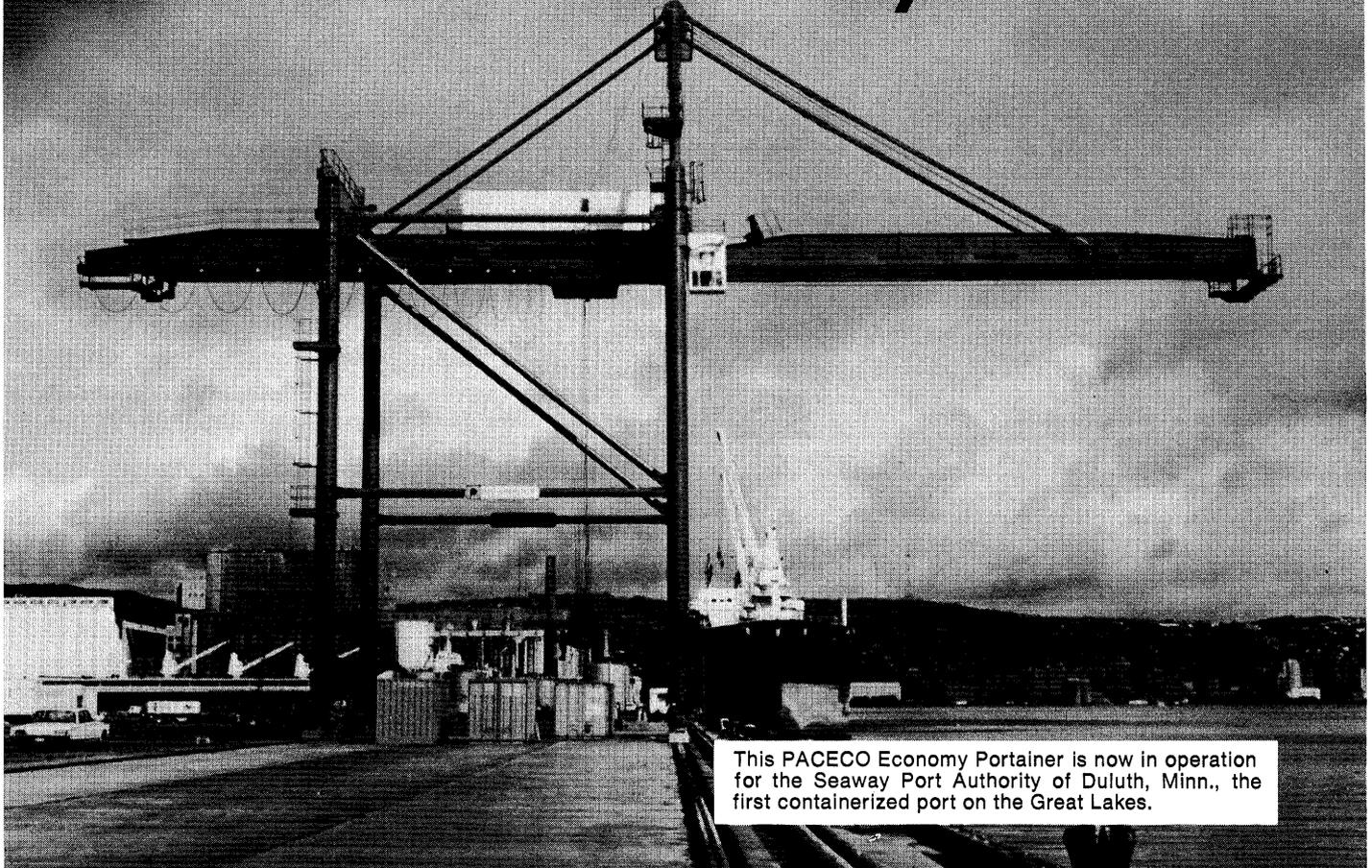
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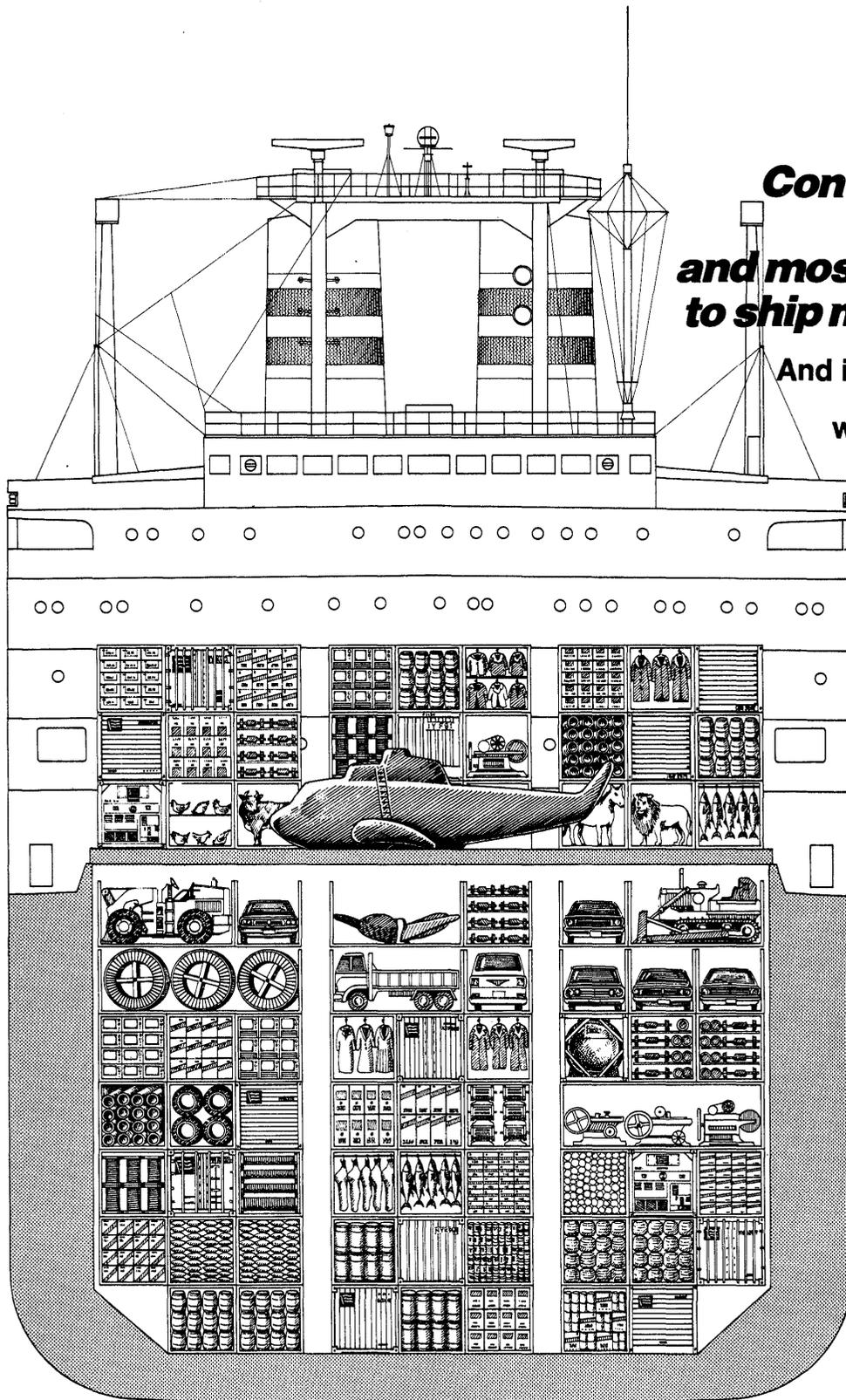
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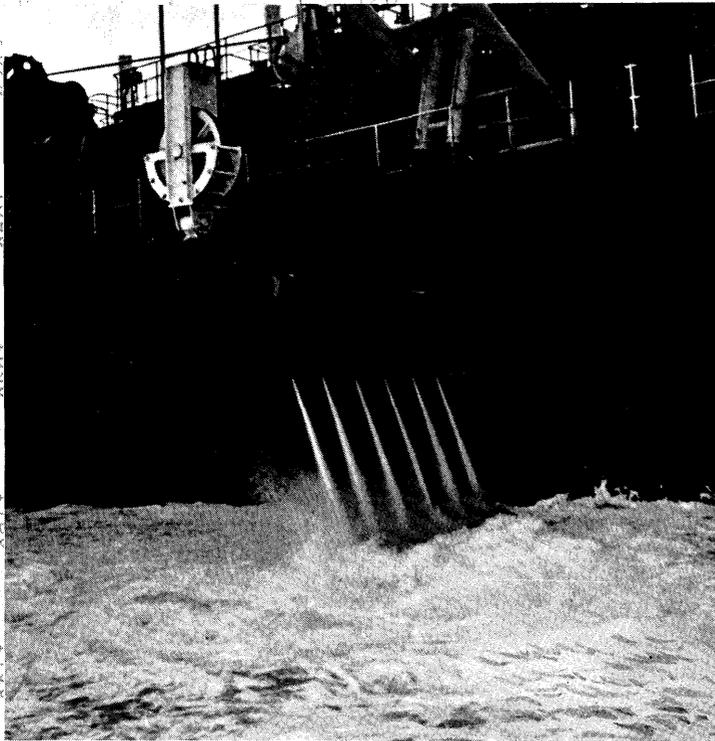
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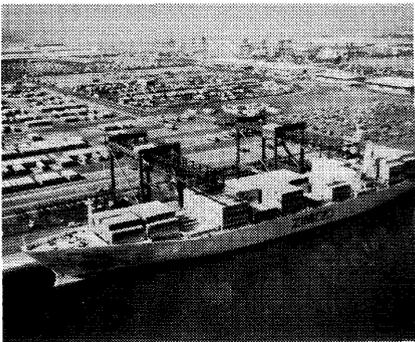
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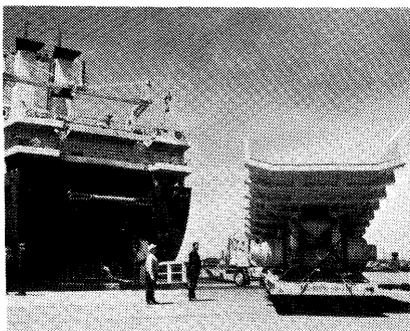
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PORTS *and* HARBORS

Editor: Yoshio Hayashi

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The International Association of Ports and Harbors

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PORTS *and* HARBORS

IAPH Head Office Announcements: Pages 7 ~ 19

10th Conference in Houston in outline

As reported in the previous issue, the preparation works for the 10th Conference are being worked out by the vigorous activity of the Organizing Committee at Houston, under the chairmanship of Mr. G.W. Altvater and having Mr. Michael Scorcio as the Conference Coordinator. An advance conference brochure was sent to all IAPH Directors introducing the over-all schedule of the Conference from Houston. Also, a special brochure for the promotion of IAPH exhibition at the Houston Conference was made available.

Hereunder is the outline of the 10th Conference. It is our hope that members will take necessary actions soon as possible for the attendance to the 10th Conference.

Changes in the programme and others will be reported from time to time to the members through this journal.

Conference sticker to be used for sealing envelopes or letter head was sent to all members being enclosed in the envelope of the July issue of the journal. Members are kindly requested to use the sticker for promoting the 10th Conference.

(Head Office)

1. **Conference Host:** Port of Houston Authority
2. **Conference Duration:**
From 24 to 30 April, 1977
3. **Conference Site:**
The Shamrock Hilton Hotel
6900 S. Main of Holcombe Boulevard, Texas,
77001
4. **Conference Theme:**
"World Ports' Role in Economic Development"
5. **Host Chairman and General Chairman:**
Host Chairman: Mr. Fentress Bracewell, Chairman,
Port of Houston
General Chairman (Conference Chairman): Mr.
George W. Altvater, Executive Director, Port of
Houston Authority
6. **Conference Registration Fees:** (In U.S. Dollars)
 1. Regular Member 250
 2. Honorary Member 100
 3. Founder Honorary Member 100
 4. Life Supporting Member 300
 5. Associate Member (Class A to D) 300
 6. Associate Member (Class E) 250
 7. Non-Member 500

For the convenience of all delegates, participants are kindly requested to complete and forward their registration forms (which will be included in a Conference-Kit which is

to be sent to members in due course from Houston) with full Conference Registration Fees not later than March 15, 1977. Checks, bank drafts or money orders should be made payable to the Port of Houston Authority. Please note that no refund of the Conference Registration can be made after April 15, 1977. Partial payment will be acceptable, provided that full payment is made when the delegate arrives for the Conference. Also, please note that all delegates should return their Hotel Reservation form to the Port of Houston Authority with the Conference Registration form (Also, to be included in the Conference-Kit).

7. Panel Discussions:

1. The Problems of Port Congestion
Chairman: Mr. Alhaji Bamanga M. Tukur,
General Manager, Nigerian Ports
Authority, Nigeria
2. Port of the Future—New Technology, Facilities
and Problems
Chairman: Dr. F.A.F. Scheurleer, Managing
Director, Rotterdam Municipal Port
Management, the Netherlands
3. The Port Contribution to International Trade and
Development
Chairman: Mr. Robert Bœuf, Ingenieur General
des Ponts et Chaussees, France
4. The Environmental Problems of Ports
Chairman: Mr. Thomas J. Thorley, General
Manager, Port of Long Beach

8. Programme (Subject to finalization)

April 23, 1977 (Saturday)

- 0900—1200 Meeting of Finance Committee and Special
Review Committee
1300—1700 Registration of Delegates
1300—1500 Meeting of Committee on Legal Protection of
Navigable Waterways
1500—1700 Meeting of Committee on Large Ships
1800—2000 Reception by the Secretary-General for mem-
bers of B/D and E/C

April 24, 1977 (Sunday)

- 0900—1030 Meeting of Board of Directors and Executive
Committee (Jointly)
1100—1200 Meeting of Nominating Committee (Con-
ference Committee)
1300—1700 Registration of Delegates
1300—1400 Meeting of Containerization and Barge Car-
riers Committee
1400—1500 Meeting of Credentials Committee (Con-
ference Committee)
1500—1700 Meeting of Bills and Resolutions Committee

(Conference Committee)
1830-2100 "Welcome to Houston" Reception and Buffet
for Delegates and Ladies

April 25, 1977 (Monday)

0900-1700 Registration of Delegates
0930-1030 Official Opening Ceremony
1100-1200 Call on Mayor and Other Local Dignitaries
(President, Vice-Presidents Secretary-General,
Secretary-General Emeritus)
1145-1330 Reception and Luncheon with Speaker (to be
announced)
1400-1530 First Plenary Session
1745-2030 Reception and Dinner for Delegates and
Ladies

April 26, 1977 (Tuesday)

0800-0900 Meeting of Bills and Resolutions Committee
0800-0900 Meeting of Finance Committee (Ways and
Means)
0900-1700 Registration of Delegates
0930-1030 First Panel Session
1030-1045 Coffee Break
1045-1130 First Panel Session (continued)
1145-1330 Reception and Luncheon with Speaker (to be
announced)
1400-1700 Open Symposium of Special Committee on
Containerization & Barge Carriers
1400-1700 Open Symposium of Special Committee on
International Port Development
1400-1700 Open Symposium of Special Committee on
Large Ships
1700-1800 Meeting of Honorary Membership Committee
(Conference Committee) (Evening Open)

April 27, 1977 (Wednesday)

0800-0845 Meeting of Bills and Resolutions Committee
0900-1200 Registration of Delegates
0845-1000 Second Plenary Session
1000-1030 Coffee Break
1030-1145 Second Panel Session
1145-1330 Reception and Luncheon with Speaker (to be
announced)
1345-1430 Third Panel Session
1500-2100 "Way Out West" at Valley Lodge

April 28, 1977 (Thursday)

0800-0900 Meeting of Credentials Committee
0800-0900 Meeting of Bills and Resolutions Committee
0900-1030 Third Plenary Session
1100 Depart for Barbours Cut (Delegates and
Ladies)
1145-1330 Dedication Ceremonies at Port Authority's
Barbours Cut Container Facilities (Luncheon)
1330 Depart for NASA
1400-1630 Tour of Manned Spacecraft Center and
Return to Houston
1930-2200 Reception and Buffet (Delegates and Ladies)
at Petroleum Club

April 29, 1977 (Friday)

0800-0900 Meeting of Bills and Resolutions Committee
0900-1030 Fourth Panel Session
1030-1045 Coffee Break
1045-1200 Closing Session
1215-1400 Reception and Luncheon by New Officers
After Noon Open
1930-2300 10th IAPH Conference Reception and Dinner
Dance

April 30, 1977 (Saturday)

0730-1000 Informal Farewell Breakfast "Come and Go"
1000-1200 Meeting of Board of Directors and Executive
Committee (Jointly)
1000-1200 Meetings of Special Committees as necessary

9. Ladies Programme

A Programme with full of variety and wonders is being
prepared (to be announced).

10. Post-Conference Tours

4-5 different post-conference tours will be prepared (to
be announced).

11. Call on U.S. Ports

Delegates are invited to visit, prior to the Conference or
after the Conference, U.S. Ports on the West Coast, East
Coast and Gulf Coast. Executive Members from U.S.A.
expressed their support for such visitors.

12. Exhibits

The Conference Site, The Shamrock Hilton Hotel, can
offer you an ample space for exhibits. You are kindly
requested to promote the availability of such space and
facility to your people concerned.

a. Location:

Indoors—Hall of Exhibits, Shamrock Hilton Hotel
Outdoors—Front Lawn at Entrance to Shamrock
Hilton Hotel

b. Proposed Dates: April 23-30, 1977

Hours: Daily 0800-1800

Installation of Exhibits begins: April 21, 1977

Removal of Exhibits: No later than May 2, 1977

c. Exhibit Categories:

1. Exhibits on Ports/Port Development/Port
Construction
2. Navigational Aids
3. Communication Equipment
4. Safety Equipment
5. Ship Fitting and Accessories
6. Propulsion Machinery and Steering Gear
7. Marine Paints, Chemicals and Detergents
8. Cargo Handling Machinery and Equipment
9. Containers and Container Handling Equip-
ment
10. Shiprepairing and Servicing Facilities
11. Shipbuilding
12. Shipping
13. Others

d. Application and Other Information

(Detailed information will accompany the Con-
ference-Kit.)

Application should be addressed to:

Conference Coordinator
10th Biennial Conference
International Association of Ports and Har-
bors
P.O. Box 2562, Houston, Texas 77001,
U.S.A.

Booth Rental Rate:

One 10 x 10 sq. ft. booth—US\$150.00
One 8 x 10 sq. ft. booth—US\$125.00

13. Organizing Committees

Conference Host—Port of Houston Authority
General Chairmen—

(Continued on next page bottom)

UNCTAD Determines to Take Steps in Overcoming Port Congestion

This news, under normal condition, should have been written by Mr. Taiwo of the Nigerian Ports Authority, who officially represented IAPH at the Meeting of Group Experts on Port Congestion by UNCTAD in Geneva in April, 1976. However, Mr. Sven Ullman, Liaison Officer of IAPH with UNCTAD and Chairman of Committee on International Port Development, wrote in his hurried note of late to this Head Office that considering further delay of the final report by the Committee on the outcome of the meeting, and considering demand for quick skeleton news on the part of IAPH members, it might be a good idea to run the Press Release provided by UNCTAD in the next issue of "Ports and Harbors" for the time being.

The Head Office accepted his suggestion.

The highlights of the Press Release as reproduced in the following paragraphs include among others,

- (1) Anti-congestion Committee representing all interests of work should immediately be organized.*
- (2) The leasing or purchasing of handling equipment should be put in progress. (DSG)*

UNCTAD EXPERT GROUP PROPOSES MEASURES TO RELIEVE AND AVOID PORT CONGESTION

Port congestion, which has been increasing at an alarming rate for almost two years now, and shows no sign of abating, was the subject of an Expert Group Meeting called by the Secretary-General of UNCTAD which concluded four days of discussions yesterday. It is estimated that, unless steps are taken to reduce port congestion, the

economic cost of ship and cargo delays in 1976 could well exceed \$5000 million, the majority of which will be borne by importers and exporters in the developing countries. And this excludes the indirect and largely intangible costs of port congestion such as delays in the realization of development projects, the frustration of export promotional activities and many others.

The growth of trade between developed and developing countries and between developing countries themselves, depends on the capability of ports and their connecting inland transport links to handle increased traffic volumes expeditiously.

In some cases decisions taken at the national level have under-estimated or overlooked the strain which the commercial activities would place on traffic to and from the ports. This has led to delays in required port and inland transport investment and has contributed to the congestion which exists today.

The Group of Experts identified a large number of causes of port congestion and proposed short term measures for combatting port congestion together with longer term measures to eliminate congestion and prevent its recurrence.

In particular, the Group felt that anti-congestion committees representing all interests involved should be constituted immediately at congested ports. The scope of work of such committees would include; the introduction of measures to improve ports' productivity; the encouragement of speedy removal of cargo from transit storage; the leasing or purchasing of handling equipment; and consulting with shipowners regarding the contribution which they can make to resolve the problems.

Since congestion has national implications, the Group feels that action at that level is also necessary. Among measures which might be taken are strengthening the port's authority for removal of cargo and simplifying documentary requirements.

To supplement this action which countries suffering congestion should take, the Group recommends the mounting of task forces under the auspices of UNCTAD which could visit countries at the request of Governments concerned to help resolve existing or imminent congestion situations.

Such task forces might consist of 3 or 4 persons comprising expertise in port administration, port operations, labour questions, documentation aspects, etc. and they could perhaps spend 6-8 weeks in a country to add weight to the actions being initiated by the anti-congestion committee and other national interests to increase port capacity.

None of these measures should be seen as a replacement for long-term action to avoid congestion occurring, such as: the development of a master plan to ensure the adequate provision of port capacity and connecting transport links; ensuring that all staff and labour receive adequate training for the job they are required to do; full co-operation with port users and all organizations working within the port; the establishment of satisfactory maintenance of port equipment. Such steps may be enhanced by the co-operation of ports within a regional association and with other ports which have initiated successful measures to combat congestion.

Mr. Fentress Bracewell, Chairman, Port Commission
Mr. W.D. Haden, II, Port Commission
Mr. Marcella D. Perry, Member, Port Commission
Mr. Paul Drozak, Member, Port Commission
Mr. John H. Garrett, Member, Port Commission

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- General Chairman: Mr. Fentress Bracewell
- Chairman: Mr. G.W. Altvater
- Conference Coordinator: Mr. Michael Scorcio
- Members: Mr. C.E. Bullock Mr. Bruce Lyle
 Mr. R.P. Leach Mr. Middy Randerson
 Ms. Ivonne Brieger Mr. C.A. Rousser, Jr.
 Mr. W.R. Cook Mr. C.G. Seaman
 Mr. J.R. Curtis Mr. Ted Sumerlin
 Mr. W.D. Dunnahoe Mr. David P. Walsh
 Mr. J.K. Henderson Mr. A. Waterland
 Mr. Norman E. Hueni

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Chairman Mrs. Michael Scorcio
Mrs. W.D. Haden Mrs. C.E. Bullock
Mrs. Marcella D. Perry Mrs. R.P. Leach
Mrs. Paul Drozak Mrs. C.A. Rousser, Jr.
Mrs. John H. Garrett

— Official Photographers

Mr. Middy Randerson Mr. Carl Bond

IAPH Participation in the Simplification of Trade Documents

As reported in the previous issue, the IAPH participation in the international works for the simplification of trade documents, being originated from the IAPH Resolution adopted at the 9th Conference in Singapore, was further confirmed by the Executive Committee. In view of the fact, this international issue has been originated from the Economic and Social Council of the United Nations (ECOSOC), although many of international organizations are now involved, the initiative of the IAPH works will be guided by Mr. Anthony J. Tozzoli, Director of Marine Terminals, the Port Authority of New York and New Jersey.

The expression of IAPH resolution has also been noted by Mr. John A. Raven, Vice-President of the U.K. Board of Simplification of Trade Procedures (known as SITPRO UK Board) who certainly is one of the most active individuals in this field of international concern.

He recently contributed to us a message outlining the international situation and needs for the achievement of simplification of trade documents. This message was backed up by Mr. Tozzoli's comprehensive paper on "Information Systems in the Modern Port".

Simplification of trade documents and procedures has been and is one of the critically vital issues in the field of world trade, although it certainly is not an easy work. However, it is certain that IAPH can contribute to the establishment of the eventual goal.

As an initial step, we hereby introduce the above said two very important articles and request you all to be conscious of the significance involved, and further request you to give your active cooperation with the works to be under-taken by Mr. Tozzoli. (Head Office)

INTERNATIONAL TRADE FACILITATION AND WORLD PORTS

At the 9th IAPH Conference in Singapore last year much interest was shown in the resolution addressed to UNCTAD calling for simpler cargo paperwork, but few of those attending the conference seemed to be aware of the intensive national and international effort which has grown up in the last few years to rationalise every aspect of international trade procedures and documentation. The initiative in this work was taken early in the 1960s by a specialist working party of the Economic Commission for Europe which building on some existing Swedish examples, produced a basic "skeleton" lay-out key on A4 paper to provide a standard format and make up for a full range of the most important trade documents including the Bill of Lading, Certificate of Origin, Customs Entries, Certificate of Insurance and various road and rail transport forms. More recently this lay-out key has been used to design standard intermodal transport documents and the ECE has just completed work on a recommended aligned standard commercial invoice lay-out key.

Most of the impetus for the ECE work has come from a rapid growth of international trade facilitation committees in many individual countries. Starting with the United



Mr. John A. Raven

Kingdom and the United States such committees are now active in most West and East European countries, Japan, Canada, Hong Kong, Australia, New Zealand and more recently, India, Thailand and the Philippines.

These national organisations are essential factors in mobilising commercial support and government interest for the painstaking practical work of reviewing traditional procedures and associated documents and working internationally to produce new world standards.

In parallel with work being done by the Economic Commission for Europe and these national bodies there are now important facilitation activities in such other organisations as the International Chamber of Shipping, IATA, International Chamber of Commerce, Customs Co-operation Council, FIATA, IMCO and of course ICAO.

The ECE work is being extended into other UN regions notably ECLA and ESCAP where the secretariat has organised a number of practical missions to developing countries and which with the growth of national facilitation bodies in the region should soon have its own central facilitation activity.

In addition, UNCTAD itself has a very down-to-earth programme of expert assistance to developing countries on such important subjects as the organisation of national trade facilitation bodies and the introduction and promotion of aligned documentary systems.

International trade facilitation has two particularly important implications for IAPH members apart altogether from the enormous benefits that smoother and easier commercial and official procedures would bring to the normal movement of goods through major international ports. The first of these is the special help that can be brought to the solution of acute problems of port congestion. Nothing could do greater damage to the already difficult economies of developing countries than unnecessarily inflated capital outlay on physical port developments to solve congestion problems which would be unnecessary

if existing resources could be freed for fully effective use by improved cargo information systems. It was for this reason, that when speaking on behalf of the International Chamber of Commerce at a recent meeting of the UNCTAD Committee on Shipping, I offered ICC assistance to the UNCTAD secretariat or any expert study group which might be set up to examine port congestion.

The aligned standard shipping note introduced in UK ports for all export consignments is an example of practical facilitation measures which could be applied in many other ports to ease congestion problems.

The second facilitation project of primary importance to ports is the development of automatic data processing and data transmission to replace traditional paper based information-handling systems. IAPH members will have heard of recent work in this direction, in Hamburg and London. Some of them will also know about the more ambitious project being developed by Le Havre and Marseille. Much basic thinking and analysis is going into the development of these applications and it would be a gross waste if other ports were to be working in the same direction without the benefit of these pioneer efforts.

IAPH headquarters have a full knowledge of the objectives and organisation of the world international trade facilitation movement and can afford useful guidance and information to any member who might wish to follow up the references to this subject at the Singapore Conference.

INFORMATION SYSTEMS IN THE MODERN PORT

by

Anthony J. Tozzoli

Director, Marine Terminals

The Port Authority of New York & New Jersey

The steady growth in volume of international commerce coupled with the increasing speed and carrying capacity of the world's cargo fleet make it imperative that some major breakthroughs be made in modernizing cargo information systems. The message which Mr. Raven presents is an important one. Port administrators around the world must become involved in improving paper work systems, simplifying documentation and standardizing coding systems if our ports are to operate efficiently.

National organizations, such as SITPRO in the United Kingdom, SITPROFRANCE and the National Committee on International Trade Documentation in the United States, are devoting considerable energy to overcoming the barriers posed by traditional paper work systems. Their activities are for the benefit of all of us who are involved in international trade. In the United States, other private, as well as governmental organizations are working on various aspects of the problem. The Transportation Data Coordinating Committee in Washington, D.C. is working toward standardizing transportation codes and cargo descriptions. The Federal Maritime Administration is attempting, through its SOIS Program, to upgrade electronic data processing in the U.S. merchant fleet. The customs service is attempting to automate its processing and the Department of Transportation is sponsoring CARDIS, an attempt to integrate the information systems of all modes of transportation. Also, colleges, universities and consultants have added academic knowledge to the procedural problems involved in moving international commerce. Nevertheless, it is up to port administrators to translate theory

into reality. Ports must take a leadership role in speeding up the integration of information systems needed to support the modern transportation services now being provided in our ports.

The port is the focal point of the procedural processing of paper work as well as the focal point for the transfer of intermodal hardware involved in cargo movement. The large volumes of cargo now moving through our ports require an equal capability for high volume information transmission.

The vast technology employed to develop new methods of physically handling cargo has far out-distanced our information processing capability which is required to keep intermodal and multi-modal transportation systems operating efficiently. The standardization and simplification of paper work is the first step toward narrowing this gap. We know that any major business which has multi-departmental activities must develop systems, procedures and documents which integrate the organization's activities. Unfortunately, this simple truth has not been carried over into the complex world of cargo movement where as many as six or seven different companies might be engaged in processing a single cargo shipment!

From the vantage point of the port, information systems are of paramount importance because it is within the port that the various systems involved in international commerce converge. It is in the port that inland transportation routes start and terminate. It is where stevedoring and cargo checking occurs. It is where governmental agencies process and inspect goods. It is where brokerage transactions and financial services related to commerce takes place and where a host of other activities, such as insurance warehousing, packing, etc. all come into play to move cargo to markets and to the consumer. The visible symptoms of faulty information systems are port congestion, shipment delays, missed sailings, truck delays, lost goods, and a host of other ills which lowers the efficiency of the modern port.

Hopefully, within the next few years, our information systems will equal the efficiency of our physical distribution systems. This change will occur only if we start at once to work toward that goal. There is great danger in delay. The rapid growth of computer based information systems in transportation presents a sword with two edges. One edge promises salvation in delivering us from unmanageable paper work, the other edge promises chaos and confusion which will plague us into the 21st century. The latter situation stems from the undisciplined manner in which new systems are being adopted. Since there is no international blueprint for constructing integrated information systems, many of the new computer based systems will have built in incompatibilities which will make integration costly if not impossible to achieve. For example; the methods and procedures in computer based transportation systems are already greatly diversified; processing formats differ; procedural steps are eliminated by some companies and not others; partially automated/partially manual systems are in common usage, etc. In other words, the same procedural morass that we have sought to escape from in manual systems is now threatening to carry over into the electronic age.

Also, there is the matter of coding. The myriad of diverse commodity codes, location codes, and customer codes used by the various modes of transportation makes

(Continued on next page bottom)

Le Havre Represented IAPH at ICB Paris Meeting

In response to the invitation from Mr. P. Vernier, Secretary General, International Container Bureau, IAPH sent an observer to the meeting held on May 21, 1976 in Paris.

The meeting took the forum style under the theme of "The role of data processing and electronic management in containerised transport" attended by some 50 members from European countries.

Thanks to the kind arrangements by Mr. J. Dubois, Director General of Port of Le Havre, who is a member of the Committee on Containerization and Barge Carriers of IAPH, his collaborator attended the meeting and sent the following five papers to the Secretary General, which we take the pleasure of printing in this journal for the benefits of our members. (TKD)

intermodal communication virtually impossible. A common language must be developed which will allow communication to take place between the machines we have created to do our work.

What then should be the role of the IAPH in helping solve the problems of both present day paper work systems and tomorrow's electronic data processing systems?

One important role is obviously that of disseminating information among the membership of developments which are occurring in this vital area. Port organizations should have access to developmental work which has already taken place in other ports. This service could prevent ports from making costly mistakes as well as preclude the necessity of "reinventing the wheel." The experiences of IAPH member ports should be shared so that we may all work toward more efficient port operations.

Another important element would be in working with national organization involved in paper work simplification and code standardization to assure that solutions arrived at are compatible with operating conditions in the port and that the interests of the maritime industry as a whole are given consideration.

Finally the IAPH ports should attempt developing a "blueprint" for computer based information systems as they relate to international commerce. The ocean carriers which call at our ports carry their own information systems with them. The need to interface these systems with our land based service industries is becoming increasingly apparent. As an international port organization we should provide leadership in formulating procedural and coding standards which will allow for the eventuality of direct interchange of information between the computers of water carriers and land based transportation companies.

Programs of this type would appear to be in our best interest as port operators. Now that we have constructed our fine ports we must now see to it that they operate with efficiency and economy. The commercial advantages to be gained will not only benefit our individual ports but will help build a stronger international trade economy.

No. 1-TRANSMODALISM : TELE-COMMUNICATIONS AT THE SERVICE OF MARITIME TRANSPORTS

By Mr. Tien Phuc
Chairman of the Board of CECOTRAT

RESUME

INTRODUCTION

In order to meet increasing needs of exchange of goods and exponential demand of transport of people, the sector of transport, in its whole, is undergoing a permanent mutation, essentially directed on innovations of technology, capacity and commercial policy.

If priorities given to these innovations are different, depending on that is relating to transport by rail, transport by air, transport by sea or transport by river, the essential objective of this mutation is nevertheless common to every mean of transport, i.e.: to accelerate goods forwarding, and so, by attempting to unitarize and moving towards transmodalism.

The acceleration of transport process depends also in great part, on the quality of information exchanges which are necessarily accompanying it.

The volume of these informations and the multiplicity of various commercial aspects which are related to it, imply the setting-up of computerized network of telecommunications.

It seems thus, that all the conditions are presently favourable to create an adapted infrastructure of telecommunications for the sector of transports and particularly the maritime transport.

I. PRESENT STATE OF TELECOMMUNICATIONS IN SECTOR OF TRANSPORTS

The majority of transport operators use presently public networks of telecommunications, but these networks are not always in a position to give an entire satisfaction to their users.

Some companies use specific private networks: for instance airlines S.N.C.F., some shipping companies, thus the necessity of rapidity in informations exchanges, of transmission security and the fact that the sector of transports moves more and more towards the transmodalism, imply in fact that be created a generalized common network.

II. ATTEMPT TO DEFINE A COMMON INTRA-SECTOR MARITIME NETWORK FOR SHIPPING COMPANIES

The creation of a telecommunications network to be used by shipping companies would enable to connect between them main economic agents of the sector: i.e. exporters, goods forwarding or dispatching agents and various shipping companies.

This network would have to be conceived in a way to cover the greater part of exchanges areas.

Besides, it would enable various applications which the most promising could be the container booking system. The creation of such a system would constitute in fact a coherent ensemble facing two main future tendencies: transmodalism and containerization.

CONCLUSION

The fact to utilize a common network of telecommunications, besides economical advantages that represents, can enable the shipping companies to accelerate the processes of goods dispatching, to render possible an improved service to customers, and to give more available time for commercial activities and human relations, because shipping companies operators will be then relieved from routine constraints. Within such a scheme, a booking system for containers will be in fact an additional service within a generalized network of telecommunications.

No. 2-DATA PROCESSING AND ELECTRONIC CONTROL IN THE FIELD OF CONTAINERIZED TRANSPORT

HOW TO CONTROL BY COMPUTER MOVEMENTS OF CONTAINERS

(By G. HARDELIN, Data processing Manager, Compagnie Générale Maritime)

To speed up the flow of GOODS is the real target of containerized transport. As a direct consequence, the flow of DATA has to be sped up, too.

For that purpose, the computer is more and more involved in container control systems, covering the various sides of transport:

- Booking of a piece of equipment, and of space on board,
- Physical control of containers
- Port terminal operations
- Marine operations
- Freight documentation
- Cost analysis
- Optimisation.

The second point only, i.e. physical control of containers, is considered here after.

— OBJECTIVES OF THE SYSTEM: The problem is to satisfy in the best possible way the shipper requirements and to increase the return on capital invested in a park of containers.

More precisely, the control of movements must answer the questions:

- Where is the container?
- What is the container status?
- What kind of operation is concerned?

SYSTEM INPUT: The system is based upon two main concepts:

- STATUS: Through this concept, the answer to questions above is possible.
- MOVEMENT: A movement can be defined as a status change. Each status change is reported to the system by means of a message issued by the operational unit (terminal, depot).

METHODS: Messages can be transmitted:

- via a visual display unit directly linked to the

computer

- or via telex network.

The choice depends on processed volumes. The performances of each procedure are significantly different.

SYSTEM OUTPUT: It is related to:

- Daily operations:

- Present and previous equipment status.
- Park situation in a depot: types of equipment, available or expected.
- Situation of each type of equipment, per depot.
- Daily list of equipments per depot.
- List of overdue equipment.
- Booking lists.
- Management control information:
- Activity per depot
- Turn round of equipment
- Repairs
- Leased container tracking.

- POSSIBLE DEVELOPMENTS: an accurate knowledge of container movements is necessary prior to implementation of an efficient cost control system, based upon standard costs.

In conclusion, the increasing number of containers ashore and aboard brings about new problems:

- As far as capital expenses grow up, the interest of management efficiency is increased.
- Manual procedures are reaching their limits.

The following facilities are brought in by electronic data processing:

- Data capture close to data source
- Quick data transmission
- Data recording and dispatching of information when and where needed.

By cutting out redundant data, the computer makes information systems more reliable.

No. 3-IS THE COMPUTER REALLY AN EFFICIENCY TOOL ?

Georges Hartmann,
Doctor of political and economic sciences.
Deputy-President of ICB.

Extension of the human mind and a logical power multiplier, data processing increases the material power of businesses and their nation. That is why the computer should, without a doubt, be considered as a gigantic conquest, for "the only true conquests are the ones which push the limits of the impossible towards the possible" (Louis Armand). Computers exist which are capable of learning, deducing, adapting themselves to their surroundings, raising their standard of perfection; these are machines which have been constructed and instructed to benefit from the failures and the successes of their experience, and to have conditioned reflexes. Does the computer not therefore become the corner-stone of most of the problems of our time, wherever it is indispensable to calculate, to simulate, to foresee, to decide more rapidly and with greater precision than before? "The measure of success of a business concern in original innovation, depends on the quality of its management as much as, if not more than, on its research potential" (J. Spacy, president of the scientific

policy Committee of the O.E.C.D.). Now, does the computer not seem to be a management tool in the highest sense of the word?

In order to solve their problems of rationalizing, and to keep up with ever greater expansion both in the volume of business and in the documents required in all industrial, commercial, banking, transport, administrative branches, a large number of companies, business concerns, public and private authorities, as well as professional associations, can no longer henceforth do without the computer. The latter goes into operations which, by man, are called intellectual work, often routine; and it thus executes better and more rapidly what man carries out with great effort and fatigue, thanks to the unexpected faculties with which it is endowed: it sees, reads, recognizes, understands, memorizes, analyses, compares, calculates, selects, appreciates, chooses, decides, translates, replies in writing, visually or orally, discloses what is anonymous, represents what is non-existent.

Since business management, both in planned economy and in working economy, or even in their mixed form, consists of obtaining a maximum profit (requiring different distribution according to the economic regime), we can claim that no activity of any great scope can be conducted without the computer, even if only for reasons of competition. Mathematics, physics, chemistry, astronomy, biology, medicine, psychology, economics, business management, sociology, linguistics, even artistic creation and other subjects as well, can no longer do without the invaluable and increasingly indispensable help of the computer. In most branches of primary, secondary and tertiary human activities, important advantages in productivity (costs, speed, preciseness, quality, etc. . . .) and in efficiency, are being sought in its applications.

Experiments carried out in the management of goods in stock, show that savings of 15–20% are possible on investments (floor-space, installations), and from 10–20% on costs. Banks which henceforth reduce the costs of certain routine work and increase their work productivity in this way, are not rare (e.g. up to 90% in the annual calculation of interest). Insurance companies have noted the same: several years ago it was generally known that in order to establish 1,000 insurance policies requiring repetitive work, 1,000 hours of manual handling were necessary; 75 hours with an adding machine; 8 hours (–92%) with a mechanographic device using punch cards; and only one hour (–99%) with a computer. Either that; or else average-sized municipal offices (St. Gallen), in all the sectors which it runs, and municipal savings banks (Munich), managed to save approximately 20% of previous expenses thanks to the computer, and to diminish the length of working operations by as much as 90%. By increasing its business volume by 7% and its yield-capacity through the work of agents by 10%, the Darmstadt savings bank reduced its staff expenses by 20%. Income tax offices, for their part, combat fraud thanks to computer cross-checking and they thus glean considerable amounts for the general benefit of taxpayers. Even though we may be aware of the high costs involved in their purchase, computers can be paid off quite rapidly (from 1–5 years according to usage).

Has data-processing not become an efficiency tool to be used to its greatest advantage in the interests of man? The wide scope given to the numerous applications of the computer in the exposé, enable us to disclose how it can help to relieve in his intellectual tasks and in his physical

efforts, while at the same time creating new work-openings and new activities.

But, if man has, so to speak, transferred certain of his own qualities onto the computer which is regular, precise, swift, untiring, disinterested, capable of learning and correcting its mistakes, this machine indubitably behaves only in accordance with rules imposed by its constructor and operator, and it is inalterably characterized by total lack of imagination, intuition, emotion, solidarity, confidence and awareness of its existence.

No. 4-THE USE OF EDP IN PORT CONTAINER TRAFFIC

Summary

(M.E. DEFOSSEZ—Port Autonome de Dunkerque)

I—CHARACTERISTICS OF PORT CONTAINER TRAFFIC

The operations on a port container terminal can be featured as follows

- specialisation
- standardisation
- speed
- recurrence of identical operations
- more concentrated responsibilities as compared with conventional traffics.

Such facts undoubtedly speak in favour of the use of EDP.

Whereas when human judgment plays a leading part, the help of the computer remains very limited; on the contrary the computer is particularly suitable to deal with well defined, simple and repeated operations, and, when the volume of data to be processed is considerable only the computer can do it within an acceptable time owing to its enormous computing speed.

Therefore the suitability of the computer to give help in port container traffic cannot be denied and is then extensively used.

II—EXAMPLES OF POSSIBLE USE OF EDP IN PORT CONTAINER TRAFFIC

II. 1—Design of installations

In order to define the necessary equipments of an important port installation such as a container terminal a few possible solutions are generally investigated and in each case one makes sure that the installation meet the required working conditions.

Then the selected solutions are examined from an economical point of view.

More and more, this kind of comparative study consists in operating a simulation model.

The method consists mainly in describing the running of an installation with a chronology of operations which is worked out taking into account the capacity of the various equipments and the working procedures and giving then a statistical analysis of the events.

The main difficulty of this type of model lies in describing very accurately the working process by the means of mathematical formulae.

The more the process requires human interference the more this description is difficult, on the contrary the more the process is mechanical and the operations repetitive the

more this description becomes easy, and this is the very case of container terminals.

The port of Dunkirk authority is now developing in collaboration with others French port authorities an important model representing the general working of a container terminal.

II. 2—Running of a container terminal

With the container traffic, operations are considerably speeded up as compared with conventional traffic and it can be difficult for the information necessary to the agents concerned to keep pace with the boxes and the circulation of information can then be an impediment to an easy working process.

It is therefore necessary to think a proper organisation for the grouping, processing and transmitting of the information relevant to this type of traffic.

An alternative which is used on many terminals is EDP.

The system used can be more or less important but the principle always consists in recording permanently the relevant data and in particular the movements of boxes on the terminal, processing them with a computer and giving to the persons in charge the possibility of questioning the computer in order to obtain the information they need.

II. 3—Custom procedure

Custom Authorities play a prominent role for the development of foreign trade and became obviously concerned with the new techniques such as container and did not hesitate to change often very significantly, their own procedure to—favour their development.

In fact Customs Authorities are particularly interested in the implementation of working procedure on the terminal that give them any guarantee. In particular the use of EDP and of a telecommunication network allowing the quick transmission of information give them the possibility to organize this control in such a way that they can be perfectly combined with the commercial process without hindering it.

However one must observe that until now the rationalisation of custom procedures thanks to the use of computer is limited to the operations on the terminal itself and is not extended to the customs declaration made by importers and exporters.

Can the automatization of this control—technically possible—be contemplated? such a question remains to be answered.

At the end of this speech it can be observed that the port is only a mere link in the transport chain and in implementing a port information system, one must take account of the information system used by other economic agents concerned with transport.

No. 5-APPLICATION DE L'INFORMATION A L'EXPLOITATION DES CONTAINERS

By Mr. R.D. HELMKE—Hapag-Lloyd—Hambourg

“Intercompany Information Exchange and Processing
In Maritime Container Traffic”

The container changed the flow of cargo from port to port into house to house.

The speed of the container vessels reduced the transit

The Australian Ports' Association will convene 25th Biennial Conference

Mr. A.J. Peel, President, the Association of Australian Port and Marine Authorities informed the Secretary-General that the Association will be holding its 25th biennial Conference at Melbourne from 25 to 29 October, 1976, under the hostship of the Melbourne Harbor Trust Commissioners. (rin)

16th Seminar on Ports and Harbours in Japan

A two months Seminar on Ports and Harbours, organized by the Japan International Cooperation Agency which is the Japan's sole governmental agency responsible for government-to-government cooperation programme is now being held here in Japan. The Seminar on Ports and Harbours is one of some 500—600 seminars and training courses of various categories which are being conducted by the Agency. There is, in addition to the Seminar on Ports and Harbours, one training course for engineering in the Agency's international cooperation project.

Bureau of Ports and Harbours of the Ministry of Transport, a Regular Member of IAPH, is acting as the coordination agency in the Seminar. Also involved in the Seminar are many of ports of Japan in providing facilities for the observation and lecturing.

Mr. Taisuke Sameshima, Technical Counselor of the Bureau, in his speech on the occasion of a welcome reception held for participants of the seminar on May 27, addressed to 18 participants from 15 countries that the seminar as well as training course are aimed not only for providing chances of studying techniques of administration, management and engineering of advanced nature with those participants but also for establishing international friendship among those participating countries. (rin)

time between Europe and Overseas.

The container led to new tasks also in the field of data processing.

The major task was to master the transport of information from house to house, i.e. throughout the chain of transport.

The master this we took into consideration two alternatives:

1. Data base system
for the chain of transport or parts of it
2. Intercompany information exchange and processing, including a Hapag-Lloyd corporate data base system and off-line programmable and intelligent visual display units for data entry and data transmission.

We decided to carry on with the 2nd alternative.

The Marine Documentation System and the Container Control System are two examples of intercompany information exchange and processing in maritime container traffic.

Standardized data carriers with standardized data elements are in operation between Europe and Overseas.

48th Annual Conference of Japan Port and Harbour Association

Japan Port and Harbour Association had its 48th annual conference in Tokyo on June, 3, 1976, attended by some 1,000 people engaged in ports and harbours in Japan.

Dr. Shizuo Kuroda, President, introduced that the 5 Year Plan for Port Improvement (1976-1980) was approved by the government as the basis of the improvement works of ports and harbours of Japan during the next 5 years.

According to his information, the Plan includes some 3,100 billion yen (10.3 billion dollars) investment to be made during the term for the improvement works with emphasis on the improvement of environmental problems rather diverting from the past tendencies of port improvement by construction of new facilities in recognition that ports and harbours can contribute to peoples' lives more organically and efficiently. (rin)

Publication of "Institute of Shipping Economics" Bremen

Dr. Hans Ludwig Beth of the Institute of Shipping Economics, Bremen, informed that the Institute's periodical "Shipping Statistics" featuring in monthly basis of figures of shipping, shipbuilding, ports and sea trade are available on sale.

In forms of up-to-date surveys, statistics, and graphs, in English and German, tell about all relevant developments in shipping economics. Among others, the following items will be included:

Original statistics concerning the world merchant tonnage

Original statistics of the national tanker and dry cargo fleets

(details on deadweight, load and bunker capacities)

Original statistics on broken-up and laid-up tonnage

Surveys on the development of shipbuilding in the world, and

Port and canal statistics as well as data on sea-borne trade

According to his information the publication is available at the prices of DM 10.00 (plus postage) per loose copy and DM 90.00 for annual subscription (plus DM 4.80 for postage by ordinary mail) respectively.

The address of the Institute is as follows:

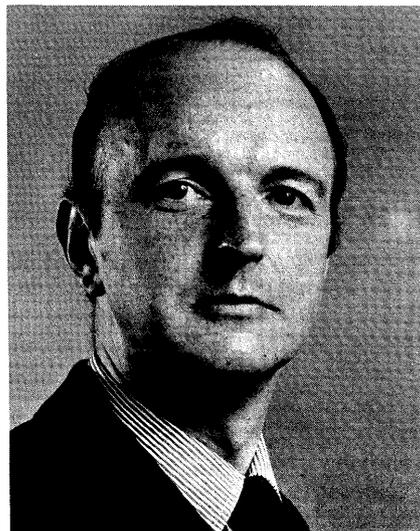
Institute of Shipping Economics
2800 Bremen/Germany
Hollerallee 32 (rin)

B.P.A. introduces computerisation in U.K. Ports

Mr. A.J. Smith, Secretary, British Ports Association recently informed that the 98 page report entitled "The Use of computers by Port Authorities in the United Kingdom" is now available on sale at the price of £3.00 (excluding postage).

The report, prepared by Computer Committee of the British Ports Association discloses the current situation in the U.K. Ports in the field of the application of EDP systems.

The address of British Ports Association is as follows:



Mr. J. Keith Stuart, M.A.

Mr. Johnson Introduces BTDB's New General Manager

Mr. Stanley Johnson, IAPH Third Vice-President, has resigned as Director General of the British Transport Docks Board and has been succeeded by Mr. J. Keith Stuart, M.A. from 1st January 1976, so appointed by the Minister for Transport.

While Mr. Johnson remains as the B.T.D.B.'s Representative to IAPH carrying on his office as IAPH Third Vice-President, he wishes to introduce his successor, Mr. Stuart, General Manager of the British Transport Docks Board to IAPH members through this journal. (TKD)

Visitors

On June 11, 1976, two port men and one computer expert from U.S.S.R. visited the Head Office. They were Mr. Nikolai I. Spas, Manager, Commercial Department of Vostochny Port and Mr. Leonid Alexandrovich, Manager of Cargo Handling Department of the same port, and Mr. Viacheslav P. Semikolenov, Deputy Head of Main Computing Centre of MORFLOT (Ministry of Shipping). Dr. Hajime Sato, Secretary-General, introduced the outline of the IAPH's purposes and objects and emphasized the necessity of establishing international friendship among the ports of the world.

They have been in Japan attending a computer seminar organized by the Mitsui Engineering and Shipbuilding Company for orientation training for the operation of computerised container terminal of the Port of Vostochny.

A highly sophisticated computer system is to be installed for the data processing of container handling at the Vostochny Port in order to cope with the ever increasing container traffic in the Far East-Europe via Siberia.

Mr. Semikolenov is an expert in the EDP matters and worked as delegate of U.S.S.R. in an international cooperation of the simplification of trade documents. (rin)

British Ports Association
3 Queen Square, London WC1N 3AR, England (rin)

UNITED STATES PORTS AND HARBORS AND THE AMERICAN BICENTENNIAL

By Anthony J. Tozzoli
Director of Marine Terminals
The Port Authority of New York and
New Jersey
and
Member, Executive Committee,
International Association of Ports and
Harbors



Mr. A.J. Tozzoli

The United States of America, one of the greatest maritime powers the world has ever known, is celebrating its bicentennial this year, 1976. During its 200 years of existence, the United States has relied on waterborne commerce more than any other transportation mode and its foreign trade, moving principally by sea, is the keystone of its economic growth and maturity.

Indeed, it was America's fine natural harbors which made possible the settlement of this great country more than three centuries ago and attracted permanent settlers to the nation. Many of our leading cities, my own New York foremost among them, as well as Boston, Philadelphia, Baltimore, New Orleans, San Francisco and Los Angeles—were the first areas to provide safe refuge for the early explorers and settlers.

Later when trade with the mother countries grew, American pioneers pushed toward the center of the country via its great inland river systems—the Ohio, Mississippi and Missouri, as well as the smaller tributary waters leading to them and linking these inland ports to the rapidly growing coastal communities.

By 1770, six years before the revolution, New York was fourth in the total of tonnage arriving and departing. Philadelphia lead with 47,000 tons, Boston was next with 38,000 and Charleston, South Carolina third with 27,000 tons, followed closely by New York with 25,000 tons.

Revolutionary War Began Over American Rebellion at Paying Import Duties

The American colonies battle for independence stemmed from excessive and burdensome import duties levied on their mercantile interests, beginning with the Sugar Acts of 1733 and 1764. And the story of the Boston Tea Party in which colonists posing as Indians dumped tea into Boston Harbor rather than pay what they considered taxation without representation to the British is too well known to bear repetition here.

Port cities played their important part in the Revolution. Our own New York-New Jersey Port was an unsung battleground and the center of America's fight for liberty as the British tried to split the Northern and Southern seaboard colonies by controlling the Port.

In battle after battle, General Washington and his Continental Army appeared to be beaten by the more

experienced, better equipped Redcoat and Hessian soldiers and New York itself was captured and burned by the invading British.

I need not recount the rest of the story of the War of Independence here, except to say that it was the presence of the French fleet at Yorktown that ultimately enabled the colonists and General Washington to win the final major battle over Lord Cornwallis in 1781.

New York and its sister ports, returned to patriot hands, were able to help the new United States to prosper and expand. With the development of the steamboat between 1787 and 1807, and the building of the Erie Canal in 1825, linking the Port of New York-New Jersey via the Hudson River to Lake Erie and the West, a new chapter in Port



The Great Dock, shown here in a sketch made in 1679, extended from Whitehall Street to Coenties Slip, in front of City Hall, and provided New York with its first major commercial dock.



Aerial view of Port Newark and Elizabeth-Port Authority Marine Terminal, looking south

history was about to begin.

From Civil War to World War II Ports Protect America from its Enemies

It was not without significance that Francis Scott Key's "Star Spangled Banner," the national anthem of the new country was written at Fort McHenry during the War of 1812 in the shadow of another great United States port, Baltimore. The besting of the vaunted British Navy by the young U.S. Naval Forces in this war with battles in the Great Lakes as well as New Orleans enabled the new nation to survive its first real military test.

Later in the famous Civil War or War between the States of 1861–1865, the ability of Northern port cities to continue to trade in the face of the Southern blockade played an important part in permitting the Northern industrial might in wearing down a tenacious and well-led foe.

It remained for World Wars I and II to demonstrate the capability of our port cities on both coasts to supply our own troops and those of our allies over great sea distances. The Panama Canal, pushed through by America in the early 1900's, opened in 1914 to link the ports of these two coasts in peace as in war.

Following World War II, in 1959, the United States and its neighbor to the North, Canada, opened the St. Lawrence Seaway, thereby giving America a fourth coast—the inland port cities of our five Great Lakes with 8,300 miles of shore line, directly bordered by eight States. This fourth seacoast augments the foreign trade capacity of our Atlantic, Gulf and Pacific ports and help the economic well-being of our cities, states, and the entire nation.



Elizabeth-Port Authority Marine Terminal

The Impact of United States Ports on the American Economy

There are approximately 130 seaports in the United States capable of accommodating ocean-going vessels, according to the Office of Ports and Intermodal Systems of the United States Maritime Administration.

The American Association of Port Authorities is an association of about 80 of the leading United States ports which was founded in 1912 in New York City. It subsequently has been expanded to include a number of ports from Canada and Latin America to make it truly an American port association.

In 1972 the AAPA distributed questionnaires to all United States port entities to determine how many people who live near ports earn their livelihood directly from the handling, documentation, promotion and financing of international commerce. The response: well over 1,200,000 persons living in those areas depend entirely or directly on port business and activity for their existence.

Who are these people? The biggest single category, tidewater industries—businesses which must be located at the water's edge: employ a total of nearly 400,000 workers.

Other jobs: 72,000 registered longshoremen, supplemented by 24,000 longshore casuals; 26,000 warehousemen and export packers; 33,700 employees in international departments of banks; 95,000 in wholesaling for export-import; 33,600 local motor freight carriers; 95,000 over-the-road truckers and railroad workers; more than 9,700 jobs in marine terminal construction; and 110,000 in ship construction/repair.

Also 6,000 people in marine insurance firms; 17,400 ocean freight forwarders; 29,000 in maritime leasing, etc.; 19,000 towing and barging; 46,000 steamship brokers, agents and employees; 11,000 in trade bureaus and 1,581 pilots guiding ocean-going vessels in and out of ports.

America's Ports Today The Container Revolution in Shipping

Shortly after the American Revolution, New York



Aerial photo showing Berths 68-74 in Elizabeth

surpassed Philadelphia and before 1800 became America's busiest port. Even today with all the competition from the burgeoning number of ports on four great seacoasts, the Port of New York-New Jersey handles twice the value of general cargo imports and exports than that of any other port.

It may come as a surprise that The Port Authority of New York and New Jersey has been in the marine terminal business less than 30 years. During that time, it has been our policy to provide the best possible marine facilities consistent with the concept of self-support. Our marine facilities today represent an investment of more than half a billion dollars in modern and efficient piers and docks in Brooklyn, Hoboken, Newark and Elizabeth.

We are particularly proud of the container complex in Newark and Elizabeth. The Port of New York and New Jersey is the acknowledged container capital of the world. It holds this position only because the Port Authority almost 20 years ago anticipated the container revolution in shipping and constructed these container terminals. Indeed the port has now reached the point where it is equipped with sufficient marine terminal capacity to meet the demands of the next decade.

Containerization Figures

It is significant that world container port traffic as expressed in TEU (twenty-foot equivalent units) shows the United States in first place in 1974, the latest year available, with 5,758,802. Japan is second with 1,770,762 TEU, and the United Kingdom a close third with 1,770,531.

New York, the world's leading containerport, alone handled 1,836,000 TEU in 1974, followed by second place Rotterdam, 939,469; and Kobe, in third place with 839,049. Three other United States ports—Oakland, No. 6, with 545,355 TEU; Seattle, No. 7, 430,511; and Long Beach, ninth, with 401,130 were in the top 10 world ports in container traffic.

The above data, from the Containerization International Yearbook 1976 is only one measure of port effectiveness. It is of course no indication of continuing large amounts of

conventional breakbulk traffic, nor does it include the bulk commodities so important to certain United States ports and their hinterland areas.

The Future of United States Ports

Alfred M. Eschbach, of Portland, Oregon, the new President of the American Association of Port Authorities, believes that the seaport of the future—say in the year 2000—will be responsive to the need, whatever that is.

Mr. Eschbach, in a recent interview, stated that two trends are at work in terms of the physical port. "I cannot see ship channels getting much deeper," he told American Seaport in May. "Many of us feel that a maximum standard in channel depth is coming. That's an economic and environmental trend, having to do with the shrinking public dollar and the expanding cost to deepen and maintain the depth, especially within environmental constraints. The merchant vessel will have to conform to the channel, rather than the other way around.

The AAPA President also predicted that channel width has also reached optimum limits. "In busy channels," he said, "electronic guidance of vessels is being seen as the alternative to widening . . . costs for widening and maintaining the width are as prohibitive as those for deepening."

Mr. Eschbach also predicted more electronic hardware both for cargo spotting and checking and for security. Looking to the year 2000 and population and world trade trends, he admitted that the unsolved problem is financing the port facilities we will need for the kind of traffic flows that are coming.

United States Ports and IAPH

Fortunately, United States ports need not depend entirely on their American colleagues for their exchange of technical and financial information to meet port problems. Twenty-six United States port organizations are members of the International Association of Ports and Harbors, and the Port of Houston will host IAPH's 10th Biennial Conference in April 1977.

Mr. George W. Altwater, Executive Director, Port of Houston; Mr. Ben E. Nutter, Executive Director, Port of Oakland; Mr. Thomas T. Soules, Port Director, San Francisco Port Commission; and I am represented on IAPH's Executive Committee. Mr. Altwater is also the organization's First Vice President, while I serve as the organization's Liaison Officer with ECOSOC (United Nations Economic and Social Council).

The United States is also well represented on IAPH's special working committees. Mr. Nutter is Chairman of the Special Committee on Containerization and Barge Carriers; and Mr. Thomas J. Thorley, General Manager of the Port of Long Beach is Chairman of the Finance Committee.

(This article was originally contributed to "Japan Times", a major daily news paper in English language, for its special edition featuring the American Bicentennial.—rin)

The aims of the Port of Rouen Authority in the VIIth Plan

Rouen, France, January 16th 1976 ("Rouen Port" International Issue, Information Bulletin of the Port Authority of Rouen):—During a day of information for the members of Conseil Régional and of the Comité Economique et Social de Haute-Normandie, which was laid on for the 11th September, the Port of Rouen Authority outlined her objectives within the framework of the VIIth Plan, and set them in the context of both national and regional economy.

Rouen Port : job creator

It is not surprising that the aims of the Port of Rouen Authority in the VIIth Plan were made public for the first time on the occasion of this Information Day for the regional assemblies, because Rouen port functions as one of the chief driving forces in the economy of Normandy. With its 1,350 agents, Rouen Port figures among the greatest enterprises in the region. The total figure for wages and social security payments has risen to 60 millions francs a year, and the Port Authority annually puts in hand nearly 80 million francs projects, most of which are in the hands of undertakings in the region (public works, building, metal construction, electrical works, etc...). Equally for the benefit of the region, Rouen Port laps the resources of shipowners and shippers outside the region.

On a wider perspective, one job in every four or five in the Rouen perimeter can claim to be directly or indirectly connected with the Port's operations. It is particularly noteworthy that ancillary jobs are to the fore (maritime agencies, transport people, Customs, Banks, Insurance Companies, etc...). Moreover, each year some 80,000 officers and sailors passing through give a far-from-negligible boost to the town's trade and other activities. Nearly 70% of Rouen Port's trade is derived from the region's own industries, or from merchandise freighted to them. Rouen Port, therefore, reflects the prosperity of the whole region, and provides considerable support in increasing this prosperity by her own development.

The geographical siting of the Port along the 120 km. of the Seine from Rouen to the sea, confers on her a very important physical advantage which leads to frequent co-operation with local authorities. This co-operation takes place in a spirit of working together, well in evidence in the workings of the «Syndicat Mixte» at Port Jérôme or at Honfleur.

In addition, the two banks of the Seine (forming a total of over 200 km.) are really an extension of the maritime frontage of the region.

This gives Haute-Normandie activities particularly connected with the sea.

A well ordered development

Rouen Port's expansion is not taking place indiscriminately. It is not a question of bringing into existence a continuous industrialisation programme along the whole river. The schema d'Aménagement de la Basse-Seine has

planned to split up industrial zones.

The Port instigates an active policy of preserving the quality of Normandy life:

— Rouen takes part in the struggle against pollution and nuisances.

Measures taken against pollution of water are already proving effective, since the deterioration trend has been reversed. The Port of Rouen Authority belongs to all the associations concerned in putting into operation the studies, the monitoring and the warning systems for the prevention of pollution in the Lower Seine atmosphere, and it is financially committed in keeping these monitoring systems in operation.

— She is helping in keeping industrial zones humanised and in blending these zones into the landscape (by creating open spaces to separate industrial zones from each other and by taking a hand in the planning of the Grand Couronne/Moulineaux industrial zone...). Experimental plantations have been undertaken to establish which kinds are the most suitable.

The third-world port

Multinational development is making France export more and more in order to pay for raw materials which are greatly increasing in price. The countries Rouen deals with most are the very countries of the Third World which are at the moment benefiting most from the increase in the price of raw materials (phosphates, crude oil, etc.).

While these conditions prevail, it seems that ever-increasing amounts of merchandise must be transported from all the French ports during the period of the VIIth Plan, but more especially from those ports which have developed special relations with the «nouveaux riches» of the world.

It is well to emphasise, for example, that Rouen offers 40 departures a month for the West African Coast, where countries like Nigeria, the Ivory Coast, Senegal, etc. . . . are at the head of important financial resources.

If redeployment of the French economy and increased French exports are to be encouraged, it naturally follows that ports in the area must be developed, and Rouen in particular.

Rouen/Le Havre : a homogenous complex

These activities actually form one of the major options in the Basse-Seine with its two great complementary ports, one facing the sea, the other 120 km. inland. Together they make up the leading French port complex. The two ports that the region is lucky enough to possess give to the regional policy-making a very interesting operations field. The activity of the two ports is, in addition, complementary and inter-related.

By reason of her nautical potential, Le Havre has naturally inclined towards the reception of the very big ships and the very heavy industries which require space; Rouen aims to deal with average ships and the trans-

formation industries, or those needing to be near their immediate markets. Rouen draws from Le Havre the crude-oil necessary to keep the three refineries in the Port running.

On the commercial field, the two ports have their fairly clearly demarcation lines; the Americas for Le Havre and Africa and the Arab countries for Rouen, for example.

Thus the region possesses a homogenous port complex well co-ordinated, yet with a certain rivalry, a situation that is very healthy in a liberal economy. The common monthly meetings between the Boards of the two ports, the participation of one port chairman in the other's board of directors avoids in any case the negative effects of competition, particularly when it comes to choosing investment projects and development plans.

VIIth plan : Rouen port's objectives

Rouen Port's maritime trade has been a little over 14 millions tonnes in 1974 (about 4 million tonnes of bulk liquid, 7 million tonnes of bulk solid and 3 million tonnes of general cargo).

In 1980 the estimated trade will be from 18 to 20 million tonnes (5 million tonnes of bulk liquid, 10 million of solid bulk and 4 million of general cargo).*

During the period of the VIIth Plan, the Port of Rouen Authority must adapt to the growth of her trade, particularly to the foreseeable increase in her exports to the Third World.

The Port must also pull to their fullest efficiency the results attained during the VIth Plan.

The Port Authority wishes to undertake the following operations:

Navigation

● **Accommodating bigger ships:** We must face up to the needs of bulk transport (coal, phosphates, cereals, hydrocarbons . . .); our objective is to be able to cope from now till 1980:

- at Rouen, ships of 40,000 tonnes fully laden.
- at Port Jérôme, and at Honfleur, ships of 60,000 tonnes fully laden.

The amount to be devoted to improving the channel of Rouen (35 million francs per year) is relatively modest, being only one per cent of the turnover of the port enterprises (industrial and allied) which is estimated at 3,500 million francs per year.

● **A new dredger into service:** The two dredgers responsible for maintaining the Rouen channel have reached the limit of their usefulness; replacing them by one single dredger of 3,000 c. metres capacity (costing 55 million francs) should be done as quickly as possible so that the channel can be maintained under economically acceptable conditions.

Equipment

The proposed programme is chiefly designed to boost the development of general cargo trade, particularly in exports.

* Rouen Port's trade does not go into a spectacular total tonnage because her imports of crude oil are not significant in volume. However, her commercial importance is comparable to that of the two leading French ports (Marseilles and Le Havre.) In fact, you can take it that value added by port handling of bulk cargoes is twice as much as for petroleum products, and ten times more value for general cargo handling than for petroleum products.

● 1,400 metres of new quays

– lengthening by 400 metres the Rouen-Quevilly Quay (600 m. is at the moment in service, with another 600 m. being finished; in autumn 1976 this will become the centre of the container trade with two gantry cranes which has just been ordered and two specialised cranes; 50,000 containers will be handled per year, as compared with the present 12,000).

– new quayside of 400 m. at Moulineaux (chiefly with the Renault factory exports and car trade in view).

– new 400 metre quay at Grand-Quevilly (the sector known as «Hauts Fourneaux de Rouen») for trade in large consignments of homogenous produce such as flour, timber, pipes, plants . . .) similar to those now in use at Quai de Petit-Couronne.

– construction of a 200-metre quay at Honfleur (a 122-metre quay is under construction at the moment.)

● Ro-ro berths

– a berth at the Quai de Rouen-Quevilly to complete the arrangements to receive containers (containers on Mafi trailers for instance).

– a berth on the Rive Droite to replace the two berths at the moment in service at Bassin St-Gervais and at Biessard, which are obsolescent as far as technical performance is concerned.

The construction of these berths for roll-on-roll-off traffic, as well as the work already in hand for a container terminal at the Quai de Rouen-Quevilly, will allow us to face up to the impending share envisaged for modern techniques in the general merchandise trade (10% in 1974; 20% in 1980).

Industrial sites

– Honfleur (Z.I.P.E.C.): rail and road access, and preparation of a first batch of industrial sites.

– Port Jérôme: purchase and equipment of a new batch of industrial areas by the Syndicat Mixte and the Port Authority.

– Grand-Couronne/Moulineaux: VIIth plan batch.

The grand total necessary for bringing about this programme of work reaches:

● on a low estimate: 445 million francs (300 m. of which will be a charge on the State.)

● on a high estimate: 565 million francs (332 m. to be a charge on the State.)

These figures are in accordance with the financial capacity of the Port Authority, and will not involve increases higher than the drift of prices.

This programme will succeed on the supposition that a certain support column is, of course, to be relied upon; a good liaison between the hinterland and the port.

Rouen Port looks chiefly to have the right liaison with the North (the Neufchatel and Amiens road, and the road to Beauvais and Rheims) as well as with the South (following on the Alençon works.). Certain work should also be undertaken by the S.N.C.F. to improve the shunting and track for wagons to the quay.

It is as well to recall also the importance to the Basse-Seine of getting on with the Seine-East liaison, which underwent considerable delay under the VIth Plan, and which would allow (by completing the Compiègne-Rheims section) us to bring back to the Basse-Seine an important trade which has swung to Belgian and Dutch ports, a fact

(Continued on next page bottom)

North Florida Port of Jacksonville Eyed by Far East Traders

News Release from Jacksonville Port Authority

Jacksonville, Florida, 5-12-76:—This city's business community, elated that the State of Florida finally is recognizing the need for wooing industrial development, is carefully assessing the significance of last month's (April) "get acquainted" visit here by a group of Japan's top industrialists.

The corporate heads of three Japanese firms with annual sales totaling \$57 billion were generally non-committal as they inspected port facilities, industrial parks and Japanese enterprises already in operation, but they admitted they were trying to determine how well Jacksonville and Northeast Florida can fit into their industrial investment plans.

The group, one of three Far East delegations touring the Southeastern United States, included Eiichi Hashimoto, chairman of the \$26-billion-per-year Mitsui & Co., Yohei Mimura, managing director of the \$30-billion-a-year Mitsubishi Corp., and Tetsuzo Miyazawa, managing director of the \$770 million-a-year Sumitomo Electric Industries.

Florida's Economic Development Division Chief Joe Hennessey said the Japanese industrialists are eyeing Jacksonville first because of the concentration of Far East

which is contributing to the adverse French balance of trade figures. In connection with this, we should note that M. André BETTENCOURT, interviewed on French television, emphasised that, in his opinion, the Seine-East, and especially the Compiègne-Rheims section, would come up with an economic return which should put this work at the head of all river-basin works to be brought to fruition.

Equally, he gave perfect expression to the importance of links between Rouen and his port; M. BETTENCOURT stated notably, that «it is quite certain that in the future of our region, Rouen holds a very important place, as much in Seine-Maritime affairs as in the Eure; and if certain questions were asked formerly, it now seemed that the policy which was adopted up to now and which has already borne fruit is on the right road; that you made no mistake; that you led us sometimes a little further than we had wished, but you have done well, and now, in the subsequent light of events, of trade, of national and European and international events, we cannot but acknowledge that you were right; we cannot but support you still for the course of action that you have to follow.

If you had not persisted in this course of action, probably the town of Rouen would not be today what it is, and the industrialisation in the region, even around Rouen, would have been finally impossible, and the great industrial undertakings which you have every right to be satisfied about, which are very important realities both on the economic and on the social level, would never have come about.»

trade already being funneled through the North Florida port.

After their 10-hour ground and aerial tour of The Bold New City, the party flew to Tallahassee for talks with Florida's Governor Reubin Askew, who two weeks earlier greeted Japan's Southeastern consul general, Kazuo Chiba, also in Jacksonville.

Askew, who says he now is giving top priority to economic development, made a strong pitch for Far East investments in his state.

Chiba indicated North Florida could well attract some of the millions of dollars in Japanese trade and investments because of Jacksonville's deep water port and labor conditions and the area's communications and transportation networks.

The Jacksonville Port Authority's managing director, James J. Scott Jr., who escorted the visiting industrialists on a helicopter tour of the JPA's two marine terminals, told them the Port Authority recognized the significance of the Japan trade potential several years ago.

The JPA became actively involved in the development of the Far East trade potential in 1969, he said. Since that time, many millions of dollars have been invested by the Authority to improve its marine facilities, and capture a greater share of the rapidly increasing Japanese trade.

"The results have been gratifying as well as profitable," said Scott.

"Today, thanks to our mutually beneficial association with the Japanese business community, the Port of Jacksonville is the largest port of entry for imported vehicles in the Southeast and a major contender for more of the rapidly expanding container business. We also are the only port in the State of Florida handling containerized citrus products for export to Japan."

The competition has been—and is—tough, said Scott, but the JPA recognized many years ago that in order to interest shippers in using the Port of Jacksonville, the Authority had to have as good or better facilities than its competitors. And when your competitors are ports like Savannah and Charleston, both of which are state supported, it becomes especially difficult to keep ahead of them when you are committed to financing all of your capital developments with revenues generated almost entirely by JPA's own operations.

To entice Japanese businessmen to use the Port of Jacksonville, the JPA has been continuously improving and expanding its marine and air facilities. Particular emphasis has been placed on Blount Island, where efforts have been concentrated on the container business, but improvements also have been extensive at Talleyrand Docks and Terminals, where a large percentage of the import car business is handled, and at Jacksonville International Airport, where the Authority hopes to increase air cargo and passenger charter flights between Jacksonville and the Orient.

However, the finest shoreside facilities in the world are useless unless there's sufficient water depth for ships to reach them. Fortunately, the JPA realized this many years

ago and assumed the role of local sponsor of a federally authorized project to deepen the Jacksonville harbor from 34 to 38 feet. Now the last mile of the 20-mile project has been put under contract by the Corps of Engineers and by next year Jacksonville will have a 38-foot channel all the way from the Talleyrand Docks to the Atlantic Ocean.

As the harbor deepening project moved past Blount Island in the early 1970's, the JPA began investing heavily in its "Port of the Future". A 45-ton container crane was put into operation in 1972 as part of the \$7 million expansion program to attract both container and general cargo to the new terminal less than 10 miles from the ocean.

In July, 1973, after two years of negotiation, the Japanese Space Charter Group, a consortium consisting of five of the largest shipping companies in Japan, sent the first vessel of its new fleet of seven giant containerhips, the Kiso Maru, to Blount Island to begin regular shipping service between Jacksonville and Japan. This triggered an even greater effort to retain the new service, and at the same time to induce other shippers to take advantage of the great and growing containerport.

To keep abreast of Japan's burgeoning economic expansion, the JPA established a Tokyo office early in 1974. The results of this first-hand contact with Far East business interests has been most beneficial, Scott said.

Container traffic has accelerated rapidly. From a total of 29,000 tons in fiscal year 1973 when the Japanese group began service, the container traffic at Blount Island jumped to 92,000 tons the next year and then to 303,000 tons in fiscal year 1975. For the first six months in 1976 (through March), the total stands at 213,000 tons.

In addition, privately operated terminals in the Jacksonville harbor also handle a considerable amount of containerized tonnage, both in ships and barges.

Much of this tonnage represents citrus products—fresh fruits, frozen concentrates and oils. Citrus products are extremely popular in Japan. South Florida ports, because of their geographical location close to the citrus growing belt, have in the past enjoyed a virtual monopoly in the movement of this cargo.

But the advantages of containerization movements over those of break bulk handling have prompted the Japanese to funnel increasing amounts of citrus products through the only full container facilities in Florida, which are located in Jacksonville. To accommodate this welcome business, the JPA has installed additional outlets for servicing refrigerated containers which must be used for moving the perishable fruits overseas. The Authority also recently purchased specialized equipment known as slip sheet machines which are fitted to fork lift trucks, and are used for sliding the boxed fruit off carrying pallets during the container packing process without damaging the citrus.

While expansion at Blount Island has been more dramatic, a completely different facet of the burgeoning Japanese industrial complex has been developed at the JPA's second deepwater facility, Talleyrand Docks and Terminals. This involved the import and processing of foreign motor vehicles.

The Toyota was the first Japanese automobile to be imported through JPA terminals on January 29, 1971. In mid-1971, the Authority's entire Eighth Street Terminal was leased to Joyserv Company, Ltd., a subsidiary of Southeast Toyota Distributors, Inc. Joyserv constructed an office and warehouse building on the site at a cost of \$1.5

Deepening the channel

Jacksonville, Florida, 5-12-76 (Jacksonville Port Authority News Release):—A \$5,956,143 contract to deepen the final 1.7 miles of the 20-mile Jacksonville Harbor Channel to 38 feet has been awarded to a New Jersey firm by the U.S. Army Corps of Engineers.

The job went to Weeks, Dredging & Construction Co. of Elizabeth, N.J., who submitted the lowest of seven bids received. The contractor has 360 calendar days to complete the work, according to Col. Donald Wisdom, district engineer for the Jacksonville District of the Corps.

Wisdom said the Corps asked for proposals for dredging and spoiling at sea or spoiling at two upland locations. The Weeks low bid was based on dumping the spoil in the Atlantic Ocean about five miles offshore.

When completed, the 20-mile deepening project will have cost a total of \$36 million. It was authorized by Congress in 1965 and a contract for the first 10-mile segment was awarded in 1970. At that time, the Jacksonville Port Authority, which agreed to serve as local sponsor for the project, anticipated that the entire job would be completed in about two years.

The estimated total cost initially was placed at less than \$9 million and the JPA's share as sponsor was estimated at \$326,000, but will exceed \$2,360,000, according to JPA Managing Director James J. Scott, Jr.

Much of the increase was due to environmental considerations which developed after the work was begun, Scott said. In the beginning, spoiling was permitted in many of the convenient adjacent marshlands along the river to which the JPA had acquired easements. Later, use of these lowlands was denied and the JPA was required to acquire expensive uplands for spoiling, and to dike and monitor them under rigid supervision of state and federal agencies.

With the completion of the 38-foot channel from the ocean to near Downtown Jacksonville in sight, the JPA has announced it is seeking another federal project to deepen the channel to 45 feet from the mouth of the river to the Port Authority's Blount Island Terminal, a distance of about 10 miles.

U.S. Rep. Charles E. Bennett of Jacksonville has submitted a request to the House Appropriations Subcommittee on Public Works for \$500,000 to study the feasibility of increasing the channel depth to 45 feet.

million.

The import auto business mushroomed, and Jacksonville became the import center for all of the Southeast. In calendar 1974, a total of 250,000 imported vehicles of all kinds were moved over the Port of Jacksonville docks. They were processed here, and moved out by rail and highway transport to dealerships throughout the Southeast. In 1974 alone, 81,341 Japanese-built vehicles were brought through Jacksonville. The following year the number was 94,820 units, and for the first six months of fiscal year 1976 the total was 71,152 Japanese vehicles.

Trade Recovery is Evident at the Port of New York and New Jersey

New York, N.Y., May 14 (News from The Port Authority of NY & NJ):—The Port of New York-New Jersey has successfully weathered the effects of the deepest national and worldwide recession since the end of World War II and its foreign trade began to move toward full recovery in the fourth quarter of 1975. This encouraging trend was reflected in figures released today by Dr. William J. Ronan, Chairman of The Port Authority of New York and New Jersey.

Although foreign oceanborne general cargo trade moving through the Port fell last year to 14,090,404 long tons, this decrease of 15.8 percent was measured against 1974, a year in which the movement of general cargo reached its highest level in more than three decades. Significantly, in the fourth quarter of last year, the rate of decline was at its lowest level of the year and suggested that the worst of the recession's impact was over.

However, figures for the entire year showed a decline in both exports and imports, reflecting the reduced level of economic activity both in the United States and abroad. Oceanborne general cargo exports fell 15.6 percent to 5,778,772 long tons, while general cargo imports were down 16.0 percent to 8,311,632 long tons.

New York's bulk cargo tonnage of 38.9 million long tons was down 17.6% from 1974. This reflected a decrease for the second consecutive year in bulk oil imports due to the high price of fuel and conservation efforts resulting from the energy crisis.

Airborne foreign trade moving through Port District airports also decreased during 1975 to 463,874 long tons, down 6.9% from 1974. The loss again was attributable to the severe recession in the United States and overseas. Significantly, 1970 and 1975—both recession years—are the only two years in which New York's airborne foreign trade has declined.

The steady growth of air cargo exports in the last four years was interrupted when outbound air shipments totaled 250,512 long tons, a decrease of 12.7% from 1974. In contrast to depressed exports, airborne imports continued their upward trend in 1975, with inbound receipts rising to 213,362 long tons, an increase of 1.2% over 1974.

Dollar value of the Port's foreign trade was \$38.4 billion, down 2.3% from 1974's record value. While the value of oceanborne foreign trade declined some 4.4% in 1975 from the previous year to nearly \$26.5 billion, airborne trade rose by 2.5% to \$11.9 billion.

The Port's 1975 tonnage figures are based on data obtained from the Bureau of the Census, United States Department of Commerce, and analyzed by the Port Authority.

Dr. Ronan said, "Despite temporary reverses to this Port's and the nation's foreign trade in 1975, the Port of New York-New Jersey still can look with confidence to the future. Among the conclusions of a 48-page Port Authority report published last year entitled **Oceanborne Foreign Trade: Lifeblood of the Port** were that the value of the Port's general cargo imports and exports is more than twice that of any other port. Moreover, the bi-state Port is

continuing to serve its historic role as the nation's primary gateway for seaborne general cargo trade.

"For example, every state in the continental United States ships exports via the New York-New Jersey Port to destinations across the seas; and oceanborne imports are routed through the bi-state Port to markets in every state in the continental United States."

The Port Authority Chairman commented further upon the bi-state agency's historic role in port development in the bi-state harbor, "With the virtual completion of the Port's modern marine terminals along the waterfronts of Newark, Elizabeth and Hoboken in New Jersey and in Brooklyn on the New York side of the harbor, we have concluded in this past year an agreement with the City of New York, imposing a 10-year moratorium on construction of additional container berths by either party. The Port Authority and the City agreed to cooperate in a joint program to create incentives for the attraction of new types of cargo to the Port.

"Meanwhile, the Port Authority's Trade Development team of shipping experts working from offices in the United States and abroad, is continuing its program of assistance on transportation information and port facilities. Last year this team provided service to over 11,000 shippers and receivers in 73 states and foreign countries.

"The World Trade Center also plays a crucial role in the Port Authority's mandate to promote the international commerce of the Port District. I am proud to say that more than 700 world trade tenants representing over 60 nations have now leased space in The World Trade Center," Dr. Ronan said. "It has truly become a marketplace for the transaction of foreign trade and serves to consolidate the administrative activities for foreign trade in the Port."

Oceanborne General Cargo Trade

The Port's oceanborne general cargo volume fell in 1975 to 14,090,404 long tons, down 15.8% from 1974. However, the 1974 tonnage was the highest level of general cargo traffic at the bi-state Port since 1941, when wartime conditions resulted in an extraordinary level of traffic.

The 1975 decrease in general cargo was divided equally between exports and imports, primarily reflecting the simultaneous domestic and overseas recessions. New York's oceanborne general cargo exports fell 15.6% in 1975 to 5,778,772 long tons. The decline in the Port's outbound movement of general cargo was broad-based, affecting most commodity groups.

For example, among the Port of New York-New Jersey's top ten commodities, declines were registered by paper and paperboard, down 33.6% to 144,274 long tons; inedible tallow, down 27.9% to 111,688 long tons; plastic materials, down 46.6% to 168,821 long tons; and hydrocarbons, down 31.9% to 113,954 long tons.

Counter to the trend, outbound movements of machinery exhibited strength. The Port's leading general cargo export commodity, general machinery, edged up 0.9% to 280,719 long tons. Machinery for special industries also

(Continued on next page bottom)

Bremen News

Bremen International

● Alarm for Western Shipping Nations

Bremen, 10.5.76 (BremIn). The continuous consolidation of the Comecon merchant fleets has resulted in the Institute of Shipping Economics, Bremen, producing a detailed statistical analysis of the present and anticipated future development of these fleets. The theme is of interest, not least because of the over-proportional expansion in the Comecon countries' share of international traffic and, respectively, of world maritime-cargo availability—which points are causing considerable disquiet and, indeed in part, a spirit of alarm in western shipping circles. Thus the West-German shipowners Association has called for a uniformity in policy by all the EEC countries, with the aim of ensuring adequate participation in commodity transportation. Support is given to the Association by the whole of the West-German economy in a analysis by the German Industry and Trade Conference (DIHT), on Traffic Economics in East and West. DIHT says that the West-German Federal Government should clearly define the form to be adopted in practicing the principles of cargo apportionment as recommended in the code for liner shipping conferences. An English-language paper issued by the Institute of Shipping Economics, Bremen: "CMEA Merchant Fleet Statistics" unequivocally demonstrates that the Comecon

advanced, up 12.9% to 98,380 long tons. Gains were also posted by road motor vehicles, up 6.1% to 262,160 long tons, and gas engines and diesels, up 11.1% to 91,314 long tons.

In 1975, inbound oceanborne general cargo imports declined to 8,311,632 long tons, down 16.0% from 1974 levels.

Sugar, New York's leading general cargo import plummeted 34.2% to 771,360 long tons. The decline reflected the impact of sharply higher sugar prices which spurred conservation measures and reduced demand.

Other commodities which sustained declines were road motor vehicles, down 21.9% to 261,493 long tons; coffee, down 9.4% to 427,413 long tons; and alcoholic beverages, down 7.0% to 449,408 long tons.

In contrast, several leading food commodities posted significant gains. For example, the Port of New York-New Jersey's imports of fresh or frozen meat rose 46.5% to 221,815 long tons. In addition, salt imports rose 34.8% to 208,797 long tons, while vegetable oils rose 11.1% to 291,132 long tons, and bananas climbed 9.0% to 566,909 long tons.

Bulk Cargo

New York's bulk cargo, comprising mostly petroleum imports, fell sharply in 1975. The volume of 38.9 million long tons was down 17.6% from 1974, due to the high price of fuel and conservation efforts.

Petroleum imports, representing 97% of this total, fell 17.8% to 37.2 million long tons in 1975. A small rise in crude oil imports was unable to offset more substantial declines in imports of residual and distillate oils used for power generation and heating.

flags have markedly strengthened their maritime activities by fleet expansion and, with the aid of various synoptical tables based on authentic material, it depicts the quite considerable extension of their liner networks since 1971. As is to be observed from the latest order-book position, this is also where the emphasis lies in further Comecon fleet expansion. The authors of this 26-page booklet are Hans Ludwig Beth (director of the Institute) and Jutta Bee. (Obtainable direct from 'Die Institut für Seeverkehrswirtschaft, Hollerallee 32, 2800 Bremen. Tel: 0421/341511. Price: DM 7.20 plus postage).

● Port Quality: A Question of Management

Bremen, 10.5.76 (BremIn). Since waiting-times are counted in months for ocean vessels outside the ports of developing countries, the broad mass of the public has also come to appreciate the key-position played by the ports within the modern working divisions of economy, declared Gerhard Beier, head of the BLG (Bremer Lagerhaus Gesellschaft), the biggest German port-operating company, before 450 transportation experts from 12 nations participating in the "13th Annual European International Conference" of the National Defence Transportation Association (NDTA), between the 21st and 23rd April in Bremen. The port-quality, continued Beier, is far less a technical problem than a question of management. One has to train the casual port labour into becoming specialised labour; to establish a sufficiency in intermediate-control elements of port operation; and finally to train more also highly qualified personnel for organisatory activities. The transference of the adaptability of international ports, which has developed over long periods, to the traffic centres of the developing countries is described by Beier as being an important task of maritime shipping, for which the ports of the industrialised countries should also make themselves available. Today the necessary know-how can be purchased everywhere.

The Bremen ports senator, Oswald Brinkmann, gave the reason for the annual European international conference of the American NDTA, after convening in London, Copenhagen and Brussels, choosing Bremen for its venue for the 200th birthday of the United States of America: "By far the greatest proportion of the extensive USA/Federal Republic of Germany trade is handled through our ports of Bremen and Bremerhaven".

● 'Automatic' Crane from Bremen

Bremen, 10.5.76 (BremIn). Following the automatic-car comes, now, the automatic crane. The first two, 32-ton capacity each, are currently being constructed by Kocks of Bremen. They guide their powerful grabs swiftly and surely in minimum handling time, in pre-programmed loading and discharging processes. Even the swinging of the grabs is automatically neutralized. The 'world-première' of the first automatic cranes will be at the end of 1976. Meanwhile Siemens technicians in Bremen are working on a robot-crane: the fully-automatic crane.

● "A Training Installation which must be Unique"

Bremen, 10.5.76 (BremIn). The 1799-founded, Nautical Academy of Bremen, which has ever been a leading institution, should now rank among the most modern international nautical training establishments since taking over, at the end of April, an extensive supplementary building, together with instructors, teaching methods,

teaching capacities and most modern, in part self-developed, training equipment. Expert circles consider this installation to be unique and it will contribute admirably to the aim of expanding the German Merchant Marine, by 1980, to 20 million tdw (12.5 million tdw by end of 1975); and will aid the endeavours of the German Shipowners Association in producing a correspondingly large number of qualified future personnel. The Bremen ports-senator, Oswald Brinkmann, commented: "The mariner on the bridge has to master the increased demands of the bigger and faster ships and of more complicated and complex traffic situations. To this end the Nautical Academy in Bremen has developed new teaching methods, new teaching capacities and novel technical training equipment. Only with the aid of large technical plant is it possible to ensure the required practical facsimile". The master-mariner of the future must be "the co-ordinator of a highly qualified ship-command team" and "an interpreter, standing apart, of all the nautical-scientific based individual departments of science". On the other hand, the Captain-Engineer, or Engineer-Captain, idea suggested by ship-owners on rationalisation grounds, has received a rebuff, according to Brinkmann's deputy, Senate-Director Dr. Udo Kapust, on a separate occasion in Bremerhaven. With the 'integrated ship's-officer', shipping would receive "instead of an expert in a specialised field, only an all-round dilettante".

Incidentally, subsequent to the decline in 1974, the number of training contracts for the West-German mercantile marine has increased again slightly (by some 10%) in 1975—thanks to the intensified training activities of the German shipping companies—according to the 1975 annual report of the Association, just published, on 'The Promotion of Nautical Successors (Bremen)'.

● Bremen Resumes Port-Installation Expansion

Bremen, 10.5.76 (BremIn). The most significant 1977 port construction project will be the further extension in Bremen to the latest port installations on the left bank of the Weser; the first section of which was made operational in 1964. An additional handling-plant is to be erected here, with 400 metres quayage, 20,000 sq. metres of shed-space and an open areal of 19,000 sq.m. The intention is to extend this terminal by 1981 to give 850 metres of quayage, 40,000 sq.m. storage room and a 50,000 sq.m. storage areal. Total cost: some DM 130 millions. In addition to improvements of the available quay and rail installations in Bremen and Bremerhaven, the vast investment program contains improvements of the Lower Weser, the Mittelland Canal and the Coastal Canal,—as well as expansion of the Bremen airfield. The total financial resources for 1977 amounts to DM 91 millions. Within the framework of the Bremen/Bremerhaven port development plans for 1975/1985, Bremen reckons in its medium term expectations, with an increase of 40 percent in cargo-handling, to around 38 million tons by 1985.

● "Step in the Right Direction"

Bremen, 10.5.76 (BremIn). Before 450 European transportation experts in Bremen at the end of April, Karl-Heinz Sager, board member of Messrs. Hapag-Lloyd AG., referred to the Code of Liner Shipping (Unctad Code), hammered out in 1974 in Geneva, as being, whilst not ideal, nevertheless "a step in the right direction". Should the code fail, i.e., should it not be ratified, then Sager foresaw an

impending chaos.

● Exportation Furtherance for Developing Countries

Bremen, 10.5.76 (BremIn). The know-how in exportation furtherance was the key-stone of an English-language seminary for management personnel from India, Nepal, Thailand, Korea, Egypt and the Argentine, which was again organised by the internationally renowned 'Bremen Committee for Economic Research' institution. During the six weeks up to the middle of May the 15 participants have the opportunity to acquaint themselves with export marketing and the exportation problems of the developing countries, both in theory (lectures and discussions) and in practice (case studies and visits to apposite undertakings and institutions).

● Great Chances for Parity Partners

Bremerhaven, 24.5.76 (BremIn). Will pre-conceived decisions of the specifically interested nations simply present fait-accomplis positions to the mammoth UNO Law-of-the-Sea Conference, before its decision-processes (which are making but laborious progress) can execute de jure that which already exists de facto? Already nearly the whole of South America has been operating the 200 sea-mile zone for years. Iceland has meantime instituted it; India and Ceylon are agreed upon their course; Mexico will extend to 200sm in June; Norway and Canada follow suit w.e.f. 1.1.1977; whilst the USA is to control international fishing within the 200 miles off her coast as from March 1977—on the basis of privileged personal utilisation under recognition of historical catching rights. On his return from the 4th session of the 3rd Maritime-Law Conference, in New York from 29.3.1976 to 7.5.1976, the German shipping and maritime-law expert, Horst Grunenberg, said: "Even though respective resolutions still have to be passed it is clear that the large majority of participants favour an extension of territorial limits to 12 nautical miles, with a 200 sea-mile economic zone off the coasts. Only few questions remain in dispute, such as on the passage through straits, free or controlled passage through the economic zones and the restricted or unrestricted use above, on and below the sea-bed".

And what next?, we asked. Horst Grunenberg: "The 5th session of the 3rd Maritime Law Conference, which should begin end of June/beginning of July in Geneva, will bring also only partial results. The Maritime Law Conference will still last for years; for the interests of the nations are as multifarious as they are oppositional and practically non-encompassable. Dependent upon the specific theme or concern, the prominent large groupings of the developing countries, the industrial nations, lands with long coastlines, those with short coastlines and inland states, those rich in raw materials and those without, all vacillate; whereby the questions of maritime-law are only of secondary importance. This is no international-law olympiad, as many will have originally believed, but a conference of sea-power, bent on adjusting economic, political and also, not least, military claims and settling innumerable problems peacefully. Whereby it becomes increasingly more clear to participating delegations, how the scarcely-solvable unites interests and how far-reaching will be the coming resolutions, also for the majority of the developing countries".



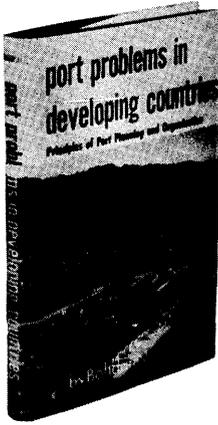
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Zurich, 31.5.1976 (FIATA Press Release):—On May 31st 1926, the international Federation of Forwarding Agents Associations was founded in Vienna, by 16 Forwarders Associations from 14 countries.

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“Portos e Navios” February '76

Rio de Janeiro, Brazil (Selected titles from the February issue of “Portos e Navios”):

Ports and Waterways

- Expansion of the Port of Belém
- Port of London Authority studies the Port of Oman
- Important improvements in the Port of Rio
- “Porto do Barquinho” to be built at Lagoa dos Patos, Rio Grande do Sul State
- Increase in the cargo handling at the Port of Santarém
- Vale do Rio Doce to have new port in Espírito Santo State
- Administração do Porto de vitória to become shortly Companhia Docas de Vitória
- Paranaguá: Expansion and improvements
- Improvements in Itajai

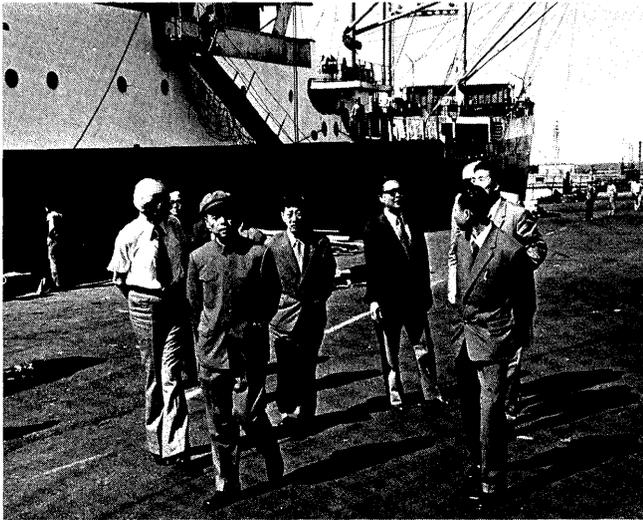
Other Articles

- Superpesa introduces in Brazil multi-modal transportation for heavy cargoes
- Sybmarine drilling platforms—IX
- The Ministry of Transports and the Navy sign contract of 37.5 million cruzeiros for the construction of three vessels for use in the construction and maintenance services of the navigation aids of the Ports of Santos, Paranaguá and Rio Gtande

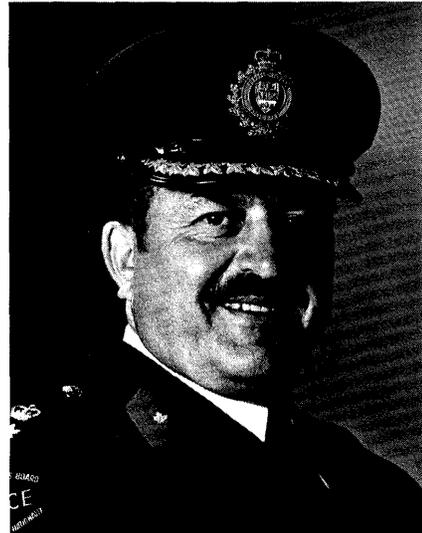
“The Unsinkables”

Hamilton, Ontario (Port of Hamilton Information Release):—Hamilton Harbour Police might well be called “the Unsinkables” with the acquisition of the force's second Guardian 21 model rescue boat built by Boston Whaler.

Last year Harbour Police Chief H.B. Bayley proudly welcomed the first unsinkable craft—referred to as unsinkable because of the unique production technique used in her construction. The “foam-sandwich production” means she has 3 inches of plastic foam to keep her afloat.



Members of a 10-man harbour mission from the People's Republic of China view port facilities in Toronto Harbour. The group also visited the ports of Halifax, Montreal and Vancouver during its two-week stay in Canada.



Superintendent T. Ciunyk
Elected IAASP President for 1976/77

Even if she was broken in two, both halves would remain above water. The closed cell foam is not affected by gasoline or oil either.

The new Guardian 21 replaces No. 4 boat which was sold last summer to John C. Eaton of Toronto after 24 years of service.

She is equipped with two 85 horse power Mercury motors and a centre console which releases more room for rescue operations. She will also be outfitted with tow-bars to assist disabled craft.

As the name Guardian 21 suggests, she is 21 ft. 4 inches in length—the largest Whaler made.

Because of her tremendous buoyancy and high degree of stability and seaworthiness similar models are used by the American Coast Guard along the Atlantic Coast and in Florida.

Canadian ports meeting in Charlottetown

Toronto, Ontario, June 7 (Canadian Port and Harbour Association):—The annual meeting of the Canadian Port and Harbour Association will be held September 12–15, 1976, in Charlottetown, Prince Edward Island.

A highlight of the meeting will be the awarding of the association's Medal of Merit for 1976. The medal, presented for the first time in 1975, is given annually to an individual the association feels has made a significant contribution in port, shipping or related marine fields.

Last year's winner was Albert Sigurdson who covers the shipping beat for a morning newspaper in Toronto.

The convention's general working sessions will be held in the Charlottetown Hotel.

Chinese mission at Toronto

Toronto, Ontario, June 8 (Toronto Harbour Commissioners):—A 10-member harbour mission from the People's Republic of China visited the Port of Toronto early in June to study cargo handling methods and to take a close look at some of the equipment used by the Toronto Harbour Commission at its marine terminals.

The group—led by Wang Bao-Shan, Director, Water Transportation Bureau, Ministry of Communications—included experts in the movement of cargo, engineers and technicians from a cross-section of Chinese ports.

The People's Republic representatives were keenly interested in Toronto's container handling equipment including the mobile container crane and both the Silent Hoist and Hyster container top handlers. China is scheduled to get its first container port at the end of this year or early in 1977.

Before coming to Toronto, members of the mission visited container terminal facilities in Halifax, Port Tupper, N.S. and the Port of Montreal. They also took a trip to the Welland Canal before concluding their tour in Vancouver.

The two-week visit was the result of an agreement worked out between the People's Republic and Canada to exchange cultural and technological missions.

Annual IAASP Meeting

Vancouver, B.C., Canada, June 15 (National Harbours Board of Canada):—More than 100 law enforcement officials representing police forces of international seaports and airports throughout the world met at Vancouver, B.C. this week for the annual conference of the International Association of Airport and Seaport Police (I.A.A.S.P.). The conference was hosted by the National Harbours Board Police and the Port of Vancouver.

The conference covered a wide range of topics with some sessions open to members only. Subjects discussed included the management of airport and seaport police forces, Interpol co-operation, national and international

intelligence, customs enforcement, organized crime and marine insurance investigations. Guest speakers were the President of Interpol, Saint-Cloud, France, Commissioner W.L. Higgitt and Dr. John Hogarth, Chairman, British Columbia Police Commission.

The next Annual Conference will be held at Boston, Massachusetts, at the invitation of Mr. David W. Davis, Executive Director of Massport. The date for the conference has been tentatively set for the week of Sunday, May 22, 1977.

Rainy Season Expected

Balboa Heights, C.Z., Panama, April 23 (The Panama Canal Spillway):—The rainy season is expected to begin during the last week of April, according to the Meteorological and Hydrographic Branch experts who state that we have already entered the 3-week long transitional period.

A number of light showers have been reported at various locations across the Isthmus and a few heavy downpours have been noted. But this does not mean that rainy season is here.

Since 1972, Met and Hyd forecasters have relied on a number of parameters as a firmer means of determining the changes in seasons. Some of these are obvious, such as the rise in the elevation of Gatun Lake and the amount of daily rainfall. The precipitation is measured over the 20 telemetering rain gages at various locations across the Isthmus. The weathermen look for a daily average rainfall of more than 3 inch as one indicator of the coming of rainy season.

Another parameter is the hourly average wind speed, which usually falls to less than 11 miles per hour during rainy season. Sea breezes that come from the south for periods totaling at least 3 hours a day are another indication.

Other parameters taken into consideration include: the Pacific sea temperature, particularly when it rises above 80°F; increase in moisture content in the air below 12,000 feet altitude; and the approach of the Inter Tropical Convergence Zone to within 100 miles of the Isthmus, as determined by satellite photos.

These factors, taken into consideration as a group rather than individually, give the weathermen a reasonably accurate indication of changes in the season.

Newcomers to the area who find the current heat oppressive will be happy to know that April is normally the warmest month and the time when the highest individual temperatures of the year are recorded. The cooling showers that can be expected next month should be a welcome change for them.

Last damaged crane at Dundalk returned to service

Baltimore, Md., June 18 (News From Maryland Port Administration):—The last of five cranes severely damaged during the major accident which occurred at Dundalk Marine Terminal 13 weeks ago will be returned to service next week.

Crane #9 suffered extensive structural damage when hurricane-force winds reaching 94 miles-an-hour caused extensive damages at the terminal on March 21.

The violent gusts, attacking without warning, thrust the crane about 185 feet along its tracks and rammed it into the superstructure of a docked ship, causing damage to both ship and crane.

At the time of the accident, the Maryland Port Administration operated 11 permanent cranes along Dundalk's waterfront. Of these, two 15-story cranes were totally demolished when the destructive winds pushed the cranes along the rail runway into the water.

In all, seven cranes were damaged or destroyed, amounting to more than \$5 million property loss. Adding to the disaster was the tragic death of two men, killed during the violent wind storm.

The terminal ceased operations for several days after the tragedy to make immediate repairs. Other harm by the wind was inflicted on five sheds, several ships, to many automobiles and numerous containers.

Since the accident, all repairs have been completed except for the final work on Crane #9. McLean Contracting Co. of Baltimore, performed the repair work with the parts supplied by Ishikawajima-Harima Industries (IHI), of Japan, the crane manufacturer.

Crane #9 required more than \$370,000 worth of repair including replacement of the outboard boom, eight travel trucks; renewal of all cables; reconditioning the mechanical and electrical components; and the recertification of crane and manlift for operation.

Already-completed repair work on cranes 3, 4, 6, and 10 amounted to \$516,000.

MPA engineers will turn over the final repaired crane to the terminal operations department, ending the on-site repair program. Operations personnel will put the crane in service after the anticipated certification by the International Cargo Gear Bureau, Inc. (ICGB). The Bureau is under contract by the Maryland Occupational Safety and Health Administration (MOSHA).

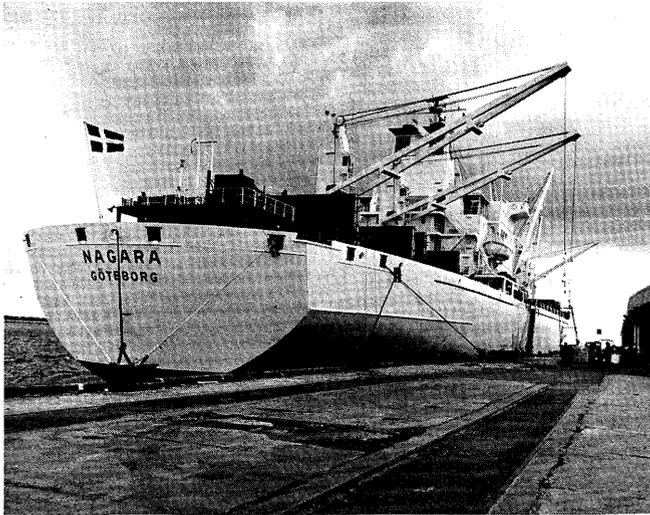
Completion of this inspection for safety and other requirements should take about one week.

A contract for the replacement of the two lost cranes, amounting to less than \$4 million, was awarded the IHI in April, 1976. MPA plans to have the two replacement cranes in service by January 1977.

Diverse cargoes at Boston

Boston, Mass., May 11 (News From Massport):—April 28 was a day for diverse cargoes at Massport's Port of Boston terminals: the Boston-Mystic Container Terminal and Castle Island Terminal. A 42-ton, 74-foot-long Fiat railroad car was unloaded at the Mystic Container Terminal. The railroad car, manufactured in Turin, Italy, was shipped aboard the Italian Line freighter M/V Pia Costa. The lightweight, self-propelled car is leased by the Massachusetts Bay Transportation Authority for commuter railroad service. The M/V Pia Costa was one of three vessels to be handled at the Mystic Container Terminal that day.

At the Castle Island Terminal, Barber Blue Sea Line's flagship vessel, the M/V Nagara, unloaded 2,500 tons of break-bulk cargo, including teak and rubber, from the Far East. Barber Blue Sea Line vessels are the most frequent break-bulk carriers serving the Port of Boston, calling at the Castle Island Terminal twice a month.



The M/V Nagara unloads break-bulk cargo at Massport's Castle Island Terminal. (051076-1PC)



Fiat railroad car on lease to the Massachusetts Bay Transportation Authority is unloaded at Massport's Boston-Mystic Container Terminal. (051076-2PC)

Largest lumber ship

Boston, Mass., May 6 (News from Massport):—The M/V Ponderosa is expected to arrive at the Port of Boston, the first port of call of its maiden voyage, on May 12 and become the largest lumber ship ever to call at an East Coast port.

Massport Executive Director David W. Davis credited Furman Lumber, Inc.'s long and steady record as a lumber importer at the Port of Boston, the recent dredging of several Castle Island Terminal berths and an upturn in the economy for bringing the 38,860 dead weight ton vessel to Boston.

Furman Lumber, a major independent lumber distributor, will receive all 7,400,000 board feet (7,400 tons) of lumber which will be unloaded from the M/V Ponderosa at the Castle Island Terminal. The vessel's total cargo upon its arrival will be 27,000,000 board feet. Furman Lumber has brought cargo lumber to the Port of Boston for the past 20 years.



From left, Port Director Thomas F. Moakley, Massport Executive Director David W. Davis and Assistant State Transportation Secretary Peter Metz view unloading of Fiat railroad car, leased by Massachusetts Bay Transportation Authority, at Massport's Boston-Mystic Container Terminal. (051076-3PC)

In 1974 Massport completed a dredging project at Castle Island creating the deepest berths (40 feet at mean low water) used for lumber ships anywhere on the East Coast. As a result, the M/V Ponderosa is able to call at Castle Island fully loaded and will call at ports to the south after it has unloaded some of its cargo and is floating higher in the water.

Massport Port Director Thomas F. Moakley, who handled the negotiations with Furman Lumber to bring the M/V Ponderosa to Boston, said that the vessel's arrival signifies an upsurge from the sharp decline in cargo volume the Port of Boston experienced due to the recession. Lumber volume at Castle Island, the port's only lumber terminal, was only 20,464 tons in 1975, compared to a high of 88,920 tons in 1969. Furman Lumber alone expects to import 50,000 tons of lumber this year and 75,000 tons in 1977 via the Port of Boston.

The connection between the M/V Ponderosa's arrival and the upsurge in the general and local economy is obvious, as enough lumber will be unloaded from the vessel at Castle Island to build 1,000 homes.

Large shipments to USSR

Boston, Mass., May 6 (News from Massport):—The Davis and Furber Machine Company, the leading U.S. manufacturer of preparatory and non-woven textile machinery, has initiated one of the largest cargo shipments ever to the Soviet Union via the Port of Boston.

Forty-five carding machines, used to manufacture high-pile fabrics such as fake fur, sold by Davis and Furber to the U.S.S.R. as the result of a \$4.6 million contract, will be shipped by the Blasco Line from the Boston Army Base to the Port of Odessa.

Massport Port Director Thomas F. Moakley said that



Long Beach, Calif., 62276 (Port of Long Beach News):—One of the largest car carriers in the Pacific, the 4200 automobile capacity polar Bear, arrived at the Toyota Terminal on Pier J in the port of Long Beach recently after a 20.5 knot average speed crossing from Nagoya with a full load of Toyotas. Aerial view graphically details the auto preparation and 20,000 car capacity temporary storage capability of the Port of Long Beach's two auto terminals near the end of Pier J.

further cargo volume between Boston and the U.S.S.R. might be realized if Boston is added to the 40 U.S. ports currently able to handle Soviet ships with four days notice. Currently 14 days notice must be given for such activity at Boston.

Davis and Furber, headquartered in North Andover, presently has appointed agencies selling its products in 31 countries.

Two deepwater terminals

Jacksonville, Florida, 5-12-76 (Jacksonville Port Authority News Release):—The Jacksonville Port Authority has announced a multi-million dollar three-year capital improvement program for its two deepwater marine terminals to be financed entirely from current and anticipated income.

The list of more than a dozen projects, including extension of two marginal wharves, purchase of a gantry crane and other heavy lift equipment, and construction of two service buildings, was approved by the JPA Governing Board.

Engineering studies already have been started for a 300-foot extension of the marginal wharf at Blount Island Terminal. This addition will provide two full 900-foot container berths with 38 feet of water on the St. Johns River just eight miles from the ocean. The cost is estimated at \$1.5 million, according to JPA Managing Director James J. Scott, Jr.

A second 45-ton container crane to serve the new berthing facility is under construction and is due for delivery late this year. The contract price is \$2.45 million.

To accelerate cargo stuffing and unstuffing at Blount Island, a container freight station will be built in an area removed from the busy marginal wharf at an estimated cost of \$400,000. The 60-X 180-foot building will have truck, container and rail loading platforms and will be centered in a 300-X 240-foot paved area.

A new \$300,000 office and trailer control building will include three inbound and three outbound cargo lanes and one outbound traffic lane, as well as 1,000 square feet of office space on each of two floors.

It will cost about \$200,000 to pave, fence and light an



Long Beach, Calif., 62276 (Port of Long Beach News):—Recent first arrival of the Pacific Far East Line LASH ship Japan Bear at its new home at ITS Container Terminal found harbor officials on hand to welcome the last of the four unique "Lighter Aboard Ship" vessels to the Port of Long Beach. From left are Port Director of Operations Harvey H. Harnagel, PFEL Southwestern regional manager John J. Firman and Harbor Commission president H.E. Ridings, Jr.

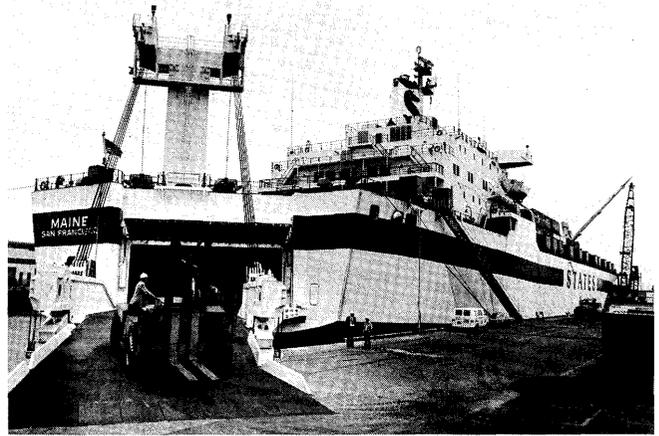
additional 10 acres of container storage area at the growing terminal, and about \$250,000 to buy another container stacker or a transtainer.

Also scheduled for purchase are a pair of yard hustlers at \$20,000 each and eight replacement forklift trucks costing a total of \$180,000.

At Talleyrand Docks and Terminals, located at Mile 20 on the St. Johns River where the channel presently is being deepened to 38 feet, the JPA will extend the 1,600-foot public marginal wharf near Downtown Jacksonville by 220 feet to permit the berthing of three vessels at the same time. The work is estimated to cost \$750,000 and will include gantry rails, train rails and unloading units for hopper cars.

A 50-ton gantry crane costing approximately \$600,000 will be erected at Talleyrand Docks. It will be used primarily for handling containers, heavy lift and general cargo.

Other approved projects, for which cost estimates have not yet been computed, include construction of bulk facilities for both liquid and dry solids, and acquisition and



Long Beach, Calif., 62276 (Port of Long Beach News):—States Steamship Company, operators of States Line, introduced the first Roll on/Roll off service to the West Coast-Far East service recently with the maiden voyage arrival of the SS Maine at their new RO/RO Terminal on Pier B in the Port of Long Beach. Photo shows how the new \$37.5 million vessel lowers its stern ramp to receive loads of up to 65 tons as they are driven aboard from the dock. The Maine will be closely followed by the RO/RO ships Arizona, Nevada and Illinois. Besides being the first U.S.-built ships of their type, each carries 12 passengers in great comfort to Far East destinations.

preparation of spoil areas to receive maintenance dredging spoil.

Meat importers meeting

Los Angeles, Calif., June 2 (Port of Los Angeles News):—The Port of Los Angeles will host the first West Coast meeting of the Meat Importers Council April 14–17, 1977, it was announced today (Wed., 6/2) by Los Angeles Harbor Commissioner Nate DiBiasi.

Approximately 350 meat importers, brokers and executives of related fields such as distribution and transportation from as far as Australia and New Zealand are expected to attend the four-day mid-year convention.

The choice of Los Angeles as the site of the confab was the unanimous decision of the Council's Board of Directors, according to DiBiasi. The Los Angeles Harbor Commissioner, along with William Chernus of the Harbor Department's trade development division, met with the MIC in New Orleans this past April to present a bid for Los Angeles. Other cities in contention were Charleston, South Carolina and Savannah, Georgia.

"The Meat Importers Council has never conducted one of their mid-year conferences on the West Coast before," DiBiasi explained. "But when it was pointed out that the Los Angeles region is the third largest meat import region in the nation, and that this area had an enormous number of scenic locations and other attractions for the convention



Los Angeles, Calif., 052776 (Port of Los Angeles):—Pretty “helmsman” Betty Laureman, Miss World Trade Week 1976, takes the wheel of the Los Angeles Harbor Department tug *Angels Gate* during recent World Trade Week harbor tours. The passenger count during the Port’s two days of free excursions passed the 2,000 mark, according to *Gate* captain Walter Smith, here ably assisting at the helm. Miss Laureman, when not bearing the banner of World Trade Week, graces the aisles of American Airlines ships.

delegates, Los Angeles won hands down.”

Determination as to the exact location of the conference is expected to be reached in the near future.

1976-77 budget adopted

Los Angeles, Calif., 061776 (Port of Los Angeles News):—The Los Angeles Board of Harbor Commissioners has adopted a \$66.5 million total budget for the Harbor Department for fiscal year 1976–77, according to Frederic A. Heim, Commission president. This figure includes an operating budget of \$18.2 million, an increase of only 1.39% over 1975–76.

Also included is an ambitious capital construction program of \$33.3 million, \$24 million more than the construction program for the current fiscal period, to be partially financed through a \$22 million Revenue Bond sale. Major projects include a Harbor Department headquarters building (\$5.3 million), and shed demolition at Berth 231–232 (\$1.1 million), in preparation for the slip fill project, and wharf construction at the site (\$9 million).

Among other expenditure categories are contributions to the employee retirement system (\$1.6 million); provisions for bond redemption and interest (\$6.7 million); equipment, including a new pilot boat and construction of a pile driver barge (\$683,913); materials, supplies and services (\$7 million, \$42,000 less than this fiscal year); and salaries, including health and medical benefits (\$10.5 million) for the 573 positions at the Harbor Department.

Total revenues projected next year are \$29.7 million, an increase of about \$1.5 million (5.45%) more than in the current fiscal year. The principal increase is in the area of shipping service: dockage (charge against a ship at berth),



Los Angeles, Calif., 76-6-3 (Port of Los Angeles):—Workmen position a 43,000-pound trolley girder on a new 40-ton-capacity container crane at Berth 131 at the Port of Los Angeles. The 186-foot crane is expected to be operational by October and, with two more cranes on order, will bring the total number of container cranes in Los Angeles Harbor to ten. Owned and maintained by the Los Angeles Harbor Department, the Paceco crane will be used primarily by the Port’s newest tenant, Seatrain Lines. Lifting the girder is a 150-ton, 200-foot Hill crane.

wharfage (charge against cargo moved over the wharf), and preferential berth assignment charges.

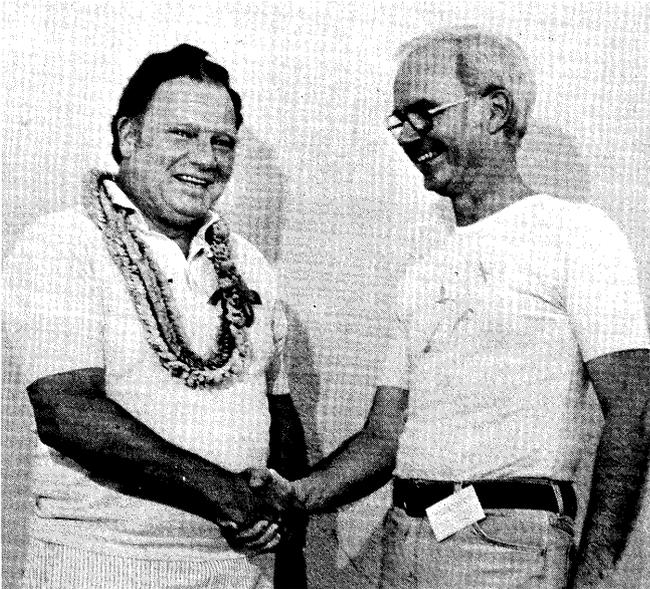
Other revenues, such as rentals, oil royalties and miscellaneous income, are estimated to increase slightly above 1975–76 levels.

Marine Terminals Corporation

Los Angeles, Calif., June 22 (Port of Los Angeles News):—Cargo handling operations for United States Army installations worldwide will begin shortly at the Port of Los Angeles as the result of a recent preferential berth assignment to Marine Terminals Corporation (MTC).

Assigned by the Los Angeles Harbor Department is a transit shed, offices, wharf and backland at Berth 146. This facility will be used in a container stuffing operation by MTC for the Army’s Military Traffic Management Command’s Southern California Outport.

The Army unit, under the command of Col. Harry McGinn, and comprised of four military and 17 civilian workers, will oversee the stuffing and shipping of cargo destined for Army bases around the world. The containers will be shipped via numerous shipping lines, providing



San Francisco, Calif., May 25 (S.F. Customs Brokers and Freight Forwarders Assn.):—SCOTTSDALE, Ariz: “Aloha” was extended to lei-decked Roland R. “Bud” Hummel, Jr., newly-elected president of the National Customs Brokers and Forwarders Association of America, by Marshall Brownfield, president of the San Francisco Association, and a director of the Pacific Coast Council of Customs Brokers and Freight Forwarders. Event was recent annual meeting and national convention of the New York-based brokers and forwarders body in Scottsdale, Arizona, with more than 300 in attendance. Hummel, president of Taub, Hummel and Schnall, Inc., presided over six days of meetings, reports and discussions involving problems and developments affecting Customs brokers and export freight expeditors. Brownfield, president of BBC International, Los Angeles and San Francisco, presented Pacific Coast views on the organizational role of the national body, which will be the subject of a special task force study.

revenue for several Harbor tenants, with the choice of shipping companies based upon shipping routes and schedules.

It is estimated that rental, wharfage and dockage from the Berth 146 facility will result in a revenue gain to the Harbor Department of over \$100,000 annually.

Included in the berth assignment are approximately 800 linear feet of wharf, 57,000 sq. feet of transit shed area, 5,700 sq. feet of office space and 108,000 sq. feet of paved backland. This area is currently occupied by California United Terminals, which operates the terminal at Berths 142-145. However, as the B-146 area was underutilized and generated a minimal amount of revenue, California United has agreed mutually to terminate its berth assignment, and will use the wharf facility on an occasional basis, if needed, by secondary assignment.

1975 general cargo tonnage

New York, N.Y., June 1976 (News from The Port Authority of New York & New Jersey):—Dr. William J. Ronan, chairman of The Port Authority of New York and New Jersey, confirmed that the bi-state port, by handling



San Francisco, Calif., 6/4/76 (Marine Exchange of the San Francisco Bay Region):—THERE'S HALF OUR LOAD of new Toyotas—2,000 of them—points out Capt. Masami Oyama, master of the M/V POLAR BEAR on the Ro-Ro auto carrier's first call to the Golden Gate. On hand to welcome the new motorship operated by NYK Line to the Port of Benicia were operations manager George Plant, Ted L. Rausch, Marine Exchange director and San Francisco Customs broker, and Dale Stringfellow, president of Benicia Port Terminal Co., where Toyota maintains a major import distribution center. Matson Agencies are agents for the Liberian vessel.

over 14,090,400 long tons of oceanborne general cargo in 1975, has successfully weathered the effects of the deepest national and worldwide recession since the end of World War II. The Port's 1975 tonnage figures are based on data obtained from the Bureau of the Census, United States Department of Commerce, and analyzed by the Port Authority.

Outbound movements of machinery exhibited the greatest strength in 1975. As the port's leading general cargo export commodity, general machinery edged up almost one per cent to 280,700 long tons and machinery for special industries advanced nearly 13 per cent to 98,380 long tons. Road motor vehicles were up six per cent to 262,160 long tons, and gas engines and diesels, up eleven per cent to 91,300 long tons.

Imports of several leading food commodities also posted significant gains. For example, the bi-state port's imports of fresh or frozen meat rose forty seven per cent to 221,800 long tons and salt imports rose thirty five per cent to 208,800 long tons. Vegetable oil imports expanded eleven per cent to 291,130 long tons, and bananas climbed nine per cent to 566,900 long tons.

Also in his report, Dr. Ronan stated that the New



San Francisco, Calif., 6/10/76 (Marine Exchange of the San Francisco Bay Region):—"Welcome to your home port" was the greeting extended by Paul O'Leary (center), president of the Marine Exchange, to Captain Everett Stafstrom, master of States Line's new RO/RO ship, the SS MAINE, upon her arrival at the Golden Gate. An inlaid souvenir tray with a San Francisco scene was presented. States' president Jack R. Dant was master-of-ceremonies for the program at Port of San Francisco's Pier 80. The highly versatile ship is first of a series of four to be operated in trans-Pacific service. Complete with bow thrusters, the 37,000 HP engine will provide 23 knots service speed. Unusual—in addition to the self-loading capability and flexible cargo capacity—are the fleet additions' passenger accommodations. Continuing a States Steamship Co. tradition, 12 passengers are carried on the ultra-modern new ships.

York-New Jersey Port can look with confidence to the future principally because the bi-state port is continuing to serve its historic role as the nation's gateway for seaborne general cargo trade. "For example," he said, "every state in the continental United States ships exports via the New York-New Jersey Port to destinations across the seas; and oceanborne imports are routed through the bi-state port to markets in every state in the continental United States." In addition, the New York-New Jersey airports comprised the nation's leading air cargo gateway in 1975, with an air cargo volume more than three times greater than that of any other U.S. port area.

Special credit for the port's position of leadership was given to the Port Authority's trade development teams of shipping specialists working from offices in the United States and abroad. Last year the teams provided service to over 11,000 shippers and receivers in 73 states and foreign countries.

The World Trade Center was also mentioned for its crucial role in the Port Authority's mandate to promote the international commerce of the New York-New Jersey Port District. Dr. Ronan noted, "I am proud to say that more than 700 world trade tenants representing over 60 nations have now leased space in the World Trade Center. It has truly become a marketplace for the transaction of foreign trade and serves to consolidate the administrative activities for foreign trade in the port."



San Francisco, Calif., 6/21/76 (California Marine Affairs and Navigation Conference):—"Welcome back to the Bay" was extended recently to Col. Henry A. "Spike" Flertzheim, San Francisco District Army Engineer, upon the move of the District's office from San Francisco Civic Center area to a waterfront site. The new San Francisco address is 211 Main Street, overlooking San Francisco Bay, with which the Corps operates in a critical role. Robert H. Langner, executive director of the California Marine Affairs and Navigation Conference located in the nearby historic Ferry Building, was on hand for the "office-warming" celebration. He was joined by two former S.F. District Army Engineers: Frank C. Boerger, engineering consultant and chairman of the Conference's Dredging Committee, and Charles R. Roberts, executive director of the San Francisco Bay Conservation and Development Commission.

Bicentennial Issue

New York, N.Y., June (News from The Port Authority of New York & New Jersey):—A special issue of VIA PORT OF NEW YORK, the monthly commerce magazine of The Port Authority of New York and New Jersey, has been published to commemorate the Bicentennial of the United States of America. This issue, which is being mailed to all 30,000 readers of the magazine around the world, contains a series of articles describing the role played by New York in the years leading up to the American Revolution as well as incidents which occurred during the conflict. The festivities which took place one hundred years ago as the port celebrated the nation's Centennial are also the subject of an article.

In addition there is a description of the activities with which the port will celebrate the Bicentennial this summer. Emphasis is placed on "Operation Sail '76", a parade along the port's waterways on July 4th by large sailing vessels from approximately forty nations. Many of these ships are portrayed in the issue through reproductions of original sketches drawn by the noted maritime historian and Op Sail General Manager Frank Braynard.

On the cover of the special issue is a full-color reproduction of a painting of the sloop PROVIDENCE

which John Paul Jones, "father of the American Navy," took command of in May 1776. Timely reviews of books dealing with New York in the Revolutionary War period conclude the special issue.

Deep berthing in S.F. Bay

(See front cover also.)

San Francisco, Calif., June 4 (Port of San Francisco News):—The Port of San Francisco has struck an agreement with a private shipyard that—providing the United States Navy approves—will give the port the only 50-plus foot deepwater berthing in the Bay Area.

Triple A Machine Shop, Inc., presently a port tenant, recently got word from the Navy it would be awarded the master lease on the disused Hunters Point Naval Shipyard, for which both Triple A and the port had been vying.

The 512-acre facility is south of existing port facilities, with alongside 50-foot water and a 55-foot channel approach that requires little or no dredging because of natural tidal scouring.

Port Director Thomas T. Soules, with active participation by San Francisco Mayor George R. Moscone, promptly entered negotiations with Albert Engel, president of Triple A. The parties reached an agreement under which the port will lease 180 acres of land and water areas on which the port wishes to develop a bulk loading facility and a deepwater container terminal.

Mayor Moscone said he has conferred with Alan Woods, Assistant to the Secretary of Defense, and believes as a result of that meeting the Navy will be amenable to the port's agreement with Triple A.

Under the agreement, signed by Soules and Engel on June 3, 1976, the port has 90 days to submit plans and engineering data to the Navy, with an additional 30 days permitted for Navy approval.

The agreement calls for Triple A to give the port an easement for a high speed conveyor system from a rail loop in the western portion of the yard to deep water at the easternmost point.

The port as its own expense would install the rail loop and a new loading pier for heavy cargo at the deepwater terminal.

Triple A would give the port road access from the yard's main gate to the cargo and bulk handling facilities, utility connections, and interim rail access over the existing rail spur.

The port would be required to remove certain temporary buildings in the area designated for container handling, repave and install new lighting in the port area, install new cargo cranes, and be responsible for any alongside dredging activities and any fill required to complete the rail loop connections.

"The port is elated to arrive at this agreement and very hopeful the Navy will approve it," Soules said.

"Of the three U.S. west coast ports with 50-plus-foot water, Hunters Point has by far the best rail access. Unlike Long Beach and Seattle, there is direct mainline service to the Port of San Francisco over the Southern Pacific right of way from the south without trains having to proceed through downtown street traffic."

Soules said that should future plans call for it, the

Hunters Point site could even be dredged at a reasonable cost to 60 feet.

Mayor Moscone termed the agreement with Triple A one "which we all hope will be the first step on the Port's long road back to the preeminence it once enjoyed. . ."

S. F. ship traffic rising

San Francisco, Calif., 6/7/76 (Marine Exchange of the San Francisco Bay Region):—Last month's ship arrivals at the Golden Gate rose 6% above April and 3% higher than a year earlier, the Marine Exchange reports.

May's 597 total transits reflected increases in both American and foreign flag activity, the maritime agency noted. The former—8% higher than the previous month—were exceeded by a 12½% gain in foreign flag arrivals. U.S. flag shipping was represented by 138 arrivals. The American vessel volume was exactly equal to traffic in May, 1975, while other shipping gained 19 vessel arrivals over a year earlier.

Tanker movements were up slightly—from 85 to 88 arrivals compared to May, 1975.

Ships of 29 nationalities were represented in May vessel arrivals.

Appointments in office

Savannah, Georgia, June 15 (Georgia Ports Authority News Release):—George J. Nichols, Assistant Executive Director of the Georgia Ports Authority, has announced the appointment of Robert W. Goethe to the position of Director of Finance (formerly Comptroller).

In making the announcement, Nichols also named Wesley Allen, Jr., Director of Engineering, Planning and Maintenance, a newly created division within the G.P.A.

Goethe is a native of Beaufort, South Carolina. He is a graduate of Palmer College with further studies from the International Accountants' Society.

Goethe was associated with the South Carolina State Ports Authority for 15 years, and served as Assistant Controller for 9 years.

He is a member and past president of the Charleston Chapter of National Association of Accountants.

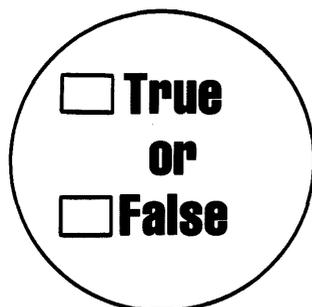
Before joining the G.P.A., Goethe was Controller of The Mower Lumber Company headquartered in Eutawville, South Carolina.

He is married to the former Phyllis Dotson of Asheville, North Carolina. They have three children, Christopher, age 20; Cheryl, age 16; and Karlton, age 8.

Wesley Allen is a native of Greenwood, Mississippi, but has lived in Savannah for the past year and a half. Before becoming associated with the Ports Authority in 1975, Allen served two years with Offshore Power Systems, Jacksonville, Florida, in the development of their facility in which offshore nuclear power plants are to be manufactured. Prior to his affiliation with Offshore Power Systems, he was employed in various engineering management positions at the Kennedy Space Center.

Allen is a registered professional engineer in the states of Georgia and Florida. He obtained his Bachelor of Science degree in Civil Engineering from Mississippi State University, and has completed graduate studies at Florida Institute of Technology, obtaining a Master of Science degree in

All Ports Are Alike



Test your transportation IQ. Put a check in one of the squares and look at the bottom of this column to see if you agree. By way of information, some ports provide only the bare essentials. Then there are others, like the Port of Houston, where facilities have always been kept ahead of customers' needs. For instance we have now expanded into three distinct port areas, each complete and designed for your particular cargo, providing the best facilities in the Gulf of Mexico.

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Answer: False; but if you marked True, please write to the Director of Trade Development for information.

Systems Management and a Master of Science degree in Contract Management.

As Director, Allen will be responsible for all engineering, construction, planning, and maintenance for the Georgia Ports Authority.

He is married to the former Margaret Bush of Greenwood, Mississippi. They have three children, Riley, age 16; Wesley, III, age 14; and Marley, age 12.

World Shipping Year Book

London, 2nd June, 1976:—The Financial Times "World Shipping Year Book 1975/76", produced in association with Fairplay International Shipping Weekly, is priced at \$36.00 surface mail, \$48.00 airmail.

For orders write to:

World Shipping Year Book
The Financial Times Limited
10 Bolt Court, Fleet Street
London EC4B 4LH
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Newport handling £3M export shipments to Trinidad

London, 21 June (British Transport Docks Board):—A £3m export contract of 112 British Leyland buses is being shipped from the South Wales port of Newport to Trinidad aboard vessels of Saguenay Shipping (UK) Limited.

The first consignment of 18 of the vehicles sailed from Newport last week (14 June) aboard the motor vessel Peter Wesch, and a second shipment will leave on the next scheduled Saguenay sailing—by the m.v. Sunbaden—on Wednesday 30 June. In all about half a dozen consignments are expected.

The buses, which will go into service with the Public Transport Service Corporation of Trinidad, are being built by British Leyland at Preston. They weigh approximately 8 tonnes each and are loaded by the British Transport Docks Board at Newport using 25-tonne capacity quay cranes normally employed for shipping heavy export steel.

The Peter Wesch's cargo also included the third and final

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Information: General Management of the Port, Town Hall, Antwerp.

shipment of an £800,000 electrical machinery contract by Parsons Peebles of Birmingham for the Sophia Power Station in Guyana. All the shipments were made by the Saguenay service and included 12 heavy lifts ranging between 23 and 36 tonnes.

The port agents at Newport were Bethell, Gwyn & Co. Ltd., and the shipping arrangements for the contracts were handled by Messrs. Stewart & Esplen Ltd., Birmingham, Midlands agents for Saguenay Shipping (UK) Limited.



EXPORT BUS SHIPMENTS FROM NEWPORT:—A consignment of British Leyland buses, part of a £3 million export order for a total 112, being loaded by British Transport Docks Board 25-tonne quay cranes at Newport (Gwent). The buses are being shipped to the West Indies by Saguenay Shipping for service with the Passenger Transport Service Corporation of Trinidad. (21 June 1976, British Transport Docks Board)

Docks Board's Report on Research 1975

Studies into siltation and dredging problems

British Transport Docks Board

Instruments specially designed by the British Transport Docks Board's own research team are being used to study the rate of siltation at Port Talbot Harbour to assist the planning of future dredging operations.

The British Transport Docks Board's Report on Research for 1975 records how the Board's research station designed a seabed instrument assembly, housing two siltmeters and an electro-magnetic current meter, to help in the study of unusually rapid siltation which occurred in Port Talbot Harbour and its entrance channel during the first few weeks of 1975. The instruments are now in operation and are relaying information to a data logger situated on the main breakwater.

Mr. Don Jones, the Docks Board's chief engineer, said "We have now had several months of continuous records of

wave velocities and silt accretion in both calm and storm situations. The information, when tests are finally completed, will enable us to predict in advance the likely rate of siltation, and to plan a more efficient dredging operation. This will help to optimise the use of our dredgers with a resultant saving in cost."

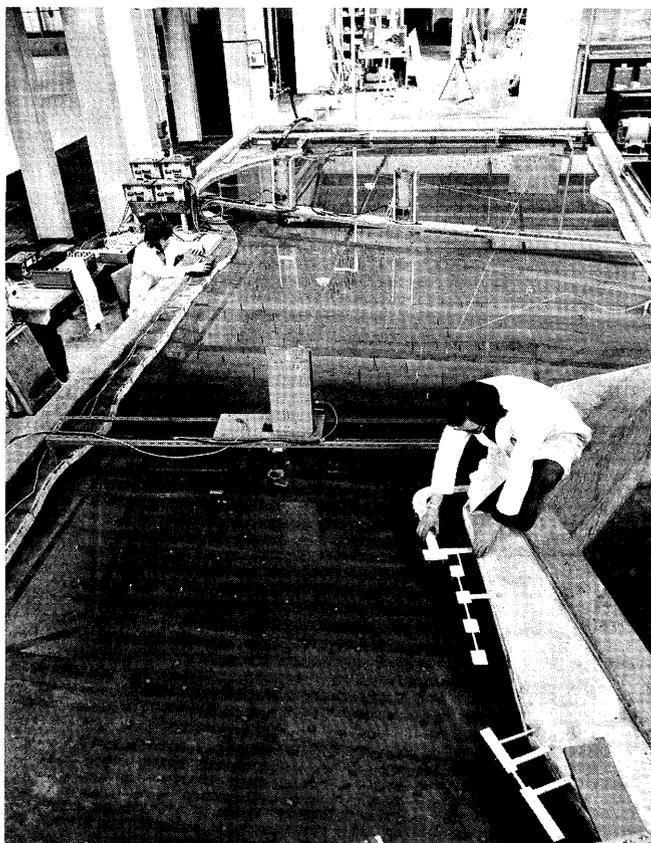
At the port of Immingham another study was undertaken on the problems of siltation and dredging in the dock and dock entrance, and a series of model tests were carried out into ways of achieving deeper water at the Immingham waterfront.

Tests to ascertain a safe depth for navigation at the Immingham dock entrance were carried out with a Harwell radio-active density probe which measured the density of the river bed. The study also gave an indication of the effects of recent dredging and the results could be of use in planning future dredging requirements.

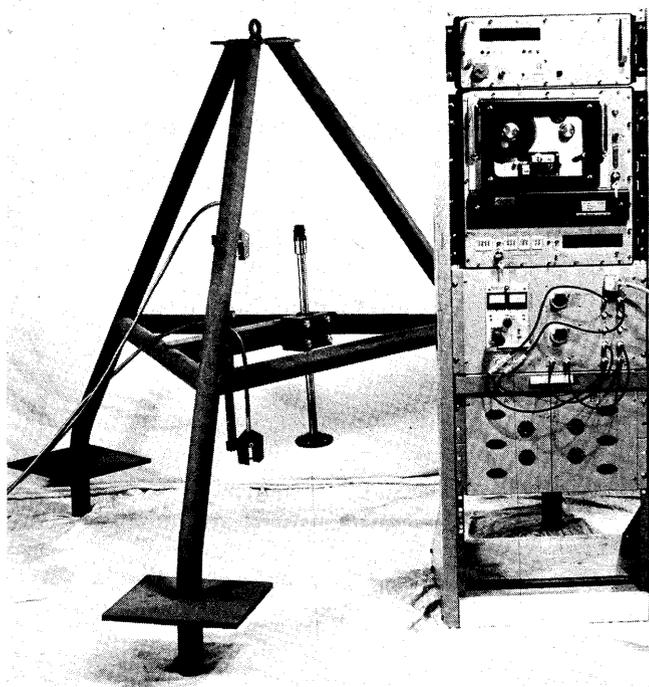
A tidal model of part of the Wyre estuary has been constructed for studies into the proposed harbour development at Fleetwood. This development would include reclamation of the foreshore and the provision of new general cargo and roll-on/roll-off berths. Tests on the model are continuing.

During 1975 the research station also examined ways of reducing dredging costs at Garston, and studied a problem associated with a floating fender at the roll-on/roll-off berth

(Continued on next page bottom)



BRITISH TRANSPORT DOCKS BOARD—RESEARCH STATION:—View of the River Wyre Tidal Model to test proposals for future development at Fleetwood. (June 1976)



BRITISH TRANSPORT DOCKS BOARD—RESEARCH STATION:—Instrument package to record velocities and suspended solids during storms which is being used to study the rate of siltation at Port Talbot Harbour. (June 1976)

Antifer: a major oil port in Europe

Le Havre Port Authority Representative in Japan June 18, 1976

On June 25th, 1976 the oil port of Antifer, about 20km away from Le Havre, will be inaugurated. The work of this large oil-port capable of handling ships with a capacity from 5 to 600,000t. started in February 1973 and will have lasted three years.

Antifer is one of the trump cards in the development of Le Havre and its region. It is the symbol for the confidence which French authorities have in the recovery of economic growth, because most of the work took place during the height of the oil crisis in 1973-1974.

The present installations of the port include a 3.5km long dyke and four tanks with a total capacity of 600,000m³.

The safety problems were studied very carefully in order to electronically guide, at a distance of 180km, the biggest oil tankers of the world which, because of their size, cannot enter the Channel.

Thus, Le Havre is now in a position to become the main oil supply base for Western Europe. However, Antifer will only be able to fully assume its role if it is connected with the refineries on the Scheldt, the Ruhr and the Rhine.

The experience acquired in receiving re-distributing oil will subsequently be used in Antifer for the installation of a methane terminal capable of handling safety tankers with a capacity of 125 to 300,000m³ of liquefied gas.

The geographic location of the Le Havre-Antifer port



at Millbay Docks, Plymouth.

The research station also offers research facilities to other port authorities, such as hydraulic model studies, collection of field data and assessing information collected. During 1975 work was carried out on behalf of the British Waterways Board, the Forth Ports Authority, and the Isle of Man Harbour Board.



Ambassador Kitahara of Japan has recently visited the Port of Le Havre. Left to right: Mr. J. Dubois, General Manager, Ambassador, and Mr. J. Thillard, Chairman of Board of Directors of the Port

can, as well, make it into one of the preferred roll-on/roll-off platforms and one of the biggest ore ports for huge ships of the OBO type (Ore Bulk Oil).

Finally, once the enormous nuclear driven general cargo ships will be in operation shipowners will, no doubt, make best use of the advantages of the Antifer port in terms of size, site and safety.

Thus, there is a whole range of direct and indirect advantages as of now, which are likely to increase the profitability of a project which, initially, was only based on the savings derived from the bulk transport of crude oil in huge tankers.

The Le Havre-Antifer port has today become an unrivalled reality serving French and European Economy.



Brazilian emplacement on Le Havre's industrial area

Le Havre (Communique de Presse, Port Autonome du Havre):—In the Franco-Brazilian agreement of the 28th April 1976, the President of the French Republic, Mr. Valery Giscard d'Estaing and the President of the Brazilian Federal Republic, General Giesel, who has just completed his official visit of France, have concerning the bilateral economic cooperation, agreed that amongst the sectors in which specific projects should be negotiated, is the implantation of a Brazilian emplacement on the Port of Le Havre Authority's industrial area.

The aim of this emplacement is to create transit, storage and assembling activities for the transformation of semi-finished products from Brazil and facilitate their commercialization on the European market.

The French "Ministre de l'Equipment", Mr. Robert Galley and the Brazilian Minister "Secretariat au Plan" Mr. J.P. Dos Reis Velloso also signed a declaration the 28th April. The two ministers both decided to promote the realisation of this project on the industrial area chosen because of its particularly favourable conditions. They will inform the administrations of both countries of the remarkable interest which the project represents; they will encourage the conclusions of the cooperation agreements and a liaison between the Brazilian and French firms. From technical, financial and commercial points of view, these should lead to concrete realisations within large specialised firms developing in the port area before the end of 1976. This decision is of a great importance to the Port of Le Havre not to mention the economy of Le Havre itself: the numerous activities concerned in these agreements create employment, especially for women. Three possible solutions for the implantation are being studied: the first South of the Lorry Centre, the second South of the Roll on—Roll off centre and the third near the nickel factory.

The idea of a varied emplacement shows that an important evolution in cooperation between the developed and developing countries exists making economic complementary notions apparent as well as an interpenetration of industrial politics.

The Port of Le Havre will therefore regroup Brazilian products for the European market and all the countries with which it keeps up regular maritime contacts. Consequently, there will be a very slight increase in the general cargo traffic and thus employment.

From this agreement with Brazil we can already hope that the possibility of similar agreements between other developing countries will be made.

Port of Le Havre Flashes

Le Havre, France (Port of Le Havre Flashes, March 1976):—

● **Pride of Port: Le Havre's navigational aids are the very latest.**

● **4,200 hp tugs for Antifer**

The Abeille No. 9, the first of two 4,200 hp tugs

specially built at the Ziegler yards in Dunkirk for use at Antifer, arrived in Le Havre on January 15th. She is 124 ft long and 36 ft in beam (37.70m x 11m) and is powered by two 2,100 hp engines. Two Voith Schneider bow thrusters make her extremely manoeuvrable. Moreover, she is equipped with a very efficient fire-fighting system with a capacity of 5,300 cu ft (15m³) an hour.

● Trading report for 1975

The Port of Le Havre's trading report for 1975 has much in common with those published by the other major European ports and shows that overall traffic, at 72 million tonnes, was 14% down on 1974, when the figure was 84 m tonnes, not counting ship's stores. The explanation is to be found, of course, in the oil crisis, with non-oil traffic only marginally affected, at 13.2 m tonnes against 13.4 million. Since August 1975, however, when the deficit was 22%, there has been a marked upturn in traffic, mainly in general cargo other than bulks.

Containers have continued to progress strongly, with 162,000 boxes handled at Le Havre in 1975, against 143,000 the previous year. This corresponds to 231,000 twenty-foot equivalent units, compared with 212,000 in 1974. Le Havre continues to be the leading French container port by a very big margin and the many new containerised services scheduled for 1976 will consolidate our position still further.

Another subject of satisfaction last year was the way in which dry bulks held up, especially coal, where imports of 2.8 m tonnes were practically double the 1.5 m tonnes discharged in 1970, the previous record year.

Finally, 784,000 passengers passed through Le Havre in 1975, which was almost 200,000 more than the year before. The very great majority travelled on the car ferries that link Le Havre with Southampton in England and Rosslare in Ireland.

For the twelve-month period beginning in January 1976 we are expecting general traffic to increase by 5%.

● New vessel for Polish Far Eastern service

Polish Ocean Lines' new containership Eugeniusz Kwiatkowski, which calls at Le Havre on her monthly sailings to the Far East, arrived in our port for the first time on January 19th. An ultra-modern and remarkably comfortable multi-purpose vessel designed to carry both conventional cargo and containers, she goes through the Suez Canal and thereby cuts a great deal of time off the voyage to Bangkok, Hong Kong, Kobe, Yokohama and Nagoya.

● Russian cotton for Tunisia

The Tunisian freighter Remada sailed for Sousse on January 13th with 642 tonnes of Russian cotton that had been transhipped in Le Havre. The agents were Worms. Tunisian vessels are as yet a comparative rarity in Le Havre.

● New lines

+ On January 9th Cameroon Shipping Lines inaugurated a regular service from Le Havre to Dakar, Abidjan, Owendo and Douala, operated by the Cam Azobe. The agents are Somarfran.

+ Since January 29th, when the Charlotte Koegel called here, Indonesia's Masaji Line has been providing monthly

(Continued on next page bottom)

Hamburg port's vital new link with hinterland

Hafen Hamburg Press Service

Hamburg, June 11th:—The Elbe Lateral Canal, scheduled to be opened on June 15th, will give Hamburg, West Germany's largest port, a vital link with the Ruhr industrial complex, Czechoslovakia, Poland and Dresden in East Germany via the Mittellandkanal and the upper reaches of the Elbe.

Begun in 1968, the Elbe Lateral Canal is nearly 72 miles long (115 kilometres) stretching from Artlenburg, east of Hamburg, via Lüneburg und Uelzen to the Mittellandkanal to the west of Volkswagen town Wolfsburg.

Hamburg authorities look upon the Elbe Lateral Canal as "a considerable technical achievement", a vital development in the infrastructure of the Hamburg region, giving Hamburg's port access to a much larger hinterland.

The first feasibility study on the Elbe Lateral Canal estimated that it would increase Hamburg's cargo turnover figures by about fifteen million tons a year—mainly bulk goods, coal, crude oil, iron ore, iron and steel, fodder, grain, potash and timber—although a later study conducted in 1974 by Hamburg Chamber of Industry and Commerce made a more conservative estimate of ten million tons increase per annum.

Nevertheless economic experts in Hamburg, both official and in the private sector, were convinced of the economic advantages the Lateral Canal would provide, and as a consequence the city government of Hamburg committed itself to providing one third of the cost.

Total investment in the Elbe Lateral Canal project has been DM 1,300 million (over \$500 million, £290 million). The remaining two-thirds of the cost have been provided by the Bonn central government.

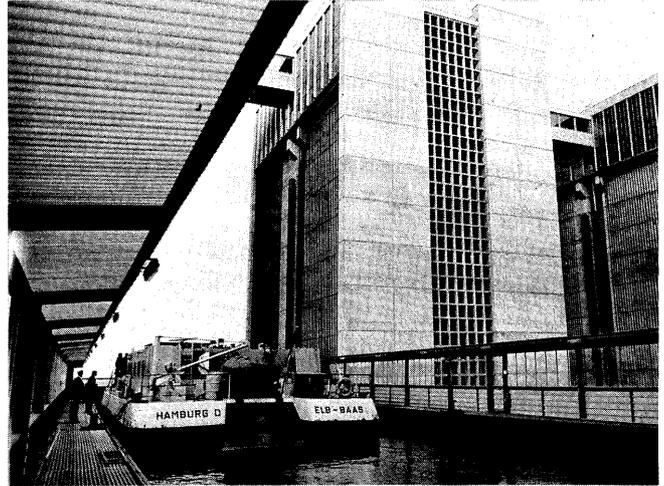
The Elbe Lateral Canal is closely linked with Hamburg's ambitious new Hansaport project, expected to boost Hamburg cargo handling (at present about fifty million tons annually) by approximately twenty percent.

At the southern end of the Canal is the giant Salzgitter

sailings to and from the Indonesian ports of Belawan, Djakarta, Semarang and Surabaya. The company is represented in Le Havre by Amanor.

• Giants bring 68% of all oil

68% of all oil brought to Le Havre in 1975 was carried by vessels of 200,000 dwt and over, as against 63% in 1974. This can be taken as clear proof that prospects for the giants remain as bright as ever, despite the oil crisis. Cargoes averaged 124,000 tonnes, not counting lightnings (against 114,000 tonnes in 1974) or 112,000 tonnes (compared with 107,000) if lightnings are included.



steel complex, state-owned but privately managed, which plans the ship iron ore via the Canal, using "Europa-barges" of 1,350GRT.

Sixty-one metres difference in water levels between the upper Elbe and Mittellandkanal are negotiated by only two locks in the entire stretch. The Scharnebeck ships' elevator to the north—the largest ship lift in the world—handles 38 meters of the "drop" in just three minutes (see photograph).

The second stage near Uelzen is a high-lift lock to cope with the remaining 23 metres. At Uelzen the opening ceremony will take place.

A further advantage of the Canal is that it will provide an all-year-round waterway for the upper Elbe, which in summer is often no deeper than 1.2 metres in certain stretches.

Moreover the new canal will provide a short-cut to the industrial complex of Magdeburg in East Germany and points further east. It will also be of considerable advantage to industry in Hanover, Brunswick and Gifhorn.

Considerable engineering ingenuity has been applied to the construction of the Elbe Lateral Canal which crosses 54 roadways, eight railway lines and 31 other waterways, some passing over and some under the main canal.

"Towards Industrial Harmony"

Tema, Ghana (Editorial in "Cargo News"—House Journal of the Ghana Cargo Handling Co., Ltd., Year ending 1975):—One unhealthy attitude which is hindering the progress of the state is the suspicion which exists in most establishments, both public and private, between management and the rest of the workers.

It is not uncommon to come across workers who regard their management as a group of privileged few whose only aim is to suppress and exploit the rest of the workers. Vice versa, some Managements are always suspicious of every move by the workers.

The attitude of WE Vrs THEM invariably hinders productivity and creates ill feelings in the establishment.

The point which needs to be stressed is that the destiny of everyone in the establishment, from the top-most executive down to the cleaner is linked up with the overall performance of the establishment. It is therefore the duty of everyone to contribute his or her maximum quota towards the progress of the establishment.

One of the main reasons for the prevalence of this attitude between management and workers is the lack of effective communications link between management and workers.

A critical observation of most industrial unrests in the country would reveal that about 95 per cent of industrial upheavals could have been avoided if the correct communications link had existed between the two groups.

The worker is not aware of the obligations and financial standing of his establishment. He therefore makes demands which the company's confers cannot afford. Likewise the manager does not care a pesewa about the problems which hinder the full utilisation of the manpower resources of his subordinates.

Such situations would be avoided if there were constant dialogue between management and staff. The Trade Unions could also play a vital role by way of educating their members on the principles of management.

Another way of combating this WE Vrs THEM attitude is the establishment of EFFECTIVE industrial relations out-fits in the various establishments to monitor the reaction of workers to management decisions and to explain to the workers reasons behind management decisions.

Another point which must be made clear is that no establishment could ever exist without management. Likewise, no management could exist without workers. Even if union leaders were asked to manage the establishments, the union officials would automatically become the new 'managers'.

There is therefore the need for everyone to work for the overall success. When an establishment folds up, both the executive and the labourer suffer and if it succeeded, the fruits would be enjoyed by all.

What is important is that everyone who derives his livelihood from any work-place, whether he is an executive or a labourer, must endeavour to do only what is in the best interest of his establishment.

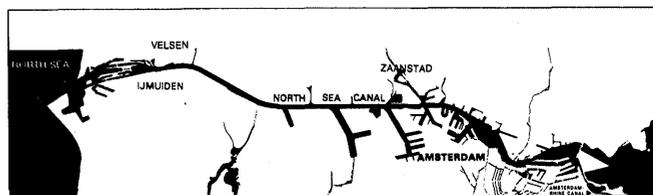
We at the Ghana Cargo Handling Company are committed to the achievement of this aim. Both management, the senior staff and union executives and their members are endeavouring to work hand in hand for the common good. We hope this spirit of co-operation would continue.

North Sea Canal celebrates 100 years

Amsterdam, May 1976 (Amsterdam News Letter):—The North Sea Canal—Amsterdam's major link with the sea—is celebrating one century of service and progress this year.

Since its opening by King William III at the end of 1876, this 10-mile long artery of commerce has infused new life into the Dutch capital—restoring its prominence as a center of shipbuilding, trade and tourism.

Amsterdam grew from a small fishing village, and life in



the water-born city has always been dependent upon access to the sea.

Down through the centuries, ships reached this thriving inland port through the former Zuider Zee (now the freshwater lake, IJsselmeer). By the 1800's, however, the traditional sea-links—including the route via the North Holland Canal and Den Helder—were suffering from silt and other limitations. The prognosis for the future appeared gloomy, but just temporarily.

To save the city from such a decline, a dramatic engineering operation was proposed—construction of a North Sea Canal, westward across several lakes and swamps to the sand dunes along the North Sea Coast at what is now IJmuiden (literally, the mouth of the IJ).

The decision was a vital one. Economic rejuvenation—not only of Amsterdam, but of the entire region—ensued. In addition to creating the Port and City of IJmuiden, the project engendered growth for the towns of Velsen and Zaanstad.

Today, these North Sea Canal ports handle about 35 million tons of international seagoing goods traffic a year, ranking the area among the 15 largest port areas in terms of tonnage in the world.

To mark the canal's 100th birthday, a number of observances are being planned.

On the 22nd of May, IJmuiden is opening an impressive exhibition composed of several sections. The first illustrates the history of the canal—early construction techniques for tunnels, bridges, etc; difficulties which had to be surmounted; and the roles played by historical figures such as Napoleon, King William I and King William III. Another section traces development of IJmuiden, and the third offers films featuring the harbor, industries and fishing resources in the area. The show is continuing until July 31.

The near-by town of Velsen also has an exhibition scheduled through August 15, depicting the feudal origins of the surrounding district.

Many other festivities will be announced throughout the year.

News from Nigeria

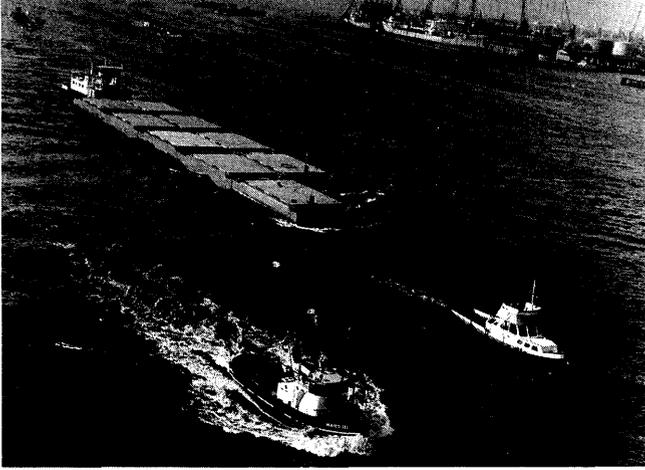
Lagos, Nigeria, Jan/March 1975 (NPA News Magazine of the Nigerian Ports Authority):—

• Senior management at panel discussion

A panel discussion attended by the Authority's Assistant General Managers, Port Managers and Heads of Departments on 'delegation of responsibility' was held in the Board Room, Headquarters Building, Marina, Lagos on Monday, February 9.

The aim of the programme was to enable the Senior Management group to exchange ideas and refresh their minds on this important management principle.

The participants were addressed by Professor E.A.



Lash barges on their way, out of the port of Rotterdam, to their destination on the European continent.

Tugbiyele, Director, Continuing Education Centre, University of Lagos and Professor G.A. Jawando, General Manager, U.T.C. Lagos.

It will be recalled that the first in the series of such manpower organisational development discussions organised for the Authority's Heads of Departments was held at the Nigerian Institute of International Affairs in October, 1974.

● **Nigeria to host port management confab**

A conference of the Port Management Association of West and Central Africa is to be held in Nigeria later in the year.

It is the first time this conference is being held in Nigeria, and the Nigerian Ports Authority will be playing host.

At the last conference held in Abidjan in 1973, it was decided that the secretariat of the Association be based in Nigeria.

Participating member-countries will include Sierra-Leone, Ivory Coast, Senegal, Zaire, Cameroon, Liberia and Gabon.

● **Decree on congestion of ports still in force**

A decree aimed at eradicating port congestion in the country completely promulgated early in the year is still in force.

The decree which came into effect on December 19, 1975 stipulates that every owner of a ship intending to enter any of the Nigerian Ports should furnish the Nigerian Ports Authority with five essential information in writing not later than two months before the departure of that ship for Nigeria.

The rest of the information required are the name and physical particulars of the ship, the name of port or ports of discharge in Nigeria, estimated date of arrival in Nigerian Ports and detailed analysis (including tonnage) in respect of the cargo carried in the ship.

The decree stipulates further that the Authority (N.P.A.) on receipt of the particulars will in turn issue to the owner of the ship entry notice, stating the port or ports in the

country to which the ship may proceed for any purpose, the date of entering the port or ports allocated to such a ship and the period during which the ship may remain at such a berth.

The decree provides for a 10,000 Naira fine or two years imprisonment for any individual who consents or connives with the owner of a ship to break the law and a further fine of ₦10,000, each day the offence continues.

In the case of body corporate, the decree stipulates that such a body shall be liable to a fine of 10,000 Naira and further fine or ₦ 10,000 for each day or part of a day during which the offence continues.

Commenting on the effectiveness of the decree, Mr. R.O. Ajayi, the Assistant General Manager (Operations and Marine Services) of the Authority said it has helped in bringing about orderliness in the arrival of vessels, so that at any given time, the Authority does not 'bite more than she can chew'. Moreover, it has helped in the pre-plan evacuation of cargo from the port, he concluded.

Gray, Mackenzie news, April

● **Dammam**

During April, 1976, 74 vessels called at Dammam to discharge 286,030 tons including 111,139 tons cement and to load 18,000 tons urea, as compared with 65 vessels offloading 193,922 tons cargo in April, 1975. Vessels were subject to a berthing delay of 88 to 92 days throughout the month, which position it is expected may continue during the month of May.

● **Abu Dhabi**

67 vessels called at Abu Dhabi during the month of April with 137,654 deadweight tons of cargo on board for discharge. Imports consisted of 42,480 tons general, 77,297 tons cement, 14,748 tons timber and 3,129 tons bitumen.

Additionally, 3 tankers called at Mina Zayed and discharged 24,900 tons of Gasoil.

There has been no improvement in the berthing position and whilst delays ranging 7 to 8 days may be anticipated during the middle of May, it is hoped that there may be signs of improvement towards the end of the month.

It is reported that a tender will be put out shortly for carrying out dredging work opposite lighterage berths No. 1, 2 and 3 to convert them into deep-water berths. A new transit shed is planned opposite No. 1 berth.

● **Khorramshahr**

54 vessels called at Khorramshahr during April and discharged 280,543 tons of import cargo.

There was a berthing delay of up to 225 days based on vessels at top of berthing turn list.

● **Kuwait**

A total number of 158 vessels called at Kuwait port during April, 1976, discharging 224,162 tons cargo inclusive of 8 cement carriers which discharged 88,687 tons. This compares with April, 1975, when 94 vessels called discharging 157,790 tons cargo inclusive of 6 cement carriers which discharged 60,078 tons.

Berthing delays at Kuwait varied for Conference Lines

from 4 to 18 days and for Non-Conference from 22 to 26 days.

In view of the implementation of the dual registration system, the Conference Lines have abolished surcharge completely effective from 5th May, 1976, and it is anticipated that the berthing delays for Conference vessels shall be further reduced to 1/3 days, as presently only two vessels are waiting at anchorage for berth. No improvement was noticed for Non-Conference Line vessels who suffered berthing delays up to 26 days.

A Necessary Investment

Melbourne (Editorial in "Port of Melbourne Quarterly" April-June, 1976):—A major portion of the Trust's capital work allocation for 1975/76 of approximately \$16 million for the Port of Melbourne is being spent on a new bucket dredge.

Built by Vickers Cockatoo Dockyard Pty. Ltd., the new dredge will be launched by Mrs. Mayne, wife of the Chairman of the Melbourne Harbor Trust, Mr. A.S. Mayne, on 29 May, 1976.

Named the A.S. Mayne, this latest addition to the Trust's dredging fleet is earmarked to take over as lead vessel in the general dredging works within the environs of the port.

The science of dredging is unspectacular, but its achievements are remarkable. Some of the world's great ports are sited on rivers: London, Liverpool, Glasgow, New York, Hamburg, Newcastle and Antwerp are examples of what has been achieved through dredging.

The Port of Melbourne was virtually carved out from the muddy depths of the River Yarra delta by a continuous programme of dredging which has played a vital role in the development and provision of port facilities.

The underwater systems of thoroughfares, swinging basins and miles of berths ranging from the conventional to modern container and ro-ro complexes are the "fruits" of continuous dredging and reclamation programmes continuously pursued by the Trust in its 99-year history.

Although an immense amount of work has been accomplished by the Trust's dredging fleet in the past, considerably more must be carried out in the future.

The prime requisites of a modern port are twofold:—

- (a) To provide sufficient elbow room on its wharves and approaches;
- (b) To provide approach and river channels which must be capacious in order to accommodate new generations of shipping.

The Port of Melbourne today has diversified facilities for handling ships and cargo, equal and often better than those found in many older and more established ports of the world.

The introduction of the A.S. Mayne to the Trust's dredging fleet is a necessary investment by the Board and will enable the port to guarantee the merchant navies of the world facilities second to none when they visit Melbourne.

Sister port affiliation

Melbourne (Port of Melbourne Quarterly, April-June, 1976):—The Commissioners of the Melbourne Harbor Trust put their signatures to a document which formally made the Port of Melbourne and the Port of Oakland sisters.

The sister port affiliation of two of the world's biggest container/general cargo ports is aimed primarily at cementing the ties of commerce, communication and friendship between the two ports.

The everyday functions and operations of the Ports of Melbourne and Oakland are almost parallel in that they are managed by a Board of Commissioners who have virtual administrative autonomy within their respective boundaries.

Both ports are linked directly in trade by the roll-on roll-off ships of the Pacific Australia Direct Line.

In the case of the Port of Melbourne this is her second sister port affiliation. In 1974 she was affiliated in a sister port agreement with another great port—the Port of Osaka.

Townsville Chairman's Foreword

Townsville, North Queensland, Australia (from Townsville Harbour Board Annual Report 1975)

FOREWORD

This is the second abridged report of the Board's triennium and includes the trade statistics, accounts and a short summary of work carried out for the year ended 30th June, 1975.

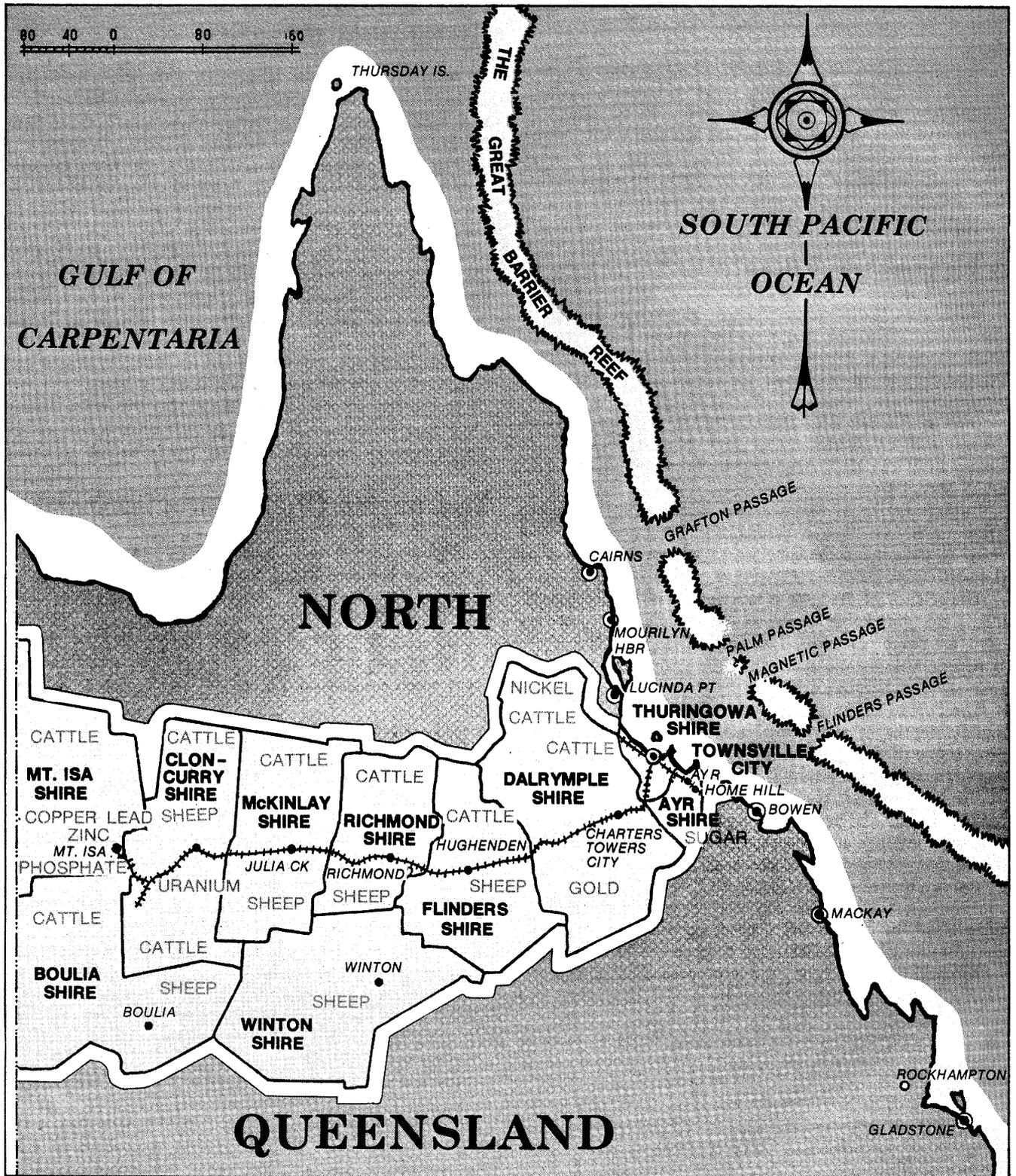
The trade of the port is developing at a fast rate, and for the first time in its history, exceeded two million tonnes. Sugar exports passed the half million tonne mark and the rock phosphate export trade has commenced. Shipments of nickel from the Greenvale Refinery at Yabulu are being handled by the Port's new container crane and materially assists in establishing the Port of Townsville as one of Australia's high value product ports.

Development work have continued—dredging to accommodate 65,000 tons (d.w.) vessels, and the extension of wharf facilities for more efficient container crane operation being in the forefront. Following the completion of the dredging the following depths and widths have been declared by the Marine Authority: Sea and Platypus Channel 10.7 m (92 m), Tanker Swinging Basin 10.7 m (396 m) and Tanker Berth 12.5 m.

The Board's finances are sound and geared to ensure the maximum port development from available funds.

The Board continues to base its development on sound long-range planning. With the rapid expansion of trade assured during the next few years, the expansion of the present harbour has become paramount. Engineering and Environmental Studies have been carried out for the Board by top level engineers and scientists to ensure that any proposed expansion is soundly based. Five hundred and fifty acres of freehold land contiguous to and south of the present harbour have been purchased to ensure that the Port of Townsville will continue to expand and remain a viable outlet for its rich hinterland.

A.G. FIELD,
CHAIRMAN



Townsville Harbour Board District

Harbour Board District

392,219 km² (151,436 square miles)—about six times the size of Tasmania.

The Harbour Board District, from which Board Members are elected, embraces the rich agricultural Burdekin River delta and extensive pastoral and minerals areas in Western Queensland through to the Northern Territory border. Cities and Shires within this district cover an area of

Singapore's Container Terminal

Port of Singapore Authority 14 June, 1976

PORT OF SINGAPORE

The Port of Singapore is rated the fourth busiest port in terms of shipping tonnage and is certainly one of the largest in this part of the world. There are six gateways to the port, namely Keppel Wharves, Container Terminal, Telok Ayer Basin, Jurong Port, Sembawang Port and Pasir Panjang Wharves. Except for Jurong Port which is operated by the Port of Singapore Authority (PSA) on behalf of Jurong Town Corporation, all the other gateways are owned and managed by the PSA.

In 1975, 40,426 vessels of over 75 NRT arrived and departed from Singapore, giving a shipping tonnage of 205.2 million net registered tons. Some 52.1 tonnes of sea-borne cargo were handled at all the gateways of the PSA.

PSA CONTAINER TERMINAL

The Container Terminal is the Port's main gateway in the handling of containerised cargo. Inaugurated only in June 1972, its growth during the past 3½ years has been phenomenal and it still remains the gateway with the highest growth potential. There were 567 ship calls in 1975 (of which 479 were container vessels) compared to 292 in 1974 and 196 in 1973. Cargo throughput rose sharply from 97,905 twenty-foot equivalent units (TEUs) in 1973 to 153,211 TEUs in 1974 and 192,000 TEUs in 1975, i.e. increases of 96% and 25% respectively. Some 2.6 million tonnes of containerised cargoes were handled in 1975, 35% more than that for the previous year.

This growth reflects the success story of containerisation in Singapore. Some 13 international shipping lines are operating in Singapore with regular services linking it with Europe, United Kingdom, USA, Japan and the South East Asian ports, and covering the Far Eastern Freight Conference Route, Straits/Japan/Mediterranean Ports, Far East/USA, SEA/Australia, Port Klang/Bangkok/Singapore, and Singapore/Israel. Of their combined fleet of 80 vessels calling at Singapore, 62 vessels are either on the transocean shuttle or round-the-world routes.

What has been achieved, however is only the tip compared to the vast potential. This is because of the Island Republic's strategic position in relation to the world trade routes and also to the South East Asian Region. One interesting feature of the Terminal's development is the growing volume of transshipment containers handled. Twenty-five percent of the 192,000 (TEUs) handled last year were transshipment containers discharged by mother ships from the industrial countries of Europe, USA and Japan. Containerised cargo is carried by feeder vessels to the developing countries of South and South East Asia. Presently, 45% of the total number of container vessels using the Terminal are feeder and regional vessels. This

figure is expected to increase as more lines will be using Singapore as the connecting port for their mother and feeder vessels.

Because of geographical position, Singapore has a logical role to play as a pivotal port and relay centre for this region. Acting as a collecting and distributing centre, and providing every facility for the fragmented containerisable cargo of the other countries in the region, Singapore has become a launching pad for the surrounding market. The shift from conventional to containerised services for the regional trade is already gathering momentum.

With the opening of the Suez Canal and the reduction to sailing time by 6 to 7 days on the Europe/Far East Route, Singapore's position becomes even more strategic. Already some shipping lines are increasing sailings and restructuring routes to capture the growing market spurred on by the improvement in the world economic situation. To gear itself for the anticipated unurge of throughput in the next few years, PSA has invested a few million dollars on improvement and additional facilities, to cope with traffic in excess of half a million containers per annum.

FACILITIES AND SERVICES AT THE CONTAINER TERMINAL

Berths: There are three main berths totalling 914 m, a 213.4 m cross berth and a feeder berth measuring 213 m. The main berths and the feeder berth have a depth of 13.4 m below low water while the cross berth has a draft of 10.4 m alongside.

Fendering & Mooring facilities: The wharf is an open-piled structure, with the front row of piles being recessed to take into account the bulbous bow of the larger vessels. Container vessels of 60,000 dwt can be safely accommodated at these berths as the fendering system is designed to take the impact of such vessels. Mooring bollards have been installed at regular intervals.

Three 3000 BHP tugs equipped with Voith Schneider propulsion units and a fleet of other tugs are available for the berthing of container ships at the Terminal.

Bunkering: Bunkers at the rate of 1,000 tonnes per hour are available from 11 outlets at the main berths and three at the feeder berth. Marine diesel and water can also be supplied here.

Container Yard: The Container Yard which is also operated by PSA extends inland by 198 m between the quay and the Container Freight Stations. It has a stacking area of 13.94 hectares capable of accommodating over 8,000 containers stacked two-high. A hardstanding of 2.12 hectares is also used for chassis-type operations.

Container Freight Station: Three Container Freight Stations provide a total of 22,072 sq.m. of covered storage space for stuffing and unstuffing operations. These stations are operated by the PSA on a common user basis. One of these sheds with an area of 7,000 sq.m. is available for LCL containers on chasis.

In addition, three back-up sheds provide a total of some 15,500 sq.m. of storage space. There is also space for the

storing of open containerised cargoes.

Machanical Equipment: The Terminal is well equipped with the latest and sophisticated container handling and transfer equipment.

There are six quay cranes of 35 tonne capacity, 15 straddle carriers, two transtainers, two transfer hoists, 72 forklifts, five freight-lifters, some cranes and a large fleet of prime movers, tractors and trailers.

Another two quay cranes and three transtainers costing some \$12 million are being added to enhance and improve on the present rate of 800 containers per 24 hours port stay.

Reefer Facilities: There are 122 reefer connections at the yards of which 62 are 400V and 60 are 200V for storage, monitoring and carrying out pre-trip-inspection of reefer containers.

Projects of reefer throughput for the next few years are being studied at the moment and expansion to the reefer yard will be carried out to meet the increased demand for such facilities.

A container Handling Information System, operating in realtime mode and aided by visual display units and a tele-type-writer terminal monitors these movements and subsequently uses the information stored for operational analyses and billing purposes.

Ship Planning Unit: The Terminal has a Ship Planning Unit staffed by trained ship planners providing free round-the-clock service to container lines using the Terminal. This Unit can provide detailed storage plans for containers on board vessels.

Customer Delivery Services: A Customer Delivery Service is available to assist consignees taking prompt delivery of breakbulk cargoes unstuffed at the CFS. Consignees are contacted by telephone and again by letter as soon as their cargoes are unstuffed. This ensures minimum delay and efficient housekeeping at the Freight Station.

FUTURE DEVELOPMENTS

The rapid growth of this Terminal has convinced the PSA to add another two main berths totalling 640 m to the present facility; Costing some \$40 million, the construction work is due to begin shortly and is scheduled to be completed in mid 1977. The two berths are expected to be fully equipped and operational in 1979 when the present facilities would have reached their optimum capacity. Some 20 hectares of back-up area will also be made available under this development programme.

Meanwhile, work has already started on a 78 hectares Container Inland Depot for the Terminal some 23 kilometres away. There will be eight additional freight stations with some 240,880 sq.m. of covered storage space and about 220,700 sq.m. of hardstanding area to serve as a consolidation depot for stuffing, unstuffing and storage of containerised cargo.

Phase I occupying an area of 20 hectares when ready in 1977, will provide additional stacking capacity of 8,000 containers. The Depot will be linked to the Container Terminal by road and rail.

PSA Symposium

Singapore, 10 June (PSA Press Release):—The PSA will, once again host a three-day Symposium this year as part of its efforts to encourage regular meetings among port users, trading communities, government Departments, and the port authority for meaningful discussions and exchange of views.

The theme for this symposium will be: "Developing Singapore as the regional warehouse and distributing centre" and it will attempt to encourage fruitful discussions on the efforts to promote the Republic as the ideal location for the consolidation and redistribution of goods for the region.

It will be held from 5th to 7th August at the Shangri-la Hotel. Mr. Ong Teng Cheong, Senior Minister of State (Communications) will officially open the symposium on 5 August at 6.00 pm at the Tanglin Room.

A total of 11 papers, by representatives from the Economic Development Board, SIA, Department of Trade, Nanyang University, Manufacturers' Association, Joint Chambers of Commerce, Freight Forwarders' Association, Association of Banks, Shipping Association, Shipowners' Association and PSA, will be delivered at the three-day gathering. Some 300 persons are expected to participate at the symposium. Participation fee is \$70.00.

More information and registration forms can be obtained from the Port Promotion Officer at Tel No. 76021 extension 337 or 549.

PSA Inland Container Terminal

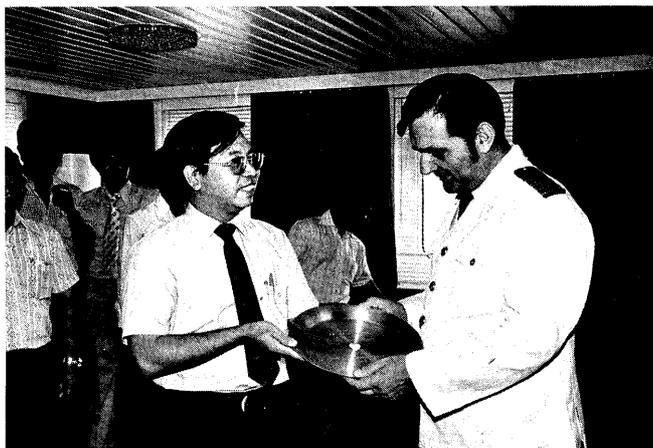
Singapore, 18 May (PSA Press Release):—The Port of Singapore Authority has started work on its S\$50 million Inland Container Terminal at Bukit Timah. Earthworks for the construction of facilities for the first phase development of the Terminal is due for completion shortly.

The 78 ha Inland Terminal, some 23 km from the PSA Container Terminal at East Lagoon, is expected to effectively perform the function of a container storage area and a break-bulk consolidation depot for the increasing container traffic through the PSA.

The re-opening of the Suez Canal is bringing about a new pattern of fewer stops for larger container vessels and the birth of new feeder services by conventional and container ships. The PSA can be an important stop and base for such redistribution for the region because of its location and efficient service. In addition, there has been an increasing diversion of conventional cargo to containers in Singapore.

It has been estimated that 70% to 75% of Singapore's general cargo is containerisable. By 1980, total containerised cargo in Singapore is expected to reach 50% of the seaborne freight. The Container Terminal then could expect some 7.6 million tonnes of cargo and 450,000 Twenty-foot Equivalent Unit (TEU) containers per annum. The Inland Container Terminal can supplement the existing facilities at East Lagoon and help to meet the land requirements estimated to be some 80 hectares to service the container berths.

Statistics for the first quarter of this year clearly indicates the increasing growth in container traffic through the PSA's Container Terminal. It handled about 66,750



The T.S. Alva Maersk, fresh from the dockyard Lubeca in Europe, called at the Container Terminal, Port of Singapore Authority during its maiden trip. This vessel GRT 27710.91 is the fifth of the nine vessels of Maersk Line for its containerised service between South East Asia and United States of America. A simple presentation was held onboard the vessel to commemorate the visit on 30 Mar. 76. Picture shows Mr. Shum Siew Hong, Senior Engineer (Container Terminal) presenting a pewter salver to the master of the ship, Captain Holm Helge. (Port of Singapore Authority)

containers (TEUs) with some 860,000 tonnes of cargo for the period January to March 1976. This is an increase of 73% in the number of containers and 69% in the cargo tonnage compared to the corresponding quarter of last year. The number of ship calls recorded 106% increase; 107 calls more than the 102 recorded for the same period in 1975.

Meanwhile, the PSA has awarded a S\$457,000 contract to Westpile (SEA) Pte Ltd. for the foundation and piling works for the Phase I development. The work will begin at the end of this month and is expected to be completed in September this year.

Under this Phase, there will be four container freight stations on a 18.6 ha area. These stations will provide some 28,450 sq.m of covered space for stuffing/unstuffing of containers and the storage of containerised cargo. Some 8,000 containers can also be stored here. Phase I is scheduled for completion in mid 1977.

There will be another four similar sized container freight stations under the Inland Container Terminal Phase II development.

Major operation changes old dredge to new

Whangarei, New Zealand, April 1976 ("Points North", published by The Northland Harbour Board):—"Never give a sucker an even break" was the axiom of churlish old comedian W.C. Fields. If he was around Whangarei at present he would have to change it to something like, "Give an old dredger an even break and you'll end up with a new sucker." For that is just about what is happening to the Timaru Harbour Board's "W.H. Orbell".

Launched in Scotland in 1962, the elderly bucket dredge was 72 metres of clanking, grinding, groaning bad eating

manners—a common fault of bucket dredgers as they gnaw their way through their work. But when she leaves Whangarei she will be 80 metres of smart, relatively silent suction dredge. And the Timaru Board will have a bill for about \$1.7 million—far less than an equivalent new ship would cost.

The conversion is being done by the Whangarei Engineering and Construction Company—no newcomers to ship-building and repairs, but this will be about their biggest project.

It involves cutting right through the ship from the engine room forward while the ship is slipped stern first. The bow section will be sealed and floated off. Meantime, a completely new bow section and a huge hopper section have been built—640 tonnes of steel and hours of meticulous welding have gone into these alone.

Joined together and ensconced on a partial cradle, the new front end of the ship will be floated on to the slipway and hauled up for mating with the aft section.

It all sounds enormously complex, but Weco's team under project controller Ortwin Ahrens has taken it as just another job and certainly well within their capabilities.

The focal point of the rebuilt dredge will be the massive 32-tonne, 3 m-diameter pump built into the bow section. This will suck up mud or slurry into the 1300 cubic metres capacity holding hoppers in the new midsection.

When filled, the dredge heads out to dumping grounds at sea and the load is discharged through a series of hydraulically controlled hinged hull doors. With its outer skin of buoyancy tanks, there is no hazard to the dredge's stability during discharge.

Now the interesting question is, what will happen to the old forward section of the dredge? In theory, the reconstruction job could be done in reverse—a new stern with engine-room and superstructure could be grafted on to make it again an operational bucket dredger.

But it would have to be a real dredge enthusiast who wanted it and there aren't too many of them around. It looks as though the unsentimental cutting torches of the scrapyards will be its executioners.

But at least the "W.H. Orbell" can expect to sail on usefully for many a year.

"Coming of Age"

Penang, Malaysia, April, 1976 (Berita Pelabuhan):—Almost all work to provide facilities to handle containers in the Port of Penang was completed in January, 1976 and became operational immediately.

The Marshalling Yard of 16 acres built in stages during 1975 was completed and made fully available for the stacking of containers. This yard has a capacity for 2,400 T.E.U.s at any one time stacked two high.

The Container Freight Station of 42,000 sq. ft. was also completed in January, 1975. There is a back-up godown of 51,000 sq. ft. to accommodate any over-flow of cargo from the Container Freight Station.

Lighting to illuminate the whole container area has been installed. For this purpose six lighting towers were constructed, and the whole yard is now brightly lit for night operation.

All mechanical equipment including 2 straddle carriers ordered in 1975 were delivered and are now available for

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use.

20 Reefer points for refrigerated containers were installed in March, 1976 and reefer containers can now be handled at the Port of Penang.

A heavy lift crane to lift containers on or off ships has been ordered and is expected to be delivered at Butterworth in August, 1976. With the acquisition of this crane, the Port of Penang will have adequate facilities to handle containers on or off ships.

With the introduction of the above mentioned facilities, the container traffic has been growing rapidly from an average of 800 T.E.U.s a month during the second half of 1975 to an average of 1,200 T.E.U.s per month for the first 3 months for 1976. Indications are that this figure is expected to rise to an average of 1,800 T.E.U.s per month by the end of this year.

Launching a huge project

Karachi, Pakistan, January 15th (K.P.T. News Bulletin):—The Karachi Port Trust is launching a Rs. 30 crore project next month envisaging the construction of an oil tanker berth, purchase of a trailer arm hopper dredger and deepening of the approach channel.

The International Development Association of the World Bank has sanctioned 50 per cent cost of the project in foreign exchange.

The fourth project will be completed during the year

1978-79.

The soft-term construction credit for financing the foreign currency component of expenditure of the project was negotiated by a delegation of the KPT in Washington with World Bank authorities over a year ago.

The construction of a new oil pier in the lower harbour will commence next month to accommodate oil tankers of up to 75,000 deadweight tonnage.

The lower harbour and the external approach channel will be gradually deepened to 40 feet from its present depth of 30 feet. The deepened approach channel to the new oil berth will be about 17,000 feet in length and 600 feet in width.

This part of the dredging also includes the provision of modern navigational aids, including buoys, radars and beacons.

In order to maintain the port's external channel to new oil berth dredged depth throughout the year, this part of the project envisages the procurement of a suitable dredging plant. The new dredger will be ocean-going trailing suction hopper dredger with a 2,000 cubic meters hopper capacity and equipped with swell-compensators.

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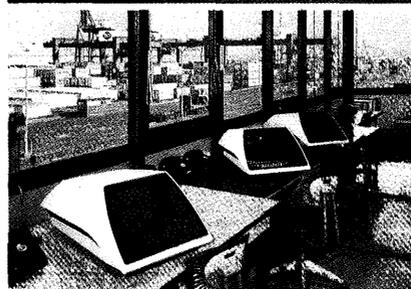
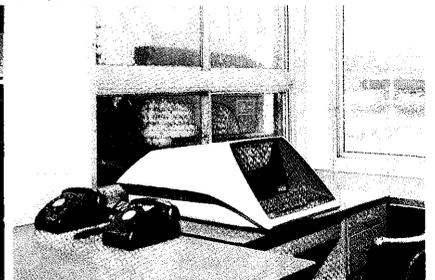
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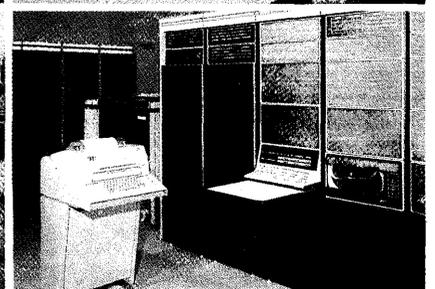
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