

# PORTS *and* HARBORS

June, 1980 Vol. 25, No. 6



Port of New Orleans

## IAPH Conference Nagoya May 1981

The Publisher: The International Association of Ports and Harbors

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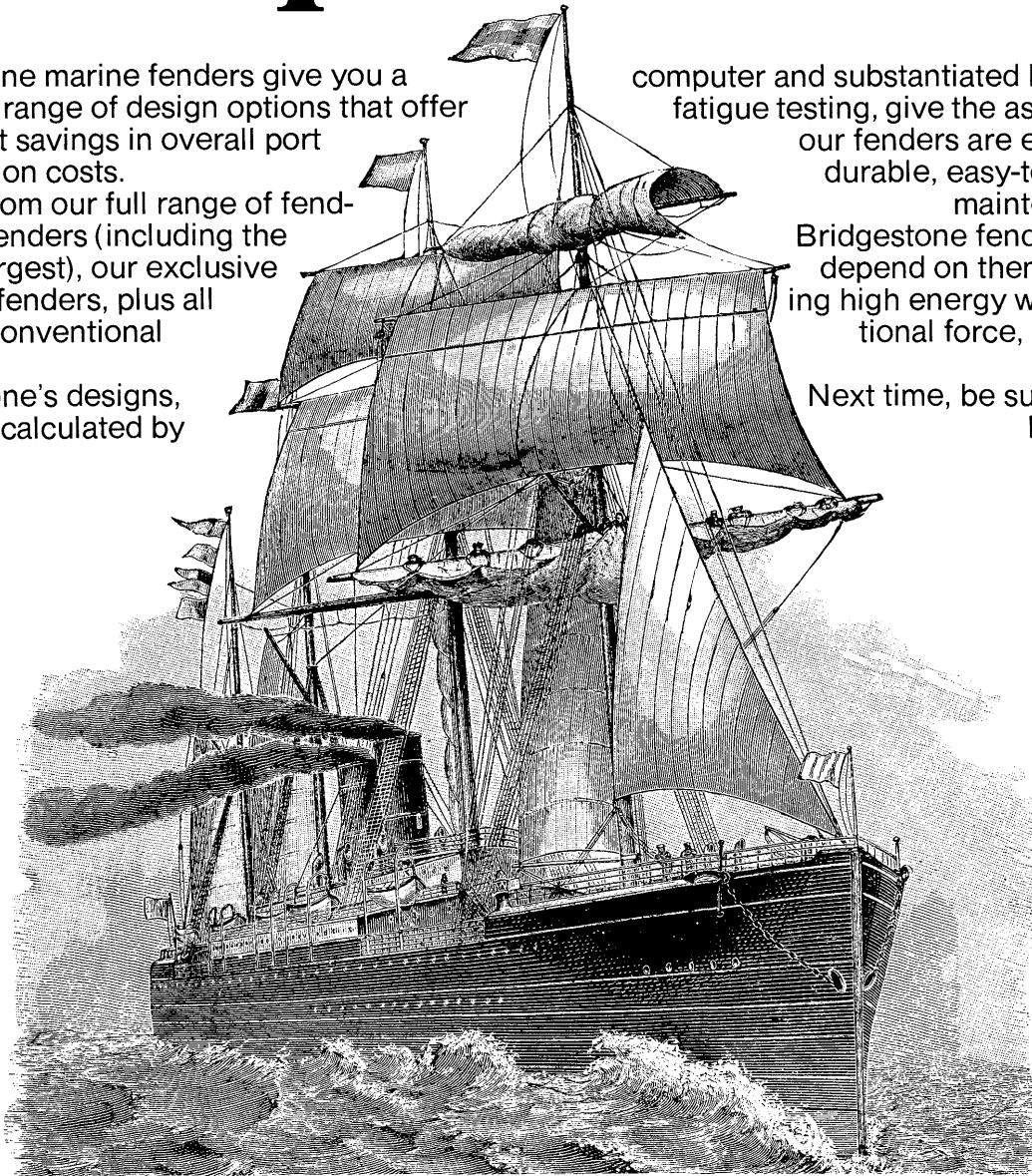
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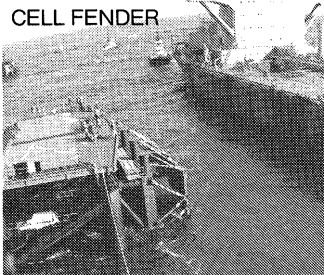
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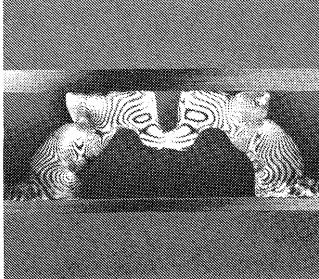
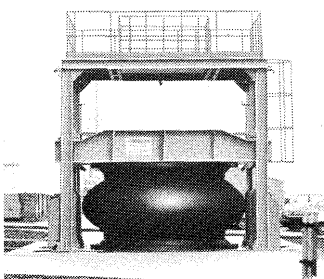
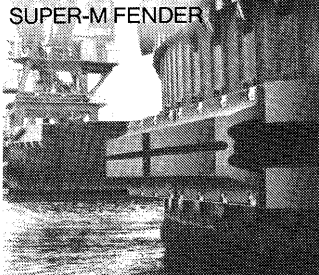
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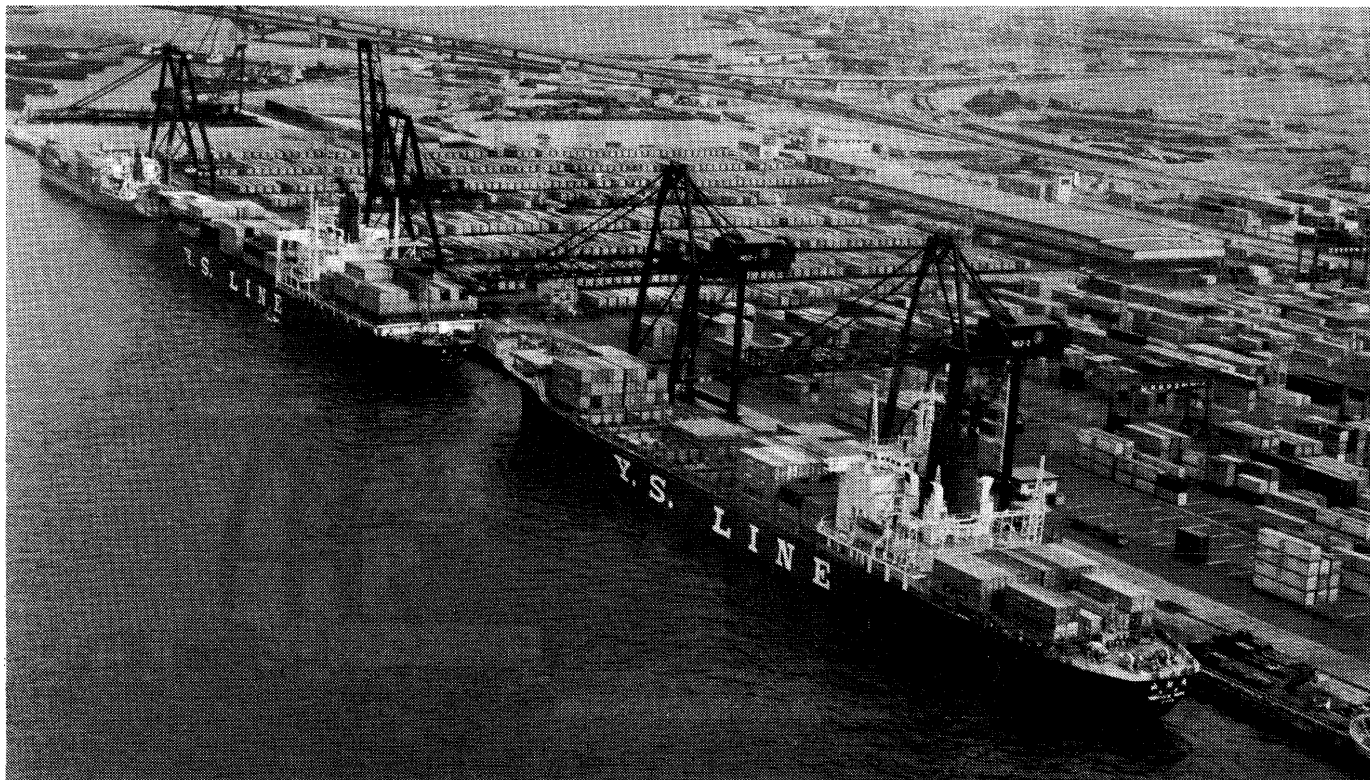
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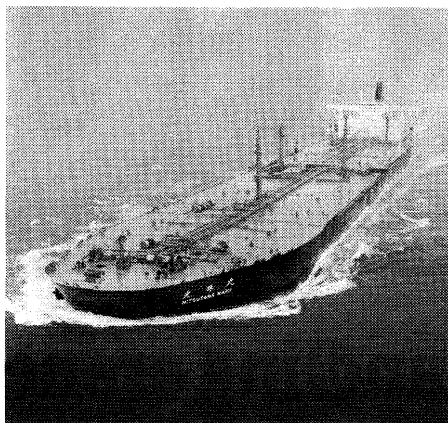
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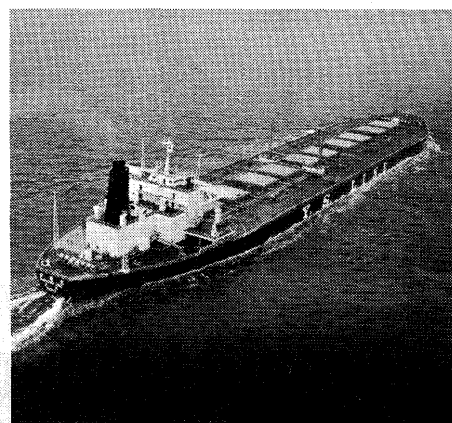
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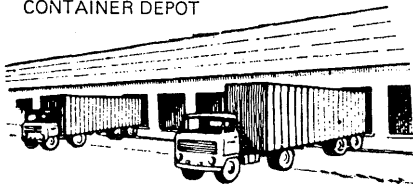
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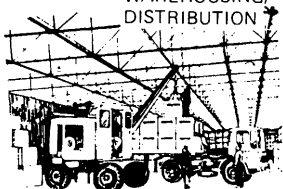


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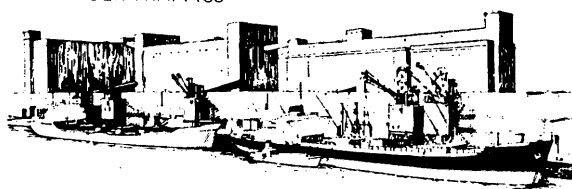


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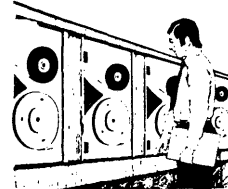
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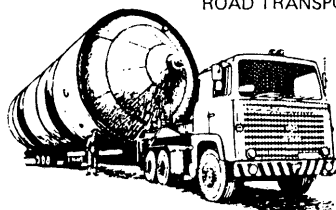
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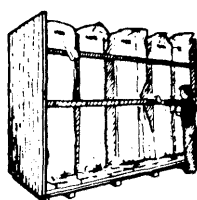
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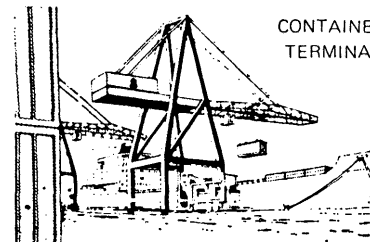
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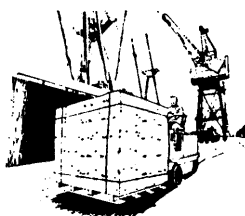
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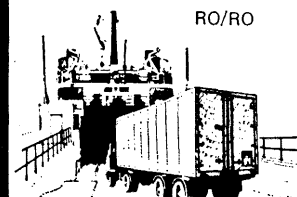
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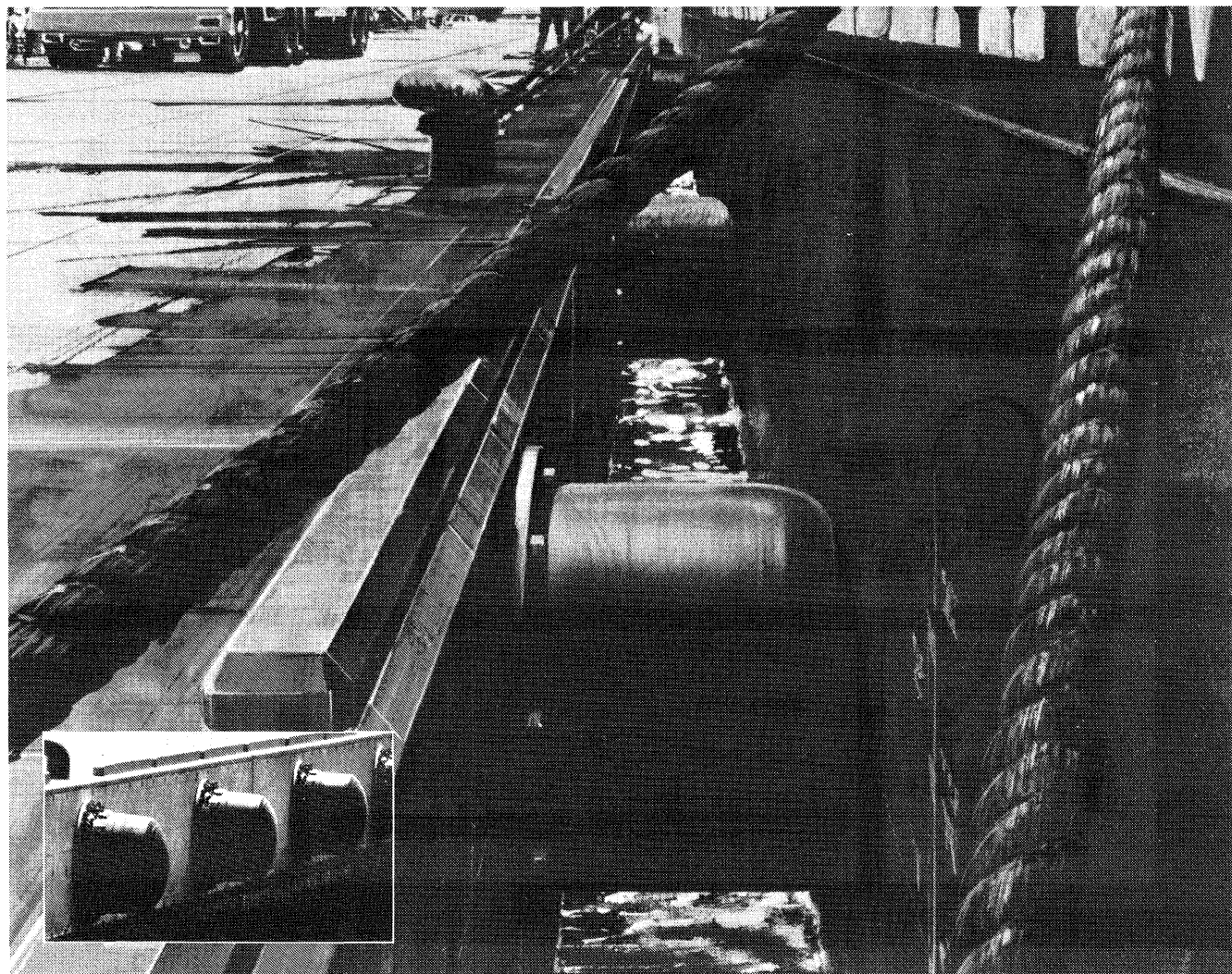
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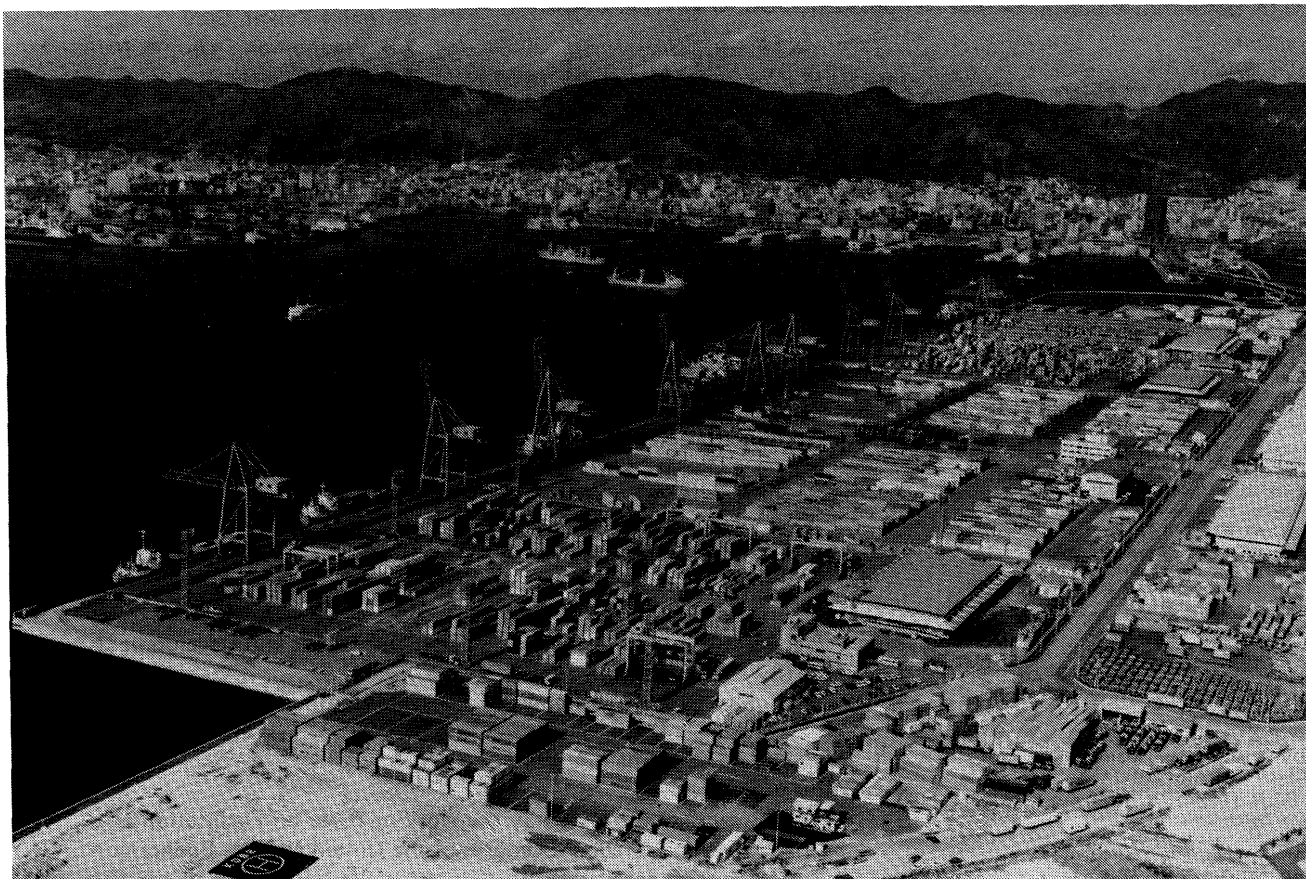
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**The Cover: The Port of New Orleans, La., U.S.A., viewing the France Road Container Terminal in the center. See also story on New Orleans on page 37.**

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# IAPH announcements and news

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## News Flash of IAPH Executive Committee Meeting in Gold Coast City, Australia

On April 23, IAPH Head Office Tokyo received a telex from Mr. R. Kondoh, Under Secretary who accompanied Secretary General Dr. Sato to attend the Executive and other committee meetings held at Gold Coast City, Queensland, Australia from 16 through 22 April, 1980, hosted by the Port of Brisbane Authority, informing the Tokyo Secretariat of the successful closure of the meeting and of the highlights of the decisions made there.

While the details of the respective meetings will be reported in the next issue of the journal, awaiting the return of the Secretary General and other staff from Australia, at this early stage we announce the following items of importance, together with the excerpts from a 96-page Report the Secretary General presented to the Executive Committee outlining the Association's activities since the 11th Conference in Deauville, May, 1979. (TKD)

### 1. Mr. Tukur of Nigeria recommended 3rd Vice-President

Since Mr. P.K. Kinyanjui's retirement from Kenya Ports Authority the office of the 3rd Vice-Presidency has been left vacant. After careful deliberations, the Executive Committee recommended Mr. Alhaji B.M. Tukur, General Manager, Nigerian Ports Authority, to succeed Mr. Kinyanjui for the unexpired term until the 12th Conference in Nagoya, May, 1981, for later confirmation of election by the Board of Directors at its meeting, by correspondence, to be called for towards the end of May, this year.

### 2. Mr. Andersen of Copenhagen recommended Executive Committee member

To fill the vacancy created by Mr. Tukur's being recommended to be 3rd Vice-President, the Executive Committee recommended Mr. Eigil Andersen, General Manager, Port of Copenhagen, Denmark for the term until the 12th Conference. His election by the Board will take place in the same manner as Mr. Tukur's case.

### 3. Mr. Wong of Singapore appointed Executive Committee member

To fill the vacancy created by the retirement of General Kang Chung Sung from Korea Maritime and Port Administration, the Executive Committee nominated Mr. Wong Hung Khim, General Manager, Port of Singapore Authority for the term until the 12th Conference and President Bastard so appointed him.

### 4. Conference Chairman and Registration Fees for the 12th Conference

The Executive Committee, at the last day of the meetings, heard of the state of the preparations from Mr. Fumio Kohmura, Honorary Vice-President of IAPH and the Executive Vice-President, Nagoya Port Authority, the host of the 12th Conference. The Committee agreed to approve, among others, the conference chairman and the

registration fees for the 12th Conference as proposed by the host port and the matters are now being put to the Board for their approval by a meeting by correspondence on May 23, 1980, in accordance with the provisions of the Association By-Laws. The following is the proposal made by the host port.

#### 1) List of Conference Officers

Conference Patron: H.I.H. Prince Takamatsu

Honorary President: Minister of Transport, Japan

Honorary Vice-Presidents

Director-General, Bureau of Ports & Harbours, Ministry of Transport, Japan

Director-General, Bureau of Shipping, Ministry of Transport, Japan

Honorary Supreme Councilor:

President, Nagoya Conference Promotion Association

Host Councilors:

Mayor of Nagoya

President, Nagoya Chamber of Commerce & Industry

Honorary Host President:

Chairman, Nagoya Port Authority Assembly

Host President:

Yoshiaki Nakaya

President, Nagoya Port Authority & President, Organizing Committee of the 12th IAPH Conference

#### CONFERENCE

CHAIRMAN:

FUMIO KOHMURA

Executive Vice-President, Nagoya Port Authority & Chairman of Organizing Committee of the 12th IAPH Conference & Honorary Vice-President, IAPH

#### 2) Registration Fees for the 12th Biennial Conference (In Japanese Yen)

Regular Member:	¥ 90,000
Honorary Member:	nil
Founder Honorary Member:	nil
Life Supporting Member	90,000
Associate Member (Class A-D)	120,000
Associate Member (Class E)	90,000
Non Member	150,000

### Excerpts from the Secretary General's Report

1) **Foreword** The Association, established in 1955 at Los Angeles, is turning a memorable corner in its Silver Jubilee year. During this period of a quarter of a century, there have been many crucial and difficult times and even the

## Papers to the 12th Conference invited

The Organizing Committee of the 12th Conference at Nagoya announces that voluntary contributions of papers by the conference participants will be welcome.

Following will be the conditions for the paper presentation:

- a) Any participants can contribute his paper on any port-related subject to the Conference.
- b) Those who wish to do so must send their typewritten texts to the Organizing Committee by the end of November 1980.  
Organizing Committee of the 12th IAPH Conference  
8-12, Irifune 1-chome, Minato-ku,  
Nagoya 455 Japan
- c) Organizing Committee will print all those papers so contributed and distribute them to the participants at the time of registration.
- d) Papers to be read at the Assembly will be selected by the Organizing Committee, with consultation with the Head Office.
- e) Authors thus selected will be notified by the Organizing Committee of the result by the end of February 1981.

existence of the Association has been threatened for many reasons including financial difficulty. But, thanks to the extraordinary and far sighted leadership shown by the people at each of such difficult times, and by the enthusiasm displayed by the members, the Association has managed to keep itself in one piece and take positive steps towards the fulfillment of the eventual goal for the improvement of the welfare of world ports.

**2) Epoch-making Measures for Financial Stability and Members' Responses** Without exaggeration, counter measures against the financial difficulties taken by the Association at the 11th Conference, were not easy for any member to comply with. The increase in dues was indeed substantial. And, we thought therefore that a considerable number of our members might as a result leave us. The three measures were:—

- 1) Collection of "Temporary Levy" (Equivalent of 25% of 1979 dues), from regular members, under the voluntary basis, setting the target amount to \$40,000,
- 2) Adoption of the SDR unit which replaces the US dollar unit, automatically meaning an increase of dues by 30%, and
- 3) A 10% increase of the dues unit amount from 600 to 660 in SDR for 1980 and 1981.

As requested in the by-laws, regular members were asked to file to the head office the recent tonnage figures for determining the number of dues units to be subscribed for 1980 and 1981.

"Relieved" is our impression of the response by members. As to the Temporary Levy, the target amount was nearly achieved and it is quite probable that the

eventual amount will exceed the target. Loss of members was well below the estimated number of 3%. During the period from March 31, 1979 to March 15, 1980, there was no change in the total number of regular members, while there was an increase of 19 membership dues units from 500 to 519 shared by 207 regular members representing 69 countries. We did however lose 2 countries from the Association.

The SDR system, at this point in time, seems to be well accepted by our members with the trend in members' dues payment at this stage almost identical to that of past years. It is therefore believed that the members' acceptance of the new system will prove positive, though there may still be some procedural confusion over payments.

**3) Activity since the 11th Conference** "Active" is the appropriate word to express the undertakings carried out by the Association, even though we are only half-way to the next Conference. Officers had an ad hoc meeting at Hawaii in November 1979 to discuss the guidelines for the overall structure of the 12th Conference. Board members have been active in responding to the study works for laying down the draft Convention on the Liability of International Terminal Operators, a really international and difficult task. The Executive Committee has, as always, been active in every sphere of Association activity, and the activeness of the Internal and Technical Committees, including that of our Liaison Officers, has been continuous. Members' cooperation has also been great, thus strengthening the ties among the membership all over the world.

**4) Contribution to Technical Assistance Fund** As important part of the active cooperation of our members, it should be emphasized that the amount contributed by means of special dues under the voluntary basis to the IAPH's Special Port Development Technical Assistance Fund has exceeded the expected amount of \$10,000. For this, the contribution by the IAPH Foundation of ¥2 million should be so noted. The amount received as of March 15, 1980 is as much as \$27,258. It is believed that the Fund will greatly enhance the future activity of the Committee on International Port Development.

**5) Membership Campaign** The Membership Committee has been actively engaged in the promotion of new members. Mauritius and Egypt are newly joined countries.

Reference: Movement of Regular Members

Data as of	Country	Members	Membership Units	Comparison		
				Country	Members	Units
Dec. 31, 1976	68	177	456	—	—	—
Dec. 31, 1977	70	190	472	2	13	16
Dec. 31, 1978	71	195	476	3	18	20
Dec. 31, 1979	73	210	498	2	15	22
Mar. 15, 1980*	69	207	519	-4	-3	21

However\*, we have to note an unhappy situation. As the result of the application of the by-laws provision that those members who had been delinquent for two years in the payment of dues should have their membership status terminated, we had to lose membership representation from Algeria, Angola, Spain and Turkey, effective Jan. 01, 1980. The situation was inevitable, for no response from the members of these countries was obtained, despite three reminders from the head office. It is sincerely wished that they will come back and stay with us in the near future.



**6) Settlement of Account for 1979** Thanks to the efforts continuously made by the Finance Committee and corresponding cooperation by the members, the settlement of accounts for 1979 proved healthy for the Association financing as scheduled. For this, we are grateful to the IAPH Foundation for their long time support and facilitation extended to the Association.

From this improved financial prospect, we see security for the future, though subject to a future price rises which are indeed inflationary worldwide at the moment. Should the general price hike stay within the level of the past few years (annual increase ratio of 5% in both personnel and non-personnel expenses), we may even manage keeping on the present level of operation for five years until 1986, without raising the dues after 1982 and without help of the IAPH Foundation.

In this context, it may be said that the Association now is in a position to consider the possibility of terminating the Agreement with the IAPH Foundation, pertaining to the execution of the IAPH head office business, by respecting the spirit of the 1973 Amsterdam Resolution.

**7) Nagoya Conference, May 23 - 30, 1981** The Nagoya Port Authority has been very active in planning how to make the Nagoya Conference meaningful and enjoyable to delegates, since Nagoya was selected as the site for our 12th Conference. Decisions to be made by the Executive Committee should assist the Nagoya Port Authority to achieve these objectives.

**8)** Last but not least, the Association's thanks and appreciation should be expressed to Mr. F.M. Wilson and all officers and staff members of the Port of Brisbane Authority for their continued and tireless efforts for the success of our gathering. The people met at this beautiful city of Gold Coast will long remember the hearty reception and Australian Hospitality.

## **Possible evolution of the Western European ports economy as viewed by Mr. Vleugels**

Mr. Robert L.M. Vleugels, Director General of the Port of Antwerp who is now serving as Chairman of IAPH Committee on Trade Facilitation recently sent the Secretary General an article on the subject "The Ports in the 80's. The European scene" which he delivered on April 15, 1980 on the occasion of the Freight Show Europe '80 in the AHOY HALLS at Rotterdam.

The full text of Mr. Vleugels is reproduced on page 11 of this issue. (TKD)

## **Port of Chittagong celebrates 93rd anniversary**

Mr. Syed Mansur-ul Haq, Chairman of the Chittagong Port Authority sent an invitation letter to Secretary General Sato to be present at the ceremony of "Port Day-1980 to coincide with the 93rd anniversary of its foundation on the 25th April, 1980.

Dr. Hajime Sato was excused for not accepting the invitation due to his engagement in the Association Executive Committee meeting in Australia and sent a message of congratulations to the Port of Chittagong.

Secretary General's message follows. (TKD)

## **Message of Congratulations to the 93rd Anniversary of the Port Chittagong**

It is a great honor and pleasure for me, on behalf of the entire membership of the International Association of Ports and Harbors, to send this message of congratulations and friendship to your fine port now that the ceremony of the 93rd anniversary is taking place in the presence of a great many dignitaries at the riverside of the Holy Karnafuli.

The Port of Chittagong was one of the first ports in the world who took a major step forward towards a modern port and has since come a long way in its endeavors, continuing the steady improvements and developments for nearly a century. Your port, presently known as the Chittagong Port Authority as one of the nation's principal ports, has always played a most important role in the economic development and improvement of social welfare in the People's Republic of Bangladesh.

Taking this opportunity, I would like to express my deepest admiration and respect to your predecessors and those who have rendered their meritorious services towards this goal.

Further I would like to emphasize that your port has participated positively in the multi-sided activities for the promotion of international cooperation and exchange of experiences and information through our world Association.

Today the world is facing so many difficult issues, both in international politics and economic relationships. However, I believe that we who are engaged in world port activities should concentrate our wisdom and energy at such a critical point of time to show people of the world that our ports are open to them and that we are ready to assist each other in the promotion of trade and further to contribute to world peace and the improvement of the welfare of mankind, this being of course the basic spirit of IAPH.

We should endeavor for closer cooperation among the ports of the world under this spirit and will have to work a great deal at gathering and exchanging views and experiences that ports can appreciate each others problems and thus strengthen our ties and I am convinced that our past mutual cooperation has already succeeded in creating a system in which we can grow and heighten our efficiency.

To mention how our members are able to help each other, I would like to draw your attention to the fact that many friends from member ports tried to answer the question you raised recently on port security in the "VOICE" column of the Association journal "Ports and Harbors". It is my firm belief and ambition that IAPH can in such a way enhance this wonderful cooperation when dealing with current matters of international importance.

Further I hope your port will continue its dynamic efforts in developing and enriching the wonderful relationship, thus made, with the ports all over the world through the multi-faceted activities of IAPH and by keeping active as one of our oldest and most experienced members.

In closing, I wish you and Port of Chittagong even greater prosperity and development in the future.

Our best wishes,

Hajime Sato  
Secretary General  
IAPH

## Port of Le Havre represents IAPH at ICB Paris Forum

Mr. J. Dubois, IAPH Executive Committee member and General Manager of Port of Le Havre Authority had one of his staff attend the Forum of the International Container Bureau (ICB) which was organized at the Le Bourget Airport, Paris, within the framework of the Exhibition "Freight International '79" on November 9, 1979.

The Forum was presided over by Mr. Hartman, Deputy-President of the International Container Bureau and were presented by four guest speakers, Mr. C. Chene, Administrator at the Transport Head Office of the Commission of European Communities; Mr. M. Marmy, Engineer, International Roadhauers Union (IRU), Geneva; Mr. G. Flechon, Managing Director of Société Internationale pour le transport par transcontainer, INTERCONTAINER, Basle whose paper on the subject "Combined Transportation in the light of the Energy Crisis" is reproduced on page 26 of this issue through the courtesy of ICB, and Mr. J. Mathieu, Managing Director of Société Nouvelle des Transports Combinés (NOVOTRANS), Paris. (TKD)

## Visitors

On April 24th, Dr. Gotz Kamps, Public Relations Manager and Mr. J.F.G. Grosser, Adviser of Hamburg Messe und Congress GmbH and accompanied by Mr. Izumikawa, Assistant to the Representative of the Free and Hanseatic City of Hamburg Tokyo Office, visited the Head Office and were met by Mr. Hiroshi Kusaka, Deputy Secretary General and other staff. The party was in Japan to "Portex '80" - International Port Exhibition due May, 1981 in Hamburg.

On April 25th, Mr. J.P. Lannou, Port of Le Havre

Authority who acted as Coordinator for the 11th Conference of IAPH held at Deauville, May, 1979, visited the Head Office and was met by Deputy Secretary General and other staff. He was with Mr. J. Monnin, Far East Representative of the Port of Le Havre Authority stationing in Tokyo, and was on the way from Brisbane, Australia where he had attended the Executive and committee meetings of IAPH on behalf of Mr. J. Dubois, Managing Director of the port and IAPH Executive Committee member who had to cancel his trip to Brisbane due to the government mission to Korea and Philippines.

## Membership Notes

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#### Change in the Board of Directors

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from: Mr. Chung Kek Choo

to: Mr. Billie Cheng Shao-Chi, Director (Finance)

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## Open forum: Port releases:

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# The Ports in the 80's The European scene

**Paper presented to a conference  
organized on occasion of the  
"Freight Show Europa '80" at  
Rotterdam**

**by Mr. Robert L.M. Vleugels, Director  
General, City of Antwerp — General  
Management of the Port**

### 1. Introduction

Summarizing the subject to which I am invited to address myself today, I am glad to make the following preliminary observations.

- 1.1. Excepting the few months already gone, the 80's are still ahead of us, meaning I must indulge in a little crystal ball gazing.

Accepting the challenge, I mention philosophies expressed by more sagacious persons than myself, who wrote:

"You should not prophesy unless you know";

"The past is the best prophet for the future"

and

"The best qualification for a prophet is to have a good memory".

These sayings can be read in the best books of quotations. For myself I now adopt the truths they express.

However, I shall not hesitate to call upon my memory and other, certainly better, sources of knowledge of the past, (such as reports of scientific committees) as stepping-stones upon which I venture to walk into the future.

- 1.2. The 80's as such contain two times five years. When making that simple addition I refer to the wave-like evolution in economic development, - a fact explained in any lecture on economics.

The past has indeed shown that in modern times "the economy" is characterised by ups and downs.

These "business cycles" stretch over a certain time: three, five, maybe seven years, all depending on the geographic, political or other aspects of the several components.

When we examine seaport statistics we clearly distinguish the good from the bad years. Do these results reflect such cycles which apparently occur? Anyhow most of the European ports published favourable figures for the year 1974, but had to explain in one way or another why 1975 and 1976 were bringing along less advantageous results. Those for 1979 again were more than satisfying. Were they depending on the "cycle" mentioned above?

Could I conclude that the 80's will be composed of two cycles of about five years? I take into account the possibility that those mysterious economic waves, going up and down, again could be dominant factors throughout the decennium which we have in view.

- 1.3. I have to confine my remarks to the European scene. Even Europe, the smallest continent of all, is large when port business is at stake. I want to limit my considerations only to the ports within the European Economic Community and specifically to the continental ports.

- 1.4. In a manner of speaking studies of future developments appear as the years go by. The reason is that even with all the help of computerization and other technologies, it is only when we have in hand the most detailed statistical data for previous years, and can compare it with current performance—which usually happens after much delay—that composite details can be fed into the machines which then, and only then, can predict future trends with reasonable accuracy.

I did not have available such technological support and necessarily must confine my remarks to the general trends and their consequences.

- 1.5. That is one reason more why I keep in mind that if later my views of the 80's were proved to be right, others will tell that also they had that same opinion, if my predictions would appear to be wrong I shall remain alone having to bear the responsibility by myself.

### 2. The General Scene

- 2.1. The activity of ports depends on international maritime trade. Over the years after worldwar II that trade has expanded in magnitude on a world-wide scale. Through the wave-like movement of the business-cycles the straight line of the trend moved up, being interrupted only by serious international political crises or warfare.

How is worldtrade going to look like in the 80's?

I like to refer to the studies developed by Nobel prize winner Prof. Wassily Léontief on "The Future of the World Economy" and to the paper he presented in April 1979 at the 11th Conference of the International Association of Ports and Harbors at Deauville/Le Havre. Taking all in all the growth of the worldtrade between the years 1970 and 2000 would be in the order of 4,1% per year, on the assumption of a conservative economic scenario. Translated into seaborne traffics that would lead to a growth ratio of 4,8% per year for the world as a whole



and of 4,1% for Western Europe (i.e. all Europe, except eastern bloc countries). It should be stressed that bulk cargo traffics to and from Western Europe experienced a lower growth ratio (3,6% per year) than general cargo (5,1% per year).

Without further comment I state that this distinguished economist, as well as several other sources of information, lead us to believe that—as in the past—world trade will continue to grow and that as a natural consequence Western European ports as a whole will be called upon to handle more cargo than they do at present.

That the average increase per year of the cargo flow in general until the year 2000 would be 3%, 4% or more is an important fact to know, but who could certify that such ratio's are fully applicable on the 80's?

- 2.2. It remains a guess. When we look around of us in Western Europe we experience that commerce and industry are not doing so well, that capital is expensive, that unemployment is too high. Simply these few facts of the present time reflect that there is somewhere sand in the machinery of world trade. Before greasing and lubricating are effected, a few years after 1980 might have gone by. The second half of the 80's should then produce better results.

- 2.3. The pattern of the world trade and of the seaborne cargo traffics is changing and inevitably will do so. Some factors are clear, but not always calculable. The following tendencies are of interest with respect to the Western European ports.

Our part of Europe is poor in natural resources. Imports—mostly seaborne—are a necessity. They include: raw materials for the industries and for the supply of energy. Moreover, to some extent, the food-reserve for people and cattle has to be "fed" regularly.

The changes occurring are that developing countries which up to a sizeable proportion are the producers of these raw materials are growing more and more into a status of manufacturers themselves. Presumably the effect of that evolution will not be too sharp in the 80's. Anyhow, it has to be taken into account in the long run.

- 2.3.1. Could that mean indeed that the Western European ports have to face a future which promises a relatively greater increase of general cargo traffic than of bulk commodities?

In any event a correcting factor should be applied to that rhetorical question i.e. with respect to the energy sources and their substitutes.

- 2.3.2. The so-called oil crisis has disturbed the world economy as well as the Western-European approach to the problem of survival. Avoiding details, I express the general conviction that, with an ever-growing need for energy ahead, Western Europe will try to limit oil imports as much as possible, and search for equivalent or better substitutes, such as coal, LNG and LPG, and nuclear energy (not necessarily in that

particular order).

The three first named "raw materials" basically constitute port business, unless the gasses are carried over extremely long distances via pipelines.

Already tonnages of coal arriving at several continental ports have increased considerably. That is a clear indication of future developments. The transport of liquefied natural or petroleum gasses comes on the move, ports able to receive gascarriers in compliance with stringent safety regulations are preparing themselves to serve as energy distribution centre. They must provide safe access for the gastankers, plus a well co-ordinated traffic control system and safe land-based (above or under the ground) storage facilities. Fully integrated marine and inland distribution systems also must be developed if not already in existence.

- 2.3.3. Next to the energy question we must examine the third-world problem. Newly developing countries, with varying degrees of support from other parts of the world, are growing, some more rapidly than others. Several such countries have been able to attract industries which before were almost monopolized by the so called developed nations. We may assume that this evolution will continue. As a result they will constitute seller's and buyer's markets of ever increasing importance. In general, their exports of finished and semi-finished products will grow; their needs for capital equipment (e.g. complete factories and major industrial machinery) and for more diversified consumer goods also will expand.

Thanks to such events total world-wide commerce will be enlarged: new and more attractive markets will emerge.

- 2.2.4. As a final remark, with reference to the "general scene" I want to stress that a great many of these assumptions would be invalidated if political incidents, as referred to in par. 2.1. (warfare, tensions, etc.), intervene. Unfortunately we must face such possibilities which seem to be a part of every day life upon this globe. Nevertheless I base my further reflections upon the assumption that humanity will develop in intelligence, in parallel with the logical growth of world trade and sea transport.

### 3. The European scene

The E.E.C.-port complexes may be described as the hub of port-technology, economy and operation.

In modern history they are those with the oldest tradition, they also are,—being located so closely to each other—, imbued with a spirit of sharp competition. On that aspect I would like to expand later on.

All in all these ports play a major part in the world's seaborne trade. That trade involved in 1977 not less than 3,380 million tons (presumably a total of 4 billion tons will have been surpassed in the meantime). Compared to that figure, only the major continental North Sea ports, i.e. in the range between Le Havre and Hamburg, registered for that year a maritime cargo throughput which was very close to 600 million tons, meaning they aggregated more than 17% of the world's port-related

commerce. But these are only a few of the E.E.C. ports. May I therefore, without submitting more statistical data, ask you to agree that the E.E.C. ports are "responsible" for the handling of at least 25% if not 30% of all seaborne cargoes, world-wide?

Their role in the years to come will continue to be as important as it is, on condition that products of E.E.C.-countries will remain competitive cost-wise and otherwise, and the purchasing power of such countries remains level or will increase still further.

These assumptions sharpen the enigma: what will the situation of these European ports be in the 80's.

I would like to consider the problem from three points of view: (1) the economics of sea-transport, (2) the economics of the E.E.C. seaports and (3) competition between these ports.

### 3.1. The economics of sea-transport.

The 50's were characterized by an extension of maritime technology existing before, and developed during World War II Liberty, Victory and Fort vessels constituted the back-bone of the Allies' general purpose cargo fleet. Next to them were the tankships, the largest of which were the "T2's" with a deadweight capacity of about 18.000 tons. If we add coasters, ferry-boats and passenger liners, we see a rough picture of the merchant marine as it existed in the years following the termination of hostilities.

Liberty and Victory ships had modest speed capabilities, i.e. 10 and 12 knots respectively, using fossil fuel oil when a single barrel did not cost a very big bundle. Some of the real old-timers were coal burners.

Operators of regular-liner vessels could afford the time to call at several, if not all ports in a particular range. In those days ships arrived at Antwerp to unload and continued their voyages to Rotterdam, Amsterdam, Bremen and Hamburg for discharging, returning via some of the same ports to load. Even the major lines were operated, so to say, "à la ceuilllette". But those were the days before wages and other expenses went through the roof, and profits plunged through the basement.

After a transitional period in the 1950's the early 1960's brought along new types of somewhat faster general cargo ships. Diesel engine propulsion was adopted on an increasing scale, accompanied by varying degrees of engine-room automation, now standard operating procedure aboard most modern merchant ships. The first semi-container ships entered the North Atlantic trades during the mid-60's. Some steaming at speeds approximating 20 knots.

The RO/RO ships reached their full technological development.

The second Suez-crisis (1967) gave a strong incentive to the construction of mammoth tankers (200.000 dwt and more).

Only a very limited number of ports were able to receive them involving heavy investments in dredging and port constructions.

These few facts illustrate how specialisation and refinement of operation brought along high investments per unit of carrying capacity and

increased expenditure for the operation of the ships. The results were clear. The time spent in ports became excessively expensive. The number of ports to be called at had to be reduced dramatically.

Evolutionary events characterizing the early to mid-60's became positively revolutionary toward the end of that decade and in the early 70's. Moreover, new elements entered the picture.

The world's merchant marine was extended and modernised. By then the general purpose ships of the old type were replaced by modern open deck vessels (with or without adequate handling gear on board).

The number and size of the full-containerships increased. After the first generation the second one showed up in the early 70's. In turn these were followed by the third generation with a carrying capacity of more than 2.000 T.E.U. (twenty foot equivalent units) and plans for the construction of containerships with a capacity of 3.000 T.E.U. are at hand.

Together with this development the smaller containercarriers, mostly single open flatdeck ships, were put at work to serve as feeders of the major containerlines.

Next to the increasing use of RO/RO ships, mainly on the short searoutes, a number of other specialised vessels for dry cargo came into operation; bargecarriers, heavy load ships, seebarges, car-carriers, etc.

The average size of the dry-bulk-carriers further increased. The bigger ones measured 125.000 dwt and more.

The gigantic size of the mammoth crude oil tankers was severely criticized after some dramatic accidents occurred, causing widespread damage to the environment. Objections to the construction of ever bigger tankers were mainly pointed at the VLCC's (very large crude carriers) i.e. those of minimum 160.000 dwt.

The gastanker has been developed in its early stage during the latter 50's, came into broader use in the 60's and thanks to the improvement in technology it could gain more carrying capacity during the 70's. We should of course make a distinction between the LPG, the LNG-tanker, but we consider the problems they put to ports to be basically the same.

The evolution in the 70's also involved economical and even political facts, some of them unknown in previous decenniums.

In general the cost of operation of ships sharply increased. Each of the principal components: capital expenditure, personnel and fuel were affected by constantly increasing prices.

The real effect on individual ownerscompanies varied greatly according to the flag the ships were flying: the flag of the nation of the owners themselves, or a flag of convenience, of a so called capitalistic or of a communist country; the flag of a developed or of a developing country. Avoiding the details of this matter I have to state that more than in any period of the modern history of commerce, the nationality of a ship

has become of extreme importance in the 70's with respect to its commercial viability.

Nationality provided much or no government subsidies, viz. detaxation, for building or operation, to employ well or underpaid crew. Maybe fuel prices were not so much different but even this aspect is not always clearly defined.

Even under these general conditions the expansion of total carrying capacity exceeded real needs in many cases. That was so in relation to several trades to and from Western Europe. The result was intensified competition amongst the individual owners and shipoperators, eventually necessitating rationalization among those with common interests.

The weaker companies either had to disappear or become a part of stronger entities, e.g. by merger, by setting up pools, or by establishing protective measures.

Within the same scope the cargo-sharing by states is illustrative. Even before the Code of Conduct (UNCTAD, 40/40/20 Rule) is internationally applied a considerable number of states concluded bilateral agreements in order to reserve 80% ( $2 \times 40\%$ ) or even 100% ( $2 \times 50\%$ ) of the mutual trade to the national flag or at least to the national companies. There are no signs that the impact of national policy on the merchant marine will weaken in the 80's. On the contrary.

The 80's will need general purpose ships at lower capital cost, with a reduced number of experienced, well paid crew and with propulsion machinery operating at acceptable fuel price levels. It may follow that horse-power must be reduced and cruising speeds lowered.

The container "revolution" apparently will continue. The point is that at the other end of the voyage not only an adequately equipped container berth must be available, but also proper transportation to the hinterland. If the former exists, the latter is not yet available in many regions of the developing world.

If present operation of container-related companies is not always profitable, construction of the fourth generation of containerships in the near future may be questionable.

Dry bulkships should find good markets anyhow, in relation to Western Europe. The imports of coal should increase and those of ores at least should stabilize. The most suitable carrier may be the 125.000-150.000 dwt ship.

As to crude-oil tankers it is conceivable that most of them will not exceed the 250.000 dwt margin. The bigger ones being exceptional for use in special trades.

As the need to replace energy increases, LPG and LNG tankers will become more numerous and tend to become bigger, as far as permissible on safety grounds (cfr. the biggest LNG tanker in the world at present is the M.V. METANIA).

### 3.2. The economy of the E.E.C. seaports.

The requirement of ship operators versus port capabilities have greatly changed in the past decades, as already mentioned.

The owners found ports in Western Europe where their ships may "safely moor and stay always afloat". In some cases the necessary equipment ashore was made available.

That statement, too general as it is, does not reflect the real situation. Some distinctions must be made in order to evaluate the evolution which necessarily took place within the ports. An evaluation of the past should be a good base indeed for a forecast in the 80's.

#### 3.2.1. The growing size of bulkcarriers and tankers has eliminated several ports as discharging places for dry bulk commodities and crude oil.

With respect to dry bulk, the major ports could manage to adapt their maritime access sufficiently enough to retain a part in the market.

Such was not the case in connection to the crude oil imports. In this branch only those which nature blessed with deep waters could keep up with the shipping requirements. Even they had to invest heavily in dredging works. Furthermore new ports or mooring places were built at high cost to receive the super- or mammoth tankers.

#### 3.2.2. Progressing specialisation and diversification in the carriage of good by sea and in their loading and unloading at adequate berths has caused problems to a great number of western European ports.

Container and RO/RO traffic requirements were the most prominent. They were the "flagships" which every port wanted to receive. Many ports could not tend the helping hand, i.e. they could not afford to invest sufficiently to create suitable berths with gantry cranes, and straddle carriers, etc. to serve them.

Specialisation meant also; which ports could, or could not, handle heavy loads, liquid sulfur, bagged cement, fresh fruit (tropical, subtropical), refrigerated cargo, fertilizer, chemical products in bulk or in individual units (drums, bags, tanks).

In fact those ports which remained able to deal with all these commodities became fewer and fewer. Roughly spoken we could qualify that evolution as a "natural" selection, as it happens in nature.

#### 3.2.3. The time factor which became so important in the economy of transportation created severe stress. The Western European ports were affected from two sides.

Firstly, a few of them could not guarantee a continuously secure and quick service, giving the ship-operator reasons for withdrawing his ships and—if commercially feasible to change voyage schedules in favour of other more efficient ports. Secondly in any case economical operation of regular lines necessitated reduction of the number of ports of call to the minimum. The "one port to one port"-concept which is a basic aim for container services, is a good example.

#### 3.2.4. Feeder services became a current phenomenon in shipping business in those traffics which were suited for that formula such as container transportation. A few main ports and several feeder ports became interrelated.

Along the same line of rationalisation some ports



assumed a function as maritime distribution centers, as transshipment ports. Bulk loads (coal, cereals, oil, etc.) or specific general cargo (cars, steelproducts, etc.) are discharged here out of bigger vessels and reshipped in smaller vessels to the final port of destination. Facilities have to be available for temporary storage unless the cargoes are directly transshipped.

- 3.2.5. All foregoing factors tended to eliminate a considerable number ports or portterminals from the cargo flow. Moreover, the capacity of new specialised equipment exceeded many times the potential of conventional berths.

As a result several ports and terminal operators got into difficulties. Individual companies had to merge, to conclude cooperation agreements or to disappear,—a story which is quite similar to what happened in the shipping branch.

On the other hand still new terminals were built on new areas in expanding ports, even new ports as such were constructed, adding more cargo handling capacity to the existing one.

- 3.2.6. As a conclusion of this chapter I can only speculate that all in all Western Europe has come to an overcapacity in its portstructures. Even with an overall growth of maritime trade,—which could be more moderate in the first half of the 80's than (hopefully) in the second one—, these ports will be faced in this decennium with problems which can be classified under the heading: competition.

### 3.3. **The Competition between E.E.C.-ports.**

There are probably about 500 seaports and harbours within the European Economic Community. It goes without saying that a great number of them only have local economic and social significance. The fact of their existence as such indicates however that potentially many of them could be enlarged and improved. That means that new ports could be developed to suit the maritime trade. Without quoting names, I might add that indeed such new ports have been built or are under construction maybe to the detriment of the existing "old timers". This is one aspect of the competition between the E.E.C.-ports.

Another aspect is that, from the aforementioned several hundreds of ports and harbours, about half of that number is situated in the United Kingdom.

Approaching the problem of competition I mention (1) the field of competition (2) The means of competition and (3) the competitive situation in the 80's.

- 3.3.1. The field of competition.

Fundamentally the ports of Denmark, Ireland and of the U.K. are not directly competitive with those on the western part of the continent. Moreover conflict of interests between the Mediterranean ports and those of the North Sea are not far reaching. Anyhow competition exists between ports situated along a common coast and/or which can serve a same hinterland viz. a similar foreland (see: transshipment ports).

In any case many such ports are competitors with respect to the handling, storage and distri-

bution of cargo and, furthermore, to the attraction of port related industries.

In Western Europe port interests are constantly defended by the individual portauthorities themselves—no matter how different their status and way of operation may be—but also protected by their national governments.

National port policy differs according to the nation concerned. It is evident that the U.K. tackled the problems of port economics from other viewpoints than did other nations of the E.E.C. Continental nations did not put ahead so much the principle of self supporting port operation. They were interested also in the economic spin-offs, i.e. the indirect income from port related activities, for which purpose they were prepared to grant subsidies for port expansion and equipment.

Port policy however involves many more facets than direct investments in port development. The transportation system linking the port with its hinterland; social policy determining the relations between employer and employee; and fiscal regulations are only a few major elements constituting the full picture.

Within the Benelux and the E.E.C. frameworks the problem of coordination of national port policies have been on the agenda for years and they still are.

If to a certain—maybe a still too limited—extent a better understanding has been developed between the ports of the Netherlands and those of Belgium, such is not the case when we refer to E.E.C. continental ports in general.

In this respect the statement made by the authors of the so-called "Seefeld-report", addressed on behalf of the "Committee for Transport" to the European Parliament (April 12th 1972) was particularly meaningful in stating "One of the most important reasons why measures concerning a common policy on transport by rail, road and waterways evolve with such difficulty is that competition between the European seaports continues to be directly or indirectly, an important issue. On several occasions governments of Member States have rejected proposals of the Committee for Transport in the Board of Ministers, apparantly because they feared that the competitive position of their national ports would be weakened".

That statement was published in 1972, when the E.E.C. counted only six members. In the meantime progress has been made in several fields, for sure, but not so much—in my opinion—in the field of the coordination of competition between the E.E.C.-ports.

When thinking about the prospects for E.E.C. ports in the 80's, we should reckon that, even when the national port policies have been worked out in more detail,—and so applied—, the competition between the ports reaches beyond national borderlines. The major ports serve an international hinterland and therefore a coordinated E.E.C. policy concerning specifically the inland transportmarket would be of signifi-

cant importance. Furthermore coordination of investments in portstructures is essential. That seems to be a difficult task within the national context.

What, if that problem has to be settled on the E.E.C.-level?

Therefore I doubt that in the early years of the 80's the E.E.C. ports will have to take into account other political "working conditions" than they knew in the 70's.

### 3.3.2. The means of competition.

The only way to secure and hold customers in a branch of activity like a port, —which is a servant of seaborne commerce—, is to provide the best services at the lowest tariffs. I am convinced that the ports we have in view have endeavoured to apply that simple rule throughout the years.

Anyway I must stress the fact that the identities of these ports differ considerably. A port is a complex entity. Public authorities (the port authority in the first place), semi- and fully private enterprises combine their efforts to make their port as attractive as possible to suit their clients.

Comparing the Western European ports we may conclude that some of them depend more on public enterprise and others more on the initiative of private companies. The combined energies of both constitute the real force which a given port can muster in order to withstand competition.

As specific means of competition a series of elements should be listed, such as attractive inland transportation rates, appropriate port installations enabling efficient work, acceptable port dues and cargo handling tariffs, etc. . .

Next to these physical and financial aspects I want to stress that above all an adequate coordination of the port operation and good human relations are essential.

These factors constitute a guarantee for the safe, secure and continuous port services.

In these times of mechanization and specialization the human factor has become more important than ever before. Its value will certainly increase in the years to come.

### 3.3.3. The outlook to the competition in the 80's.

After this general review of some facts and tendencies in the sea transport and port business, I shall come to some forecasts; they are the most delicate part in this paper.

The 80's could be characterized by a slower growth in seaborne tonnage than were the 60's and the 70's. But growth there will be anyhow.

The efficiency of the Western European Ports will further develop both by technological means and by improved organization. Their overall capacity will grow quicker than traffic would do during the 80's, at least during the first half of this decade.

As more port capacity is created in existing ports and in new ports, the question is open: which of these ports will be able to secure a share of the total cargo flow, on a scale sufficient to support the burden of investments and operating costs.

No doubt national policy will play a predominant role in the port economics as it does more and more in the field of ship operations.

Competition will be hard and individual. Every port will have to mobilize all available forces and maybe also will have to reorganize existing operational patterns.

The latter fact again focusses on the human factor. Ports with good community relations, with a work force eager to earn their living by the port, will have an advantage over others were such a beneficial situation has not been developed to the same degree.

Therefore my final remark is as follows: "In the 80's man himself will stand in the centre of the scene of competition between ports."

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(Turned back from page 18)

## (Federal Involvement—)

operate at a profit may be able to use help if they have difficulty obtaining funds. Underwriting of ports' financial needs by the Federal Government would leave the initiative in the hands of local port authorities. However, the Federal Government would probably have to have a national port plan against which proposed projects could be measured to avoid contributing to redundancy of facilities. The advantages and disadvantages discussed in options 1 and 2 would then apply.

**Federal financing of federally mandated costs.** Ports support this choice on the grounds that nonrevenue-producing expenses imposed by Federal regulations (*i.e.*, those for environmental protection, employee health and welfare, and cargo security) should be borne by the Government. The ports' rationale is that collectively their efforts benefit the national economy and they should be reimbursed for these costs. One disadvantage of this choice is that it could establish a precedent, if granted, and start an avalanche of similar requests from other publicly owned and operated enterprises, such as public utilities, public transportation companies, etc. A strong counterargument to the ports' rationale is that social and environmental regulations are simply a cost of doing business in today's world.

## Conclusion

Officials and users of each port in the United States must begin thinking now about how best their particular interests might be served by Federal involvement in financing of operations and development—if at all. Indications are that this subject may very well be pursued in the next Congress, and a reasoned position that is well thought out in advance can carry a great deal more weight than a passionate but unsubstantiated outpouring of feeling and opinion at the last minute. Legislative planning should be as much a part of the day-to-day concern of a port as financial planning, because the two intersect at a "go-no go" point on the graph of realistic options for each port. The important thing is that, if there are legitimate reasons why a "universal solution" ought not be adopted by the Congress, the reasons be cogently and persuasively presented together with workable suggestions for concession or accommodation. That takes thought and planning ahead of time. It's not too soon to start.

# Federal Involvement in Financing Port Operations and Development

By Karl E. Bakke in  
Stockton's "Port Soundings"

Port activity in the United States is big business. A 1977 study conducted for the Maritime Administration concluded that the port industry then provided, directly or indirectly, employment for more than one million people and added about \$30 billion to the Gross National Product (*i.e.*, the value, at market price, of total national output of goods and services).

Our port operations and development have traditionally been funded by local financing initiatives, both public and private. State, country or municipal subsidy, in one form or another, for such activity is not unusual, but Federal assistance, to date, has largely been confined to maintenance of navigable waterways and installation/servicing of aids to navigation. Part of this tradition is derived from the Constitution: Article I, Section 9, provides that "No preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another..." Another, and perhaps more compelling reason, historically, is that dictates of transportation economics in the good old days of breakbulk trade provided a naturally tributary pool of cargo that could be depended upon in making projections concerning expenses, revenues and financing of port activity.

The past two decades have seen major changes in the factors influencing port operations and development. There has been an astronomical increase in cost due to inflation, technological developments in ocean transportation, and compliance with stringent Federal, State and local environmental regulations. As a result, the traditional sources of port financing are becoming increasingly difficult to tap for funding of the magnitude required.

The U.S. General Accounting Office, an investigatory arm of the Congress, has recently completed a study designed to develop background and options for evaluating both existing Federal programs and future legislative proposals that affect port operations. Titled *American Seaports-Changes Affecting Operations and Development*, the study is based on interview with officials of 21 public ports throughout the United States, the A.A.P.A., inland and ocean carriers, and interested Federal agencies.

The principal findings of the report are summarized here:

## Technological and Regulatory Problems

**Technology.** Innovations in moving and handling cargo in recent years have—

- Resulted in development of specialized vessel configurations (cellular, LASH, Ro-Ro) and larger body size to reduce unit costs of cargo movements;

- Required deeper harbors and ship channels;
- Required new, larger and capital-intensive port facilities for both bulk and containerized cargo; and
- Resulted in a shift in the patterns of some cargo movement away from "natural tributaries" due to developments of loadcenter ports and joint ocean/inland through routing under a single factor rate.

Continuation of those trends will require even deeper harbors, extensive capital investments and greater concentration of cargo in fewer ports.

**Regulation.** Increased Federal—and, to some extent, State and local—regulatory requirements have—

- Compounded the problems of deepening harbors and channels by restricting disposal areas (dredging costs can be increased by 200 to 1000 percent because of added transportation or dike construction costs);
- Delayed or increased the time needed to modernize ports (it can take up to 18 years from the time a dredging project is proposed until it is completed);
- Increased the costs of implementing employee safety and cargo security measures;
- Encouraged States to limit development of coastal zone resources to those areas that have already experienced development (thus adding to the cost of land acquisition for expansion of port facilities); and
- Contributed to a shift in the patterns of some cargo movement because of inability of ports to respond promptly to dredging or expansion requirement (for example, Baltimore stands to lose some 10 million tons of coal and ore cargo annually because of bureaucratic delays in approval required for dredging access channels to accommodate deep-draft vessels).

## Public Ports' Financial Problems

The capital-intensive nature of today's specialized requirements for cargo handling and movement has led most ports to undertake large long-term borrowing commitments, with a resulting interest burden so heavy that, in some cases, operating profit is insufficient to service the debt.

This debt service squeeze has a double-pronged effect, because (a) revenue bond financing becomes difficult for an operation that is losing money or is only marginally profitable and recourse to State or local general obligation bonds (*i.e.*, backed by the taxing power of the issuing authority) becomes the only source for expansion capital to improve port revenue flow and profitability, but (b) reduction of highly visible (and vocal) direct labor at mechanized ports, coupled with competing demands of other programs for funding out of tax receipts, have influenced many State and local authorities to look with disfavor on general obligation bonds to finance port activity.

This trend is demonstrated by comparative data developed by the A.A.P.A. for the periods 1966-1972 and 1974-1976. During the earlier period, 59 percent of the funds used to finance port development came from general obligation bonds or similar sources; during the latter period, only 29 percent of the funds were derived from these sources.

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*Karl E. Bakke is a former Chairman of the Federal Maritime Commission, and former General Counsel of the U.S. Department of Commerce. He resigned as a member of the Federal Maritime Commission last year and is now a resident partner in the Washington, D.C. office of the New York-Washington law firm of Kirlin, Campbell & Keating.*

## Federal Alternatives

For the foregoing reasons, many individual ports as well as the A.A.P.A. have reversed their traditional policy of opposing Federal aid to ports and now endorse legislation to provide Federal aid for "federally mandated costs"; i.e., those incremental costs for environmental protection, employee safety, and cargo security attributable to Federal legislation and regulations. Past opposition to Federal involvement has been based on the premise that if assistance be accepted, bureaucratic meddling cannot be far behind. But since we now have the latter situation in any event, the pain can perhaps be diminished by soothing application of the long green.

The G.A.O. study lists, and critiques, five options, ranging from the *status quo* to a broad-based national subsidy program:

**Continuance of existing Federal role.** Ports that operate at a profit would probably prefer this choice. On the other hand, ports that do not operate at a profit would probably welcome some type of assistance, so long as the price of Federal interference or control was not too high. Continuing the current Federal role of noninterference in port development would probably result in the continued growth of a few loadcenter ports on each coast. Smaller ports would probably lose more and more cargo unless they specialized in handling specific cargoes. Aggressive and innovative management in local port authorities will determine the growth of each port. The adjustment for ports that do not keep pace with their competitors might be severe.

Ports have the option to increase fees charged to users of their facilities; this step would require no additional Federal assistance or action. Theoretically these charges could be large enough to offset the expense of operating the port facilities and to service existing debts as well as accumulate capital for future expansion.

A 1978 Maritime Administration study entitled *Current Trends in Port Pricing* points out that, historically, user charges have not offset costs and that there are many problems in increasing user charges to cover all costs. Some of these problems are that ports have long-term leases with tenants and charges cannot be increased, ports are reluctant to increase charges because they may lose cargo to a nearby port, some ports are more efficient than others because of more modern facilities, etc. The study makes recommendations to overcome the problems and objections with the goal, in time, of increasing port usage charges to a point of reasonable relationship to cost. Since publication of the study, the American Association of Port Authorities has requested the Maritime Administration to proceed in developing a uniform ratemaking formula that would result in bringing port prices closer to costs. The Maritime Administration will attempt cooperative research in this area.

The subject of possible loss of cargo to ports in adjacent countries is not discussed in the study. If U.S. ports raise their charges and ports in adjacent countries do not, loss of cargo is possible, especially if the countries involved also have efficient intermodal transportation networks that tie into the U.S. transportation system.

**A national plan for port development, including Federal underwriting of capital investments and Federal subsidies of operating deficits.** The advantages of this choice are the potential for determining the best number and spacing of ports, within the context of an integrated national trans-

portation system, to best meet the commercial and national security needs of the Nation. This option would permit an analysis of the costs, benefits, cargo distribution, and legal implications of alternate policies with respect to port development and their role in the national transportation network. The option would also permit elimination of excess or duplicate marine terminal facilities; an orderly investment in navigation and traffic control systems; a systematic approach to selection of channels and harbors to be dredged; a comprehensive approach for marine estuarine preservation; and elimination of competition between ports.

The disadvantages of this choice are that there would be no guarantee it would work any better than the existing, locally motivated port development; employment opportunities and economic development would shift from one section of the country at the expense of another section; shippers and receivers of cargo would have limited choice in routing cargo shipments; flexibility and adaptability of the existing approach to meet national emergencies might be lost; and localities would lose the initiative to be self-sufficient and innovative.

**A national plan for port development, financed by a special tax on port users, patterned after the airport development program.** Airports and seaports face similar problems in keeping pace with technological advancement and coping with environmental and social constraints imposed by Federal, State, and local agencies. Both airports and seaports have large capital requirements, and only the larger and busier activities generate revenues that approach their capital development needs.

Unlike seaport development, which is a State or local effort in the United States, the Federal Government is responsible for planning and guiding the development of the national civil airport system. The Airport and Airways Development Act of 1970, as amended, gave the responsibility of promoting airport development to the Federal Aviation Administration (FAA). FAA assists States, regions, and communities by providing funds for planning and making matching grants for development, including land acquisition, construction, and alterations. FAA has developed a National Airport Systems Plan, and only the airports that are part of it receive development grants financed from dedicated taxes on air system users. The act set authorized funding levels for the grant programs and established formulas for distributing them.

This choice would require a national plan, and the advantages and disadvantages cited under option 1 would apply. The local entity would own and operate the ports; however, local plans would have to mesh with the national plan to merit funding. Funds derived from the activities of larger and busier ports would, in part, be used to finance development at smaller, less active ports. Airport hinterlands are more discrete than seaport hinterlands and, unlike seaports, airports generally do not compete with each other. This difference would have to be considered in allocating any funds. Ports that do not form a part of the plan, while not precluded from operating, would not receive Federal assistance.

**Federal underwriting of ports' financial needs by guaranteeing loans.** This choice would probably reduce ports' interest costs on borrowed funds. Ports that operate at a profit would not need such assistance. Ports that do not

(Turn back on page 16)



# Triennium 1976-1979 Report: Townsville Harbour Board (Extracts)

## 1. Chairman's Review (extract)

Although the years 1976 to 1979, the period covered by this report, have seen some major changes in the areas of trade, finance and employment, I believe the Townsville Harbour Board has continued to progress and is ready for the upsurge in the economy which should become evident in the months ahead.

Trade peaked in 1977 with a total throughput of 2 550 000 tonnes and fell slightly to 2 464 000 tonnes in 1978 and 2 273 000 tonnes in 1979.

The major reasons for this downturn are all linked to the world economy with a fall of 86 000 tonnes import of oil products whilst exports of sugar fell 83 000 tonnes and phosphate rock some 53 000 tonnes.

Other matters which continue to hamper the progress of the Port is the rail freight policy of the Queensland Railways, and the resistance by some major sections of the wool brokers to the export of wool from Townsville.

A major wool dumping and core sampling facility was established in Townsville in 1977 offering operating costs lower than those in comparable southern establishments. Despite this advantageous offer to northern and central woolgrowers the trade to date is only some 4 000 bales per annum.

The Queensland Railways did slightly reduce the per bale freight from Western areas to Townsville, but the freight costs per tonne mile are still substantially higher from point of despatch to Townsville when compared with the rate offered to rail wool to Brisbane.

Although valuable support has been given the Townsville facility by the Australian Wool Corporation and the declaration of Townsville as a base depot for the Limited Offer to Purchase Scheme (L.O.P.S.) the wool brokers have continued their opposition to the declaration of Townsville as a wool export port.

These factors, coupled with the continued support of the Railways in riling cargoes, particularly meat for centralised export at Brisbane and even Sydney precludes the conference shipping lines from using Townsville as a major export port for the products produced in this area.

The Port has continued to upgrade and improve its facilities. No. 2 Berth has been completed. Shippers and shipowners are now offered a continuous line of reconstructed reinforced concrete decking on steel piles 512 metres in length equipped with a 55 tonne container handling crane and two upgraded electric cranes of 20 tonne and 12 tonne capacity.

A new Roll On Roll Off pad has been completed at a cost of \$500,000 and will handle the largest RO—RO ships at present in service.

Planning has proceeded and tenders will shortly be called for the reclamation of 9.1 hectares of land adjoining Berths 2 and 3. A modern container terminal will be constructed on some 4 hectares of this land, whilst the balance will make provision for the handling of bulk liquids—molasses and tallow—and general stevedoring operations.

Townsville is fast becoming established as a major prawn processing base, and to assist in this export orientated industry the Board is establishing a commercial fishing boat

harbour in Ross River.

A channel some 2.7 km in length is being cut into the River at a cost of \$1.5 million.

A modern unloading facility will be constructed by K.F.V. Fisheries (Q'ld) Pty. Ltd. at a cost of \$150,000 and plans are in hand for the Queensland Fish Board to construct a similar facility.

Besides the great number of local and southern fisherman which make Townsville their base, K.F.V. Fisheries (Q'ld) Pty. Ltd., has constructed ten new 22.5 m steel prawn trawlers to operate out of the port.

This company's operations will see the employment of up to 300 people in the city, and will take the number employed in this industry to approximately 1,000.

## 2. Community Relations

The Board has given emphasis to its relationship with the community of both the Port and the City which it serves, recognising the social implications of its role as an employer, the significance of the environment and management of its affairs in relationship to costs and quality of services.

The importance of good management to provide an efficient Port in relation to the needs of North Queensland generally and the City of Townsville in particular, has been appreciated in its scope of influence on industrial development, community social structure and realistic conservation.

Changes in methods, the location or provision of special facilities to handle specific cargoes through the Port, have all been appreciated as having an effect on the community—the people of which make up the Port labour force as well as the consumers of the City and producers in the hinterland who rely on the Port's services.

The advent of new cargoes through the Port, particularly in the area of those products which are handled in bulk, have called for environmental study and the development of methods and selection of location to ensure minimum effect on both the environment and the community. It is from this appreciation that strong support is given to extending reclamations to provide sites and space for facilities away from the traditional developed and industrial areas.

Reclamations are planned and are in course of construction which cater not only for the industrial user and the handling of cargoes, but also for provision of amenities such as shore beautification and small boat havens.

During the Triennium the Board has given high priority to safety and the protection of life on the waterfront, in the estuary and on the waters of Cleveland Bay. The needs of small boat owners, and the independence of the individual fishermen and their cooperatives have been recognised by interim favourable treatment until relocated and better facilities can be provided in Ross River. In addition, the Board has given generous support to the Arts and Community Festivals, as well as initiating community education programmes in both schools, tertiary institutions and with business and commerce groups.

This education effort has not only been in promoting the Port's services, but in identifying in a positive way the needs of the primary producer, and the effect of the present tremendous freight and transportation costs in

getting his products to the market place. The effect of minerals handling from their source has prompted strong effort to ensure that Governments are made aware of the long term effect of hasty short term and inadequately researched analyses. The positive role taken in support of an International Airport for the City of Townsville is a further area of action for the benefit of the North Queensland region as a whole.

The support of the local media generally and when warranted, the participation of national television in regular coverage of activities at the Port is greatly appreciated. This has justified the continuation of a public relations service, which apart from conducting regular tours of the Port by international visitors, tourists, industrialists and school children, is active in the publication of printed material of a standard to appeal to both local and overseas recipients. The regular publication in handbook format of Townsville Port Information, is much sought after and coloured brochures depicting activities and facilities are produced for the benefit of shipowners, prospective Port users and exporters.

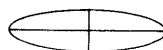
### 3. Receipts and Payments for the Year ended 30th June 1979

	1979 \$	1978 \$
<b>HARBOUR FUND</b>		
Balance 1st July	(265,034)	(41,270)
Receipts		
Harbour Dues	2,833,658	2,593,485
Tonnage Rates	749,276	596,455
Channel Development Charge	23,859	19,653
Rents	258,326	205,259
Plant Hire	25,042	10,997
Water & Electricity Charges	95,877	103,794
Interest on Investments	29,856	36,803
Other Operating Receipts	107,661	68,918
Advances for Container Crane	2,662	187,089
Advances from Assets Fund	382,854	385,892
Asset Retirements	4,642	2,087
	<u>4,513,713</u>	<u>4,210,432</u>
Sub-Total	<u>4,248,679</u>	<u>4,169,162</u>
Payments	<u>3,949,165</u>	<u>4,434,196</u>
Balance 30th June	<u>\$299,514</u>	<u>\$(265,034)</u>

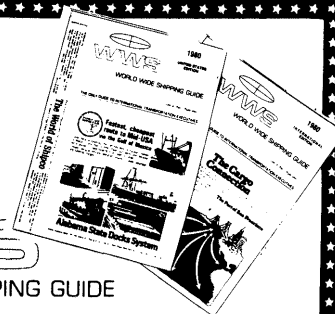
### 4. Balance Sheet as at 30th June 1979

	1979 \$	1978 \$
<b>ACCUMULATED FUNDS</b>	8,866,026	8,137,180
Reserves	3,401,779	3,018,925
Total	<u>\$12,267,805</u>	<u>\$11,156,105</u>
<b>REPRESENTED BY</b>		
Current Assets & Investments	964,829	450,469
Deduct Current Liabilities	238,810	258,692
Working Capital	726,019	191,777
Fixed Assets	24,300,315	23,576,133
Deduct Long Term Liabilities	1,858,965	2,011,592
Loans	10,899,564	10,600,213
	<u>12,758,529</u>	<u>12,611,805</u>
	11,541,786	10,964,328
<b>ACCUMULATED FUNDS</b>	<u>\$12,267,805</u>	<u>\$11,156,105</u>

## 1980 Edition



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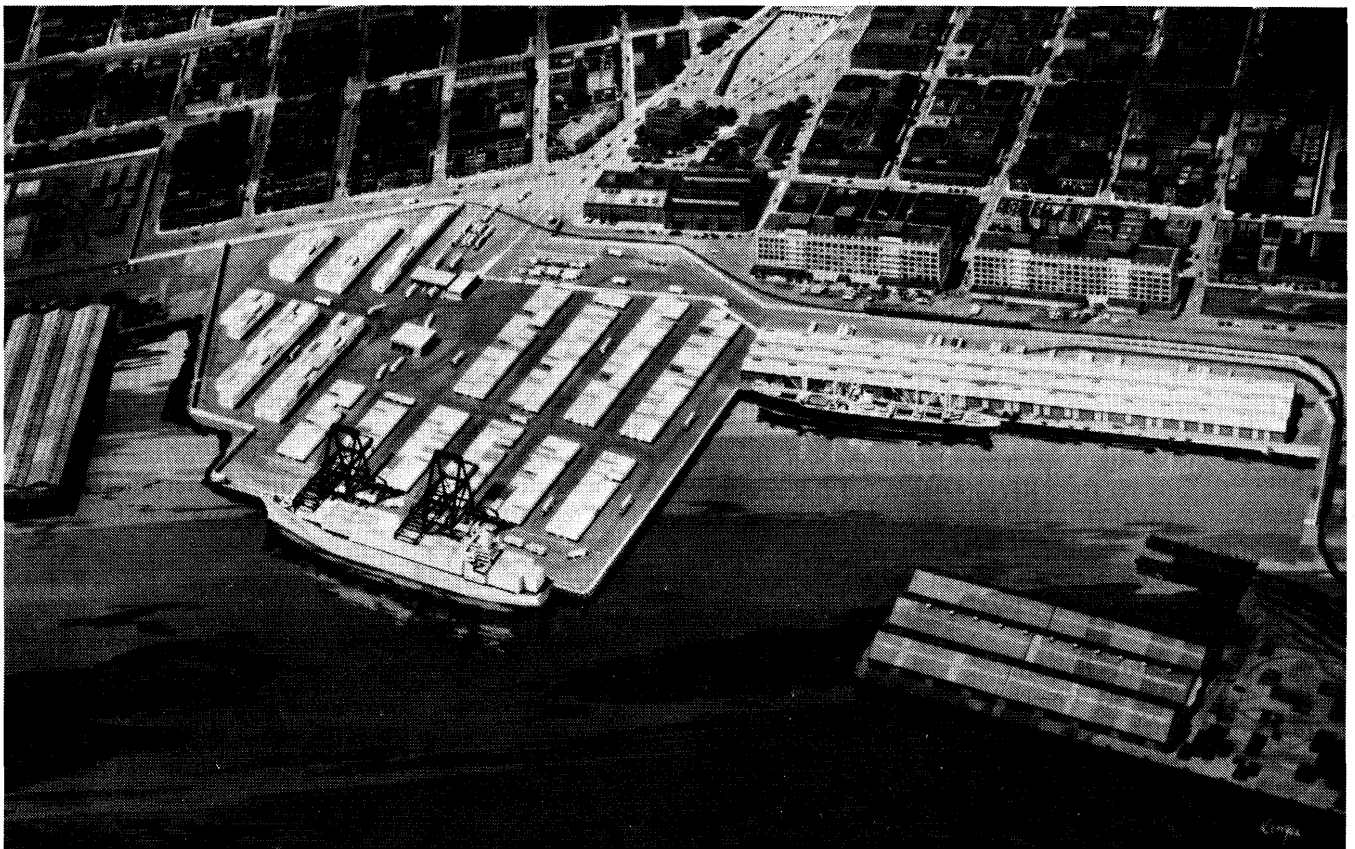
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**THE PORT AUTHORITY OF NY & NJ**

Marine Terminals Department

## International maritime information: World port news:

# Recommendation adopted by the Working Party on Facilitation of International Trade Procedures of the United Nations Economic Commission for Europe

The Working Party on Facilitation of International Trade Procedures, a subsidiary organ of the United Nations Economic Commission for Europe, is working on the legal problems connected with the facilitation of international trade procedures. Identification of some of these problems was made in 1976 (document TRADE/WP.4/GE.2/R.79 dated 21 September 1976) and this was followed by a more comprehensive study, resulting from the work of a small team of experts, entitled "An overview of legal problems of trade facilitation" (document TRADE/WP.4/GE.2/R.102 dated 10 November 1977), which described some of the known problems, identified the parties most concerned with them, and suggested ways in which the search for solutions might be assisted and speeded up.

In September 1978 an informal team of experts which had been set up to deal with "Legal Problems"—task team GE.2/TT.2, convened by the International Chamber of Commerce—submitted a study on legal problems of import procedures and a draft recommendation thereon to the Group of Experts on Data Requirements and Documentation for discussion at its nineteenth session. The Group of Experts forwarded the text to the Working Party which adopted it at its ninth session in March 1979.

At the ninth session of the Working Party representatives attended from:

Austria; Belgium; Bulgaria; Canada; Czechoslovakia; Denmark; Finland; France; German Democratic Republic; Germany, Federal Republic of; Hungary; Netherlands; Norway; Poland; Romania; Sweden; Switzerland; Turkey; Union of Soviet Socialist Republics; United Kingdom of Great Britain and Northern Ireland; and United States of America; and from Australia; Japan; and Kenya.

### RECOMMENDATION

The Working Party on Facilitation of International Trade Procedures,

**Being aware** that the Customs Co-operation Council has sought in the annexes to the International Convention on the Simplification and Harmonization of Customs Procedures (Kyoto Convention), and especially in Annex B.1, to encourage Customs authorities to grant special facilities for the expeditious clearance of goods;

**Being aware** that the main concern of import authorities is the completeness and correctness of the information submitted rather than the form in which it is presented, and that problems often centre on the requirement of

satisfactory supporting information;

**Recalling that** in some countries special procedures have been introduced whereby detailed physical inspection of goods and presentation of the formal evidence at the point of importation are no longer required, allowing approved importers to take the goods directly to their own premises, sometimes on a deferred payment basis, on condition that:

- the goods may be inspected;
- the Import Declaration and satisfactory supporting evidence is made available when required;
- such information is retained for later verification; and
- security of payment and responsibility for the goods are assured;

**Recalling that** national rules and regulations are being developed either to create wider definitions of the terms "document" and "signature" in view of electronic or other automatic methods of data transfer, or to allow for the use of such methods of data transfer under acceptable conditions;

**Noting that** the Customs Co-operation Council has already identified many of the problems and has already included consideration of them in its programme of work;

1. **Recommends** to Governments to take account of the developments referred to above with a view to the further promotion of all steps which would facilitate international trade procedures;
2. **Recommends** to Governments to take note of the provisions contained in the Kyoto Convention and especially in Annex B.1 concerning clearance for home use and to examine the possibility of introducing them into their national legislation;
3. **Recommends** to Governments to study and evaluate the possibility of accepting data transmitted by electronic or other automatic techniques under specific criteria;
4. **Invites** Governments to communicate their views on the enclosed study to the Economic Commission for Europe; and
5. **Draws** the above recommendations and the attached study to the attention of the Customs Co-operation Council and the General Agreement on Tariffs and Trade.



## STUDY OF FACILITATION OF IDENTIFIED LEGAL PROBLEMS IN IMPORT CLEARANCE PROCEDURES

### The problem area

Legal problems of trade facilitation which are related to import procedures stem from the fact that, for reasons of national laws and regulations, import authorities often require a variety of paper documents, properly authorized, before goods can be released. Some of these documents (often called shipping documents) have to be prepared and presented at the place of export at the time of dispatch, and they may not always be available at the place of import clearance when the goods arrive. This can cause delay and seriously add to the costs which in the end will have to be paid by the residents of the importing country, either in the form of higher prices for goods, or higher taxes, or both. Incompatibility of data content of documents, or lack of essential items, add to the problems.

These particular problems have been specially identified in two sections of document TRADE/WP.4/GE.2/R.102, paragraphs 35-38, which cover import procedures, and paragraphs 90-93, which deal with documentary requirements of a regulatory nature. The legal requirements which give rise to these procedural and documentary demands can slow down international trade, and it is important to study ways in which Customs and regulatory bodies can share in the benefits of technological progress, particularly in respect of the transmission of information by electronic or other automatic means, within a legal framework. A quotation from an earlier paper is worthy of repetition:

"Without law, there is anarchy, so that we must not sweep our regulations away, but must modify them and bring them up to date."

The present study suggests ways in which this objective might be achieved. It shows that the real concern of import authorities is with identification of the goods and the commercial parties concerned, verification of the nature and value of such goods, their origin and correct classification and valuation for import clearance, and for health, safety and technical standards purposes. A formal document—the Import Declaration—has to be submitted at the point of importation by a person who is legally responsible for import dues and the correctness of data and goods. The demand for a declaration does not, in itself, usually pose problems of trade facilitation. The problems centre on the requirement of satisfactory supporting evidence, which basically can only be made available at the point of exportation at or after the dispatch of the goods; and with traditional documents, such evidence frequently cannot be provided sufficiently quickly at the place where it is needed, i.e. at the point of importation.

### Import procedures and requirements

Import authorities concerned with the release of goods which have been imported have many aspects to consider, and their requirements are usually embodied in statutory form. Often, however, they are given fairly wide powers under an act to frame detailed regulations. Such regulations usually call for a formal document, an Import Declaration, to be given by the importer or forwarding agent on his behalf. This declaration can take different forms, depending

upon:

- (i) the nature of the importation (i.e. goods for duty payment, for process/repair and re-exportation, for deposit in warehouse, etc.);
- (ii) national requirements which may e.g. specify different forms for air/sea/postal traffic; or
- (iii) arrangements for groups of countries within Customs Unions or similar associations.

The main purposes of Customs declarations are to enable any duty, tax or other charge payable on the goods to be assessed and collected, to control the importation of goods with special regard to those which are subject to national limitations, e.g. by the use of licence, quota or other restrictions, or by outright prohibition, to control the grant of relief from duty, and often to provide information from which trade statistics are compiled. They also provide the basis for legal action to be taken in cases of contravention of requirements. Because the Customs declaration is required to fulfil so many different purposes, it often becomes a complicated document, and it has to be accompanied by a variety of supporting documents, such as a copy of the commercial invoice (or a special Customs invoice), a value declaration, an import licence, a certificate of origin or other document to support a claim for reduced duty (or no duty). Responsibility for supplying the Customs declaration and any necessary supporting documents rests with the importer of the goods or his agent (Customs agent, shipping and forwarding agent, Customs broker, etc.).

Information which is required for import declarations is collected by the importer or his agent from a number of sources, and can be broadly described under headings as follows:

- |                           |   |
|---------------------------|---|
| (i) the goods             | — packages, description, value, quantity, origin                                |
| (ii) the parties involved | — importer, consignor, agent  |
| (iii) transport           | — mode and means of transport, place of loading and discharge, container number |
| (iv) special conditions   | — licence, quota, goods for warehousing.  |

Some of this information can be obtained by the declarant before or shortly after the goods have been dispatched by the exporter, from commercial invoices, packing notes and bills of lading, particularly when this information is transmitted as soon as it is available—for example, commercial invoice data sent by telex, or transport document data sent by computer link. Transport information is sometimes only available when the goods actually arrive, and transit documents may often be carried by the drivers of international freight vehicles. Importers will be well aware of special conditions once they have details of the consignment, and will be responsible for ensuring that import licences are available, and that certificates of origin, health, etc., are coming forward as required. In some cases importers are required to make provisional assessments of charges payable.

### Problems of supporting evidence

The requirement for an import declaration does not of itself create a serious problem of trade facilitation, as the document can be prepared and authenticated in the country of import for presentation at the place where the

goods are to be cleared. Naturally enough, difficulties can arise if the document is not correctly made out. However, the regulations usually call for additional supporting evidence to satisfy the import authorities. The barrier to trade is more likely to be found in the added requirement of presentation of supporting evidence, and its authentication and verification.

Here it is possible to differentiate. Documents that travel with the goods, such as ships' manifest or copies of transport documents, may be inconvenient, but they do not pose major problems of facilitation. The main documentary requirements which do pose problems are:

- the commercial invoice, which often has to be signed and sometimes even further authenticated;
- a Customs or a consular invoice, similarly signed and authenticated;
- certificates of origin, signed and authenticated; and
- special certificates of health, weight or other characteristics.

Much of the data content of this documentation is vital to import authorities for efficient import clearance. It should be realized, however, that the need is for identification, verification, classification and evaluation purposes. The formal requirement of paper document and signature meets historic needs and has no doubt been fully justified, but changing conditions demand reappraisal of the needs. In any case, the value of the document lies not so much in the paper itself as in the information which it carries. The advantage of a paper document is that it remains stable and can be a carrier of additional information without losing its identity. Even though it may often be lacking in information or may be partly incorrect, or even faulty, it retains its main characteristics. The problem, however, is that a paper document does not lend itself to speedy transfer of data.

### Development of import procedures

In general, Customs will not release the goods at importation until they have received the import declaration and have given their consent to the removal of the goods. However, with recent changes in the methods of transport of goods, and in particular with the development of air freight, roll-on/roll-off traffic, and containerized traffic, Customs authorities have introduced various concessionary arrangements which have been designed to speed up the removal of the goods from the airport/port/frontier post, on presentation of simplified declarations, with clearance of the goods taking place at inland sites when full declarations are presented.

There has been an increasing tendency, particularly in European land-mass areas, to move Customs controls away from the port/frontier post to offices inland, or indeed to the traders' own premises. The ultimate aim of such removals is the replacement of physical controls by a system based on the inspection of traders' account, subject to some preventive checks when the goods actually arrive at the port or cross the frontier.

The development of concessionary methods of treatment of imported goods by Customs authorities has been extremely variable, and reflects the different pressures to which the authorities have been subjected, associated with aspects of natural geography, port placement and growth, traffic flows and changes, trade requirements, and the ability of the authority, within financial and other con-

straints, to redeploy resources and adapt procedures. Allied with such changing attitudes has been an increasing but equally variable willingness by Customs authorities to participate in more novel methods of data and document transmission, by computerized methods or facsimile transmission. Document TRADE/WP.4/GE.2/R.81 (issued on 16 September 1976) exemplifies the diverse approach which authorities may make to a problem—in this case, the acceptability of facsimile documents and signatures.

### ADP considerations

Willingness on the part of Customs authorities to change from traditional documentary procedures to electronic or other automatic information exchange has been linked, to a certain extent, with the problems of signatures and evidence. Two of the main requirements which have been identified previously on the administrative or regulatory side are:

- (i) the need to secure the enforcement of legal requirements; and
- (ii) the need to control the authenticity of documents.

The presentation of a signed declaration is a legal requirement which embodies penalties for non-compliance, for errors of substance and for fraudulent irregularities.

Most Customs authorities have a duty laid upon them to enforce the legal requirements so as to protect the revenue against fraud and/or under-declaration or under-payment of duty. In some cases, this requires the provision of legal proof of an offence in the Court; and the absence of a signed document has been regarded as an obstacle to a successful prosecution. Legal opinion in some countries is now turning towards the view that, whilst the signature of a document remains a desirable element of evidence, its absence in other than absolute offence cases can be compensated by other evidence.

It remains necessary, however, to ensure that, if traditional documents give way to electronic or other automatic information exchange, national judiciaries will admit information stored on computer in evidence, and will accept that information stored in a computer is an accurate record of what was fed in to the computer.

As regards the authenticity of data supplied in any information transmission system which takes advantage of such methods, the responsibility of the declarant to provide accurate information remains, and the adoption of new techniques to establish this responsibility (input devices, input security badge, security password system) can be undertaken if Customs authorities are prepared to revise their legislation.

### Alternatives to paper documents

It must be recognized that, even when the bulk of trade data is transmitted by non-paper means, there will probably always be a residual amount of paper. In these cases, the utilization of improved facsimile transmission machines may provide the answer, or there could be an extension of the system of undertakings required by certain Customs authorities, whereby goods are released before all supporting documents are received, subject to an undertaking to produce the documents within a specified period of time. There are various alternatives:

- Telecopying retains most of the advantages of the original document, but it is costly, time-consuming

- and slightly less acceptable as evidence;
- Ordinary telex is good for identification of source, but not so good for accuracy of data content; and
  - Electronic data transfer is swift and very efficient and does, under certain conditions, offer many advantages. Contrary to the permanent representation of data on paper, data transferred by any electronic method are converted into electronic signals during the transmission and must be reconverted to become visually meaningful. However, printouts can be made at both ends for verification and several control methods are being developed and gradually finding acceptance in law. Such methods of transfer of information are being increasingly used and may offer a speedier and more reliable alternative under certain conditions, i.e.:
    - that the original data are correct;
    - that correct transfer of data is assured;
    - that retention of data for later verification can be established; and
    - that unauthorized use can be avoided.

Essentially, it must be up to national authorities to establish under what conditions "satisfactory supporting evidence" can be accepted. It would seem important also for relevant international organizations to establish acceptable guidelines.

If a national statutory law lays down requirements of documents and signature, it may be a question of introducing broad definitions of "document" and "signature" and investigating the time when such signed document should be available. In certain cases, a change of national law may be essential. When national law gives import authorities power to make detailed regulations, the situation is more adaptable to the very fast developments taking place in transport, trade and data transfer.

Within the context of the urgent need for more efficient import clearance, the following points are essential:

- the vital need of import authorities for speedy verification of correct and sufficient data;
- the need for an import declaration and for a person at the point of importation to accept responsibility for the import dues, the correctness of data and the goods;
- the need for legal security; and
- the need to provide solutions that will create more efficient import clearance with retention of traditional paper documents as well as with the development of steadily more sophisticated methods.

### Possible solutions

The Customs Co-operation Council has, as one of its major aims, the securing of the highest degree of harmony and uniformity in the Customs systems of its members. In May 1973, the CCC adopted an international Convention on the simplification and harmonization of Customs procedures, known widely as the Kyoto Convention, containing a number of annexes which introduces standards and recommended practices on many aspects of Customs procedures. The Council hopes that Customs authorities will progressively adopt the various Annexes, and that thereby procedures will gradually become harmonized.

Whilst welcoming the continuing action already initiated within the Customs Co-operation Council in respect of a

number of the problems discussed in this paper, it is felt that widespread publicity should be given to the need for the adoption of modern procedures and technical developments by Customs authorities.

Subjects for consideration, which would concern predominantly—but not exclusively—imports, and which could provide benefits to the Customs authorities as well as to the trading community, might include the following:

- (i) the use of magnetic tapes, for advising periodic declarations of imports, or statistical information, linked to quick release procedures at ports/frontier posts;
- (ii) the acceptance of telex information, or computer-transmitted data, required for import declaration purposes, to permit early release of goods;
- (iii) the acceptance of documents sent by facsimile transmission, when such documents are needed to support import declarations;
- (iv) the facility for traders with computer systems to be linked to Customs computer systems for import declarations;
- (v) the acceptance of export invoices produced by computer link in the import country, where multinational traders are involved;
- (vi) the acceptance of arrangements for immediate removal of goods inland, subject to lodgement of an abbreviated declaration, duty deferment arrangements and an audit-type control exercised at traders' premises;
- (vii) the extension of the practice of permitting provisional clearance of goods subject to formal legal undertakings to produce the required documents in due course;
- (viii) the use, where legally permissible, of export documents (or data transmitted by computer) to give pre-release of the goods in the importing country. This would be an extension of the trial arrangements in Australia/New Zealand traffic. This presupposes also the expedited transfer of documents of title, etc., on the commercial side;
- (ix) the possible acceptance by Customs of commercial documents providing the information required for Customs purposes as currently under discussion in the United States of America and in other countries in lieu of the more formal import declaration;
- (x) a study of changes which are necessary to national laws to admit as evidence information which is stored on computer;
- (xi) a study of the changes which are necessary to national laws to accept that information stored in a computer is an accurate record of the input to the computer; and
- (xii) a study of the alternative methods of authentication of data which are open to Customs authorities when customary documents are dispensed with.

# “ Combined Transportation in the Light of the Energy Crisis ”

**Paper by Mr. G. Flechon, General Manager of the Company for International Transport by Transcontainer (INTERCONTAINER), at the Forum of the INTERNATIONAL CONTAINER BUREAU, 1979 — Paris — Le Bourget**

## INTRODUCTION

The development of transport throughout the ages can be said to have consisted mainly of ensuring more and more rapid transport for any given energy expenditure. The invention of the wheel, coupled with the appearance of surfaced roads and that of the horse-collar, came as true revolutions in this respect. Much closer to our own age, combining the advantages of the steam engine and the steel rail—which affords the least resistance to movement—constituted a decisive step in progress. Finally, the internal combustion engine and the tyre are at the base of soaring road transport such as we know it.

All these forms of progress have made it possible to bring about a considerable reduction in the expenditure of energy per traffic unit (Ton/kilometre) carried out within a given lapse of time. They have also brought with them an extraordinary expanse in changes, which have influenced greater and greater cargo volumes and ever-lengthening transport distances.

But, due to this, they have also lead to an overall energy consumption (in various forms) which has reached huge proportions in absolute value, and which has been characterized by an accelerated growth rate during the last decades.

## TRANSPORT VERSUS THE ENERGY PROBLEM

The main problem of today's world economy, and even more so that of tomorrow, is a problem of energy, both in terms of available quantity and of cost. Most noteworthy is the fact that industrialized countries depend on external sources for almost all their oil needs (95% for the GFR.). For European countries, the percentage of petroleum used for primary energy varied, in 1976, from 31% (Luxembourg), to 83% (Denmark), with the percentage from France amounting to 62.4%.

In the same year in the German Federal Republic, the transport sector absorbed 20% of the total energy consumption, and this percentage was distributed as follows among the various modes:

- road traffic : 85.8%
- air traffic : 6.4%
- rail traffic : 5.1% (approx. 1% of total consumption)
- river traffic : 2.7%

France will be found to show similar figures; the SNCF represented only about 1% of French energy consumption and about 5.5% of consumption in the transport sector.

## FAVOURABLE ENERGY BALANCE FOR RAIL

The most interesting comparison, however, is that given for specific energy consumptions, expressed in oil-equivalent-grams (OEG) per kilometric unit of traffic. An official study recently conducted in France, gives the following consumption ranges for the consumption of goods in OEG per ton/km:

- rail : 7 to 20
- road : 25 to 70

It should also be noted that the marginal consumption of the railways—the only one to be taken into account in the case of traffic development—is lower than average consumption, since the increase in traffic leads to an increase in tonnage and to better utilization of trains, without a proportional increase in energy expenditure.

For any given unitary dispatch it is, of course, necessary, in comparing the different modes, to take into account the transport chain as a whole, from door to door, making allowance for the possible necessity of auxiliary operations such as trans-shipment and terminal forwarding. In this respect it is obvious that transport by full train from one branch-line to another, represents the most advantageous situation.

## RAIL, THE LEAST VULNERABLE TRANSPORT MODE FOR ITS ENERGY REQUIREMENTS

What should be stressed above all is the fact that, thanks to electric locomotion, whose energy efficiency has never ceased to improve, the railways are capable of using the entire range of primary energy sources: coal, oil, gas, hydraulic, nuclear. The latter supply, whose proportion is ever-increasing, can be made available to overland transport only in the form of electricity, which the railways alone are capable of utilising economically on a large scale. In France this energy source covers more than 70% of the needs of SNCF locomotion, ensuring the operation of 80% of its traffic. The other modes of overland transport cannot, apart from extremely marginal cases, use anything but petroleum products, and, as things stand that the present time, it is difficult to envisage any swift change in this situation.

We should also point out that:

- the curve representing electric power called for over a period of 24 hours by rail locomotion, is much flatter than that for overall consumption;
- this curve is the inverse of that for overall consumption; owing to freight forwarding by night trains, the peak for rail networks in fact lies between 22h. and 7h.

Moreover, in view of the future rôle that will be played by nuclear power stations, and due to the fact that the production of these utilities is less modulable than that of classical utilities, night freight will, as from 1985, be consuming energy produced at almost no cost at all by the community, since it will be produced wherever possible and without any other potential user.



## AN ANSWER TO THE CHALLENGE OF THE ENERGY CRISIS: COMBINED TRANSPORT

Both at the international symposium on transport technologies, held within the framework of the IEA in Hamburg, June 1979, and on the occasion of the 8th international symposium on theory and practice in transport economics, organized by the CEMT at Istanbul in September, experts felt that towards the end of the century:

- the flow of goods will gradually increase,
- exchanges will be oriented more and more towards the international level,
- the mobility of goods and people will double.

At the same time, the supply of unrenewable petroleum-based energy will become more precarious, and various estimates have pointed to alarming developments in this field, whereby 60 to 65% of energy needs will, by the year 2000, have to be covered by sources other than petroleum. The price of the latter could reach and rise beyond twice the present level in constant currency. This does not include any major political crisis which might arise for any length of time, noticeably reducing deliveries and causing prices to soar.

Transport economics is thus faced with a formidable challenge, and it should logically turn more towards the railways, without, however, having to give up the intrinsic advantages of the other great overland transport mode, which is the road. The latter is, indeed irreplaceable in its flexibility and its wide coverage.

It is thus immediately apparent that combined transport—or intermodal transport—offers a particularly appropriate solution to the problem in hand.

If—in considering the main distance covered—the advantages of rail, as regards energy, safety, power, costs (increasing efficiency), space saving, environment, automation, etc., are combined with those of the road, for terminal transport, the combined transport system can be seen as uniting performance with a noticeable drop in specific energy consumption. This technique; in its different forms: containerisation and railroad transport, offers the best means outside of pure road transport of carrying out door-to-door transport without load rupture, for firms which have no private branch-lines.

From before the beginning of the energy crisis, the advantages of combined transport, in its many aspects, was recognised by a great many experts, and gave signs of its existence in the government agencies of most countries, and in international organizations such as the CEMT, the Economic Commission for Europe and the European Community. The oil crisis considerably reinforced these advantages, which were thenceforth translated into concrete measures of encouragement and promotion. In this way, the French Agency for energy saving, was empowered to grant subsidies to forwarding agents who wished to acquire mobile packing cases designed for use in combined Rail/Route transport. Financial aid for containers and Kangaroo articulated lorries, arising from real-estate credit agreements, were also planned. The European Community, on the other hand, has already taken measures for liberalizing international combined transport, and the Brussels Commission is studying new measures for facilitating matters and creating incentives in favour of this form of transport.

Special mention should be made here of the fact that the authorities of the German Federal Republic have promoted this cause with great determination. Indeed, by an official decision of June, 1978, the government of this country commissioned the Deutsche Bundesbahn to increase its container traffic by 1985, from 5.2 to 12.5 million tons, and its "Huckepack" traffic (road/rail transport and mobile packing cases) from 3.1 to 6 million tons, providing it, during this period, with considerable credit destined for developing the necessary needs (terminals, specialized wagons, containers, etc. . .).

### IMPERATIVE FOR THE NEXT FEW YEARS: INVESTMENT

The example of the GFR, just quoted, indicates the necessity for immediate adapting of means to expand, which is already making itself felt in combined transport, and which is very likely to soar within the next few years. Governments should offer their national networks the possibility of investing, not only in equipment directly necessary for combined transport (terminals, wagons), but also in their infrastructure, in their means of locomotion, of telecommunication, etc. . .

Indeed, the capacity limit on certain international main routes, where a rapid increase in combined traffic has been noticed during the past years, has practically been reached already, a fact which is likely to have a slowing effect on the desired development.

As far as transport units are concerned, operators—whether they be forwarding or loading agents—will also have to make investments, and, as already in the case of certain countries, help should be given to them by public authorities in their efforts to save energy. This aid should logically orientate operators towards the most economic energy techniques, particularly towards those which offer the best dead-weight/carrying capacity ratio.

### INTERCONTAINER AND INTERNATIONAL COMBINED TRANSPORT ON THE EUROPEAN SCALE

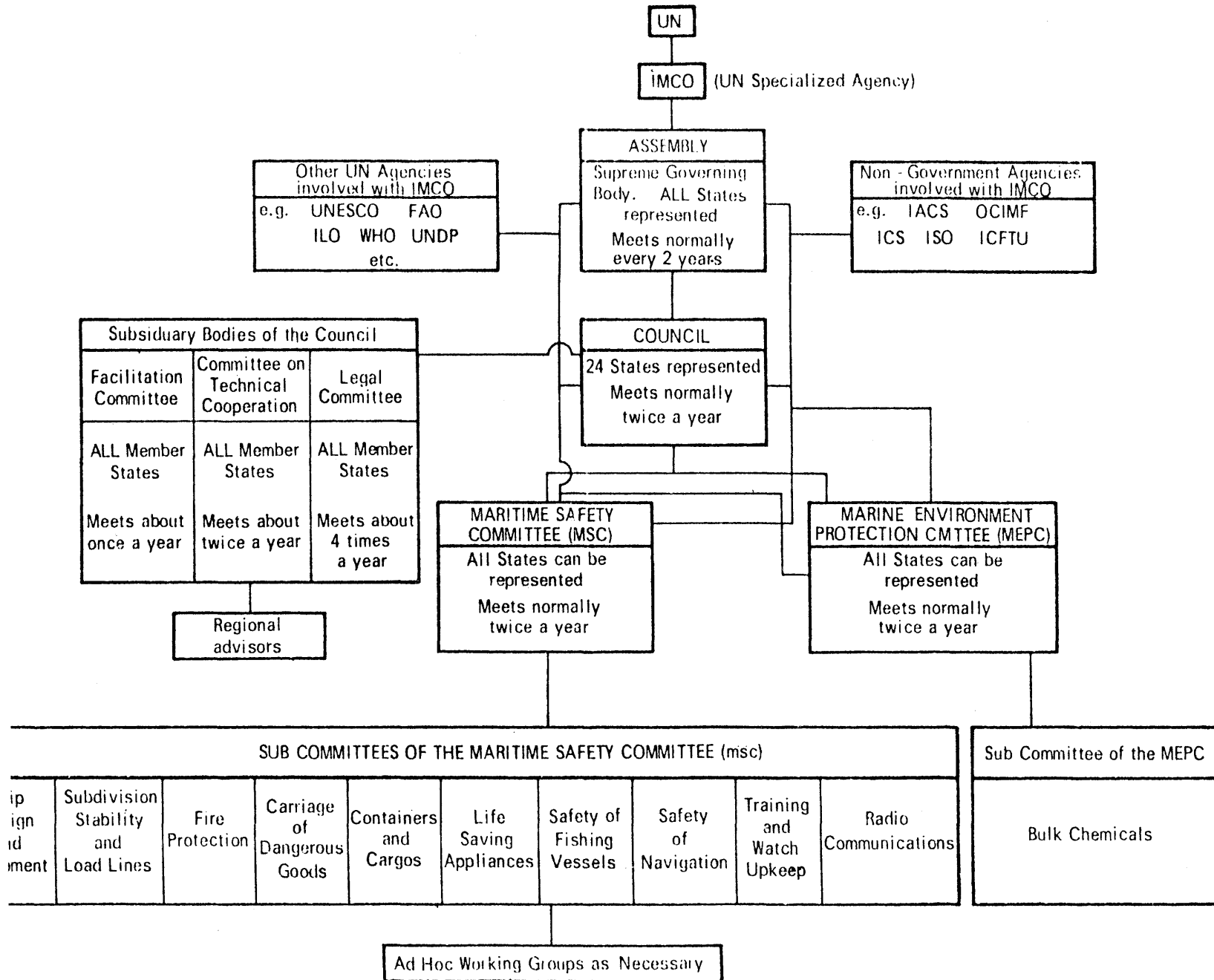
Intercontainer, a common agency with 24 European rail networks for international combined transport by container, is aware of the fact that, since the beginning of its activities in 1968, it has contributed in an ever-increasing way, to considerable energy savings. In this way, with the 610.000 containers and mobile packing cases which Intercontainer will carry this year (representing an increase of 15% above 1978), it will be making a noticeable contribution towards the aim of reduction in oil consumption.

This result supports that which has been achieved by combined transport effected on inland traffic by networks, or their specialized national affiliates, and in international traffic by Rail/Route firms. Concerning Intercontainer itself, the firm was also determined to fulfil the imperative of investment, as stressed earlier. It has, in fact, called for the construction of 1452 container wagons (including 1352 60' bogie-wagons and 100 80' articulated wagons with 3 bogies), and has just ordered 960 new units (550 of 60' with bogies, and 410 of 40' with 2 axles), to which will soon be added 75 Spanish-gauge wagons of 60'.

### CONCLUSION

An increasing number of transport firms, forwarding  
(Continued on page 31)

# Principal Organs and Subsidiary Committees of IMCO



## Conference & Symposium

1. "1st International Inland Shipping Exhibition and Conference" presented in conjunction with Europort Exhibition Rai-Hallen Amsterdam, 18-22 November 1980

Details from:

1st International Inland Shipping Exhibition  
Waalhaven Z.Z. 44, 3088 HJ Rotterdam,  
The Netherlands

2. "Portex '81—International Trade Fair and Congress on Harbour Technology"

Hafenmesse, Hamburg, 26-30 May 1981

Details from:

Hamburg Messe und Congress GmbH, Postfach  
302360, D-2000 Hamburg 36, Federal Rep. of  
Germany. Tel: 3569-1 Telex: 212609

3. "Transport Symposium IV—The 4th International Forum on Transport, Handling and Distribution of Pulp, Paper and their Raw Materials"

Royal Garden Hotel, London, 3-5 November 1980

Details from:

Pulp & Paper International, Chaussée de Charleroi  
123a, Bte 5, B-1060 Brussels, Belgium  
Tel: 538.60.40 Telex: 24672

## CEDA calls for papers

Two Dredging Days, with the theme "Suppliers to the Dredging Industry" will be held on 20th and 21st November 1980, during the Europort Exhibition in the RAI Congress Centre, Amsterdam. This event will be organised by Europort under the technical sponsorship of the Control Dredging Association, CEDA.

The following subjects have been chosen for the main sessions:

- Unconventional dredge design; mechanical engineering aspects.
- Power distribution and control.
- Dredging duty transmissions.
- Development of wear-resistant materials and components

Papers dealing with these themes will be welcome. Papers should be in English and should not exceed 5000 words. A CEDA Paper Committee will evaluate the abstracts and the final manuscripts. Abstracts of the papers should reach the Secretary of the CEDA Paper Committee before 30 April 1980 and completed manuscripts will be required by 30 September 1980.

Papers should be original and not previously published, they will be bound in volume which will be handed to delegates during the event.

Acceptance of the papers will depend upon the contents of the abstracts and of the complete papers and will be determined by the CEDA Paper Committee.

Please send abstracts and all correspondence to:

The Secretary of the Paper Committee  
CEDA Secretariat  
P.O. Box 3168  
2601 DD DELFT  
Telex: 28070 (Attention: CEDA)

## Publications

1. "Containerisation into the 1980's"—An appraisal of world container demand in the medium term  
205 pages: Price £32.50

"COAL: Seaborne trade, transportation and handling"—  
A review of trends and prospects 1970-1985  
Price £50.00

Book distribution, dept., C S Publications Ltd.,  
McMillan House, 54 Cheam Common Road,  
Worcester Park, Surrey KT4 8RJ, England  
Tel: 01-330 3911 Telex: 8953141

2. "Liner Shipping in the Eighties"—Symposium report  
386 pages: Price DM 120 plus postage & tax  
Institut für Seeverkehrswirtschaft, D-2800 Bremen  
Tel: 0421-500 233

3. "Standards for Marine Cargo Security" by the American Association of Port Authorities. Price \$15.00 (including shipping and postage (surface rates)) Available in English or Spanish

American Association of Port Authorities  
1612 K Street, N.W., Suite 502, Washington, D.C.  
20006, U.S.A.

## Mr. P. Finlay elected Chairman of IAPCO

Mr. Patrick Finlay, Secretary General of International Cargo Handling Association and Editor of Jane's Freight Containers, was elected Chairman of the International Association of Private Container Owners (IAPCO) at a meeting in London recently. IAPCO has been established to promote and serve the interests of the private owners of freight containers and related equipment.

Mr. Finlay also announced that he would be retiring from the Cargo Handling Association in June in order to devote more time to IAPCO and to his other consultative work.

## Honoring transportation: Canada and U.S.

The maritime industry and transportation activities generally are to receive national recognition in both the United States and Canada during the month of May. May 16 has been designated as National Defense Transportation Day and the week beginning May 11 as National Transportation Week by President Jimmy Carter.

The following week, May 19-25 has been named World Trade Week, and May 22 is set aside as National Maritime Day.

Canadian Transportation Week and Canadian Port and Harbor Week are set to run concurrently during the week of May 25-31.

A joint resolution designating the week of October 7 as "National Port Week" is currently being prepared by the U.S. Congressional Port Caucus.

## Brazilian port news in brief

- Portobrás signed a contract with Bardella S.A. for the supply of two electric cranes for the container terminal of the Port of Santos; this is the first terminal to be built in Brazil for this type of cargo and shall be finished in July 1980.
- During the first ten months of 1979 the Port of Rio de Janeiro handled 23.2 million tons of cargo, 11.3% above the 19.7 million tons handled in the same period of 1978.
- Companhia Brasileira de Dragagem is performing the dredging services of the Port of Belém, with an estimate of a total of 2 million cubic meters to the reclaimed and

transported to a site 7 miles off the Port; the access channel is to be 7 meters deep and at the oil jetty the depth shall be of 10 meters.

## 1979-Another record year: Port of Québec

1979, the third successive record year of activities in the Port of Québec, has been marked by an impressive number of improving factors. Tonnage handled has increased by 307 751 metric tons, total number of ship arrivals climbed to 1718 from 1631, or 5,3% and cargoes loaded and unloaded at the N.H.B. piers reached a high of 9 377 057 t. compared to 8 679 895 t in 1978, an increase of 8%.

The net result is a 2% increase when losses incurred at privately-owned piers, notably in hydrocarbons, are taken into consideration.

This is, of course, only the beginning of the new year, but already a number of port users are expressing confidence that they will establish new records in 1980. This seems to fully justify the optimism of the port authorities who, in their concluding remarks for the annual report, do not hesitate to state that the objective of 20 million t in 1985 is a realistic one.

### Outlook for the future

The annual report anticipates a total of 20 million tons for 1985. A survey of factors which encourage that optimism features the following points:

- The vocation of the Port of Québec for solid and liquid bulks which asserts itself more firmly each year. That continuous growth is well established: an increase of 3 728 000 t for solid bulks from 1975 to 1979, an average of 5% each year and 3% each year for liquid bulks for the same period, with an increase to 6,9 million t from 6,2 million t.
- The increasing size of ships used. Average capacity will eventually be between 80 000 and 100 000 t.
- The improvement of the RO-RO technique, the latter implying the increasing use of coastal vessels for trailers.
- The more frequent use of "OBO" ships (Ore, Bulk, Oil) calling at the Port of Québec.
- The fact that the Port of Québec still remain the only deepwater oceanic inland port open all year round, thus an ideal location for transshipments.

## New progress for Montreal

During the past year, the Port of Montréal registered an increase in most spheres of its activity, and its total traffic has again exceeded 20 million metric tonnes of cargo and commodities of all types.

General cargo traffic, the most lucrative in the Port's economy, has reached an all time high of 4.6 million metric tonnes, for an increase of 23.3% over the preceding year. With such results, the Port of Montréal is first in Canada and ranks in fourth place among Atlantic North American ports for general cargo and containerized traffic.

Containerized traffic has continued its upward trend both in units and volume handled, to reach 245,000 units at the end of the year, for an increase of 38.1% over 1978.

During 1979, the volume of containerized traffic has exceeded, for the first time, three million tonnes and has represented 66.8% of all general cargo handled at our installations.

During the year under review, foreign shipments totalled

5.7 million tonnes, compared to imports of 5.4 million tonnes, for a total traffic of 11.1 million tonnes in the international category.

Domestic traffic reached 8.9 million tonnes, inward shipments representing 4.8 million tonnes and outward movement 4.1 million.

## Miron's cement shipments

A somewhat unusual ship loading operation takes place at the Port of Montréal periodically. There are no gantry cranes dropping containers into their cellular resting places nor are there any slingloads of cargo being winched up from the wharf and down into the hold. There are no cranes with clamshell buckets transferring bulk material from wharf to ship. Instead there is a great fleet of tanker trucks alongside the ship which are connected to it by scores of lengths of hose.



The operation is the highly efficient loading of a cargo of bulk cement being shipped by Miron Inc. to an east coast American port, to a Canadian port on the lower St. Lawrence River of Labrador or to an overseas destination. Miron manufactures the cement, loads the vessel and supervises the unloading at destination.

A fleet of 35 tanker trucks is required for maximum loading efficiency. Each of these trucks, which range from 26 to 40 tonnes capacity, is equipped with an air compressor. Cement is blown by compressed air into compartments in the hold of the ship through five inch diameter hoses at the rate of 20 tonnes per hour per truck. Work proceeds continuously 24 hours per day. 9,000 tonnes of cement are loaded each day.

Miron Inc., one of the largest cement manufacturers in Canada, is a Montréal company which has been in this business since 1961. In addition to being a prominent local supplier, Miron has been a major exporter of cement through the Port of Montréal for 15 years. Its limestone quarry and cement plant, which represents the largest property on the island, are conveniently located in the northern part of Greater Montréal about 11 kilometers from the port.

The largest single cargo exported thus far was a shipment of 36,000 tonnes loaded on the M/V "LA ENSENADA" in June 1979 for a middle eastern destination.

# Great Lakes Ports want Seaway extension of 30 days

The International Association of Great Lakes Ports (IAGLP) has joined the Western Great Lakes Port Association in asking U.S. President Jimmy Carter to approach the Canadian Government to extend the Seaway shipping season by 30 days to the middle of January.

The IAGLP, meeting in New York City recently, took the position that a one-month extension of navigation would help alleviate the seriously overloaded transportation system of upper Midwestern States, conserve energy and provide substantial economic benefits.

In a letter to President Carter, Admiral Roy Hoffman (USN Ret.), Chairman of the Western Ports Association and port director in Milwaukee, wrote that the three-day extension of navigation in 1979 allowed more than 15 million additional bushels of U.S. and Canadian export grain, valued at \$53 million, to move through the Seaway.

In the letter he also called the president's attention to a White House letter written October 23, 1979 which said that "the administration will re-evaluate the degree of importance which we attach to extending the Seaway season ..."

With six of the top 10 grain producing states bordering on the Great Lakes and the other four located in the immediate area, the transportation bottlenecks in the Midwest and the Gulf will require a balanced approach by improvement in all modes of bulk transport, according to both associations.

But Admiral Hoffman stated that the Seaway offers the most economical and timely approach.

"For economy of energy to the Atlantic trade routes, the Seaway is incomparable," he pointed out. "It requires about 55 days per round trip to transport 1,200 tons of grain on a fully loaded barge to New Orleans from Minneapolis. In the same time frame of 55 days, an ocean carrier can transport from 18,000 to 20,000 tons of grain from Duluth to Rotterdam and return," he added.

Admiral Hoffman said a 22,000-ton grain ship is equivalent to 726 maximum-sized grain trucks or 219 jumbo railroad hopper cars.

"The cost of extending the Seaway navigation season one month would be a lineal extension of normal operating expenses plus the additional costs of ice control equipment such as ice booms and bubblers, U.S. Coast Guard icebreaking requirements and improved 24-hour navigation equipment," Admiral Hoffman noted in his letter to the president.

In its position paper on season extension the St. Lawrence Seaway Authority (Canada) said that the season could be extended to 9½ months at a relatively modest cost of \$40 million. Some of this cost would be shared with the United States.

Admiral Hoffman noted that the successful results of year-round maritime operations from 1975 through 1978 on the upper four Great Lakes and connecting locks and canals—as part of the U.S. Corps of Engineers demonstration program for season extension—clearly demonstrates the feasibility of operating safely through an extended season with minimal environmental impact.

"A similar operational demonstration program for the

St. Lawrence River was never conducted, primarily because of environmental and economic objections by the State of New York and local hydro-electric power authorities," said Admiral Hoffman.

"But we again contend that the successful results of winter operations on the St. Marys and Detroit Rivers, the favorable findings the Corps of Engineers' hydraulic ice models, and supporting findings of two independent hydraulic consultants for the St. Lawrence Seaway Development Corporation, refute any major risk to the understandable concern over lake water levels and the consequent potential effect on hydro-electric plants," he explains.

Admiral Hoffman said that economic and social benefits of keeping the Seaway open 30 days longer far exceeds the minimal environmental risk.

The present season starts around April 1 and lasts to December 15.

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## Expansion plan for waterfront: Nanaimo Harbour

A program to double the moorage available to small vessels in the Commercial Inlet Basin has been developed by the Nanaimo Harbour Commission.

The plan calls for increasing the present number of berths, from approximately 300 to 600, adding to locker space and developing the water front to Brechin Point and along Newcastle Channel.

In the winter, when the fishing fleet is in port, there are about 200 commercial vessels, including tugs, and 85 pleasure craft, often tied up two deep.

In the summer, when pleasure craft from all along the coast do stop off in Nanaimo, the Commercial Inlet Basin is usually crowded.

Nanaimo fishermen have been requesting greater mooring facilities pointing out that they would benefit Nanaimo by attracting marine-related industry and more tourists during the summer when the fishing fleet is at work elsewhere along the coast.

Port Manager Lloyd Bingham pointed out that a plan was developed in late 1977 which proposed some 300 new small boat and commercial vessel berths fronting on the Malaspina Hotel and other waterfront buildings.

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(Continued from page 27)

agents and loading agents, have revealed their intention of turning towards intermodal transport, in which they see a possibility of fore-arming themselves against an increasingly gloomy energy future. In the same way as all the other combined transport firms, Intercontainer will implement all the means at its disposal to fulfill this need. But the extent to which Intercontainer is called upon to fulfill this need—one which it is preferable to fulfill—during the next few years, can be achieved only if all the interested parties, and first of all the various government agencies and railways, devote the necessary effort to this cause, particularly as regards investments.



## "Thank You Miss Dove"

(By Les Rimes, in "Harbour & Shipping" February, 1980): "We liked to see the ships. We liked to see the big cranes. It was very interesting, thank you Miss Dove."

That's one of scores of thank you notes from nearly 15,000 school kids who have traipsed through the Vanterm viewing area since its opening in April, 1977, giving the general public, school classes, and special groups an opportunity to glimpse something of the glamour of the port of Vancouver in safety and comfort. In all, a total of 35,758 people had visited the lookout area up to Dec. 31, 1979.

But it is more than a glassed-in platform where one can look down on container ships loading or unloading cargoes. There's an auditorium for audio visual shows—which range from short presentations for primary school kids to longer, more technical showings, for special interest groups. Among groups that have visited the National Harbours Board viewpoint area have been Wolf Cubs, Sea Scouts, deaf classes, senior citizens, longshoremen, shipping agents, visitors from Japan, Germany, eastern Canada, and all points throughout the U.S.

Janet Dove, the NHB's public relations assistant, is multilingual, speaking French, Spanish and Italian as well as English, and she's found her fluency comes in mighty handy while managing the facility.

Interested visitors sometimes leave the premises with a list to port as they carry out some of the \$10,000 (per annum) resource materials such as pamphlets, maps, and statistics, tucked under their left arms.

So excellent is the audio visual presentation that Jack Barratt, manager of public relations, is able to proudly show off a bell plaque "Award of Excellence" presented by the American Association of Port Authorities in 1978 for audio visual showings.

As well as taking charge of the Vanterm viewing area, Janet Dove spends some of her time doing what she likes best—taking pictures. And her colour slides, along with those of NHB Police Sgt. Mike Toddington, and others, go to make up audio visual packages.

To most visitors, the presentation is an eye-opener. They have no concept of the complexity of port business; no concept of containerization.

Janet, also, by the way, has a busy time—mainly during the cruise ship season—answering phone calls from the general public—especially in the Point Grey and West Vancouver districts—who want to know the name of a ship that's just passing under the Lions Gate Bridge. Because of the interest people are taking in the cruise vessels, Jack Barratt now is mailing out schedules showing times of arrival and departure. If you want a list, call Janet.

The Vanterm site is not the only lookout area for the public. Over an Lynnterm, on the North Shore, the NHB, along with the District of North Vancouver, has developed a mini-park and viewing platform; and benches are being installed on the roof parking area at Centennial Pier so that visitors can sit and see the ships, stevedores, and seagulls. And more "visitor" parking is being made available.

Jack Barratt and his crew do not limit their interests to look-out posts. The NHB each year has helped the sea festival committee both financially and by helping visiting

seamen and visiting ships to enjoy their stay in the port.

The NHB also makes a modest donation to the carol ships, and helps out with co-ordination of the annual Christmas-time event. A financial donation also has helped keep the old steam tug **Master** sailing the local seas. The Missions to Seamen also is given a financial boost because the NHB owns the building now occupied by the Flying Angels and all they pay for is \$1 a year rental.

### UPCOMING P.R.

This year the NHB will be playing a starring role in National Transportation Week with a display booth at the Pacific National Exhibition grounds and static displays in shopping malls around the Lower Mainland.

Jack Barratt also has informed *Harbour & Shipping* that the quarterly *Port News* will be published six times a year beginning June—mainly because shipping agencies now are taking an interest in supplying news items for the publication.

The *Port News* is mailed out to all parts of the world as well as to interested locals.

This summer, again, the NHB will be employing four students from local universities and colleges to meet the cruise ships as they berth in the port of Vancouver. The girls are encyclopedias of information—including directions on where to get a Chinese dinner, where to buy china, how to catch a plane to Arizona, and the cheapest way to get to Grouse Mountain.

Although tight on funds and personnel, Jack Barratt and his aides are hoping to see the inauguration, this year, of a press information service. If, for example, a ship is offloading an elephant for a zoo in Edmonton, the NHB hopes the shipping agent will dial Jack Barratt and tell him the news. Barratt, in turn, will prepare a news release and the port and its activities will be spotlighted.

After all, how often is an elephant offloaded onto a dock in any harbour?

But it makes interesting reading.

Although the port has not tooted its own horn too loudly, it is, in a quiet way, bringing the harbour into the footlights, fully aware of the difficulties of presenting to the public a port that is on the other side of the busy ribbons of railway tracks. It has, in a sense, overcome the problem through the establishment of the public viewing areas at Centennial, Vanterm, and Lynnterm.

An ongoing public relations policy, now undertaken by the Port of Vancouver, is aimed at increasing the public awareness of the importance of the harbour and its shipping. The P.R. policy also is aimed at assisting the harbour users to understand the intricacies of the port. For instance, an updated harbour map will be published in February or March to tell yachtsmen and small boat owners about the shipping channels and who to contact for assistance.

And if you're sitting, biding time, in a Vancouver hotel you may see, on the tourist rack, along with hotel, motel, and scenic attraction folders, a folder entitled *The Port of Vancouver*. It's just one more way the port has of reaching out to the general public—and to thousands of rubber-necks—to brief them on the importance of the harbour and its shipping to the economic wellbeing of western Canada and the free world.

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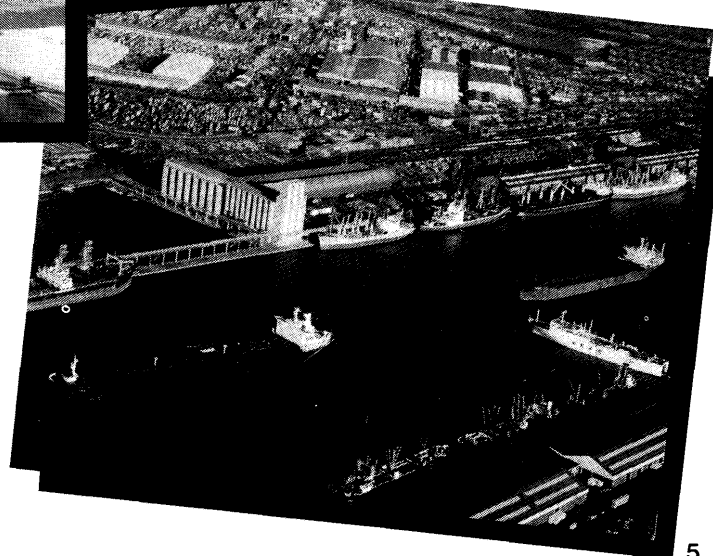
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## Master plan study for new Maryland Port Terminal to be prepared

A consortium of three engineering firms has been selected by the State of Maryland to prepare a master plan for a new marine terminal in the port of Baltimore.

The new terminal will be located on a planned 350-acre site in Masonville, in the southern part of Baltimore's port area. It would fill the port's long-term need for additional container cargo facilities, according to officials of the Maryland Port Administration. Container traffic in the port has already more than tripled since 1970, and is projected to exceed 7 million tons by the year 2000, according to the MPA.

The master plan and environmental impact statement will be done simultaneously.

The new four- or five-berth terminal would be equipped to handle approximately 3 million tons of cargo per year, making it the largest terminal exclusively handling containerized cargo for the port of Baltimore. Chessie System rail facilities are located at the site, and access to the adjacent Baltimore Harbor Tunnel Throughway is being considered with a new interchange. Total costs for the Masonville project are estimated at nearly \$200 million.

The site's 170 acres of fast land will be augmented by filling, stabilizing and grading additional submerged land to create the planned 350 acres. These massive changes in the existing shoreline will provide a challenging and complex assignment for the engineering firms' environmental team.

Work on the new marine facility has been scheduled to start sometime in the mid-1980's.

## 1979 excellent year for Port of Baltimore

The World Port of Baltimore had its second-busiest year in history during 1979, the Maryland Port Administration reported in its annual review of trade activities.

An estimated 39 million tons of import-export cargo were handled in Baltimore last year, according to W. Gregory Halpin, Maryland Port Administrator. The total tonnage figure was second only to 1974 figures, when a record 41 million tons moved through the port thanks to 13 million tons of import ore for steel-making that helped set the record that year.

The past 10 years have indeed been eventful for the port of Baltimore; a decade marked by massive construction programs and the adoption of a master plan for development that moved the port into the 1970s and established it as a major force in the international maritime community.

A highlight of the era was the port's ability to adapt to containerization, putting Baltimore in the forefront in terms of cargo handling.

New facilities were constructed for container handling at the port's two largest marine terminals—Dundalk and North Locust Point—providing a substantial impact on the amount of tonnage moving through the port.

Last year, the 39 million tons of cargo represented an increase of 15.4 per cent over the 34 million tons handled in 1978. Exports rose from 14.4 million in 1978 to 17.7 million last year, while at the same time imports jumped 9.5 per cent from 19.2 million to 21 million.

There is also approximately 20 million tons of domestic intercoastal trade moving through Baltimore annually

which is measured differently from the foreign commerce and is not included in the foregoing estimates. By adding this projected domestic volume to the foreign volume, the port can expect to register about 60 million tons in total volume for the year.

### General Cargo:

Container cargo moving through Baltimore reached an all time high in 1979 at 4.4 million tons. A 6.4 per cent increase over the 4.1 million tons handled in 1978, this figure includes both import-export and Puerto Rican container freight.

Of this total, 3.3 million was handled by MPA operated terminals, approximately 75 per cent. Generating the largest tonnage was Dundalk Marine Terminal, which had 3 million tons of container cargo movements.

The remaining 1.1 million tons of container cargo, 25 per cent of the total, were handled by privately-operated terminals. Included among these facilities are Sea-Land Terminal, which handled an estimated 400,000 tons, and South Locust Point Marine Terminal, which handled 200,000 tons. South Locust Point Marine Terminal, although owned by the MPA, is under a five-year lease to Atlantic and Gulf Stevedores, Inc.

The record container figure brings the total general cargo statistics, container plus breakbulk, to 5.9 million tons for the year.

Total import-export general cargo reached 4.9 million during 1979. A decrease of 15.1 per cent compared to the 1978 total of 5.7 million, the decline was only in imports.

In fact, the export of general cargo grew 4.6 per cent in 1979, from 2.5 million tons in 1978 to 2.6 million. Import general cargo decreased from 3.3 million in 1978 to 2.3 in 1979, a 30.1 per cent drop.

### Bulk Cargo:

The strongest commodities moving through the port of Baltimore in 1979 were bulk cargoes. The estimated figure for all bulk cargo is 33.8 million tons, a 21.6 per cent increase over last year's tonnage of 27.8 million. This large increase is due to record movements by two of the port's leading bulk commodities.

Coal exports hit a record high during 1979, with an estimated 9 million tons moving through the port. Compared to the 5.9 million tons handled in 1978, this is an increase of 52.5 per cent.

Grain exports also exceeded all port records, hitting 6.1 million tons, a jump of 6.6 per cent over the 1978 total of 5.7 million.

### Future:

"It is cheaper to ship through the port of Baltimore because of its natural advantages and always will be," Halpin said. "The port is an essential port of call in any steamship service, and the continued demand for waterfront space by carriers not now located here supports this. Therefore, we are optimistic about the future of the port."

"The foreign demand for U.S. coal and grain can only increase in the years ahead, a factor which should keep bulk tonnages at a high level," he pointed out. "Also, the decline of the U.S. dollar will continue to stimulate export trade—a category of foreign commerce in which Baltimore excels."

"Every sector of the local maritime community is

## Export expedition



At the Port of Charleston, there's a lunch hour, but little "recess" and certainly no "recession", as the South Carolina State Ports Authority continually expedites containers, LASH barges, and a variety of heavy equipment units to their overseas destinations. More than 65 percent of the Ports Authority's current fiscal year tonnage movement has been export cargoes.

behind the cause of increasing cargo movements through Baltimore." Halpin stated. "Baltimore will continue to use every means at its disposal to retain and improve its competitive position and its services to the shipping industry. We are confident that our efforts will increase the level of cargo handled at the port of Baltimore's waterfront facilities."

## Port of Houston's cargoes exceed 112 million tons for new record

Cargoes moving through the Port of Houston in 1979 set a new all-time record of 112,056,767 tons, a three per cent increase over 1978, according to preliminary statistics released by the Port of Houston Authority.

Refineries and other industries along the Houston Ship Channel's fabulous 50 miles contributed substantially to the total, probably retaining the Port of Houston's position as the third largest port in the United States.

The nation's decreasing appetite for gasoline and other petroleum products is reflected in crude oil imports which totaled 25,177,924 tons as compared to 29,485,666 tons in 1978.

Total foreign trade for 1979 was 54,592,758 tons according to the preliminary statistics as compared to the final tabulation of 62,474,095 tons in 1978, a difference largely accounted for by the decrease in crude oil imports.

Port of Houston Authority cargo wharves handled 13.8 million tons of revenue cargo, which was a slim three per cent below the previous year.

Barbours Cut Terminal was the bright spot in the tonnage picture with a 97 per cent increase over 1978. This intermodal terminal handled 1,701,586 tons, most of which was in the 266,250 containers. In 1978, the Barbours Cut Terminal moved 864,364 tons, mostly in 183,680 containers.

The Bulk Materials Handling Plant recorded a total of

## Port of Houston accepts delivery of two Rubber Tired Transtainer® crane



Houston's Barbours Cut Terminal management team have put the 30 Long Ton capacity cranes to work stacking and moving 20 and 40 ft. containers in the terminal. The 74 foot span Transtainer cranes are equipped with reeved-in telescopic spreaders including multi-purpose twistlocks, and are capable of stacking containers six wide and four high with additional space for a truck roadway. Manufactured at Paceco's Gulfport, Mississippi plant, the terminal cranes were barge shipped to the Port of Houston and were erected on site by Bickerton Iron Works.

2,292,276 tons, compared to 2,221,967 tons in 1978.

Although grain shipments through the Port were up three per cent, the Public Grain Elevator had substantially reduced volume due to a major modernization program that was completed late in the year. The Public Grain Elevator exported 591,170 tons out of a total of 10,523,255 tons for the entire port.

Automobile imports, which have been climbing each year, took a downturn of 10 per cent to a total of 178,070 units from 199,278 units in 1978.

## Port of Houston buys new cranes for Barbours Cut

The Port Commission of the Port of Houston has authorized the purchase of two additional shipside container cranes and four container yard cranes at a cost of \$8.5 million to meet the expanding demand at Barbours Cut Terminal.

Presently there are four shipside cranes, two of which are owned by Sea-Land, at Barbours Cut. The two new units will provide six cranes for the three container wharves.

"We are seeing a tremendous upswing in container business," said the port's Trade Development Director, C.A. Rousser. "The container lines are showing an ever increasing interest in the facilities at Barbours Cut. Two other new

lines have also expressed an interest in using the facility which necessitated the purchasing of new equipment to handle the traffic."

## **"Export Experts": Port of Los Angeles**

The Port of Los Angeles has embarked on the largest special advertising campaign in its history. Focusing on the Port as the "Export Experts," the thrust of the \$128,000 campaign is twofold: To promote more cargo traffic through the Port and to help counteract the nation's imbalance of trade by encouraging American businesses to export their products.

The campaign is designed to assist manufacturers in the Los Angeles community who are ready but unfamiliar with procedures to sell their products in the world marketplace.

A look at the top ten exports and imports shipped through the Port of Los Angeles suggests that the U.S. is a resource country which sells the world bulk and raw materials, then buys much of it back in manufactured goods. Shipments include, for example, "Pulps and Waste Paper," and imports show "Paper and Paperboard."

Iron ore and iron and steel scrap, most of which is shipped to Japan, returns as iron and steel bars, rods, plates or sheet steel, pipes and tubes, and as our busy freeways attest—imported automobiles. Outgoing cotton comes back as manufactured shirts and skirts.

American industry was rudely aroused from its historic dream of exports as marginal business last year as it peered into a yawning chasm in the U.S. trade account—a record deficit of \$28.5 billion. Meanwhile, the U.S. has watched its trading partners in Western Europe and Japan build huge trade surpluses through their aggressive export policies.

Western European producers compete on equal terms with their American counterparts and are gaining greater shares in growing markets. U.S. exports last year totaled 6.8 percent of the Gross National Product, while Japan's accounted for some 12 percent and Germany rang up an impressive 23 percent.

A study found that while U.S. exports have been increasing, total world exports have grown faster—by 375 percent from 1968 through 1977. The U.S. share actually declined during those years from 16.1 percent in 1968 to 11.7 in 1977. The difference of one percentage point in the 1977 share of world exports equals \$10.2 billion in actual exports.

The National Foreign Trade Council has predicted that because of the Panama Canal trade diversions, there will be a 12 percent growth rate in imports and a 21 percent growth in exports for the United States. According to U.S. Commerce Department estimates, 250 American manufacturers who export their goods account for 85 percent of all U.S. exports—and of the country's 300,000 manufacturers, 275,000 do not export at all. It is estimated that each \$1 billion of exports creates 40,000 jobs in the U.S., but many corporate managers consider exports as marginal business, not worth bothering about.

The "Export Experts" campaign is taking a radical new direction from past advertising efforts which have been aimed largely at advertising in maritime trade publications. The campaign is unique and involves a direct publicity effort to reach business leaders through metropolitan

## **Paceco completes crane order to Matson Terminal, Los Angeles**



**Paceco Portainer ® crane operating at Matson Terminal, Terminal Island Los Angeles, CA.**

newspapers and major business magazines. Outdoor advertising and direct mail pieces further create public awareness of the Port's contribution to the correction of the U.S. trade deficit and the stimulation of the nation's business.

The ad program positions the Los Angeles Harbor Department's trade development personnel among the experts in export financing, distribution and overseas marketing, adding their particular expertise in port and transportation facilities and cargo routing.

Los Angeles Mayor Tom Bradley kicked off the seven-month export campaign during 1979 World Trade Week activities in May. The Mayor gave a taped message about the export campaign on business news segments of Los Angeles' all-news radio stations. Los Angeles Harbor's trade development division received hundreds of phone calls on the Port's special "Export Hotline" as a direct result of the radio message and subsequent advertising. The trade development staff is also receiving about five inquiry letters about exporting per day and sends out an informational packet to each inquirer.

Los Angeles Harbor has become additionally active in encouraging more U.S. exports with the recent appointment of Harbor Commissioner Jun Mori to President Carter's Export Council. The President's Export Council (PEC) is a 40-member group which will make recommendations to Carter on export expansion. Mori was selected as one of 27 private sector members of the new Council. Mori also serves on the advisory board to the State's Office of International Trade and is therefore able to serve as liaison from the campaign to all three levels of government. The Port's new advertising campaign ties in with the Council's goal of export promotion.



# The Total Port — New Orleans

**(See front cover also)**

The Port of New Orleans is truly one of the great "natural resources" of the United States. Situated at the bottom of a gigantic transportation funnel created by the nation's most significant waterway system—the Mississippi River and its tributaries, the Port of New Orleans has played a major role in the industrial and agricultural livelihood of America for over 250 years. Goods from all over the world, which supplied the great westward expansion of the United States, passed over New Orleans wharves in the 1800's. Mid-America's vast agricultural and industrial output has always found worldwide markets via the Port of New Orleans, helping to build the nation's strong international economic posture.

Today the Port of New Orleans continues to be the logical point of entry and exit for shippers reaching the great American heartland, where more than 60% of the Nation's farm products are grown, half of all manufactured goods are produced, and 90% of the country's motor vehicles, transportation equipment and other types of machinery are built. Forty percent of the Nation's consuming public live and work in this heartland served by the Port of New Orleans.

In calendar year 1978 the Port of New Orleans chalked up impressive statistics confirming its vital role in the worldwide transportation of goods. One hundred sixty-three million tons of cargo passed over the wharves in New Orleans last year. Total foreign commerce was 38 million tons, valued at \$10 billion. This trade equates to an impact on the State of Louisiana of two billion dollars.

Within the Port of New Orleans are 101 cargo berths which serve nearly 5,000 ships annually. Second only to the Port Authority of New York/New Jersey in total waterborne commerce New Orleans handled 7,664,000 tons of general cargo in 1978. Container traffic through the Port increased by 54% over 1977, with 251,000 TEU's being handled last year. There are now three lift-on/lift-off berths with four container cranes in operation at the Port's France Road Container Terminal, with construction of a fourth berth progressing rapidly. In addition, there are seven Ro/Ro berths in operation and partial container service at all general cargo wharves in the Port.

Being ideally situated to take advantage of the vast inland waterways system, the Port of New Orleans is the center of the nation's barge activity. More than 100,000 barges pass through the Port annually. In 1977 barge-carried tonnage totaled more than 78 million.

New Orleans is the Lash and Seabee capitol of the world. Last year more than 4,000 barges were loaded or unloaded in the Port with a total of 1.6 million tons of cargo. There are five lines operating Lash or Seabee ships in the Port of New Orleans.

The Port was good to U.S. Customs last year, contributing \$317 million to their coffers. Principal commodities exported via New Orleans in 1978 were heavy machinery, paper, grain, flour, coal, chemicals, food preparations, animal feed, vegetable oils and lumber. Principal imports via the Port were iron and steel products, petroleum, ores, coffee, sugar, molasses, plywood, meat, automobiles and chemicals.

Japan was the Port of New Orleans' biggest trading partner in 1978. Other countries in the "top ten" were West Germany, Brazil, Italy, Nigeria, Netherlands, United Kingdom, Venezuela, Belgium and Indonesia.

In order to maintain its position as one of the world's great ports, New Orleans is investing millions of dollars each year for renovation and construction of facilities throughout the Port. By the year 2000 the Port of New Orleans will have invested more than \$500 million in improvements in just over thirty years.

Midway through the first phase of this port expansion project, a \$108 million, 5-year renovation and new construction program, the Port of New Orleans is currently spending \$100,000 each working day on capital improvements. Included in this program are ten heavy-duty berths, expanded Ro/Ro and container capacity at the Port's France Road complex, and new covered and open cargo handling areas throughout the Port.

The Board of Commissioners of the Port of New Orleans is committed to keeping the Port one of the most productive and efficient centers of maritime activity in the world. As the 21st century approaches, the Port of New Orleans, with its major investments in modern facilities and effective, efficient service, will be ready to meet the needs of an expanding and changing industry.

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## Port of Yokohama, Port of Oakland to be united as Sister Ports

The Sister Port relationship which was proposed by the Mayor of Yokohama, Michikazu Saigo, will be formalized in ceremonies to be held in Yokohama on May 2.

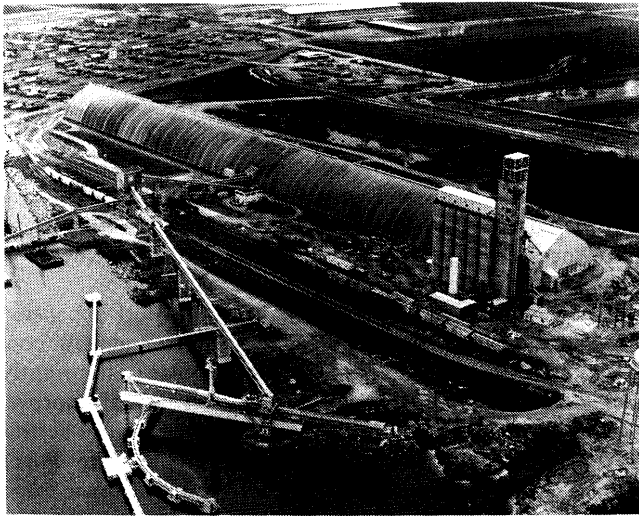
"We are very pleased, and honored, to be selected by the City and Port of Yokohama to be affiliated as a Sister Port," Thomas L. Berkley, President of the Oakland Board of Port Commissioners, said. "Yokohama is Japan's largest port, it lies on the Pacific Ocean facing Oakland, and our two ports have a historic link that dates back more than a century," he added.

Berkley will lead an Oakland delegation to Yokohama for the May 2 ceremonies that will include the signing of documents in the Mayor's office, a reception, a parade and lecture-seminar to be conducted in the International Conference Center for business and maritime leaders. The lecture-seminar will feature an address by Mr. Y. Ariyoshi, an internationally known and respected shipper executive and an Advisor and former President of NYK Lines, Japan's largest steamship company. Walter A. Abernathy, Executive Director of the Port of Oakland, will make a presentation on the Oakland port facilities and services during the afternoon lecture-seminar.

The document to be signed by the two ports points to the mutual friendship and trade already established between the two major shipping centers, and a desire on the part of both ports for an increased flow of commerce across the Pacific between the two ports. Both Oakland and Yokohama are major containerports engaged in international commerce. They are directly linked by 20 steamship lines, carrying more than 260,000 short tons of cargo per year.



## Continental reports high soybean tonnages: Georgia Ports Authority—



As the shipping phase of the 1979-80 soybean season draws to a close, Continental Grain in Savannah reports brisk business for the concluding year. The company indicated some 20,000,000 bushels of the crop were handled through Georgia Ports Authority's dry bulk terminal. Of the total, some 18,000,000 bushels were Georgia grown. Having handled that volume, Continental was responsible for moving approximately 1/3 of the total Georgia soybean crop for the past season. Continental Grain officials foresee the possibility of a 50 percent increase in exports to 30,000,000 bushels, contingent upon a good growing season and completion of a planned expansion of truck unloading facilities.

## ICC petitioned by Port of Oakland on new railroad tariff on empty marine containers

The Port of Oakland, which has been a major force in an appeal to the Trans-Continental Freight Bureau, a tariff bureau established to publish tariffs of railroads in trans-continental service, to reconsider its proposed railroad rate tariff on empty marine containers, recently filed a petition with the Interstate Commerce Commission seeking a suspension and investigation into the new charges, it was announced by Walter A. Abernathy, Executive Director.

The New railroad tariff, which is scheduled to become effective on April 18, would establish a charge of \$814 per flatcar for the movement of empty containers and a daily storage charge of \$21.64 for containers at rail yards awaiting disposition.

Abernathy said the Oakland port action comes after an appearance and statement before the TCFB last July in which the Oakland Board of Port Commissioners voiced its opposition to the new railroad rate, and called for a more reasonable approach to compensate the railroads for the movement of empty containers. (Empty containers have moved for repositioning without charge to the railroads' customers.)

"The Port asked the TCFB to meet with ports, shippers, carriers and any other party concerned with the tariff to see

## Californians unite in support of coastal projects



WASHINGTON, D.C. = A delegation of 40 California sponsors and supporters of commercial ports, major recreational marinas and related coastal projects, led by Robert H. Langner (left) executive director of the California Marine Affairs and Navigation Conference, were joined by Congressional sponsors in recent testimony seeking adequate funding. Among those who joined in testimony was U.S. Senator S.I. (Sam) Hayakawa, who lent major support to C-MANC's recommendations. These included funding in the next fiscal year of \$2,850,000 for Federal studies in the Golden State, \$17,812,000 for construction and \$21,624,000 for maintenance of existing projects. "California Week" on Capitol Hill was concluded the day following testimony with presentation of the 21st annual Golden State Luncheon in the Rayburn Hose Office Building.

if a more constructive and reasonable approach to empty container compensation could be worked out. Unfortunately, the TCFB membership chose not to respond, and has now moved forward with publishing a tariff on empty containers. We feel the charges published by the TCFB are too drastic, and they will have an adverse effect on the ports and intermodal movement of container traffic. Our petition to the ICC seeks an investigation to determine if a more reasonable approach can be taken," Abernathy said.

A port like Oakland, he said, which is heavily containerized, could be negatively affected by the new railroad tariff if shippers transload cargo into railroad equipment at the port, rather than move the containers to their ultimate destination, or if they divert containers to Canadian, Atlantic or Gulf ports. Transfer of cargo to rail equipment would defeat the advantages of intermodal transportation developed over the past decade, while diversion of cargo would have a serious economic effect on all West Coast ports.

The transportation and positioning of empty equipment is not something new for the railroads. It has always been part of their business, and railroad rates historically have been computed to include the movement of empty equipment, he added.

# Parks plazas and promenades—a key to recreation on San Diego Bay

Whether you're filming a commercial for television or frying hamburgers, the parks and public access areas around San Diego Bay provide a unique setting of incomparable beauty and variety.

The legislation which created the San Diego Unified Port District in 1962 charges the organization with responsibility for "... the promotion of commerce, navigation, fisheries and recreation ..." on the tidelands. The Port District has met that responsibility by creating over 128 acres of landscaped areas around San Diego Bay for public enjoyment, recreation and access to the water. The Port's recently updated Master Plan calls for the eventual development of a total of 150 acres of park land around the Bay.

Now that spring has arrived and summer is not far off, activity has begun to pick up again in the recreational areas around San Diego Bay. The variety of recreational pursuits is impressive. On a recent Sunday, for example, it was possible to observe such activities as fishing, kite flying, sunbathing, sailing, power boating, walking, viewing, jogging, picnicking, cooking, and art sales. There were people walking their dogs, and others engaged in playing Frisbee, cards, Mah-Jongg and touch football. Among the most popular areas of public usage are Shelter Island, Harbor Island, and Spanish Landing Park. Busiest times at these locations are the weekends. Capt. Don Hadley of the Harbor Police indicates that the peak hours of activity are between noon and 3:00 p.m. on Sundays.

Another popular spot, particularly during lunchtime on weekdays, is the landscaped area along Harbor Drive between Broadway and Market St. It is ideal for eating a brown bag lunch, strolling, and viewing waterfront scenes. Shelter and Harbor Islands also draw substantial numbers of people during the week at lunchtime.

No doubt the most steadily used public recreational facility on tidelands is the golf course in Coronado. Built and maintained by the City of Coronado, this attractive bayfront area occupies 98.2 acres of tidelands along the south shores of Coronado, between the Bay Bridge and Glorietta Bay. As you might expect, there is a steady stream of golfers on the course from sunup until sundown every day of the week.

Boating is another important part of the recreational mix on San Diego Bay. Each week, especially on weekends, you will see hundreds of pleasure boats sailing Bay waters. Many of these vessels are berthed in San Diego Bay marinas. In addition, many are launched each day from the four public launch ramps—on Shelter Island, on the Sweetwater River channel in Nation City, at J Street on the Chula Vista Bayfront, and on Glorietta By in Coronado. The launching areas are yet another type of facility provided in the Bay for public recreation.

Shoreline areas proposed for public recreation or already developed by the Port District for those purposes account for 10.22 miles of waterfront. That represents 31% of the total Bay shoreline under the Port's jurisdiction.

The Port District Master Plan distinguishes several categories of public recreational areas. Among them are parks, plazas, promenades, open space, golf course (Coro-

nado), open bay, boat launching ramps, public fishing piers and vista areas.

A number of areas around the Bay—Shelter Island, Harbor Island, Spanish Landing, Embarcadero Marina Park, and the launch ramp areas in National City and Chula Vista—each contain several categories of public recreational uses.

Planning Director Fred Trull cites the Broadway Pier as one of the most versatile areas on the entire waterfront. It provides superb public access to the Bay. It has a small, park-like area at mid-pier. Public parking is available. There is room around the outer edges of the pier for tunaboat crews to mend their nets, always a colorful waterfront activity to observe. Deep water berthing alongside the pier has been retained from the days when it served as a cargo handling facility. As a result, passenger cruise ships are able to dock there, and Navy vessels tie up throughout the year for public visitation on weekends. The passenger embarkation platform also provides an excellent viewing area, as well as a serviceable location for luncheons and various other public events.

A great deal of time and expense goes into the maintenance of all the public recreational areas around San Diego Bay. One of the men most directly involved in that effort is Dick Asman, the Port's gardener supervisor. He is responsible for the work of six gardeners and 14 groundsman-gardeners.

Tidelands present special challenges to the maintenance department. The several public access areas are scattered throughout miles of waterfront. As a result, it takes time to get to them, and the equipment and power sources have to be highly mobile.

Because tideland soil was dredged from the bay, it is saline and the landscaped areas need frequent watering. Care is taken to do the watering at hours when the fewest number of people are around. There are over 5,400 trees on the tidelands and more than 36,000 shrubs which have to be trimmed and looked after by Port maintenance crews. Their gardening expertise is further put to the test by the great variety of plant life which is represented on the tideland areas devoted to public recreation. An inspection of the recreational areas around San Diego Bay and the intensity with which they are used and enjoyed by the public is testimony to the fact that Port planners, police and maintenance professionals have done their jobs well in proving for the design, operation and care of these showcase areas which line the perimeter of our lovely "harbor of the sun."

## Grain and auto shipments remain steady: Port of Seattle

Although containerized cargo gets heavy attention, particularly at the Port of Seattle, there are two other major categories which have been doing well for years: grain exports and auto imports.

### Grain Exports

The year 1979 broke all records with 1,976,983 tons of grain shipped out of the Port's deepsea export grain terminal at Pier 86, operated by Cargill, Inc.

The next nearest record year was 1973, with 1,885,961 tons.

The reasons for such dramatic increases in short periods are not simple. World grain conditions, ocean and rail rates, Panama Canal rate increases which change shipping patterns for a time, politics involving the USSR and China—even ecology—affect the sales and shipments of grain all over the world in a sort of domino effect. In 1979, the People's Republic of China (PRC) purchased large quantities of corn, which helped boost Seattle's statistics.

### Auto Imports

Import autos have played a big part in Port tonnages for several years, especially Datsun cars and trucks.

The 1979 year-end report of import cars shows a total of 135,863 units, all of them from Japan. This is down a bit from last year and down about 19 percent from the record high of 167,927 in 1977 when Datsun, LUV pickups and a couple of European makes were included.

In 1979, Mazda delivered 38,095 units, mostly at the Port's Terminal 115 facility; and Datsun brought 97,768 units to Terminal 91. There were no European cars at all imported during 1979.

The number of Datsuns and Mazdas imported through Seattle represented about 22 percent of all the Datsuns and Mazdas sold in the U.S. in 1979. Most of these imports leave quickly for Midwest and East Coast markets and do not enter local distribution areas.

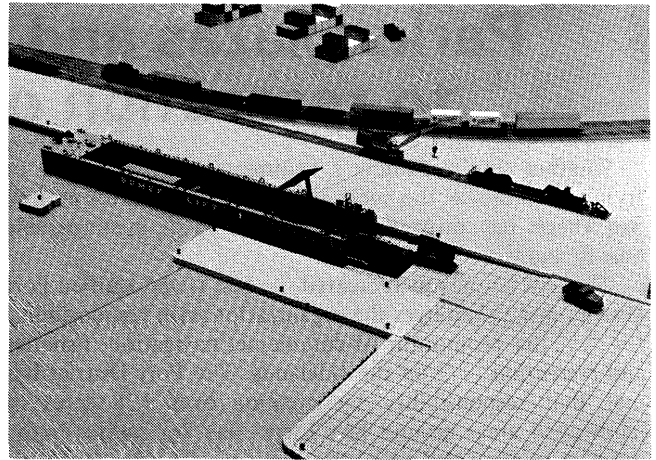
The auto import average for 1977, 1978 and 1979 shows 148,863 imports, all but 7,000 being Japanese, and they were predominantly Datsuns.

## New installations for ultra heavy lifts at Antwerp

The transport of ultra heavy lifts (1000 tons and more) and large cargo-units has become part of worldwide trades. The settlement of industries, power plants, etc. very often necessitate the carriage of indivisible units which cannot or could only with great difficulty—be shipped by lifting.

Anyhow heavy lift cranes or jibs are of essential importance in a port. Therefore Antwerp ordered a selfpropelling floating jib with 800 Tons lifting capacity. However the need remains to cope with the demand for the shipments of still heavier or more voluminous units.

A new technique has been developed during recent years. Actually there are seavessels especially built for the carriage of that kind of cargo equipped with powerful loading gear or with RO/RO devices. Their counterpart on land are pushbarges conceived for the transport of ultra heavy weight and extra measurement units. Finally the



carriage by road or by rail over certain distances is limited in both respects.

The model on the picture shows a pushbarge of the type referred to (Length o.a.: 76 m., width o.a. 11,40 m, maximum draft 4 m.), able to carry loads on wheels of about up to 1.200 tons. It is landed on a concrete slope and has its ramp opened.

Next to the mooring place of the barge and parallel to it is the berth for heavy load RO/RO-seavessels (front or back loaders).

These twin berths are under construction in the port of Antwerp now and will be available early 1981. As the Antwerp port complex is located behind locks the water-level at the berths is always constant.

## New record for Port of Antwerp

At the specialized terminal of Hessenatie in the port of Antwerp a number of 5,419 cars has been loaded—or unloaded—aboard the Swedish car-carrier "Avesta" in less than 4 shifts.

In this way the previous record, established just a year ago by the m.s. Traviata with 4,966 cars was largely improved.

Moreover, during loading and unloading time of the Avesta, at the same terminal 453 Japanese cars were discharged ex the Norwegian m.s. Milross while 338 cars bound for Great Britain were loaded aboard the Belgian m.s. Undine.

## Productivity in the Port of Antwerp

The importance of the port of Antwerp is indisputably enhanced by its flexibility and multi-functional role. The port firms and above all the Antwerp docker are world famous for the speed and expertise with which cargoes are loaded and unloaded.

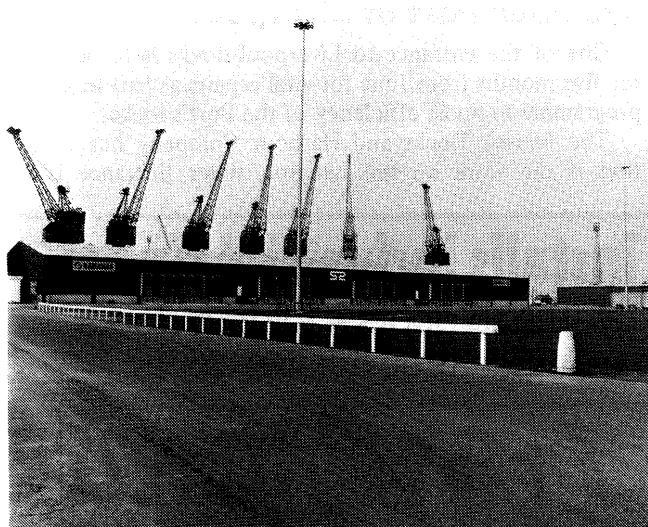
Their ability to adapt to cope with the individual wishes of shipowners, shippers and receivers as well as with the requirements of new techniques is of great importance.

One of Antwerp's trump cards is the fact that all interested parties have the possibility of having their goods loaded and/or unloaded 24 hours out of 24 on every single day in the year, which is an advantage which should not be underestimated especially in the case of tramp shipping. The speed with which loading and unloading operations are carried out depends upon the nature and presentation of the goods to be handled.

The averages in the table below will serve as a guideline.

Productivity in the port of Antwerp (averages)		
Cargo	Loading	Unloading
Ore	—	2,000 t per hour and per ship
Sulphur	—	1,200 t per hour and per ship
Coal	1,000 t per hour and per ship	1,500/2,000 t per hour and per ship
Fertilizers	2,500 t per shift	3,000 t per shift
Iron and steel	120 t per hour and per ship	100/275 t per hour and per ship
Wheat, maize, soya	2,000 t per shift and per pipe	1,700 t per shift and per suction pump
Barley	1,800 t per shift and per pipe	1,600 t per shift and per suction pump
Cars Ro/Ro	50 cars per man and per shift	50 cars per man and per shift
Cars Lo/Lo	500 cars per shift and per gang of 8 men	500 cars per shift and per gang of 8 men
Cars Elevator ship	25/30 cars per man and per shift	25/30 cars per man and per shift

### Official opening of Newport Jamaica Terminal; £800,000 investment brings 100 new jobs



The Newport Jamaica Terminal

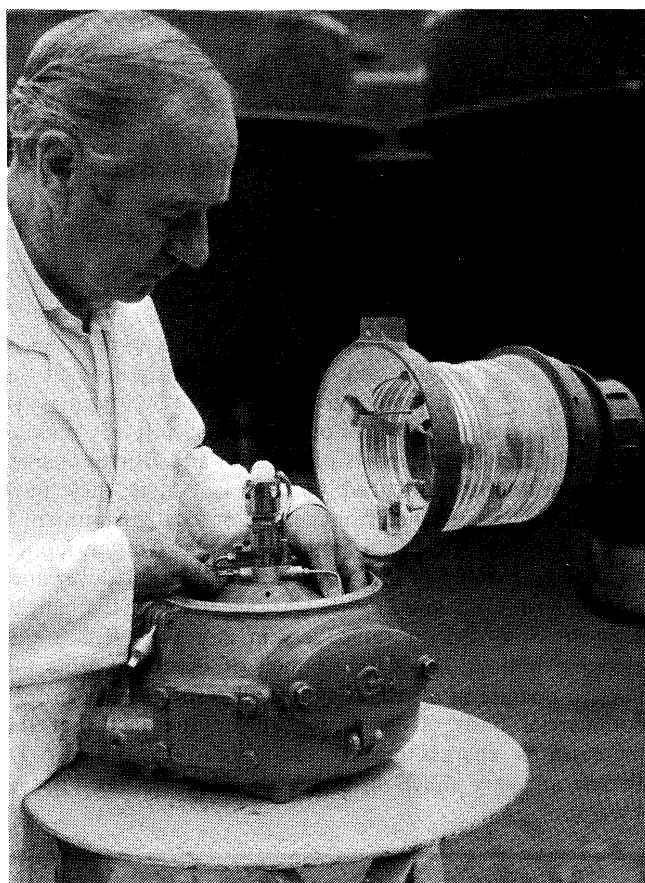
The British Transport Docks Board's new Jamaica Terminal at Newport Docks, Gwent, was inaugurated recently by the High Commissioner for Jamaica, Mr. Ernest G. Peart, C.D.

The terminal, built at a cost of £800,000, will meet the needs of a new weekly shipping service between Britain and Jamaica. Imports to Britain will consist mainly of bananas and other agricultural produce, while westbound traffic will comprise highly diversified general cargo.

After welcoming guests to the inauguration ceremony, Mr. J. Keith Stuart, Deputy Chairman and Managing Director of the British Transport Docks Board, said that the new terminal meant valuable new business for the port, over 100 new jobs, and the fastest shipping service between the UK and Jamaica.

"The new Jamaica terminal," said Mr. Stuart, "follows hard on the heels of other encouraging new trades won in recent years by the BTDB's South Wales ports. We particu-

### Propane gas lights for navigation buoys



Propane is widely used for fuelling navigation buoy lights in countries where it is readily available cheaply as a by-product of oil refining. Here an operator at AGA Navigation Aids Ltd., Brentford, is fitting an automatic propane flasher into a lantern to be used on a buoy to light a harbour approach channel in Saudi Arabia.

larly hope to see an upsurge in British exports through Newport, as well as a rising volume of banana imports."

### British Ports Traffic— 1979 traffic reaches new peak

Total traffic tonnages through British port in 1979 was at a new peak level, some 2% higher than in the previous best year, 1973. During 1979 fuel traffic increased by 12% compared with 1978; non-fuel traffic increased by 4%, to a level 3% higher than in 1973.

These figures are published recently by the National Ports Council in their Quarterly Bulletin of Port Statistics for the fourth quarter of 1979.

Container and roll-on traffic continued to grow steadily with the annual tonnage 8% up on 1978. Deep Sea unit load imports rose by 19% during the year, but exports to Deep Sea countries declined by 8%.

Non fuel exports in total were 2% lower in 1979 than in 1978 while imports were 8% up. During the year, non-fuel traffic through East Coast ports increased by 6% compared with a rise of only 3% through West Coast ports.

As to fuels, foreign imports in 1979 were 2% down on 1978, but exports were 36% up over the year.

## Port subsidies criticized

Spokesmen for both the Mersey Docks and Harbour Company and the Port of Southampton have recently criticised the Ports of London and Bristol by name in the press for receiving subsidies whilst other ports have to make their own way in a very competitive market.

Mr. John Williams, Port Director at Southampton, said: "If U.K. ports are to survive, they must compete, but all ports should play by the same rules."

"They should get off the feeding bottle. The problems are the same for us all."

### Disparities

A spokesman at Liverpool, where charges were recently raised by 17½ per cent, said: "We have recently brought the disparity (of the difference in treatment between ports) to the attention of the Minister once again, specifically making the point that at the ports of London and Bristol charges were no doubt influenced by the fact that they have been receiving assistance from central or local government."

Port of Bristol General Manager, Stanley Turner, replied to the latter criticism in a letter to the shipping newspaper *Lloyds List*: "... I must refute the suggestion that financial support from Bristol ratepayers in any way affects our charging policy. The City Council of Bristol expects the Port to operate at all times and in all respects on a proper commercial basis, as is illustrated by the fact that the increases in charges recently announced by the Port of Bristol are very much in line with those for the Port of Liverpool."

"Such contributions, as we have received over the past two years from the General Rate Fund are intended to assist the Port in the heavy capital and interest charges on the Royal Portbury Dock during the interim period, whilst the facilities at the new dock are being fully developed."

"We have not thought it necessary to bring to the attention of the Minister of Transport the fact that the Port of Liverpool and other ports in development areas of the U.K. have enjoyed substantial E.E.C. Development Grants whilst these have been denied to Bristol."

## New chairman and new managing director for Clydeport

The Minister of Transport, Mr. Norman Fowler, has appointed Mr. James P. Davidson full-time Chairman of the Clyde Port Authority for three years. Mr. Davidson succeeds Mr. Robin G. Duthie who became Chairman of the Scottish Development Agency at the beginning of the year.

Mr. Davidson was last week elected Chairman of the British Port's Association.

Following the Minister's announcement, Clydeport's board has appointed Mr. John Mather Managing Director in Mr. Davidson's place.

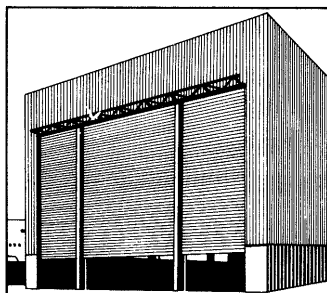
## River entrances to get £5 million overhaul: Port of Liverpool

One of the entrance to Liverpool docks is to be closed for five months from June for vital repairs as part of a £5 m programme to boost efficiency of the Port's locks.

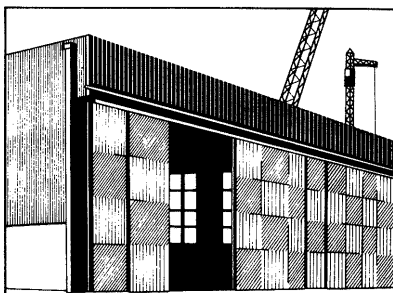
The Mersey Docks and Harbour Company has warned that if the work on the Langton River Entrance is not

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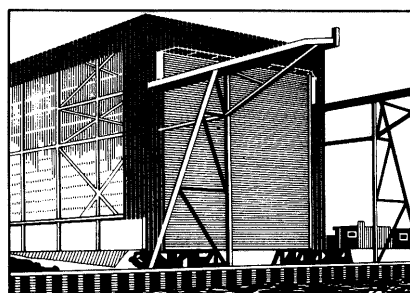
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carried out there could be a total failure of the lock.

In a letter to Port Users the Port Services Director Mr. Jack Marshall said: "It is imperative that this work is undertaken with the minimum delay".

The operation which is expected to close the Langton River Entrance to shipping from 1st June, involves repairs to the inner and outer caissons (sliding lock gates) following work which is currently underway on the middle caisson.

At the other major entrance to Liverpool docks, the Gladstone Lock, two new pairs of gates have recently been installed and the machinery overhauled.

Across the River at Birkenhead repairs to the 100 ft wide River Entrance and Passage are also programmed along with modernisation of machinery and impounding pumps. The future of the Birkenhead 80 ft River Entrance and Passage will be considered by the Dock Company once its larger neighbour has been given a new lease of life.

### Survival of fittest—Message for 80s: James Fitzpatrick

Only Britain's fittest Ports will survive the 1980's. That's the stark warning from the Mersey Docks and Harbour Company managing director and chief executive Mr. James Fitzpatrick at the start of a tough new decade.

It comes with a confident prediction that Liverpool will be among the winners... but only if the Port fights for every ship and ton of cargo.

Mr. Fitzpatrick forecast that 1980 will be a difficult year with less cargo crossing the quays as the UK's export

drive hits rock bottom.

"Only the best will be able to win what trade is on offer," he said. "That means we have got to continue offering a good, reliable service at a price that's attractive to the traumatic changes of the 1970's. And the 1980's

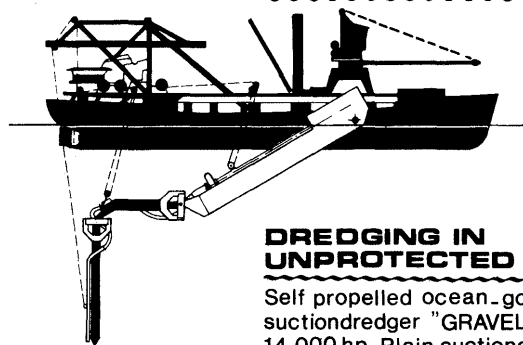
Liverpool had demonstrated its adaptability in meeting the traumatic changes of the 1970's. And the 1980's would turn what some regarded as a disadvantage—the port's geographic position—into a major asset. "The spiralling costs of fuel oil will mean that road transport becomes an increasingly significant part of the cost of goods. A port which is strategically placed will have a great advantage. That's Liverpool. The nearness of the United Kingdom's main consumers and principal exporters to this port will be decisively in our favour", said Mr. Fitzpatrick.

But the partnership which had pulled the port out of the gloom of the early 70's would need to be even stronger to earn the increasing role Liverpool must take in international trade in the new decade.

"Nobody owes us a living", said Mr. Fitzpatrick. "If one group decides to walk down the road they take us all with them. In today's port industry we are all inter-dependant. No one group can survive without the others and the others cannot succeed if any one group does not play its part".

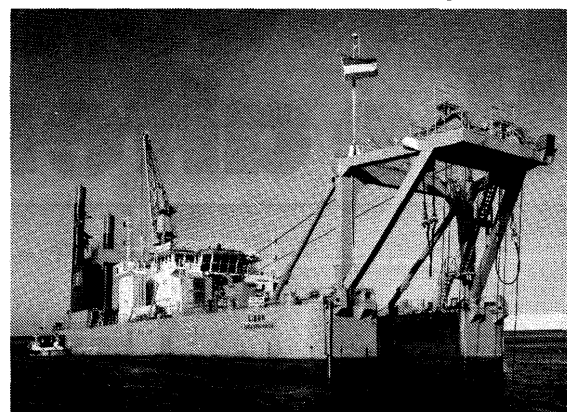
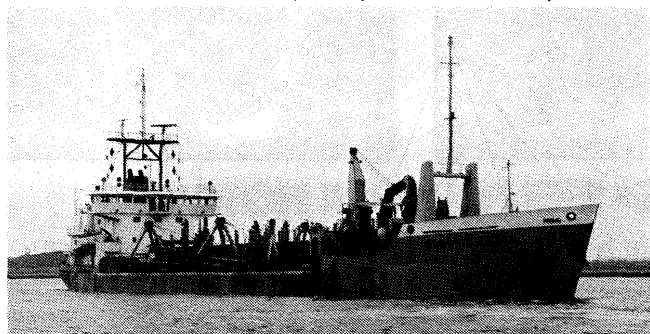
Mr. Fitzpatrick did not deny that there would be problems. "But they must be sorted out in the way that has become the norm for Liverpool—around the table".

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## Port of Manchester



Picture shows mv Patria at the Manchester Container Terminal—the first vessel to inaugurate the new weekly Manchester/Rotterdam container service operated by Trident-Currie Line.

### Port of Manchester to start a new container service to Rotterdam

This service, operated by Trident-Currie Line, will initially be a weekly sailing in each direction.

This new service at the common-user container facility at Manchester Docks has already created tremendous interest among local importers and exporters, keen to take

advantage of the obvious benefits of local handling. Docks Manager Harry Cooke commented, "Due to the escalating cost of road transport the original concept of the Ship Canal is again a viable proposition to shippers wishing to import/export from Manchester and its hinterland. Manchester businessmen now have the benefit of a direct link to all deep-sea services operating out of the Port of Rotterdam as well as easy access to EEC countries."

Patrick Dempsey, Sales Director of Trident-Currie Line, added, "The introduction of this service will present real economies to local industry, and reduce their dependence on east-coast and southern ports. At present existing facilities for shipping to and from the continent via Rotterdam are limited. Also, we will carry cargo from the Far East and other long-haul destinations which are served by shipping lines who restrict their European calls to Rotterdam only."

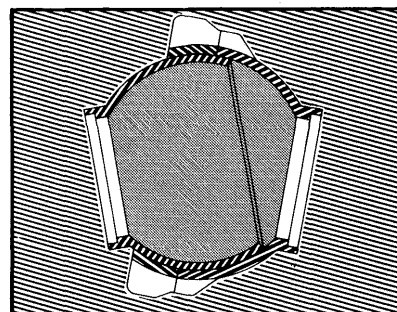
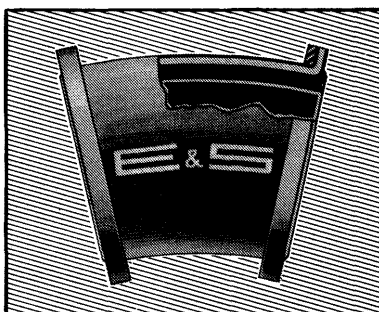
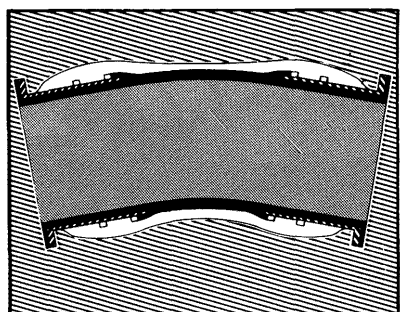
### An encouraging quarter for the Port of Dunkerque

For the first quarter of 1980 the port of Dunkerque has seen a record tonnage. The provisional figures stand at 11 407 210 t. against 8 955 435 t, a rise of 27% over the same period in 1979. This significant increase is due mainly to the large ore and coal imports (+82%) and (+33%) respectively.

Another remarkable feature is the rise in cotton imports (+20%) mainly from Russia and Chad. Prospects for this sector remain good.

As for exports, even though "other goods" rose, traffic has seen a slight drop owing to the weakness of oil products.

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# French bridgehead for international trade: Port of Le Havre

The Port of Le Havre is situated on the right bank of the Seine. The Port was almost entirely destroyed during the second world war and a tremendous re-building effort has had to be undertaken which was sustained without respite up to 1964. While total traffic, shortly after the war, did not exceed 10 M tons, the limit 20 M tons was exceeded in 1960, 40 M tons were reached in 1968 and in 1979 it reached 88 M tons. This rapid increase has promoted Le Havre to the 3rd rank of European ports after Rotterdam and Marseilles. The increase is mainly due to oil traffic and to a smaller extent to ore and general cargo. However, all bulks excluded, general cargo which plays an important role especially because of the value added by port transit and because of the jobs it produces, has noticeably increased over the last few years.

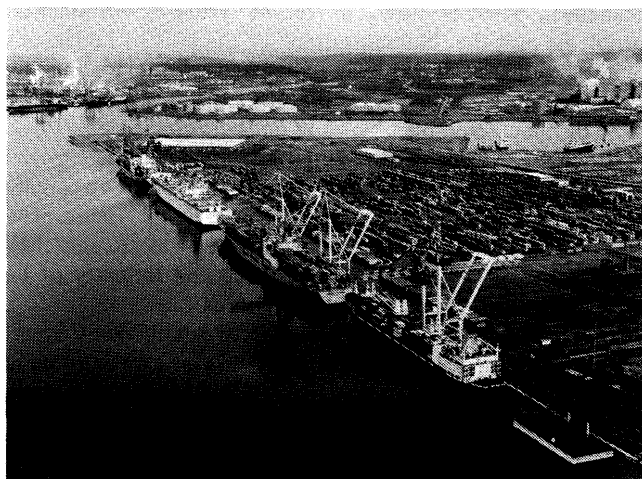
One of the main reasons for the Port of Le Havre's advancement lies in the fact that the port knew very early how to adjust itself to new packaging and transport conditions and it invested in the creation of new facilities. Today with a special terminals for containerized traffic, Le Havre holds a first-class rank among the main European ports. Its position with regard to container traffic has continued to improve for 5 years, containerized traffic has tripled in tonnage, as its share of general cargo traffic, all bulks excluded, has risen from 20% in 1971 to 57% in 1979. In 1979, 450,809 containers T.E.U. were handled in Le Havre, which puts it far and away at the head of French ports in this field.

Besides after 3 year's works, the port of Le Havre Antifer was put into operation in April 1976 and thus constituted the most efficient facility offered to very large ships both as regards the admissible draught (28.50 m) and as regards reliability and safety in the reception of ships. In 1979, 252 ships over 200,000 dwt berthed at the terminal.

A new ore berth was put into service in 1978, which in its first stage can receive 250,000 dwt ships. A 650 ton-capacity sheer-legs has consolidated the port handling equipment for heavy loads. In the future there will be a floating pontoon for the repair of 170,000 dwt vessels, which will make it possible to deal with a good many vessels visiting the port.

Another asset of the port of Le Havre is a 7,000 ha industrial area where a certain number of firms have been established which through their imports of raw material or forwarding of finished goods, play a great part in the increase of port traffic. This area is served by the largest lock in the world, François Ier lock, making it possible for ships to berth directly at the factory. The assets of the port of Le Havre are undeniable and they play a decisive role in its development. First of the big ports met by a ship entering the Eastern Channel and henceforth the North Sea, it is also the last port of call for export.

At the mouth of the world's most frequented ocean, Le Havre attracts ships in search of remunerative freight without extending the length of the voyage, and modern high productivity ships, for whom the smallest loss of time must be avoided, continue to be frequent callers at Le



Container Terminal "Quai de Bougainville"

Havre. Its nautical possibilities allow the port to receive very large ships at any time without making them wait in the roads, and turnaround can be completed in a minimum time.

Moreover, Le Havre is situated close to one of the most important consumer centres of Western Europe: a quarter of the French population lives within 200 km Le Havre. A dense and diversified network links this port with the principle zones of French economic activity and to some of the most important economic centres of Western Europe, particularly those of Belgium, Germany and Switzerland.

Thanks to these natural assets and its technical equipment, the port of Le Havre responds to all the demands of modern maritime traffic. Its international impact continues to grow, and recent agreements made with Brazil and South Korea are signs that its reputation is solidly established worldwide. The plans for the realization of industrial and commercial platforms, putting into operation jointventures between French companies and Foreign investors are already proving highly successful. But if the port of Le Havre represents a certain volume of traffic, and generates through its specific activity a certain number of jobs issuing directly from its function, it must be emphasized, at national, regional and local levels, how far its role extends beyond the framework of reception, loading, unloading or repair of seagoing ships.

At a national level, the supply of thousands of enterprises depends on the port functioning well. All the port professionals are aware of this heavy responsibility and the social climate prevalent in Le Havre is a guarantee of the continuity of this vital chain of supply with the assurance of a quality of service which foreign competitors are beginning to envy.

Of course at a regional level the importance of this function is even more widely felt because the majority of large industries established in Haute Normandie make use of the services of the port of Le Havre.

At a local level, the impact of the port of Le Havre

represents, due to all the activities arising directly or indirectly from it, close on 50% of jobs in the Le Havre area.

Understandably, such a social and economic impact condemns the managers of the Port Autonome du Havre to working closely with the executives of all level and branches. This is how, in recent years environmental problems and the "humanisation" of the port of Le Havre's extension plans have been discussed either within the context of a commission of the ports on the Seine estuary or with the elected members and partners concerned.

Equally, this is how the Port Autonome became engaged in an effective participation in the attempts to create training programmes of a port nature in Le Havre. The "Institut Portuaire d'Enseignement et de Recherche" created by the Chamber of Commerce and Industry of Le Havre constitutes the first element in this.

The port of Le Havre continues to act in many areas, and to move in many directions. This is an exalting role in which all the port professionals of Le Havre participate with all their energy.

### Mexico's bridgehead in Le Havre

In April 1976 the French and Brazilian governments signed an important trade agreement providing for the establishment in Le Havre of a Brazilian free zone to facilitate the transit, storage and processing of Brazilian products intended for the European market. Other countries have also shown interest in the idea, particularly Mexico, with which we have been negotiating the setting up of a similar zone.

During the French Technology Fortnight in Mexico, the Franco-Mexican Joint Commission, set up under the terms of an agreement between the two countries, met early in November, 1979, and chose Le Havre as the site for a Mexican free zone on this side of the Atlantic. A few days later, on November 14th, the Director General of the Mexican Institute for Foreign Trade and the Chairman of the Port of Le Havre Authority, M. Le Chevalier, signed a draft agreement providing for a full study of the conditions under which the zone should be set up, so that a definitive agreement can be signed in February 1980, covering all points in detail. It seems likely that in the early stages the free zone, which will serve as a bridgehead for Mexican products to be marketed in Europe, Africa and the Middle East, will mainly be used for agricultural foodstuffs.

### World container boom unbroken; Numerous container variations from orange juice tankers to full container-aircraft-carriers

International production of standard-size containers increases unabounded. According to the German Institute of Shipping Economics of Bremen, some 14.2 million TEUs were handled world-wide in 1973: already reaching 27.1 million containers (calculated into 20-foot units) in 1978. The world's container fleet grew simultaneously. At the beginning of 1979 there were 451 full-container ships registered—and 500 by the start of 1980. 80 such specialised freighters are currently under construction. After the Japanese, the West-German shipyards report also having a high proportion of new-buildings. Thus, of 379 floating specialistic ships, 101 (26.7%), with container capacities for

130,072 units (25.8%) are being built in Japanese yards and 92 ships (24%), equipped for 151,061 containers (30%), in 6 West-German shipyards—with two Bremen major shipyards alone participating with 43 of them.

Meantime the standard tin-box units have developed into numerous varieties for individualistic transportation: tank containers for various liquids, also recently for orange-juice; reefer containers for fruit, vegetables and flowers from the tropics; open, roofless, containers; flat-containers without side-walls; insulated containers E-containers with electric points on decks and in terminals; animal-cage containers; mobile hospital containers; and, newly, USA full-container ships are being planned as aircraft-carriers—with runways, hangars and tin-boxes for complete equipment in flight operations at sea. Experts estimate that international container handling will increase, in 1980, to exceed the 30-million mark.

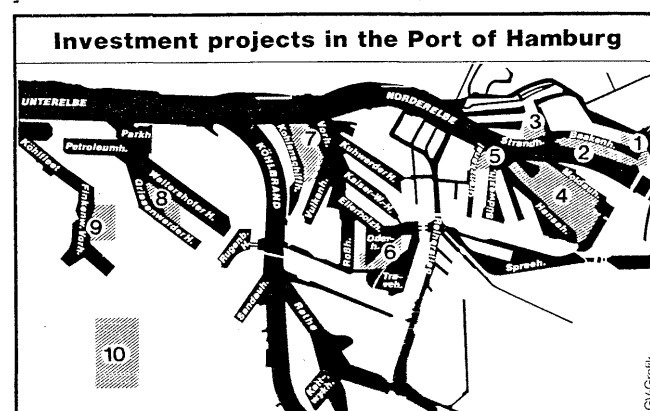
### Port of Hamburg further expands its position in ro-ro traffic—Twelfth ro-ro facility commissioned

The twelfth ro-ro facility recently went into operation in the Port of Hamburg. It is part of the newly modernised terminal of Messrs. G. Schürfeld & Co. at Baakenhafen. The company, which specialises in handling newsprint, packing paper and cellulose, transships some 450,000 tons of cargo per annum.

The new roll-on/roll-off plant underlines the importance of the Port of Hamburg in ro-ro traffic. In the wake of the stormy development of container traffic, this mode of transportation also gained in significance over the past years in the Port of Hamburg. Today almost every sixth to seventh ton of general cargo is handled here by the ro-ro method.

The time has long since passed when ro-ro traffic was restricted to European trade, as was the case at the start of developments after the Second World War. Ro-ro traffic meanwhile has a firm place in many overseas trading regions. This modern mode of traffic was favoured by the fact that the infrastructural measures in the ports on the high import Near and Middle East oil countries, as well as in West and North Africa, could not keep up with the rapid increase of incoming cargo. Ro-ro traffic provided a solution to the problem in this respect, helping to overcome hold-ups and congestion in the ports.

However, combined forms of ro-ro and conventional traffic systems were developed, as well as container traffic. In 1973 the first ro-ro container ships were commissioned



in the Australia trade (Scan-Austral). Hamburg today provides sailings in rolling traffic mainly to the ports of Europe (Great Britain, Scandinavia, USSR), North America, South and West Africa, Red Sea, India, Indonesia, South Seas and Australia/New Zealand. Some 70 sailings per month are offered within the scope of regular ro-ro liner services from the terminals. In this connection, shore-based special ro-ro facilities are no longer necessary in every case. With their movable, swingable stern and bow ramps, the modern ro-ro ships can for all practical purposes discharge and load at any quay.

In the course of the upward development in ro-ro traffic, the range of "rolling" cargoes has considerably expanded. Almost exclusively lorries are taken over by the stern, bow and later side doors of the special ships. Nowadays the handling of major loading units are the order of the day. They are placed on flat-bed trailers or bogies and towed on or off the ro-ro ships by tractors. This also applies to semi-trailers, articulated vehicles and complete lorry trains, as well as heavy transportable machines (building machines, heavy transport vehicles, forklifts etc.). By a combination of "rolling" and "lifting" (ro-lo), a degree of handling efficiency can be achieved today which was not considered possible a few years ago.

Closely linked up with the further development of ro-ro traffic is the question of how the special traffic systems will develop in the regions of the Near and Middle East, and North, South and West Africa. In this connection expansion of foreign trade of the countries in question plays just as much a part as the possibility that other traffic technologies might impair ro-ro traffic. This in turn is largely determined by the important factor of "infra and superstructure" in the ports of destination.

### **Messrs. J.D. Mturi and J. Kegode appointed Managing Director and Dy. Managing Director respectively: Kenya Ports Authority**

Mr. J.D. Mturi, has been appointed Managing Director of the Kenya Ports Authority with effect from February 28, 1980. He replaces Mr. John Gituma, now Permanent Secretary in the Ministry of Information and Broadcasting.

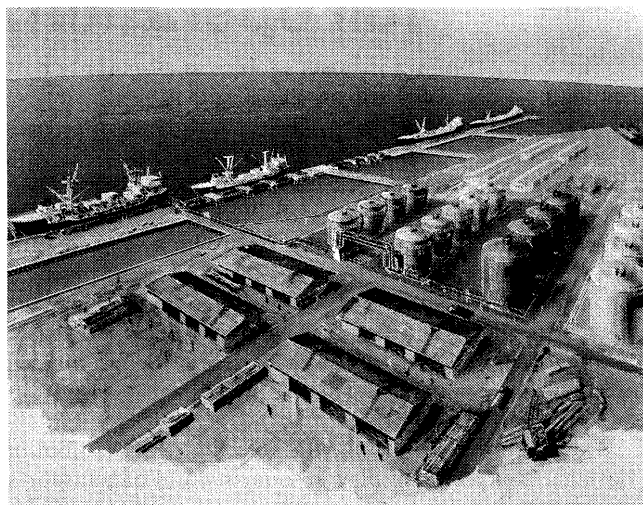
With the formation of the Kenya Ports Authority, Mr. Mturi was appointed Deputy Managing Director in 1977, a post he has held until his present appointment.

Mr. Mturi has trained extensively in port and shipping matters and has travelled to many world ports. He is also a member of various professional bodies including the Chartered Institute of Transport; the British Institute of Management, the Kenya Institute of Management and the International Management Association.

Mr. Joshua Kegode has been appointed Deputy Managing Director of the Kenya Ports Authority with immediate effect. He replaces Mr. J.D. Mturi who has been appointed Managing Director.

He has been on the Management of The Old East African Trading Company Limited which deals in Import/Export business for the last eleven years.

### **Safety & operational improvement emphasised; Kelang Port Authority**



This is how the North Port Second Extension of the Kelang Port Authority will look like in another 2 year's time. The 213 m. dolphins for liquid bulk cargo are scheduled for completion in August 1981 and the 640 m. general cargo wharves in December 1982. On completion of the project, the North Port wharves will measure 3.85 km, from Berth No. 8 right through to Berth No. 25.

Traffic through Port Kelang is on the upswing. The estimated tonnage for the whole of 1979 is in the region of 6.3 m. tonnes. With the greater volume of cargo handled, management is placing greater emphasis on safety of workers. The Industrial Safety Committee was set up to recommend ways to prevent accidents and to formulate a code of safety for LPK workers. There are 7 subcommittees to look into safety of workers in various aspects of port operations e.g. handling of dangerous cargo and chemicals working at wharves and back up areas and civil construction.

IMPROVE—IMPROVE—IMPROVE. That was the by-word for port operations in 1979. Various recommendations by the Berth-Throughput Study team were put in practice e.g. steps were taken to cut down delays in ship operations. Turnround time of vessels was improved to 1.5 days for conventional ships (2.27 days in 1977). A 30% improvement was seen in tonnage handled per gang hour—from 11.1 tonnes to 16 tonnes. Performance indicators were introduced, rationalisation of the container terminal is still going on and ways are still being looked into to improve productivity.

### **Ten berths added at Shuaiba port**

United Arab Shipping (UASC) offices in Tokyo report that Shuaiba port, Kuwait, now has 10 additional berths available on a new 2,100-meter quay with an alongside depth of 14 meters. The new quay represents completion of the first and second stages of a \$15 million extension to the port.

(Continued on next page bottom)

# Distribution Terminal goes into full operation: Port of Nagoya

The Port of Nagoya is Japan's foremost all-purpose port, combining commercial and industrial port facilities.

West-4 Section and Kinjo Pier are now being developed into the core of Nagoya's future commercial port.

Situated in West-4 Section are the NCB Container Terminal and the Foreign Trade Wharf, as well as a 2.1 million square meter (approx. 2.5 million square yard) Distribution Terminal in its very center. This Terminal was planned to accommodate efficiently the rapidly expanding volume of import and export cargo that transits the port. It combines all functions of the complete terminal: loading, reloading, consolidated loading, storage, and transport of cargo.

This is an outline of the vital role that the Distribution Terminal is expected to play in today's world of transportation, where a major part of international trade is carried in containerized ships and where integrated land-sea transportation has become possible.

## Organically Linked to the Container Terminal

A variety of facilities for transport and storage are located in the Distribution Terminal: the Distribution Center, the Warehouse Complex, a truck terminal, open storage yards, and cold-storage warehouses for meat.

Of these, the Distribution Center, which plays the role of a freight station for the NCB Container Terminal and the Foreign Trade Wharf, and the Warehouse Complex for cargo storage, are already completed and businesses have

(Continued from page 47)

The additional 10 berths gives Shuaiba a total of 15, with five more due for construction under the third stage of the extension program. Third stage construction is to start in the near future. With its present 15 berths, UASC reports, Shuaiba is estimated to have a capacity of 7 million tons of cargo a year, as opposed to 2.6 million tons before the new quay was built.

## Deepening approach channels under consideration: Gladstone Harbour Board

The Gladstone Harbour Board recently released a report containing details of a Study of the sub surface materials for dredging in the approach channels to the Port of Gladstone.

In releasing the report, the Chairman of the Board, Mr. A.W. O'Rourke, M.B.E., said that the investigation showed that a shipping channel can be constructed to a dredged depth of 18 metres below low water, using conventional dredging equipment.

A shipping channel of this depth would cater for very large bulk carriers in the 120,000 to 150,000 tonne range.

Recent discussions with shipping interests and exporters have shown that vessels of this size may use the Port of Gladstone in the future, particularly for the Coal trade.

Whilst no decision has yet been taken to dredge the harbour to accept very large bulk carriers, Mr. O'Rourke said that a number of sources had shown considerable interest in the eventual projects.



NCB Container Terminal (foreground) against the background of the Distribution Terminal.

begun their operations.

The Nagoya City Meat Center has also decided to locate here to meet the increasing demand for meat in the future.

In coordination with the development of the Distribution Center, the adjoining NCB Container Terminal plans to add a third berth in the course of the 1980 fiscal year; the Foreign Trade Wharf, situated to the north of the NCB Container Terminal, will build an additional berth beginning the same year to respond to the increasing volume of cargo.

It has also been decided that work will begin in the near future on the Port of Nagoya West Bridge that will link West-2 Section with Kinjo Pier as part of Ring Road No. 2 that links the Port of Nagoya with the Greater Nagoya Region. When completed, this bridge will make it possible for the Distribution Terminal to play its role of the largest compound terminal in the Chubu region.

## Port of Nagoya Distribution Terminal

The Distribution Center is where unloaded and or to-be-loaded cargo is sorted and organized, etc.

These facilities were built and operated by the Nagoya Transit Center. It is now being used by 19 tenant companies who conduct their business in the Port of Nagoya.

The Warehouse Complex is a storage facility for cargo processed at the Distribution Center.

The Warehouse Complex is divided into two parts which are operated by two different companies.

Ten warehousing businesses from the Chubu Region participate in the Tokai Warehouse Complex. Fifteen small and medium-scale warehousing businesses from the area surrounding Nagoya participate in the Nagoyako Warehouse Complex.

The Meat Distribution center was planned to rationalize the production and distribution of meat, in response to increasing future demand.

It has been decided that Nagoya City will build facilities for wholesaling, cold storage, processing, and slaughtering in a 160,000 m<sup>2</sup> site.





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