

昭和44年11月15日第三種郵便物認可 昭和59年10月号 昭和59年9月20日発行 第29卷第8号(毎月1回20日発行) ISSN 0554-7555

DORTS and HARBORS October, 1984 Vol. 29, No. 10

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IAPH announcements and news

Guide to the Working Sessions of the Hamburg Conference

The host of the forthcoming Conference of IAPH in Hamburg headed by Mr. J. Rommerskirchen, Conference Chairman and Head, Office for Port, Shipping & Transport, Dept. of Economic Affairs, Transport & Agriculture, City of Hamburg, has recently communicated to the Secretary General on the state of preparations for the May 1985 Conference. Among other items, our host draws attention to the four working sessions scheduled. The outline concerning the conference theme and the respective working sessions, as received from the Hamburg Organizing Committee, are reproduced below.

Theme of the 14th IAPH Conference

"Communication through Ports"

With their interface to all the various forms of transport, ports provide important links in the transport chain connecting shippers and receivers in different countries. This interface, this transfer role between different modes of transport, involved ever more complexity and expense, so that careful thought has to be given to the port facilities that are provided.

The importance of communication becomes obvious: communication in a comprehensive sense, in the context of the use of appropriate technology in the ports, and much more widely.

Regardless of the organization of any particular port, its efficiency will depend on how information is handled, on how co-operation is organized within the whole transport chain. Communication through ports is both a necessity and provides an opportunity.

The discussion of this theme and of its most important aspects at the Hamburg World Port Conference in May 1985 builds on the work of earlier conferences. Furthermore, with its connection with the International Trade Fair Portex '85, the World Port Conference provides opportunities that are relevant to the theme: "Communication through Ports".

Working Session I

Monday, May 6, 1985 (14:30 - 17:30)

"The Requirements of Ports in Developing Countries"

The existence of an efficient ports sector, with adequate and appropriate port facilities, often has a vital role for the achievement of satisfactory patterns of economic activity, and nowhere more so than in developing countries. Developing countries can ill afford capacity shortages, congestion and other port problems with their negative impact on trade volumes, the balance of payments and economic growth. At the same time, capital for investment — whether in the port sector or elsewhere — is scarce in many developing countries. This means that there is a vital need to ensure that the best possible use is made of existing port facilities. There is similarly a vital need to avoid wasteful investment, and to ensure that port investment is appropriate in its timing and scale, and in relation to technological and commercial changes in shipping and transportation.

These matters have implications for various aspects of port development and of port management, operation and training. This session - which will be taken wholly in plenary form - will consider the problems from two standpoints: there will be a paper on the needs of developing country ports; and a paper on the scope for inter-port co-operation, especially in the context of IAPH. The first of these papers will be given by a senior member of the staff of the Asian Development Bank (whose responsibilities particularly include the evaluation of projects), and who was responsible - prior to joining the ADB - for ports policy matters in India. The second speaker will probably be the General Manager of an African port authority. Both speakers will summarise the main points in their papers (which will have been pre-circulated), and there will be a wide-ranging discussion. In conclusion, there will be a keynote summary speech by the President of IAPH.

Working Session II

Tuesday, May 7, 1985 (09:00 - 12:00)

"The Role of Communications in Ports"

The introduction of advanced technology in transport has led to very short ship-turnaround times in port, notwithstanding increases in the volumes of cargo handled. The tasks and aims of communications, information and administration within the ports have considerably changed. In addition, it has been necessary to change and improve structures of organization. How can and how should the introduction of electronic data processing influence discharging and turnaround times in ports with different degrees of technical development? Are international regulations necessary? How can the chain of transport facilities and services be supplemented by information links, the ports having an interface function?

Answers to these and similar questions will be considered in a symposium. Three papers will deal with different aspects and will put forward points of view for discussion. The way of working that has been chosen will make possible both a broad over-view, and a many-faceted discussion.

Working Session III

Wednesday, May 8, 1985 (14:00 - 17:00)

''Free ports—Preconditions, systems, significance''

Free ports and free trade zones serve to promote and improve the international exchange of goods. In them goods designed for foreign trade are treated, stored, loaded and unloaded without the necessity of any import duty. This efficient method of handling goods will continue to exist as long as tariff and non-tariff restrictions on trade continue to hamper the free exchange of goods. Actually there is no such thing as a free port system. All over the world, depending on existing conditions and objectives, a number of variants have been practised, each geared to the requirements of the country in question. These different possibilities will be discussed in a symposium, using as examples the ports of Johore, Colon and Hamburg.

The symposium will open with an introductory paper covering the general theme of free ports and free trade zones. Then the speakers from the three ports selected as examples

- will explain the organization and function of their particular free port
- as well as the
 - legal,
 - infrastructural,
 - personnel, and
 - economic conditions

which have to be fulfilled in order that their modification of the free port idea can be realized.

They will also show how important the particular type of system implemented in their country is for

- the economy,
- its development perspectives,
- foreign trade, and
- the port economy.

The discussion following each paper offers the listeners an opportunity of examining in depth and comparing individual aspects of the variants.

Working Session IV

Friday, May 10, 1985 (09:00 - 12:00)

"Men in Port-aims, training, working and labour relations"

The port is the workplace of large numbers of people. As elsewhere in the world of work, conditions in the port are undergoing rapid changes. The subject of Session IV will be the causes of these changes, their results and the possibilities of mastering them. A wide exchange of experiences between the representatives of the individual ports present at these workshops will provide the best answers to these questions. These discussions provide an opportunity of getting to know the different approaches to the solution of work problems in the port.

In the introductory paper in the plenary session the following problems will be specified as themes:

- Characteristics of work in the port,
- Development of work in the port up to the present day,
- Different stages of port extension, and technical standards in port and on ships and their effect on the port,
- Objectives which the port pursues and their effect on work in the port,
- Training in port training on the job, state institutes, commerical training institutes,
- Use of technologically advanced equipment and level of training,
- Different systems of social security for port workers.

Session IV; Workshop 1

"Experiences with working conditions in different ports"

In this working group there will be an exchange of ideas about the working conditions in the various ports of the world. Aims of the workshop:

- a) To gain an understanding for the problems of the individual ports,
- b) To discover how working conditions develop in ports,
- c) To learn how work problems are handled in other ports, for instance
 - working hours and their distribution,
 - safety at work,
 - technical standards,
 - social security.
- d) To get to know the overall economic objectives of the individual ports (ports as development pools or as independent operational organizations).

Session IV; Workshop 2

"Work in the port, today and tomorrow"

In this workshop, the representatives of the individual ports will state how work in their respective ports has changed and how, in their opinion, it will change in the future. The aim of this session is

- to recognize the cause of the development the change of working conditions in the port as a result of the demands of shore-side and seaborne customers;
- to elaborate the close connection between technological development, training and working conditions;
- to demonstrate changes in the training system;
- to get to know the positive and negative developments in the different ports; and thus
- to be in a position to assess development potentials of those employed in one's own port and so be able to prevent faulty developments in good time.

Session IV; Workshop 3 "Working conditions in times of technological changes"

Ports, as one link in the transport chain, have to adapt themselves to the demands made on them by the preceding and succeeding links. Their infrastructure and superstructure must conform with the wishes of their shore-side and seaborne port customers. These wishes have exerted and exert an influence on the situation of the men in the port.

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The aim of the session is to learn from the participants how they are meeting this technological challenge to the worker; how they have complied with the demands

- of social security;
- of safety at work;
- of the correct and efficient use of technological equipment;
- of advanced training;
- what challenges technological change has brought with it for social partnership in the port;
- how the changes have affected wage structure and
- how, as a result of technological change, relations between the workers in the various links of the transport chain have changed and will continue to change;
- how the different technological levels in the various ports are taken into account and influence the work in the port.

Session IV; Workshop 4 "Development of training for work in the port in Hamburg. One example of many"

The aim of the session is to give participants an insight into the development and present state of training for port related work in Hamburg. Here particular attention will be paid to training in the Hafen Fachschule (Port Technical College).

Progressive technological advances in port operations demand a higher standard of training than is required for cargo handling dependent mainly on manual labour. The Hafen-Fachschule is Hamburg's answer to this constant demand for training and advanced training. The subjects for discussion will be the College's training programme, its financing and the qualification certificates which it awards as well as the results of the use of this institution made by both employers and employees. The discussions will also cover the possibility of use of this institution by port workers from outside and the conditions needed for setting up a similar system in other ports. The paper will also give participants an insight into training and advanced training programmes run by private firms.

* * * * * * * *

Exco approves fund for Attitude Survey

Exco, at its meeting by correspondence called on September 5, 1984, unanimously approved the allocation of an additional fund in the amount of \$10,000 for the Community Attitude Survey conducted by the Public Affairs Committee (Chairman: Mr. F.M. Wilson, Port of Brisbane). The additional fund allocation was requested by the Committee to prepare a final report to the next conference incorporating survey items added to the draft report which was submitted to the Glasgow meeting.

Bursary Recipients

Mr. J.K. Stuart, Chairman of the IAPH Committee on International Port Development, has announced the names of the bursary recipients and the courses for them to attend as follows:

- 1. Mr. A. Sulieman, Financial Director, Yemen Ports Authority, to attend the IPER Finance Seminar at Le Havre in June, 1984.
- 2. Mr. W. Baeto, Warehouse Superintendent, Port of

Foniare, Solomon Islands Port Authority to attend Port and Shipping Administration Diploma Course at UWIST (University of Wales Institute of Science and Technology) in September 1984.

IPD meeting in Le Havre

According to IPD Chairman Stuart, an IPD meeting has been scheduled for Le Havre on October 26, 1984, to discuss the IPD working session to be conducted at the forthcoming 14th Conference in Hamburg next May.

Plaques, flags, medals of IAPH member ports displayed

For the purpose of publicizing the role played by the port and in order to foster interest in maritime matters among the citizens, Kitakyushu Port Authority organized the 6th Kitakyushu Port Exhibition for 7 days from July 19 to 25 at a department store in Kitakyushu City. The event attracted some six thousand visitors.

On this occasion, the 25 plaques, 12 flags, 15 medals and ornaments which were contributed by the member ports and are permanently on show in a meeting room of the IAPH head office were also displayed.

Visitors

On August 10, 1984, Mr. Mohd. Hashir bin Abudullah, Director General of Kelang Port Authority, Malaysia, accompanied by Mr. Lim Boon Hong, Chief Engineer (Planning), Mr. Choo Choon Yeow, Co-Project Manager, Jurutera Consultant, visited the head office and met Mr. Hiroshi Kusaka, Dy. Secretary General, and the head office staff.

He was visiting Japan to observe the current situation of operation systems at container terminals, and visited the ports of Yokohama, Kobe, Hiroshima and Nagoya during his week-long stay in Japan.

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IMO Reports by Mr. A.J. Smith

Report on the International Conference on Liability and Compensation for Damage on the Carriage of Certain Substances by Sea

1. Sixty-nine States were represented by delegations at the International Conference on Liability and Compensation for Damage on the Carriage of Certain Substances by Sea, held in London, from 30th April-25th May 1984 inclusive. Two States attended through observer delegations. Representatives of the United Nations Economic Commission for Europe (ECE) and the United Nations Conference on Trade and Development (UNCTAD) also attended the Conference, as did observers from five intergovernmental and twenty-four international non-governmental organizations in official relationship with IMO, including IAPH.

2. Purpose of the Conference

2.1 The purpose of the Conference was two-fold: (i) to consider the adoption of a treaty instrument on questions of liability and compensation for damage on the carriage of noxious and hazardous substances by sea (HNS Convention); and (ii) the adoption of appropriate treaty instruments to revise the International Convention on Civil Liability for Oil Pollution Damage, 1969 (1969 CLC) and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 (1971 Fund Convention).

3. The Proceeding of the Conference

- 3.1 It will be appreciated that the substance of discussions both at Plenary Sessions of the Conference, and in the Committees, established by Plenary, were both detailed and highly technical. The revision of the 1969 CLC, for example, involved detailed discussion, amongst other things, of the meaning of pollution damage; the scope of the Convention; exoneration issues; levels of liability limitation; the process of future revision of limitation levels; tonnage measurement issues; and treaty law matters. The same pattern existed so far as discussions to amend the 1971 Fund were concerned.
- 3.2 With regard to the proposal for an HNS Convention, extensive discussion took place on such matters as scope; person liable; levels of limitation; compulsory insurance; claims and actions; a listing of relevant hazardous substances and amendment procedures.
- 3.3 Each of these discussion areas was accompanied by considerable documentation prepared by the IMO Secretariat, Member States and Non-Governmental Organizations including submissions by IAPH.

4. Matters of Concern to IAPH

4.1 Both in an HNS Convention context and in terms of the CLC and the revision of the 1969 Fund Convention IAPH representatives paid particular attention to discussions dealing with:

- (i) the need for rapid and fair compensation for the victims of pollution damage;
- (ii) exonerations;
- (iii) compensation levels;
- (iv) the procedure for updating the limitation amounts;
- (v) definition of the liable person and the regime of liability.
- 4.2 IAPH had submitted position papers on these subjects prior to the Conference. Representatives were also able to emphasize their particular concerns by way of interventions during debates.

5. Results of the Conference

- 5.1 It must be said that the results of the Conference were unsatisfactory from an IAPH viewpoint.
- The hoped-for HNS Convention failed to materialize. 5.2 A committee of the Conference failed, in the time available, to resolve the many complex issues in the draft convention and reach broad general agreement on a treaty instrument which would receive wide acceptability among States. However, there was general recognition of the need for an international agreement regarding questions of liability and compensation in connection with the carriage of noxious and hazardous substances by sea. Accordingly the Conference, on the recommendation of Committee, decided to send the draft HNS Convention back to IMO for such further action as might be deemed appropriate, taking account of the views and proposals presented during the discussions of Committee. Specifically, the Conference recommended that IMO, after requesting such opinions as it may consider necessary, arrange to prepare a new and more widely acceptable draft for submission to a diplomatic conference which may be convened in the future. In this connection, the Conference adopted a Resolution that IMO assign priority to the preparation of such a new draft and arrange for its examination by a Diplomatic Conference at the earliest possible time.
- 5.2.1 The problems which concerned IAPH members have not, of course, been similarly postponed. If anything, they are on the increase. Insofar as risk liabilities have to be covered by existing Conventions it is obviously of great importance that maximum pressure be brought to bear to ensure that the 1976 Convention on Liability for Maritime Claims be enforced and that its limitation levels be urgently revised upwards.
- 5.3 In other respects, the Conference could claim it did achieve success. It adopted two treaty instruments:
 - (i) the Protocol of 1984 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969; and
 - (ii) the Protocol of 1984 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971.
- 5.3.1 IMO has been given certain functions under both Protocols. It has been given the responsibility of convening conferences for the purpose of revising or

amending the Protocols, either on its own initiative or at the request of a specified number of Contracting States to the Protocol concerned. Additionally, IMO's Legal Committee has been designated as the body to consider and adopt amendments to the limitation amounts in the two Protocols. Such amendments will be brought into force through a "tacit acceptance" procedure. Taking specific account of IAPH interests, however, the details of the Protocols leave much to be desired.

- 5.4 IAPH had hoped that provision would have been made for the payment of rapid and fair compensation to damage victims. Even though an IAPH intervention during Committee proceedings had given rise to a 29/22 indicative vote in favour of the IAPH position, the Conference, in Plenary Session, could not find the necessary two-thirds support for deleting Article 3.2.C of the 1969 CLC which, whether or not rightly invoked, can open the way to prejudicial actions to determine responsibility. These could last for months, or years, to the severe disadvantage of damage victims.
- 5.5 On compensation levels, IAPH had hoped for an overall capacity of at least \$250 million with a minimum liability limit greatly expanded beyond the level agreed by the 1976 Liability for Maritime Claims Convention. What has resulted may well be regarded as reasonable in the circumstances.
- 5.5.1 The 1984 CLC Protocol has established a minimum liability of 3 million Special Drawing Rights (SDRs) for tankers of less than 5,000 grt.
- 5.5.2 The liability limit rises by 420 SDRs for each ton to a maximum of 59.7 million SDRs.
- 5.5.3 The 1984 Fund Protocol, closely aligned with the 1984 CLC Protocol, has established a new two-tier system for payments. Under the first tier – when the Fund enters into force with 8 or more States contributing the value of 600 million tons of oil imported into their terminals – maximum compensation payable will be 135 million SDRs. A second tier will take effect when 3 contracting parties (effectively Japan, USA and 1 other) together import 600 million tons of oil; the maximum compensation then payable will be raised to 200 million SDRs, approximately \$200 million.
- 5.5.4 The combined compensation package therefore falls below the desired level of at least \$250 million; on the other hand, it is significantly higher than the level of \$120 million proposed by a group of important maritime States including China, Cyprus, Greece, India, Italy, Japan, Korea, Poland, Portugal and

Singapore.

- 5.5.5 What does concern, however, is that the implementation of these new compensation package levels will, in all probability, take a very long time during which, it might be supposed, money values will have eroded considerably.
- 5.6 IAPH favoured simplified and accelerated procedures for updating limitation amounts as often as justified. The agreed procedures under both Protocols, which place responsibility on IMO's Legal Committee for considering and adopting amendments to limitation amounts, will certainly speed-up matters. There will not be an automatic review, however, after, say, a 5 year interval. Other provisions are that a review must be requested by at least one-quarter of the Contracting States; it must then be adopted by a twothirds majority of these States; and it would be stipulated that increases in limitation levels shall not exceed 6% per annum. It is entirely probable therefore that the gains in limitation levels achieved by the Conference will lose their meaning because of monetary erosion.
- 5.7 IAPH's concern to establish clearly the person liable fell away, in a sense, with the failure of the draft HNS Convention. In 1984 CLC Protocol terms, the person liable is the owner.
- 5.8 Other Conference results of interest to ports were:
 - (i) the extension of the geographical scope of the Protocols to the limit of the exclusive economic zones of Contracting States;
 - (ii) agreement on the form of certification needed to prove financial security in the context of compulsory insurance.

6. Concluding Remarks

6.1 The large number of abstentions by important maritime States in the voting on both the 1984 CLC Protocol and the 1984 Fund Protocol, 16 and 21 respectively, must, as has been mentioned elsewhere in this Report, create some doubt as to their enforcement in the near future. IAPH must therefore look to other ways of securing the necessary protection of ports which, it had hoped, would have resulted from the Diplomatic Conference.

Address change of AAPA

Effective August 6, 1984, the office of AAPA (the American Association of Port Authorities) moved to: 1010 Duke Street, Alexandria, Virginia 22313, U.S.A. Tel: (703)-684-5700

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Open forum:

Ports and Shipping: Two Elements – One Task

By Dr. Werner Dollinger Federal Minister of Transport Federal Republic of Germany

Seaborne trade, the merchant fleet and port functions play a predominant role in the Federal Republic of Germany. Our country is, on the one hand, dependent on the import of raw materials; on the other hand, it is orientated to the export of high-quality goods. Germany plays an important part in world trade and in the North Atlantic Treaty. We make an essential contribution to the economic capacity of the Western world while trying to successfully integrate our national economy into the world's economic structures.

Both volume and directions of the flow of goods carried by sea as well as the merchant fleets and ports used for this purpose thus are very sensitive indicators of cyclical and structural developments of the world's and national economies. Latest developments give rise to looking into the future with a certain optimism.

The economy of the Federal Republic of Germany has apparently survived the cyclical recession of almost three years; our foreign trade is noticeably improving, owing to the favourable economic development in other developed industrial countries. Consequently, shipping and ports are profiting from the upswing of foreign trade, particularly from the increase in breakbulk and general cargo carried.

However, the situation for shipping and ports remains serious, as the enormous problems of the last few years, in particular the structural imbalance between supply and demand in international shipping, continue to depress shipping markets.

In this situation, the Federal Minister of Transport finds himself facing requests from many interested parties to assist various ailing sectors of the maritime industry through governmental regulations. Many of these requests go beyond the limit of what a Government is supposed to - and, in fact, can - do in a competition-orientated market economy. Apparently there is no longer a clear distinction in certain circles between governmental responsibility, on the one side, and the wide spectrum of private business initiative and responsibility, on the other side. I take the view that the economic system of the free world and its success is based on the principle of enterprises making their commercial choices and decisions on free, unimpeded markets where competition reigns. The economic, and of course the transport, policy of the Federal Government is orientated to promoting this principle of business responsibility in a framework of free competition. This principle takes top priority. Neither the size nor the structural composition of the West German merchant fleet and related industries are subject to State planning, for we are convinced that governmental intervention into markets should be restricted to the assistance of commerical decisions made by enterprises in those areas where market distortions created by the interventions of another state interfere with the mechanism of free and fair competition.

Such narrowly-defined State intervention into the markets must be flexible: The development of necessary Government measures must be geared to the international situation prevailing at a given time.

The situation for shipping and ports remains serious. The recession of the last few years has put an enormous strain on the resources of the maritime industry. International shipping markets continue to be plagued by overtonnaging or, in other words, a considerable imbalance between supply and demand.

However, the role of our merchant marine is an integral part of our economy, and its functions are closely related to the requirements of our national economy. These functions are not restricted to the transportation of goods. They also comprise

- the safeguarding of supplies (energy and raw materials) in times of crisis (included here are military supplies);
- the promotion of the economic development of the country's coastal region;
- making a contribution to the balance of service transactions; and
- ensuring the employment of seamen and clerical staff in shipping companies and connected service industries.

This is why it has long been a guiding principle of the policy of West German governments that this country must have an adequate high-quality and modern merchant fleet. However, following this principle does not in any way imply a political planning of the fleet's capacity, for with any such measures we would quite clearly be overstepping our mission and would be deviating from the basic outlines of shipping policy in a system of free market economy.

The inevitable result would be an incalculable extension of State subsidies, leading eventually to a shipping dirigisme which, according to our idea of politics, must be flatly rejected. Nor can such dirigisme be in the interests of free enterpreneurs geared to the principle of competition.

The national concept of an "adequate merchant fleet" (meaning "adequate" to the above-mentioned economic functions) is thus not an instrument of political planning but rather a concept of political <u>orientation</u>. This is why, in a free market economy, shipping policy measures should not subsidize capital investments up to a (perhaps political-ly desired) level; they can only counteract undesirable developments, especially if these result from market distortions. The aim then would be to preserve a favourable frame of conditions for free entrepreneurial expansion or to create such frame anew, but not to further distort the markets by own intervention, especially by any kind of counter-protectionism.

The day-to-day shipping policy of the Federal Government is governed, to a large extent, by the recommendations that were adopted by the Merchant Shipping Advisory Committee on 9 March 1981 and by the Resolution on Shipping Policy that was passed by the German Bundestag on 15 December 1982.

The Merchant Shipping Advisory Committee had, at the time, established that West German shipping companies had operating under foreign flags as many as 500 out of 2000 ships in service (approximately 35% in terms of gross tonnage). The tonnage of ships sailing under the West German flag had declined from 9.3 m to 8.4 m GRT between 1978 and 1980. The tendency towards registering ships under a foreign flag was continuing so that there was a danger that the West German merchant fleet would no longer be able to carry out its economic functions or, at any rate, could do so only to a limited extent.

By the end of 1983, West German shipping companies had at their disposal ships of just under 10 m GRT, of which 6.3 m GRT were flying the West German flag. This is to say that the proportion of ships flying foreign flags stood, at the time, at about 37%. This means that the consolidated tonnage reduction of ships sailing under the West German flag has amounted to about one third since 1978, or to about 500,000 GRT per year. The number of units registered under foreign flags has now reached a high, if very much fluctuating, level.

However, it must not be forgotten that a very considerable, and very positive, structural change has taken place parallel to this development: The highly productive containership tonnage has increased by 1.8 m GRT (which means it has more than doubled) between the beginning of 1978 and the end of 1983. The tendency towards a reduced but highly competitive merchant fleet, already indicated in the Merchant Shipping Advisory Committee's report of 1981, is thus continuing.

This makes us realize that the Federal Republic of Germany, as before, still possesses one of the most modern and productive merchant fleets in the world. This is largely the result of the sense of responsibility and initiative of private enterprises in their efforts

- to cushion personnel costs by increasing productivity;
- to counter low-price competition by the application of technological know-how; and
- to retain market shares by supplying first-class and reliable services.

Nevertheless, we must not close our eyes to the fact that West German shipping is still in a difficult competitive situation. What are the reasons? Firstly, and most importantly, it is the ever more widening gap between supply and demand on the shipping markets. It is a sad fact that many countries pursue a wrong shipbuilding and merchant fleet policy by subsidizing the prices of new ships so heavily that their shipping companies are largely relieved of any operational risk. The result of this is a tonnage surplus on an unprecedented scale which, to all probability, will prevent the 4 to 5% rise in world trade, which has been forecast for 1984, from being reflected by consolidating shipping markets. In this context, it should be noted that the Federal Republic of Germany is not pursuing any policy of capacity expansion or shipbuilding promotion; its promotional measures are rather directed to continual fleet modernization and, hence, to the improvement of the fleet's competitiveness. I should like to emphasize once more that the consolidated tonnage reduction of ships under the West German flag has amounted to about 3 m GRT in 6 years.

Furthermore, steadily increasing competitive distortions created through flag protectionism and dumping practices on the part of State-owned merchant fleets in liner services are causing the West German merchant fleet considerable difficulties. This is the type of development that the commercial shipowner cannot fight against with only the instruments of a private enterpreneur at his disposal — in other words, he is helpless against state dirigisme.

One thing should be made quite clear: Market imbalances resulting from entrepreneurial decisions, for example speculation, are facts that the German shipowner – or any other competing foreign owner, for that matter – has to live with. Such imbalances cannot be influenced by any national shipping policy. Flag protectionism and dumping, on the other hand, are a fundamental challenge to our market economy system. In this case, our shipping policy must ensure that free manoeuvring space for our shipping companies is retained, or created anew, on the international market.

In view of the cyclical and structural difficulties of German shipping, the Merchant Shipping Advisory Committee and the German Bundestag have considered it necessary to introduce a package of promotional measures; these include, among others, measures for safeguarding free access to cargo for our shipping companies.

In this respect, everything is set and ready for the gradual implementation of an effective policy mix, which will enable our foreign trade legislation to be applied at short notice in any case of urgency in any one trade. To be sure: We always attempt to reach solutions by negotiations; this is our top priority choice. But arrangements have been made for the application of the various tools of our foreign trade legislation in cases of competition of a noncommercial nature when negotiations have proved unsuccessful in the end. Such action, which is fully in accordance with procedures already introduced by our neighbours in the European Communities, provides for consultations with the EC partner states most affected, should the situation so require. The Federal Cabinet will shortly adopt the necessary amendments to the relevant foreign trade legislation.

The Federal Government's readiness to take political action is thus an unmistakable sign that appropriate action will be taken, and will be taken effectively, if need be

In a climate of political and economic changes, the situation of the sea ports, too, has been marked in the last few years by increasing difficulties.

Ports have had to cope with spectacular developments in seaborne traffic. Containerization and the constantly progressing specialization of ships has led to vast increases in vessel size and turnaround speed, inconceivable even only a few years ago. And, it should be added, these developments are continuing. The slump in world trade was clearly reflected, above all, in container traffic but, luckily enough, in 1983 our main general cargo ports, Hamburg and Bremen, were again moving up in this sector.

The competitive situation of ports is not only influenced by the technological dynamism of ocean transport, which requires flexible adjustment to continually changing conditions. Important factors include also tariffs and "nontariff conditions." As regards the transport to and from ports of goods carried by sea, our industry may not only avail itself of German ports but may also choose ports on the estuary of the River Rhine, i.e. Antwerp, Rotterdam, and Amsterdam. This is, of course, due to the geographical situation of the Federal Republic of Germany. The choice, however, is influenced, with a general tendency to the detriment of the German ports, by the fact that liberal traffic regulations apply to the ports of the Amsterdam/ Rotterdam/Antwerp range, whereas for our ports, as a result of the national "controlled framework of competition," this is not the case. Owing to these different conditions applying to transnational traffic, on the one hand, and the export trade via German ports, on the other hand, our ports feel themselves at a disadvantage and see this as a major cause of the reduction in cargo handled over the last few years. They demand that haulage to the ports be put on an equal footing with transnational haulage. I am sympathetic to these demands and I intend to eliminate these competitive imbalances - insofar as they result from governmental regulations - within the framework of our legal system, taking into account relevant developments within the European Communities and always bearing in mind the fundamental fact that this is a free market economy. In the meantime, concrete proposals for action to be taken have been developed. These envisage that export via our ports should be subject to the same conditions as transnational traffic and thus aim at equal opportunities for the West German ports vis-à-vis their Belgian and Dutch competitors in respect to hinterland traffic conditions.

This does not mean a farewell to the existing national "controlled framework of competition." It rather means that moderate and sensible steps are being taken towards an adapted framework stimulating competition and ensuring the functioning of market forces.

A beginning has now been made. If necessary, we will bring the matter to a solution on our own, should the parties involved show a lack of discernment and compromise.

The further development of the "framework conditions" demands considerable effort on our part, since these conditions are being increasingly challenged by economic, technological and, above all, political developments, which sometimes come and go ever so quickly. These demand well-balanced governmental reaction. It is essential in a market economy that private enterprises, too, recognize what is necessary and make creative and flexible use of their commercial possibilities.

New structures may be discovered in international liner shipping, structures that might decisively change the whole character of shipping. I am thinking of the concept of American and Taiwanese shipowners to start "around-theworld" services with container vessels carrying between 3,000 and 4,000 TEU. Should this concept work out, it is said to lead to cost savings of up to 30, or even 40, percent. This certainly is one of the biggest challanges of the last decade to conference-orientated liner shipping.

Shipowners, aware of the competitive situation, will hardly be able to avoid answering certain fundamental questions, for example, whether conference areas (whose limits have developed historically) should be adapted to changes now occurring; whether new combinations of partial trade routes, already shown, through the pressure of outsiders, to be commercially viable had better be put into operation more quickly; and whether the entire conference system, with its organization rooted deep in tradition, had better be set on a completely new basis.

It is equally necessary for West German ports to continue making improvements in efficiency, as they have done in the past. The geographical proximity to the great overseas trade routes of the competing ports on the Rhine Estuary and their constant capacity improvement demand urgent action if West German ports are to commercially survive vis-à-vis their foreign competitors. Technical improvements and cost reductions in hinterland traffic alone will not suffice. What is required above all are efforts by West German sea ports to increase their cargo-handling capacity between ship and dock. In short, it is inevitable that the West German sea ports, with their system of private enterprises which have a readiness to venture investments of a potentially revenue-producing nature, will be forced to reduce cargo-handling costs and to improve the overall efficiency of their superstructure.

To sum up:

Today, far more than in previous decades, when the special demands of particular transport modes provided a guideline for political action, a country's transport policy

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Repercussions on the Ports of the "Round-the-World-Service"

By Helmut F.H. Hansen Executive Director of Port Commerce The Representative Port of Hamburg

The thought of casting off the disadvantages of cargo liner services tied to specific ranges or round voyages is not so novel as the announcements recently made by various shipowners could have people believe. Existing only exceedingly seldom in a trade in both (incoming and outgoing) directions, "even" load factors had in fact already given the shipowners of earlier days the idea of pursuing "main cargo flows," i.e. of giving up a "there and back" service in a geographically very restricted trade which suffered from a severe imbalance, and instead providing several "related" services forming a sequence. This entailed the principle of rotation for ships in their own fleets. Whether a "round-the-world" service is launched here, or "several continents" served along a U-shaped route, is quite immaterial. The principle remains unaltered, i.e. a selection is made of routes offering relatively heavy cargo volumes, and others - where these are comparatively modest, and hence the subject of tougher competition and less lucrative - are avoided wherever possible.

In earlier years - prior to the introduction of modern cargo handling and transport technologies - it was naturally difficult to realize the concept of a round-the-worldservice in such a way that this not only functioned well operationally (with an organization spanning the globe) but also proved successful commercially. After all, the "breaks" called for by the use of feeder services invariably entailed costly and time-consuming utilization of (conventional) cargo handling facilities, meaning that it was largely impossible to cut the number of ports served (as is now certainly normal on container services, for example). All main seaports had to be served as before, because it was only thus that sufficient cargo volume at reasonable conditions could be attracted (acquired). Services of this kind, therefore, remained just as fast or as slow as their more run-of-the-mill competitors. One important competitive edge was, therefore, forfeited, nor could such services be offered at rates much lower than those of the competitors.

New cargo-handling and transport systems (especially for containers) and mounting competition ensured that the idea of pursuing salient cargo flows would be taken up

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must help develop integration potentials and new forms of co-operation between the various modes of transport. New models for co-operation, together with a network of multilateral and bilateral agreements — plus, in case of urgent need, unilateral defending action — should effectively help us counteract world-wide protectionist tendencies.

again by some shipowners. Successes achieved in the rationalization of container handling have made feeder services attractive once again in certain circumstances. This has been proved by developments hitherto. Yet the main services affected here are those by road and rail aimed at concentrating movements at one port among several "neighbours," and diverting both incoming and outgoing containers bound for the others, where it proves impossible to persuade shippers or forwarders to deliver or accept all cargoes in the one port served direct (even if this should prove somewhat more costly prior to delivery and after collection there). So as to achieve this, some carriers have introduced carriers' haulage. This procedure takes account solely of the shipborne side of the equation, sometimes ignoring the rates actually valid among the carriers on land. In some cases, other opportunities are being grasped for "directing" cargoes. Naturally there are also seaborne feeder services. These can look back on long traditions, those to Scandinavia being one example. Yet the consignment affected here are almost without exception "in transit" or, as they used to be known, "through loads."

The ideas of the shipowners whom people are so happy to label "aggressive" actually go even further — even if it seems that some of them may now be afraid that they have been excessively bold. In at least one instance, the intention was to embark on a new, fourth (Jumbo) generation of containerships. These Jumbos were also meant to be "super-fast." Meanwhile, though, some changes have obviously occurred in the philosophy hitherto proclaimed. On speed, some rethinking has gained acceptance. In another case, as regards size the ships seem to be more akin to second-generation vessels than floating Jumbos.

However, one intention common to all is that of making a sharp reduction in the number of ports of call a cardinal principle of the new services. The idea is to serve only one port in a range — the one generating the biggest cargo volume. Now of course that volume alone will not suffice to fill ships or to cover costs. Hence the feeder services come to be of even more significance that at present. Since what is needed is not simply to acquire cargo from "neighbouring" ports, these cannot be confined simply to overland services and inland waterway transport, but must also include seaborne feeder services — this not simply for operational reasons, but on cost grounds, especially. One shipping company has already made it known that it will be deploying feeder vessels — and units, namely, with a capacity of 440 TEUs.

Before I come to the changes which (could) result in this context for the ports, one further basic pointer: the past has shown that developing and threshold countries, especially, react extremely sensitively to any changes on the transport market which are tied in with any form of "exclusion from services" for them. One needs only to recall the development of "cargo dirigisme." By means of nationalistic legislation, this came to mean that on many overseas routes, the ships of developing/threshold countries were carrying a higher proportion of such a nation's foreign trade than those under all other flags together — those affected mostly being from the traditional shipping countries. This unsatisfactory state of affairs then led to the UNCTAD Code of Conduct for Liner Conferences, which was due to come into force on October 6th, 1983, in the signatory states. It cannot be ruled out that such states, if they see their national foreign trade being handled via nodal points in third countries rather than in their own ports, will take action to protect themselves. As the past has shown, much can be achieved by means of "national" legislation.

For the seaports – and this naturally applies to Hamburg - the commencement of the round-the-world services announced could also lead to additional adverse changes in their position vis-à-vis the competition. Yet the possible negative repercussions should largely remain within the bounds of those already applying to, e.g., the major container ports, and hence the two German universal ports on the North Sea (if only one of the two is served). It is even conceivable that a further reduction in the number of ports of call will lead to a decline in the land-based movements of containers, for it would no longer be simply a matter of making up for the "neighbouring" port no longer served, but of covering long distances which for cost and operational reasons can best be served by seagoing feeder vessels. For ports not served direct, this trend would be advantageous because - while it is not immaterial to a port whether a large ship or a feeder is being handled dealing with a seagoing feeder vessel (unlike a land-based carrier) means preserving the full range of traditional port functions and cargo-handling throughputs. Seen that way, the trend could prove positive for the ports (including Hamburg).

How such "globe-spanning conveyor belts" (to quote a leading transport journal) will perform commercially, and how the prospects are for the container shipowner adhering to classical cargo liner services, is quite a different matter. In this context, another basic factor must be stated: the "one-way" shipowners will be impairing transport capacity in the opposite direction (the one generating less cargo), and this direction only, the reason being that – provided these "round trip" operators enjoy success – they will naturally be withdrawing capacity from that trade. Yet the impact will be small, for naturally only those shippers who have movements to organize in both directions will as a result spring to the aid of the "classical" shipowner. The importance of this group will be strictly limited.

Let's revert to the question of viability! When USLchief McLean asserts "I'll run the cheapest slot," then this statement reflects solely the shipowner's own commercial interest, not necessarily the shipper's. The question arises in any case, whether these "round-the-world services" actually constitute the cheapest slot. The size of the ships – even if the talk is no longer of 75,000 dwt or almost 4,150 TEUs per unit – calls for very high load factors, calling for superb organization and a very elaborate sales network. On a different scale, the same applies to today's services with third-generation vessels. Something else reflected in the costs, both in normal and round-the-world trades, is whether a ship is purchased cheaply or expensively. Dis-

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regarding the ships which were series-built in the USA during the Second World War, it would also be a novelty if shipowners were to abandon their separate ways when ordering ships, and switch to "production line" units. Moreover, for so long as traditional shipowners continue to praise speed as a significant competitive factor, then operating "slow movers" must entail risks.

Naturally the shipper will be almost solely responsible for deciding success or failure, for he alone will be determining the extent to which this somewhat novel facility will be utilized. So what's the shipper's verdict, or likely verdict, on such services? Insofar as the "round voyage" interests already mentioned do not exist, then he'll not care in the least how the (round-the-world) shipowner's scheme may look. Invariably, he's interested simply in the rate for the sailings offered, their rapidity and reliability between the port of loading and the port of discharge. If calls at additional ports make the connection slower but cheaper, then the shipper will weigh up the advantages and disadvantages and reach a decision. In many cases the timings will be more important, in some the cost burdens.

If the round-the-world shipowner is bent on striking fear into the hearts of the traditional competitors, then he will have to pass on most of the benefits of rationalization (insofar as these actually materialize) to the clients (in his rates). On some routes, though – namely where the traditional operators will not give up their system of commodity rates – a "box rate" will be enough to work miracles. Yet this has long been common knowledge and practiced – with success – by Outsiders. Moreover, even for the round-the-world services such Outsiders will remain a challenge.

In connection with the opportunities for rationalization, the question in any case arises of whether the feeder services needed can really make the round-the-world services "cheaper." This must be doubtful, for the proportion of "feedered" containers must necessarily be (proportionately) considerably higher than the quantities shifted by land operators in today's container transport system. Yet every "feedered" container costs more than a box accepted direct.

To sum up, it can be said that round-the-world services are not aimed primarily at improving transport services but more or less entirely at alleviating the shipowners' costs situation. At the same time, the attempt has to be made to achieve the highest possible utilization of revenue slots, so that revenues are given a boost and part of the benefits of rationalization can be passed on to the client. As far as the ports are concerned, a deterioration of the position is only to be expected if additional quantities of containers take other routes or come to be "feedered" in by road or rail. On the other hand, should increased recourse be had again to sea-going feeder vessels, then the situation of the ports affected will be more favorable, for all traditional seaport services will be required. As for the shipper, it must be said that from his point of view the only relevant aspects of competition among the shipowners are the rates, rapidity and reliability they offer between the port of departure and the port of arrival. Facet: even the round-the-world services will not be unleashing a revolution on the transport market.

The Shipping Act of 1984—Its Impact on Marine Terminal Operators

By John J. Farrell President International Terminal Operating Co., Inc. (I.T.O.)



(The speech delivered at the Containerization and Intermodal International Institute Conference held in New York in June)

Prior to the adoption of the 13th Amendment in 1865, the U.S. Constitution referred to slaves as "other persons."

Those unfortunates who lived in that shadow status were officially acknowledged as citizens with the passage of the 13th Amendment. The Shipping Act of 1916 made no reference to Marine Terminal Operators, a group which really did not come into existence until the 1940's and 1950's. Their existence was initially noted in certain decisions of the Federal Maritime Commission and its predecessor, the Federal Maritime Board, in matters dealing principally with terminal leases. The statutory basis for such decisions was the reference in the Shipping Act of 1916 to "other persons subject to the Act."

With the advent of port oriented terminal conferences, which set rates for truck loading and unloading, free time, demurrage and many other services and facility charges, marine terminal operators occupied an increasing amount of the FMC's time and attention, but always as "other persons subject to the Act."

Understand, I am not suggesting that MTO's were in any other way comparable to slaves, but many of my former competitors would probably try to make that point, if given the chance.

The situation is now changed with the passage of the Shipping Act of 1984, where Section 3 (15) defines the words "Marine Terminal Operators" as meaning:

"A person engaged in the United States in the business of furnishing wharfage, dock warehouse, or other terminal facilities in connection with a common carrier."

Section 4 (B) of the Act provides that:

"This Act applies to agreements (to the extent the agreements involve ocean transportation in the foreign commerce of the United States) among marine terminal operators and among one or more marine terminal operators and one or more ocean common carriers to -

- (1) discuss, fix, or regulate rates or other conditions of service; and
- (2) engage in exclusive, preferential, or cooperative working arrangements."

The scope of this description is very broad and is intended to permit cooperative agreements to fix or establish prices, free time, credit terms or virtually any other arrangements among MTO's. Section 7 (A)-1 provides Anti-trust immunity to such agreements, once filed under Section 5. Any such agreement becomes effective 45 days after filing with the FMC, unless additional information is requested. (Just as you have heard from speaker after speaker talking about the effect on steamship conferences, this provision affords MTO's an advantage of flexibility which was hitherto unavailable).

It must be recognized, of course, that every right carries with it a concommitant duty or obligation. In this case, we now have the statutory admonishment that:

"No MTO may fail to establish, observe, and enforce just and reasonable regulations and practices relating to or connected with receiving, handling, storing, or delivering property.

No marine terminal operator may agree with another marine terminal operator or with a common carrier to boycott, or unreasonably discriminate in the provision of terminal services to, any common carrier or ocean tramp."

It also provides a number of other limitations, which were obviously written into the Act to cover ocean common carriers and then made applicable to MTO's, apparently as an afterthought. Finally, the penalties for violations of the Act have been increased, for all parties subject thereto. Also, the fines for violations have been increased to such a level as to command everyone's strict attention in compliance.

The legislative history makes it quite clear that Congress did not intend to change the FMC's jurisdiction over MTO's from that which it had under the Shipping Act of 1916. It is also clear that Congress did intend for the FMC to continue to regulate not only the providing of marine terminal facilities, but also marine terminal services, as in fact the Commission has historically done. The Act refers, at Section 10 (D)-1, to:

"Receiving, handling, storing or delivery of property." Of these services, only "handling" has been defined by the FMC, which said that it means "moving cargo anywhere on the terminal except between point of rest and end of ship's tackle." That definition recognizes the historic separation of marine terminal operators and stevedores.

Given all these new rights and obligations, what changes can we look forward to, from a practical point of view?

First of all, the major problem facing all of us is that of liquidity and cash flow. Credit terms and payments occupy everyone's attention to a greater degree than ever before. Common carriers have heretofore been able to deal with a divided industry – an industry which would not and, legally, could not agree within itself to restrict credit to those who did not pay for the services and facilities supplied by MTO's. Various attempts at legislation to correct this situation were met with rebukes and refusals. The rebukes were from American flag lines who resisted the efforts to require evidence of financial responsibility on the part of vessels calling at American ports. They resisted those efforts even though they were the most likely beneficiaries of such a requirement. They are in the United States, subject to every manner of legal process, while their

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With Special Emphasis on Maritime Transportation — Japan's Shipping Policy—

By Shigeya Goto Director Japan Maritime Research Institute

(Remarks before the Pan-Pacific Sister Ports Seminar II, Yokohama, Japan, May 31, 1984)

Enactment of Marine Transportation Law and Subsequent Developments

The Marine Transportation Law of 1949 is a basic law pertaining to the shipping industry. This law, enacted while Japan was under the Allied Forces' Occupation after the end of World War II, was all but modeled on the U.S. Shipping Act of 1916. For instance, the law provided for exemption of liner conferences' activities from the Antimonopoly Law, which was also enacted in 1947 after the pattern of the U.S. antitrust system. Moreover, it prohibited such practices as "fighting ship" and "deferred rebate system"

The enactment of the law generated widespread concern among the interested quarters in Japan and abroad that the Japanese Government would also adopt an American-style policy of controlling the activities of liner conferences. In fact, prior to the enactment of the law, Japan's Fair Trade Commission (FTC) had started to go through procedures for investigation of the dual rate system, which had been adopted by the Far Eastern Freight Conference (FEFC) for the westward voyage, on suspicion that the system ran counter to Japan's Antimonopoly Law. In 1951, moreover, Maersk Line filed a complaint with the FTC to the effect that it had been refused admission to the Indonesia/Japan/Japan/Indonesia Freight Conference. The actions taken by the Japanese Government regarding these cases amounted to an answer to the suspicion entertained by the quarters concerned both at home and abroad, although Japan was still under military occupation. As to the dual rate system, the FTC served notice that the hearing procedures then under way would be suspended provided the terms of contract between the liner conference and shippers would meet five conditions specified by the FTC, including a 9.5 percent spread and a penalty equivalent to less than 50 percent of dead freight. The FTC thus put an end to a controversy over the dual rate system. After that, many liner conferences related to Japan adopted the dual rate system, and there has since been not a single case of dispute about the legality of the system in Japan.

As to problem of closed conferences, the Japanese Government's attitude has changed delicately with the passage of time. Regarding the earlier mentioned Maersk Line case, agreement was reached between Maersk and the conference on the firm's participation before the FTC launched the formal hearing procedures, bringing the case to an end. Then in 1952, Shinnihon Steamship Co., Ltd. filed a complaint with the FTC to the effect that it was refused admission to the Japan/India-Pakistan-Gulf/Japan Conference, and the FTC started hearing procedures. But this case was also settled without the FTC's decision as the conference and the Japanese line reached a compromise agreement, enabling the latter to take part in a newly organized joint service for the India-Pakistan route. Consequently, this case was also settled without the FTC's decision. After that, not a single case was brought before

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competitors are free to roam the oceans of the world, using chartered vessels and frequently having no enforceable obligation to pay anyone in the United States once they have decided to stop doing business here.

The refusals have come from our legislative representatives who insist that there is no credit problem; that we have only to demand payment in advance to avoid unacceptable risks. They tell us this, despite the record which shows an increasing incidence of bankruptcy in the shipping industry and in its shoreside servants, the stevedores and MTO's, whose ability to determine which ocean carrier is financially responsible is, almost for the most part, nonexistent. That ability is further limited by actions of governments and major banks who supply funds in huge amounts to carriers and then withhold further backing when least expected by the shoreside operators. It is a very difficult problem for our industry, and one which the new freedom to create credit agreements among competing MTO's may help to mitigate. It can't happen too soon!

The long term result of the new statutory authority may be a tendency to combine marine terminals, following the European pattern of large consortium-oriented terminals, e.g. E.C.T. in Rotterdam.

Only a very few individual MTO's have the ability to finance, set up and operate a specialized, modern marine terminal. The new authority may help preserve competition in this area by affording the smaller firms an opportunity to participate cooperatively in the operation of such terminals.

It must be noted that no agreement will be permitted which is likely, by a reduction in competition, to produce an unreasonable reduction in transportation service or an unreasonable increase in transportation cost. Most of the effects which I have anticipated are likely to increase competition by prolonging the lives of a decreasing number of competitors. The private Marine Terminal Operator in the world's greatest port now stands at three, the West Coast is down to a precious few and the toll is increasing.

It is possible that help from the Shipping Act of 1984 has arrived just in time to preserve competition among MTO's rather than to reduce it.

FTC or the court in Japan regarding the problem of participation in a liner conference. In 1953, Mitsui Steamship Co., Ltd. waged a fierce struggle with the Far Eastern Freight Conference concerning the opening of a European service. Three years after, it managed to enter the framework of the conference in the form of assigning ships under the wing of Nippon Yusen Kaisha (NYK Line). This dispute generated various arguments unofficially, but Mitsui did not elect to bring a suit against the conference on a charge of violating the Marine Transportation Law.

In 1959, the government amended the Marine Transportation Law. From the time when the administrative intervention of the Occupation Forces came to an end in 1952 with the effectuation of a peace treaty, it became a major problem to revise this law which had been imported from the U.S. and thus was not suitable for Japan. The amended law has been in force to this day. At the time of the revision, clauses prohibiting "fighting ship" and restricting the dual rate system were deleted, while the prohibition of the deferred rebate system was limited to only those cases in which it would "unduly restrict the shipper." As to the closed conference problem, it was explicitly provided that liner conferences shall be authorized to reject an application for membership on the grounds that "ship supply will exceed demand." Furthermore, the government was empowered to make a recommendation to liner operators for the purpose of halting or preventing excessive competition.

This amendment merely put into writing actual practices Japanese quarters concerned had developed on the basis of their experiences and sentiments under an American-style law for 15 years after the war. As such, it incorporated no new ideas. In form, the amended law still bears considerable resemblance to the U.S. shipping act. But what is most noteworthy is that it attaches great significance to cooperation among carriers. Insofar as this is concerned, the law draws a clear-cut line against the American concept of giving overriding priority to free competition. This was demonstrated more clearly on the occasion of the blanket reorganization of the Japanese shipping industry through regrouping and merger, or "kaiun shuyaku" as we call it, which will be dealt with later.

At the same time, it is worthy of note that although the Japanese law represents a transplantation of an American law, there has been scarcely any dispute related to the law in Japanese court. This may be attributed to a difference between the two laws. Under the Japanese law, liner conference agreements automatically come into force once they are filed with the Ministry of Transport (MOT). The law provides for no such procedures as approval and modification, and MOT has no quasi-judical authority. More important, however, is the Japanese inclination to settle their disputes through talks between the parties involved. Japanese do not like to bring their disputes regarding commercial transactions to the FTC or lawcourt and thus engage in a prolonged legal fight. The government for its part responded to the wishes of the quarters concerned by clearly indicating in advance the borderline between the areas which might violate the law and the areas which would be safe. It is for these reasons that there is no such thing as "lawyers' paradise" in Japan's shipping community.

On the other hand, however, freight conferences operating along Japan-related routes, supported by such a policy of the Japanese Government, have lost their market-stabilizing power with the change of the times. Moreover, consortia of Japanese lines, which used to boast firm solidarity, can no longer give full play to their strength in the face of powerful foreign rivals rich in mobility. There are facts already well known to all.

Role of Keikaku Zosen

The system of Keikaku Zosen (government-sponsored annual shipbuilding program) is another characteristic of the Japanese Government's administration of marine transport.

Before World War II, the government promoted the development of the shipping industry mainly by means of direct subsidization. After the war, those countries which occupied Japan – especially Australia – were strongly wary of the Japanese Government's restoration of such a subsidization policy as they were afraid that the Japanese mercantile marine would be reconstructed and again pose a threat in the Far Eastern market. Apart from such external pressure, however, Japan's postwar national treasury could ill afford to restore the subsidization policy.

However, Japanese shipping interests had scarcely any funds needed to reconstruct their merchant fleet. Nevertheless, the government was considered to have a moral obligation to assist in the reconstruction of the merchant fleet, because it had suspended compensation to shipping firms for the wartime loss of 8.3 million g/t of vessels by means of imposing tax on the total amount of wartime loss insurance money. Starting in 1947, the government set up a system of annually earmarking a certain amount of funds for providing low-interest, long-term loans for shipbuilding. In particular, the Japan Development Bank, founded in 1951, played a major role in lending such loans. Even after the Japanese shipping industry restored its prewar scale the bank has continued to be a major supplier of funds to the shipping interests. The annual construction of merchant vessels, undertaken under this funding system according to the government's annually formulated program, has come to be called Keikaku Zosen.

The 1953 Law for the Subsidization of Interest Payments on Loans for Construction of Oceangoing Vessels opened the way for the government to bear part of interest payment on shipbuilding funds. It further reduced shipowners' burdens of interest payment and contributed to eliminating a gap between them and Western shipowners. But the subsidization ratio was altered from year to year in consideration of the condition of the national treasury and the shipping market, and the business performance of shipping firms. The system itself was suspended a number of times, and no new interest subsidization contract has been entered into since 1981.

The Keikaku Zosen system enabled the government to guide investment in shipping, through the choice of shipowners receiving subsidies, in such a way as to realize its own specific visions regarding not only the volume of merchant ships to be built annually, but also their composition by type. For instance, the government placed prime importance on construction of liners from 1950 to 1955, and main consideration was given to the construction of large-sized tankers and specialized carriers, which were then entering the world shipping market since 1955. In the latter half of the 1960s, the construction of a large containership fleet was completed within a short time. The government's guidance policy with Keikaku Zosen as leverage demonstrated its maximum effectiveness on the occasion of the "kaiun shuyaku" carried out in 1964.

A protracted slump, which gripped the world shipping after the reopening of the Suez Canal in 1957, also dealt a telling blow to the Japanese shipping industry, which was then in the process of reconstruction. As of 1961, only four out of a total of 58 oceangoing shipping firms in Japan were able to continue dividend payment, and most of them found it impossible to proceed with repayment of principal and interest according to contracts with respect to massive loans borrowed in the past for the rapid expansion of their fleets. Worried by such a situation, the government studied measures for the fundamental reconstruction of the shipping industry in consultation with the business circles. As a result, the government enacted a law providing for special measures centering on a five-year moratorium on the repayment of principal and interest regarding Keikaku Zosen-related loans. The law was enforced from 1963. On that occasion, the government mapped out a plan to reorganize shipping firms into a small number of groups in order to drastically improve the structure of the shipping industry which tended to invite excessive competition, in view of the bitter experiences of Japanese shipping firms in the postwar years. The government thus decided to apply the new special measures only to those companies which would participate in the regrouping. As a consequence, 12 major shipping firms were merged into six new "core" companies, and a total of 95 companies organized six groups around these "core" firms, completing the concentration of the shipping interests which has continued to date. Immediately after the establishment of such a concentrated system, containerization of liner routes got under way, prompting Japanese liner operators to form a closely knit consortium for each route. This eliminated the possibility of an internecine competition among Japanese shipowners along liner routes. Furthermore, the improvement of the world shipping market from 1965 and the marked growth of the Japanese economy resulted in improving the earnings position of shipping firms substantially. Greatly reassured by this, the government went ahead with a policy of expediting the stable development of the marine transport industry through mutual cooperation among shipping firms.

On the other hand, "kaiun shuyaku" ironically resulted in giving prominence to the raison d'etre of those shipping firms which elected not to join the regrouping. Tanker operators owned by petroleum firms and Sanko Steamship Co., Ltd. did not participate in "kaiun shuyaku," but they pursued new courses by devising unique methods of fund raising. Some of them markedly expanded their operations in the fields of tankers and specialized carriers without being subjected to cumbersome intervention and restrictions by the government, experienced by those taking part in "kaiun shuyaku." In particular, they were more active in acquiring flag-of-convenience vessels through overseas subsidiaries than the firms covered by "kaiun shuyaku."

Immediately after the regrouping, the firms involved owned more than about 80 percent of the Japanese-flag merchant fleet. But now their share has dropped to 40 percent in the number of vessels and 60 percent in tonnage. Moreover, according to an UNCTAD survey on shipowners, which are beneficiaries of flag-of-convenience vessels in the world, Japan ranks fourth after the U.S., Hong Kong and Greece, in effect controlling 10.6 percent of the world's flag-of-convenience fleet. A considerable portion of this share is presumed to be under the control of firms not participating in "kaiun shuyaku."

Furthermore, because of the recent change in the financial market, it is not as difficult as before to raise funds for investment in merchant vessels. As a result, Keikaku Zosen has lost some of its attraction. Therefore, the government now finds it less easy to influence the shipping circles through its guidance than immediately after "kaiun shuyaku."

Trends of Ships Owned by Oceangoing Shipping Enterprises

						(1	Unit: milli	on dw,
	1965		1971		1976		1982	
	Owned Vessels	%	Owned Vessels	%	Owned Vessels	%	Owned Vessels	%
6 "core" firms	6.10	47.9	17.85	44.7	25.71	42.6	22.31	37.3
Other "shuyaku kaisha"	4.39	34.5	9.88	24.7	14.82	24.5	13.35	22.3
Total of "shuyaku kaisha"	10.49	82.4	27.73	69.4	40.53	67.1	35.66	59,6
Other firms	2.24	17.6	12.24	30.6	19.89	32.9	24.14	40.4
Total of oceangoing shipping firms	12.73	100	39.97	100	60.42	100	59.80	100

Note: Vessels owned by "shuyaku Kaisha" – as of the end of March. Total of oceangoing shipping firms – as of July 1. Source: Shipping Bureau, MOT

International Cooperation in Shipping

Next, let us take a brief look at Japan's position in the international relations.

In 1964, Japan joined OECD and carried out the liberalization of shipping-related transactions according to standards promised by advanced maritime powers in the form of OECD's "Liberalization Code on Invisible Transactions." Then in 1966, Japan took part in the ministerial conference on shipping of Western European nations and thus elected to exchange information with maritime nations in that region and cooperate with them in regard to shipping policy. Japan already possessed a large merchant fleet, and its domestic economy had grown to the extent of generating massive demand for marine trade traffic. Thus Japan was similar in nature to Western European nations. Accordingly, its policy of cooperation and coordination with Western European nations could be enforced without any strain.

Talks between developing nations and old-type maritime powers presented a new problem as UNCTAD was inaugurated. Japan positively participated in the dialogue and voted in favor of the U.N. Convention on a Code of Conduct for Liner Conferences.

Basically, Japan belongs among old-type maritime nations. Thus it does not think that a system of governmental intervention in international shipping activities as advocated by the group of developing nations is an ideal one, because it believes that such a system will hinder an efficient management of marine transport and therefore will not contribute to the smooth development of world trade.

Nonetheless, Japan has rapidly developed its shipping industry in only about 50 years, and finally joined the ranks of Western maritime powers. Therefore, it can fully understand developing nations' strong desire to join the field of international shipping and to avoid being forced to accept foreign firms' unilateral decision regarding freight rates of their own products. Such desire of developing nations will never vanish, regardless of the fate of the liner code convention. If nothing is done, it could become a disturbing factor in international shipping.

The liner code convention, although not an ideal one, represents compromise laboriously worked out between the two sides, and as such, can possibly become a standard for the orderly advance of the world shipping industry in the years ahead. The convention should be chosen as the second best step rather than a do-nothing course. It is from this realistic point of view that Japan endorsed the convention. Nevertheless, there is a wide gap between developing nations' wishes and the reality.

Any attempt to close the gap forcibly by ignoring the market principles will undoubtedly cause fresh confusion. Japan holds fast to the stand that the future development of the world shipping should be viewed in a long-term perspective without taking any rash action, and that it is absolutely necessary to calmly regard the convention as nothing more than a code of conduct in the literal sense of the term.

Next, relations with the maritime nations in the Far East pose a new problem to Japan. In the world liner shipping, the relative weight of Western European, American and Japanese shipping firms, which used to command an overwhelming share, tends to decrease, and it is impossible to disregard newly rising, dynamic enterprises in Far Eastern countries.

Moreover, the fast growing economies and trades of these countries are really impressive as major factors generating liner cargoes. In particular, Japan is located in a corner of the Far East, which is becoming a major center for liner assignment comparable to the U.S.-Canada area and the Britain-European continent area. This being the case, I think it necessary for Japan to keep a close watch over the trends of these maritime nations in the neighboring Far East and to start with a close mutual exchange of information. Lastly, let me say a few words on Japan's cooperative relations with developing nations. Not a few of the so-called developing nations, noting the new trends of the world, are exerting earnest efforts to develop merchant fleets of their own. Japan is extending positive cooperation to such efforts. In 1982, the Maritime International Cooperation Center of Japan (MICC) was inaugurated through the efforts of shipowners' organization. MICC has since been engaged in positive activities, such as the dispatch of experts to nations in Asia, Africa and Latin America and acceptance of trainees from those countries.

Future Prospect

Finally, I would like to touch on the recent trend of Japan's shipping policy.

MOT set up the Study Group for Oceangoing Shipping Problems within itself in 1983. The group has since been analyzing the problems facing Japan's oceangoing shipping and striving to bring matters requiring proper measures into focus. In April this year, MOT convened a meeting of the Council for Rationalization of Shipping and Shipbuilding Industries (CRSSI), an advisory body to the Minister of Transport, and asked it to submit a recommendation on an oceangoing shipping policy which should be pursued by Japan in the future.

In response, the council started deliberation on the matter. Indications are, however, that its recommendation will not be submitted until late this year at the earliest. Therefore, it defies prediction at this moment what recommendation CRSSI will come up with. Nevertheless, a background explanation, given by MOT when it asked CRSSI for a recommendation, serves to clarify how the government has analyzed the current situation and selected matters requiring immediate attention.

MOT cited the following six problems which it believes are of prime concern for Japan's oceangoing shipping interests:

Table 1 Trends of Newbuilding Volume Under the Government-Sponsored Program



Firstly, at a time when the international shipping order is undergoing a major change, how should Japan cope with it?

Secondly, seaborne cargo traffic surrounding Japan is also showing a marked change. How will Japanese shipping firms alter their business policies?

Thirdly, the competitiveness of Japanese-flag merchant ships (manned by Japanese crews) has weakened rapidly in recent years, while the number of Japanese-flag vessels has been declining. What vision should be shaped about the future composition of the Japanese mercantile marine and the role of Japanese seamen in that context?

Fourthly, the financial condition of oceangoing shipping enterprises is deteriorating rapidly because of a serious slump in the shipping market. Is it not necessary to rationalize and vitalize the management of the enterprises?

Fifthly, 20 years have passed since the enforcement of "kaiun shuyaku." There is criticism that the companies involved seem less dynamic than those which did not take part in "kaiun shuyaku." Besides, there is a demand for a review of the internal relations within "kaiun shuyaku" itself. Is it not necessary to undertake a review of the "kaiun shuyaku" setup?

Sixthly, is the present system of liner route operation all right? It has been pointed out that the present system, especially the space charter arrangement for the North American route, is debatable from a viewpoint of ensuring functional and efficient operation, if we consider such developments as a decline in the self-regulating functions of liner conferences and a change in marine cargo flows in the Far East.

MOT should be commended for the timely mention of these six problems. It is to be expected that CRSSI will conduct a thorough debate and submit a recommendation on the guidelines for a new oceangoing shipping policy in a realistic, long-term perspective.

Of the six problems cited, the third – that is, the decreasing competitiveness of Japanese-flag bottoms – is most difficult to handle. Disturbed by a relative rise in cost per seaman and the resulting drop in Japanese vessels' competitiveness, the Japanese shipping community has been endeavoring to reduce the ship complement to about 18 men on the strength of technological innovation related to ships and the modernization of the seafarer system. This effort has been exerted primarily through the Committee for the Modernization of the Seafarer System, set up in MOT in 1979.

The number of experimental ships involved in the effort is approaching 150. But MOT has said that the level of modernization so far achieved is still inadequate to restore the competitiveness of medium- and small-sized vessels. Moreover, although the size of ship crew has been reduced, the total number of seamen in the employ of shipping firms has not shown a corresponding decline, bringing pressure to bear upon the financial position of those firms. Japanese shipping companies maintain an employment system peculiar to Japan and moreover, they have to deal with the powerful All Japan Seamen's Union. Under these circumstances, how will they be able to find means of getting rid of the heavy pressure of surplus seamen? This seems to be the stickiest point.

The six problems pointed out by MOT apparently reflect

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Port Planning in Denmark

By Erik Schäfer General Manager Port of Copenhagen Authority



Denmark has now produced its first overall plan for the development of the country's ports – referred to as "The National Ports Plan '82 \sim '83."

The desire to establish a co-ordinated overall plan for all Danish ports – thus avoiding duplication of investments – was affirmed by the adoption of "Act No. 239 of 12 May 1976 on Traffic Ports" by the Danish Folketing. This Act provided legislative authorization for implementation of the first overall planning for future development of the Danish traffic ports.

§ 8 of the Act enjoins the Minister of Public Works to draw up, on the basis of proposals from the single traffic ports, a National Ports Plan, which lays down the framework for co-ordinated long-term development of such ports.

With a view to advising the Minister on the subject of drawing up the National Ports Plan and other matters in accordance with the provisions of the Act, a National Ports Council has been appointed, consisting of representatives of port owners and port users, along with representatives of the State for interests pertaining to port traffic activities.

(Continued from page 22)

second thoughts of government authorities about the results of their past policies. Namely, the watchword of mutual cooperation and restraint on competition, adopted in view of the bitter experience of excessive competition among Japanese vessels, has tended to detract from corporate verve and restrict the freedom of flexible corporate management.

Moreover, a bitter memory of a serious financial crisis, which formerly threatened Japanese shipping firms, has led to the imposition of detailed regulations on corporate management, which in turn has resulted in lessening the enterprising spirit of Japanese shipping firms.

Japan's mercantile marine virtually collapsed during World War II. However, the Japanese shipping industry has established a giant fleet we see today through three decades of strenuous endeavors. Credit for this goes primarily to various favorable factors including the growth of Japanese industry and foreign trade, efforts of shipping enterprise managers, growth of able seamen and cooperation of ship-



On the basis of the discussion in the National Ports Council on organization of work on drawing up the National Ports Plan, the single ports were requested in June 1981 to submit a contribution to a plan, and when these contributions had been commented upon by the regional planning authorities, the National Ports Council devised the first National Ports Plan '82 \sim '83. Subsequent to its being submitted to the Minister of Public Works, the Plan was issued in June 1984.

The Plan consists of three volumes: Volume I, which contains information on the structure of the traffic ports system and its relationship to society, with an outline of the ports' historic development: Volume II, which contains information on the single ports, with a map of each port, and Volume III, which establishes the perspectives for development of the traffic ports.

builders with excellent technologies. At the same time, it should not be forgotten that the government extended support by choosing appropriate policies as needed.

I think that in all probability, Japan's shipping policy will in the future proceed in the direction of making efforts to have the shipping interests acquire enough competitiveness to be able to cope with rivals in other countries, and at the same time, abolishing or relaxing governmental regulations so that shipping enterprises can restore their vigor and vitality.

In this context, I must add that firstly, Japan has basic philosophy of avoiding any unnecessary intervention in the freedom of cooperation among shipping enterprises from a long-term perspective based on the characteristics of the shipping industry, and that secondly, Japan will refrain from imposing restrictions on international shipping by itself and will instead choose a course of policy coordination with other countries which find themselves under similar circumstances to those of Japan, in order to ensure the efficient implementation of its policies. Of the Plan's contents and conclusions the following items deserve particular mention:

Today the Danish traffic ports system comprises 77 ports, the majority of which (about 2/3rds) are public traffic ports, i.e. ports which allow public access and are at the disposal of the business community as a whole and which are under an obligation to receive maritime traffic.

The remainder are private traffic ports, which are used solely by the firm (business entity) which has been granted a permit to establish the port. Of particular importance in this context are private ports serving electricity power stations, specific refineries and cement factories. In 1981 turnover for the private traffic ports (primarily solid and liquid fuels, along with other goods, e.g. cement) amounted to a total of about 45% of Denmark's aggregate ports turnover.

The traffic ports which allow access to the public (the business community etc.) are mainly owned and managed by municipalities - the municipal ports. Finally, the Port of Copenhagen is a public traffic port, but is unique with respect to ownership status, being a self-owning institution, as it is termed.

The objective laid down for the Danish traffic ports system is continuous adaptation of the system with regard to service and facilities, so that the needs of society for maritime transport can be met, locally and nationally.

As a measure in devising the National Ports Plan, a forecast for the period up to 1992 predicting goods turnover has been produced.

The forecast shows an increase in aggregate turnover via Danish ports from 59 million tonnes (average for $1977 \sim 81$) to 64 million tonnes in 1992 i.e. a relatively modest increase.

A separate forecast has been devised with specific reference to container turnover, showing that the aggregate turnover (by sea) of containers and trailers can be expected to increase from some 360,000 TEU (20' units) in 1982 to some 500,000 TEU in 1992, corresponding to an average annual growth rate of some 3%.

An investigation was also conducted into the ports' current capacity and the needs for future ports' capacity. The results showed a satisfactory level of capacity in all parts of Denmark, in that also in the future potential users will be in a position to choose between various ports to handle consignments. The aggregate capacity for the primary infrastructure (i.e. docks, quays, port areas and approach depths) in today's ports system, on the basis of the forecast for goods turnover, must be regarded as satisfactory, and with respect to this point no need for major expansion of capacity is to be anticipated.

The fact, however, that the National Ports Plan envisages a certain need for investments in new installations and major repair projects may be attributed to the necessity of continuous adaptation of the ports system to technological developments and alterations in Denmark's traffic pattern. Single ports are likely to experience capacity problems, e.g. when bigger and bigger special vessels berth in docks proportioned many years ago, or where the urban development effected has limited the port's access to suitable land areas adjacent to its port facilities. The main emphasis in the future development of capacity will probably be laid on the <u>secondary infrastructure</u>, e.g. special loading and unloading equipment.

With reference to container turnover, the special report shows that today's capacity in Esbjerg, Arhus and Copenhagen is adequate, so that it is unlikely that any capacity problems for Danish container terminals serving maritime traffic, taken as a whole, will arise at least until the early 1990's.

In the main conclusions of the National Ports Plan on the framework for the future and concrete guidelines for development of the ports it is stated that - on the basis of the forecasts produced for goods turnover for the period in question, of a realistic evaluation of the long-term needs, of the obligation of the public ports to handle goods and traffic, and of investment figures for recent years - it must be assumed that through annual reinvestment and new investment in the publicly owned traffic ports of some D. Kr 200 mill. (in terms of 1982-prices), it will be possible to maintain the traffic ports system and to conduct the requisite new investments.

In line with the future distribution of population and production of goods among Denmark's main regions, West Denmark can expect that over half of the investments will be applied there as a measure in the allocation - in accordance with policy on traffic ports - of the total investments amount.

Two ports in the traffic system – Arhus and Copenhagen – have been accorded the status of base ports for a considerable number of shipping lines operating overseas line traffic. As it is an indisputable advantage for the business community to retain this status, investments in new installations must be allocated so that goods turnover via these base ports is maintained.

Thus in East Denmark the Port of Copenhagen, under the provisions of the Plan, is to be ensured an adequately large share of the investments for port modernization schemes etc.

With respect to navigation conditions, it has been established that major projects for large-scale increases of approach and/or dock depths will not appropriate a large part of the investments in any main region during the perspective plan period.

Apart from the possible building of a deepwater port, mainly to serve tankers and coal carriers, the Plan does not envisage the creation of new traffic ports. Nor does the Plan contain proposals to close down existing Danish traffic ports. However, a number of minor ports must expect such a modest goods turnover in the future that it must be regarded as doubtful whether the traffic port function, on its, own can be maintained in the longer term.

The aim is to update the National Ports Plan in the future to the extent necessary. This is expected to be implemented at intervals of four years, thus setting 1986 as the date for the first revision of the Plan.

Botany Bay Six Years After

By J.M. Wallace President Maritime Services Board of New South Wales Sydney



(The paper presented at a Marine Technology Symposium, Royal Institution of Naval Architects, 27-29 August 1984, Sydney)

It is desirable that now and again we should take time out from the problems of the moment, the planning of new ventures or marketing strategies etc., and look back on the results of the past endeavours and achievements of our organizations. It is often a salutory experience to review both the achievements and deficiencies of past activities and also to realize how in retrospect the major problems of our yesterdays appear relatively insignificant when viewed from todays perspective.

It was with these thoughts in mind that I was pleased to accept the invitation to address this Marine Technology 1984 Symposium on the topic "Botany Bay Six Years After." Apart from the desirability of reviewing the progress and setting out the present importance of the development, I wish to make reference to the application of some new technologies in the marine field associated with the development of major new port facilities in what is now known as Port Botany.

I must confess that in some ways the title of my address could be regarded as a misnomer. A decision on a datum point for the establishment of a time scale for such a major project is rather difficult. Six years ago the initial port reclamation had just been completed. Since that time, further areas have been reclaimed, additional channels and port basins dredged, major wharfage constructed, roadways, cargo areas and product storage facilities progressively developed on the reclamations, road and railway connections have been made to the port areas, and major shipping operations have commenced.

The last six years have thus seen the dramatic transition from an incomplete, barren sandy reclamation (see photograph 1), looking somewhat like a flat portion of the Sahara Desert (and prone to sand storms somewhat similar to that area), to a modern port served by up to 500 vessels per annum which load or discharge a total of more than 6.2 million tonnes of cargo per annum at Port Botany.

In order to put the time scale of this development into a better perspective, it should be realized that the initial studies for new port development in Botany Bay were commenced some 20 years ago. Following these and several subsequent investigations and reports, the New South Wales Government fifteen years ago (in 1969) publicly announced its decision in principle to proceed with the development of a major new port on the northern foreshore of the Bay.



Photograph 1

The first works were put in hand in 1970 when part of the new entrance channel and the area for the installation of the new Single Buoy Mooring off Yarra Point were dredged to provide sand for the second extension of the North-South Runway of Kingsford Smith Airport.

In March 1971, the Board awarded a contract for the completion of the dredging of the new entrance channel, the construction of a major revetment (or breakwater structure) which extended 2 km out from Bumborah Point and which was designed to provide protection from storm waves for the large port area created by reclamation using the sand from the dredging work included in the contract. During the progress of the work on the revetment, the contractor often had to battle against the seemingly relent-less forces of nature, particularly during the severe storms in 1974 and 1975, to place the large concrete armour units required to protect the reclamation. The work of the contract was completed in 1978 at a cost of \$55M.

In February 1975, the Board awarded a contract for the construction of the Bulk Liquids Berth, a specialized facility for the handling of bulk liquid chemicals and petrochemicals.

In March 1977, the Board awarded a contract for further dredging in the port area, further reclamation for the present container terminal area as well as reclamation westwards along the northern foreshore, together with the construction of more than 2 km of wharfage for the new container terminals. This major project was completed in March 1982 at a cost of \$76M.

During recent years the Department of Main Roads constructed a major roadway around the northern foreshore of the Bay on land reclaimed by the Board. The new roadworks involved the construction of overpasses at the intersection with General Holmes Drive and over the rail tracks at the intersection with Beauchamp Road.

The State Rail Authority and the Board were involved in the extension of the rail facilities from the Botany area onto the new port reclamation to serve the new container terminals. The Board also constructed major roadways on the port reclamations and met the cost of servicing these areas with water and electrical power.

Since the first land in the port reclamation was leased in 1975 to Terminals Pty. Ltd. for the construction of storage facilities for bulk liquids and gases, subsequent areas have been leased to Powell Duffryn Oil and Chemical Storage Pty. Ltd. (P.D.O.C.S.), Imperial Chemical Industries Aust. Ltd. (I.C.I.) and to Boral Ltd. The areas associated with these leases total 23.5 ha., much of which has already been fully developed by the lessees. A major development by I.C.I. for the storage of L.P.G. has recently been completed while other facilities for the storage of L.P.G. are at present under construction on areas leased to Boral and P.D.O.C.S.

An agreement for lease for an area of 42 ha. for a container terminal on the northern side of Brotherson Dock was signed with the Australian National Line in December 1975 and an agreement for lease of an area of 38.6 ha. for a container terminal on the southern side of the Dock was signed with Container Terminals Australia Ltd. (C.T.A.L.) in February 1978. Both lessees have since developed major container handling facilities on their areas (see photograph 2).

The Bulk Liquids Berth was officially opened on 23 April 1979 after the first vessel to discharge bulk liquid chemical cargo at the berth, the "Botany Chemist" had berthed on 13 March 1979.

The Australian National Line Container Terminal and the Brotherson Dock complex was officially opened on 10 December 1979. The first vessel to handle cargo at the A.N.L. berths was the "Hyogo Maru" which arrived on 12 March 1980. The first vessel to handle cargo at the C.T.A.L. berths was the "Jervis Bay" which arrived on 27 February 1982.

In preparation for the future extensive imports of L.P.G., which recently commenced through Port Botany and which are estimated to be of the order of 350,000 tonnes next year, the Board has recently carried out a number of works at the Bulk Liquids Berth to facilitate the safe transfer of L.P.G. and other hazardous cargoes. These works, undertaken at a cost of more than \$2M, have included the installation of new firefighting monitors, improved pumping and control equipment for firefighting, together with deluge sprays at particularly sensitive areas.

One major development which is currently being planned for Port Botany is a new Crude Oil Berth. It is being designed for vessels of up to 160,000 D.W.T. and is to be located near the southern end of the main reclamation beyond the Bulk Liquids Berth.

The Government has approved the concept of a new Tshaped berth, adjoining the port reclamation, which will be used for virtually all crude oil imports currently being made through the A.O.R. No. 3 Berth (a multi-buoy mooring) at Kurnell, and the Board's Single Buoy Mooring off Yarra Point.



Photograph 2

The use of the new "alongside" berth, in protected water behind the main port reclamation, will substantially reduce the present risk of spills from vessels discharging at the relatively exposed buoyed moorings, and its location will more readily facilitate the containment and collection of any accidental spills which may occur.

The new berth will necessitate the construction by the oil industry of crude oil pipelines from the new berth across the bed of the Bay to the A.O.R. refinery at Kurnell, and over the port reclamation to the Ampol refinery at Matraville.

This then is the present stage of development of Port Botany in 1984 - six years after the completion of the first major reclamation contract.

To date the Board has spent more than 160M on the development while the lessees of the various areas in the development have spent a total of approximately 175M on the construction of their facilities.

The question which arises is how significant is the new Port Botany Development from the standpoint of both present and future trade to and from the Sydney Region and N.S.W. generally?

In addressing this question I would like to first outline the reasons for the establishment of Port Botany and the Board's policy in planning the on-going development.

Port Botany was planned to incorporate port facilities to complement those in Port Jackson so as to provide, both in the short and long term, adequate facilities to serve the Sydney Region and those parts of N.S.W. for which the Sydney area is the most suitable port for import or export of cargoes.

While it is Government and Board's policy to continue to redevelop the existing port facilities in Port Jackson so as to provide for the needs of those general cargo trades requiring shed accommodation for cargo, it has long been recognized that the land area limitations of Port Jackson would necessitate handling of most liquid bulk trades and a significant number of the fully cellular container trades at Port Botany. Large reclamations to provide additional land in Port Jackson in most cases would reduce the available waterway and thereby exacerbate the problems of handling larger bulk vessels. Because the existing port area is surrounded by land extensively developed for commercial, industrial and residential purposes, the option of increasing the port area to any significant degree by incorporating adjoining land areas is not practicable.

Faced with these difficulties, the Board's planning for Port Botany has always been to provide large land areas and extensive and deep waterways suitable for large vessels of deep draft. Also, because of the very significant developments which have taken place in shipping and cargo handling during the last two decades, and the possibility of further developments in the future, wherever possible a flexible approach to planning has been adopted so that wharfage and port areas generally could be capable of being adapted for other trades etc., if required in the long term.

The magnitude of the changes in scale of the new Port Botany facilities is perhaps best illustrated by the container terminal developments of the late 1960's and early 1970's in Port Jackson and those in the late 1970's and early 1980's in Port Botany. As previously stated, the two container terminal areas at Port Botany have areas of 38.6 and 42 ha. and each has three berths in a wharf length of approximately 1 km. By way of comparison, the maximum area and length of wharfage which could be constructed at the former container terminal area at Nos. 4, 5 and 6 Berths, White Bay (in Port Jackson) was 11 ha. and 0.7 km (for 3 berths) respectively, while the corresponding figures for the existing Glebe Island terminal (in Port Jackson) are 10 ha. and 0.5 km (for two berths) respectively.

In addition, the minimum depth of water in Brotherson Dock at the Port Botany container terminals is at present 15 m, while the design of the wharves would permit possible future deepening to 16.75 m. The maximum depth of water currently available at any of the container or general cargo berths in Port Jackson is 12.2 m.

The area of the two Port Botany container terminals is 10 ha. more than the total area currently available for the handling, stacking and transit storage of cargo at all wharfage areas in Port Jackson.

The significance of the availability of the larger areas and the high standard of the equipment and operations has resulted in the achievement of rates of handling containers to and from ships at the new Port Botany terminals which compare favourably with those achieved at leading overseas terminals.

Further, although the Port Botany terminals at present handle more than 50% of the total container movements in all of the Sydney Port areas, the fact that these two terminals have sufficient capacity to more than double their present throughput, ensures that adequate facilities will be available for some considerable time, to meet the needs of the Sydney Region for trade handled in specialized container vessels. In Port Jackson it would not have been possible to provide a suitable land area which would be comparable with the present area of 23.5 ha. which has been leased at Port Botany for the transit storage of bulk liquid chemicals, petrochemicals and gases.

The importance of the present developments at Port Botany from the standpoint of trade can be seen from the following comparative statistics for Port Botany and Sydney Ports (Port Botany and Port Jackson) for 1982/83.

Containerized Cargo	:	Port Botany	
		4.7 million tonnes	(52%)
		Sydney Ports	
		9.0 million tonnes	(100%)
Total General Cargo	:	Port Botany	
		4.8 million tonnes	(42%)
		Sydney Ports	
		11.6 million tonnes	(100%)
Number of Container	:	Port Botany	
Movements		201,000 T.E.U.'s	(54%)
		Sydney Ports	
		372,000 T.E.U.'s	(100%)

In addition, approximately 200,000 measurement tonnes (kilolitres) of bulk liquids are at present handled annually through the Bulk Liquids Berth, while 1.2 m measurement tonnes of crude oil and petroleum products are handled each year through the Single Buoy Mooring.

The Botany Bay port facilities as a whole (i.e. including the A.O.R. berths at Kurnell) handled 64% of the Sydney Ports imports of crude oil and petroleum products during 1982/83, while during the same period Botany Bay accounted for 659 ship arrivals (24% of the total for Sydney Ports) involving a total of 12.8 million gross tonnes (35% of the total for Sydney Ports).

In Port Botany a total of 401 vessels used the Brotherson Dock Container Berths during the year, while 61 vessels used the Bulk Liquids Berth and 34 vessels used the Single Buoy Mooring.

These statistics clearly illustrate the importance of the present port facilities in Botany Bay.

In reviewing the development of Port Botany I wish to make reference to several particularly unique features which involved relatively new applications of technology and planning.

Most of you will be aware of the large hydraulic model of the Bay which was constructed by the Board at Mascot in 1970/71. In this model, one of the largest of its type ever built, the various planned dredging and reclamation works were subjected to simulated storm waves to observe the effects on wave action within the port channels and basins, as well as at the beaches and foreshore areas around the Bay. By the use of the model, the suitability of various development proposals was determined and evaluated. Using the information obtained from these studies, action was taken wherever necessary to ensure that the environment was not adversely affected. Works were undertaken to ensure the continued stability of some beaches around the Bay. Associated with the work in the hydraulic model was the development of a specially shaped dredging area at the seaward end of the main entrance channel. By the principles of wave refraction, the shaping of the dredged area is responsible for the diversion, away from the entrance to the main port area, of most of the wave action which enters the Bay at times of storm. This wave energy is expended on the large armoured revetment so that even at times of the most severe storms there are no adverse effects of swell waves on the cargo vessels at the berths within the port. This is in sharp contrast to the conditions which exist at the more exposed buoyed moorings near the entrance to the Bay. At times of storms, vessels have to vacate these facilities and wait at sea for the conditions to abate.

The large 2 km long armoured revetment is the largest development of its kind in Australia. After difficulties during construction when storm waves were able to damage incomplete sections of the work where sections of the smaller stone underlayers at the outer limits of the construction stage had not been protected by the layers of larger armouring, the completed revetment has proved most suitable in resisting the forces of storm waves without damage. The revetment is made up of 2 million tonnes of selected stone and more than 18,000 concrete armour units built in special shapes and of weights which range from 2.5 to 20 tonnes.

The design of the wharf for the container berths was of a new innovative design, developed by the contractor, which incorporated 370 precast concrete units each 18.7 m tall (the height of a six storey building), 6 m long and up to 15 m wide. These units were constructed (in the dry) on the reclamation using specially developed techniques, and when completed each unit in turn was lifted and placed in position on a specially prepared foundation some 18 m below water level, to form the face of the new wharfage (see photographs 3 and 4). The uniqueness of the design and the construction techniques adopted were responsible, in 1980, for the Board's contractor, Leighton Candac, winning the prestigious Construction Achievement Award. This award, which is sponsored by the Australian Federation of Construction Contractors, is presented for achievement in civil engineering and construction.

In the formulation of development requirements for the new storage and terminal areas on the new port reclamation, the Board adopted proposals for the use of landscaping along the major roadways within the port area. The construction of suitable landscaping, incorporating native trees and shrubs which would be suitable for the exposed conditions of the area, and which was designed to soften rather than hide the extensive storage and cargo handling areas, was made a requirement of each lease. The Board developed a co-ordinated master plan and detailed specifications for this work to ensure uniformity. The benefits of this early planning initiative are now strikingly apparent along the major roadways in the port area. It is significant that other Australian port authorities have subsequently adopted somewhat similar requirements in recent developments in their ports.

To provide a barrier between the new port areas and nearby residential and industrial areas the Board reclaim-



Photograph 3



Photograph 4

ed, contoured and landscaped an area of 20 ha. between the former northern foreshore of the Bay and the newly constructed Foreshore Roadway. Upon completion of the work the ownership of the area which incorporates walking and bicycle tracks, lakes, picnic and parking areas is being transferred to the Crown for administration by the local municipal council.

Considerable public debate took place in earlier years about various environmental aspects of the then planned Port Botany Development, and in particular about the possible effects of the major dredging and reclamation works and the introduction of a large volume of shipping into the Bay.

Experience with the present stage of the development has confirmed the Board's earlier views, based on various studies, that the effects of the new port would not be as significant as many of the well-meaning critics envisaged. Indeed such experience has shown that several of the changes which have been made, have resulted in significant improvements to conditions which existed prior to the commencement of the work in the early 1970's.

Reference has already been made to the large landscaped open space area around the former northern foreshore and to the major new roadworks which now exist around the northern side of the Bay. Directly and indirectly these result in considerable benefits to residents in the Botany area.

The construction of the large revetment on the seaward side of the main reclamation has resulted in the provision of an elevated scenic four lane roadway from which panoramic views of the Bay can be obtained. This roadway, not connected to the main port area, has proved to be most popular with the general public.

The placement of the large concrete armour units which form the face of the revetment, results in the formation of a series of gaps both within and between the adjoining units. While these "holes" are designed primarily to absorb the energy of storm waves, they provide an important part of what is in effect a 2 km long artificial reef which is an ideal feeding and breeding area for fish. As a consequence Botany Bay continues to feature prominently in fishing reports.

Some unusual environmental problems of a different kind have arisen during the construction of the project.

At one time the rabbit population from the nearby Randwick area, which had apparently survived both the urbanisation of most of the suburb as well as the ravages of myxomatosis, decided that the large crib block wall (made up of sand reclamation faced by precast plank-type concrete units placed in a grid pattern with gaps between the units), which had been built between the levels of the main port reclamation and that of the scenic roadway along the top of the armoured revetment, would make an ideal location for their future activities.

This was understandable as the location was undoubtedly choice real estate for a rabbit. The site was sheltered from southerly winds, caught the full effect of the afternoon sun, and offered panoramic water views of the inner part of the Bay and the shipping activities of the nearby port.

Unfortunately the Board's engineers, concerned about the rapidly increasing rabbit population, the extent of the burrows, and the structural safety of the crib block wall had to order the area to be fumigated.

So that I do not leave you with the thought that construction engineers are not nature lovers at heart, I must make reference to the sudden arrival in the area, late in 1979, of a group of about forty Little Terns (Sterna albifrons). These birds, a very delicate looking sea bird about half the size of the common silver gull, had apparently decided that the extensive new sand reclamation which the Board had formed was the perfect place for their 1979/80 breeding season. It apparently mattered little that major paving works were about to commence right alongside the area they chose to nest.

Following discussions with officers of the National Parks and Wildlife Service, the Board's engineers modified construction schedules and temporarily fenced the nesting area. Eventually twelve chicks survived the hazards of the site and eventually departed with the group.

(Continued on next page bottom)

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PORTS and HARBORS - OCTOBER 1984 29

Port of Lübeck

(The Port of Lübeck is one of the hosting organizations of the 14th IAPH Conference next year and scheduled to sponsor the participants' stay in Lübeck on Wednesday, May 8, 1985.)

This is to introduce you today to the port of Lübeck, the largest Baltic Port of the Federal Republic of Germany and one of the largest ro-ro ports in Europe. Lübeck and Lübeck-Travemünde have a population of 230,000. Lübeck-Travemünde is located directly on the Baltic. The city, founded in the 12th century, was for many centuries in the Middle Ages the leading shipping and trading centre in Northern Europe. Lübeck was called the queen of the Hansa League and her influence in the Baltic area was extensive.

Lübeck is the only major city in West Germany which is situated close to the German Democratic Republic border. Lübeck is connected with Travemünde by the River Trave which has a draught of 9.5 m. A large section of the river between Lübeck and Travemünde forms the border with East Germany. Travemünde has been a part of the city of Lübeck since the 14th century. The commercial quays in Lübeck and Travemünde are owned by the city of Lübeck. Lübeck was an independent city as Hamburg and Bremen are today, but in 1937 Lübeck was integrated into the province of Schleswig-Holstein. The ports of Lübeck and Lübeck-Travemünde were under the jurisdiction of the Lübeck Chamber of Commerce until 1934 when the Lübecker Hafen-Gesellschaft mbH (LHG) was founded. Since then the commercial quays in Lübeck and Travemünde have been under LHG's jurisdiction. The city of Lübeck and the West German Government each hold 50% of the equity, a unique financial structure for a West German sea port. LHG's labor force is 350 strong and draws on the labour pool for further 150 workers.

Until the beginning of World War II in 1939 and during the immediate postwar years throughput of the port of Lübeck did not exceed 2 mill. tons annually. The passenger service to Scandinavia only operated during the summer months from Travemünde, whilst all other traffic was exclusively handled by the port in Lübeck.

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It is interesting to note that with all the nearby construction activities involving heavy plant etc., the most disturbance to the nesting birds was caused by members of the public, including small boys on school holidays, who came to the area after the nesting was unfortunately reported in the press.

In the foregoing I have endeavoured to describe the reasons for the Port Botany development and in particular the recent progress as well as the unique features of the project and its importance to both the Sydney Region and the State.

Some years ago in an endeavour to describe the early stages of the project the Board produced a booklet and a



Vorwerker Hafen, Lübeck



Lübeck-Travemünde Skandinavienkai

The construction of the Elbe-Lübeck-Canal in 1900 was a significant development for Lübeck. This canal, 67 km long, connection the Trave with the river Elbe, links Lübeck with the central European waterways network. A few years ago the Elbe-Seiten-Canal was built and this meant a further improvement in the barge-traffic to the port of Lübeck.

film both titled "Birth of a Port." Looking back over all the various happenings of the last twenty years I must concede that the gestation period was rather long, and while the birth was natural, the formative years were certainly rather eventful. This latter aspect however is not particularly exceptional in the life of many infants particularly in these modern times of nuclear families and such like.

However, I feel sure that those of you who are associated with the shipping industry or with trade generally will agree that even in the recent times of relatively slack trading, the infant Port Botany development has already proved to be a most valuable asset to the continuing prosperity of both the Sydney Region and the State. I am sure that like the Board, you will look forward to its continuing progress in the future. Until 1962 the total traffic from and to Scandinavia via Lübeck was only handled by lift-on/lift-off-vessels.

The port of Lübeck was fortunate enough not to be severely damaged during the 1939-45 war. Nevertheless, reconstruction after the war was relatively difficult for Lübeck since the port lost its natural hinterland – the Eastern parts of Germany – when the border dividing West Germany from the GDR was created.

Lübeck was forced to acquire new markets in West Germany and the European hinterland. Today, some 25% of LHG's throughput consists of transit cargo. Major transit clients are the Benelux-countries followed by France, Switzerland and Austria; Czechoslovakia, Hungary and of course GDR are also part of Lübecks customers. The total throughput for the port of Lübeck in 1983 amounted to 11.5 mill. tons, 10.0 mill. tons via the public ports managed by LHG accounting for 87% of the total. Lübeck, in cargo volume terms is the fourth largest port in West Germany.

In the late fifties when container traffic was developing worldwide the question arose as to whether or not container traffic would be an ideal transport mode for the Baltic. Various shipping companies at the time made intensive studies of the subject and came to the conclusion that container traffic would have only limited success in the Baltic due to the relatively short distances to be travelled and because of the types of cargo that are normally transported within the Baltic.

Forest products such as timber, pulp and paper from Finland and Sweden to be shipped south did not lend themselves to containerization easily. Shipping companies looked at other systems and that was the beginning of the ro-ro traffic. In 1962 a Finnish shipping company decided to start a regular service between Helsinki and Lübeck with a combined passenger/freight ferry. Until 1962, as mentioned before, passenger traffic services between Denmark, Sweden, Finland and Travemünde only operated during the three summer months. Now it was decided to have a year-round service for passengers and freight deploying a ro-ro ferry.

This new technique was great challenge and an additional investment for the port of Lübeck. It was obvious that the old passenger berth at Lübeck-Travemünde would be inadequate for a ro-ro service. Despite the tight money situation the city administration decided to build a new port in Travemünde in 1962, the Skandinavienkai.

The first ro-ro berth at Skandinavienkai in Travemünde was opened on March 20th in 1962. In that year, the new service to Finland was followed by a second regular passenger/freight service to the south Swedish port of Trelleborg. The traffic at Skandinavienkai developed very quickly over the following years as did the city's investments in facilities. Between 1962 and 1982 a total of 7 ferry berths were built. Lübeck invested in total appr. DM 200 mill. Not only were ferry berths built but also a new terminal was constructed with offices for the shipping companies, forwarders and the customs authorities. The size of the ro-ro berths developed as ever-larger ships called at Skandinavienkai.

At the beginning the combined passenger/freight ferries using the facility did not exceed 3,000 grt with accommodation for 400 passengers at the most. The length of the first ro-ro berths at Skandinavienkai were appr. 150 up to 200 metres. The No. 6 berth was 220 metres in length and the No. 7 berth, completed 1982 has a total length of 290 metres. Berths No. 1 - 6 are equipped with a hoistable ro-ro ramp of bridge class No. 60. No. 7 berth is not yet equipped with a movable ramp, but it is planned to equip this berth with a ramp tailormade for a special rail ferry service. In the early years of Skandinavienkai the port was mainly used by combined passenger/freight ferries transporting passengers and private cars as well as accompanied trucks. As from 1973 the picture slowly changed and more and more trailer ships were operated by the shipping companies, carrying only accompanied trucks or unaccompanied trailers. Today's position is that the Skandinavienkai Travemünde is used by 7 combined passenger/ freight ferries, 7 trailer ferries and 1 rail ferry.

The years 1975 and 1977 were very significant in the short history of Skandinavienkai. In 1975 a regular rail ferry service with the "Railship I" was started between Travemünde and the port of Hangö in south-west Finland. RAILSHIP I is the largest railway ferry in the world and the only vessel that can carry 75 large railcars distributed over three decks. The ship has an elevator which transports the railcars to the lower and upper deck. Discharge and loading in the port takes about six hours. The ship calls twice a week at Travemünde transporting special railcars since the track width in Finland is greater than in central Europe, a width the same as in Russia. Thus RAILSHIP I owners have their own railcar-system. The bogies for the railcars are exchanged upon arrival in Finland making it unnecessary to load the cargo from one railcar to the other, allowing the shipping company to offer customers a doorto-door service. The port of Lübeck has built a special ramp at berth No. 6 for this system, equipped with railtracks. Eventually, when this railway-system to and from Finland was started the port of Lübeck finished the construction of a new railway access to the Skandinavienkai. This was a DM 40 mill. project. The railway service has developed very successfully and a second ship has been ordered to be put in service in November 1984.

A second high point for the Skandinavienkai was the start in 1977 of a new passenger/freight service operated by the gas turbine-powered FINNJET, a 25,000 grt ferry, 211 metres long and with engines developing 75,000 hp. She can carry nearly 1,600 passengers in cabins and has space for 350 saloon cars. The vessel has a service speed of 31 knots taking 22 hours to travel between Helsinki and Travemünde. During the summer the ship calls at the Skandinavienkai Travemünde every second day. In winter she puts into Travemünde twice a week. The mentioned sixteen ships regularly connect the Skandinavienkai with the ports: in Denmark Gedser and Copenhagen, in Sweden Gothenburg, Helsingborg, Malmö and Trelleborg, in Finland Helsinki and Hangö and in Poland Swinemuende. During the summer season there is also a link with Danzig. Sailing times are relatively short. The shortest distance is to the south Danish port of Gedser, only 3 1/2 hours and to Trelleborg it takes only 7 1/2 hours giving Travemönde a very dense network of traffic connections. In 1983 in total

4.0 mill. tons of cargo was carried and appr. 2.3 mill. passengers. Between 1962 and 1982 in all 30 mill. tons of cargo and 30 mill. passengers were carried. The number of trailers or trucks grew from year to year. Last year a total of 370,000 trucks and trailers passed through the Skandinavienkai. The development in trailer traffic has also led Deusche Bundesbahn, West German Railways, to think about piggy-pack-services. As the new railway station is being built at the Skandinavienkai this traffic could be handled without any difficulty. For the past two years a huge piggy-packer has been operating, loading and discharging the railcars. A straddle carrier is available to handle containers. Some 9,000 containers were moved through Skandinavienkai last year. In the piggy-pack-service about 1,200 units are passing through Skandinavienkai per month. More and more transit containers are transiting Skandinavienkai coming from the large container terminals in Bremerhaven and Hamburg and going by ferries to Sweden or Finland.

The Skandinavienkai in Travemünde is managed by Lübecker Hafen-Gesellschaft mbH (LHG). Physical cargo handling at the quay is undertaken by Skandinavienkai-Betriebsgesellschaft (SKB), a joint venture of the shipping companies that regularly call at Skandinavienkai. SKB has available a number of tugmasters and forklift trucks with a more or less 24-hour service. What are Lübecker Hafen-Gesellschaft's expectations for the future and what are the company's Plans?

LHG expects that in near future a regular new service with a combined rail/truck ferry will be opened between a south Swedish port, most probably Malmö, and Travemünde. This would be a special ship carrying railcars on the maindeck and trucks or trailers on the upper deck. LHG would equip berth No. 7 with an additional hoistable ramp for this service. It would be the first direct rail ferry service between a port in West Germany and Sweden competing with existing lines between Trelleborg and Saßnitz/ GDR or with the Vogelfluglinie between Puttgarden and Rödby.

Lübeck is also in discussions with the USSR to develop a rail ferry service between the Russian Baltic Port of Klaipeda and Travemünde. It has been hinted that up to 4 rail ferries would be deployed in the service. Should this Russian service come about, large additional investments would have to be made since the volume of cargo could reach 1.2 mill. tons per year. Lübeck is lucky enough to have sufficient space for further extension of the Skandinavienkai.

The city of Lübeck is 17 km up the river Trave with a draught of 9.5 metres. The city port of Lübeck, speaking quite generally, consists of three parts; first the old conventional city port Wallhalbinsel, then the Konstinkai, mainly for bulk cargoes and Nr. 3, the modern Vorwerker Hafen.

The Vorwerker Hafen can be divided into two parts, Nordlandkai and the grain silos. The Nordlandkai is also known as the Finland centre.

It was mentioned before that the construction of the Skandinavienkai in Lübeck-Travemünde began in 1962.

The construction of Nordlandkai was started in 1965. The growing freight volume between Finland and West Germany prompted the city of Lübeck to build a ro-ro port on the Nordlandkai peninsular in 1965. Today this area of the port is equipped with 3 ro-ro berths, 2 additional berths for conventional ships and a covered warehouse area of approximately 70,000 sqm. Whilst the Skandinavienkai in Travemünde is only used for self-wheeled traffic, the Nordlandkai in Lübeck is designed for the physical handling of goods to and from Finland. This quay is regularly used by 5 large freight ferries connecting Lübeck with the Finnish ports of Helsinki, Kotka, Rauma and Turku. The service is operated by the joint venture Finncarriers/ Poseidon. The Finns deploy 3 freight ferries of the socalled Finnflow-system. The West German shipping company Poseidon operates two large ferries. These ferries transport trucks and trailers, and their speciality is the transport of goods on 20', 40' or 60' Mafi-trailers and 20' flats. Every day there is at least one of these ferries in the port of Lübeck. The ship is normally berthed in the port 10 hours. During the stay appr. 3,000 tons are discharged and the same volume loaded. Normally the ships arrive at the port at the beginning of the first shift, 7:00 o'clock, and leave the port again depending on the volume of cargo between 5-6:00 o'clock in the evening. Traditional merchandise from Finland is forest products like timber, pulp, paper and board. Northbound cargo on the other hand consists mainly of prefabricated goods, machinery, equipment and chemicals. A port of Lübeck speciality is the export of fruit and vegetables to Finland. In 1983 almost 100,000 tons passed through the Nordlandkai. The fruit and vegetables come from all over Europe. Bananas in transit from Hamburg or Bremerhaven find their way via Lübeck to Finland. The terminal at Nordlandkai is fully equipped to handle vessels suitably, for LHG has available straddle carriers, forklift trucks, clamp trucks (for paper handling), 25 Tugmasters and cranes with a lifting capacity of up to 40 tons. A floating crane for heavy lifts up to 200 tons capacity is also on hand. Roughly 150 to 200 dockers work per shift in this part of the port, enabling the company to process ships within 10 hours.

The Finland terminal in Lübeck has been developed to one of the largest distribution centres for Finnish forest products in Europe. In 1983 the total volume to and from Finland via Nordlandkai amounted to 1.5 mill. tons. Included in these figures are appr. 700,000 tons of forest products. Modern warehouses covering 70,000 sqm, have been built for temporary storage. There are appr. 50-60,000 tons of these forest products in the warehouses enabling the Finnish forest industry to distribute their products with speed within West Germany and their neighbouring countries. It goes without saying that the Nordlandkai has excellent railconnections and can handle piggy-pack services which is of great importance for truckers. In addition to the regular service of Finncarriers/ Poseidon, Nordlandkai is also regularly used by a special ro-ro ship from Northern Finland carrying 6,500 tons of forest products each time. Whilst Finncarriers/Poseidon transports forest products in the main on Mafi trailers the service from Northern Finland is a stow/ro-system. The ship

(Continued on next page bottom)



Port of Tacoma

(Extracts from "Annual Report 1983, Port of Tacoma")

Executive Director's message (extract)

1983 was a year of recovery for both the world economy and international shipping and trade. It was also a very successful year for the Port of Tacoma, which earned a net income after depreciation of \$9.5 million, and maintained an impressive debt service coverage ratio of 3.45.

Major new construction projects and a total tonnage increase of 31% were just two factors which helped make 1983 one of the most significant years of growth in the history of the Port of Tacoma. Foreign Trade Zone #86, a modern new gatehouse for containers, and continued data processing developments for cargo tracking were also major accomplishments for the Port during 1983.

On February 28, 1983, the Port made shipping history by signing a shipping terminal construction agreement and a 30-year terminal operating and lease agreement with Tacoma Terminals, Inc. A subsidiary of Sea-Land Service Industries Investments, Inc., Tacoma Terminals will operate the facility for primary use by Sea-Land Service, Inc., the world's largest containership operator. Sea-Land will be moving from Seattle to Tacoma in May, 1985. This major development assures future growth and increased trade for the Port.

The Tacoma Advantage

The Port of Tacoma enjoys many advantages which will guarantee the Port a major share of the growing trade with Pacific Rim countries. For one, the Port has an excellent geographic location in relation to the Orient. The Great Circle Trade Route makes the Port a day to a day and a half closer to the Orient than are the more southern ports.

(Continued from page 32)

can in addition also discharge via side ramps. It takes appr. 16-17 hours to discharge 6,500 tones of forest products.

The five freight ferries from Nordlandkai Lübeck, FINNJET from Travemünde and RAILSHIP I from Travemünde offer 540 regular departures to Finland per year giving Lübeck the lion's share of the traffic with Finland over other European ports.

The steadily increasing traffic at Nordlandkai will eventually induce LHG to build new facilities there. New warehouses are planned for 1985. It is the belief of LHG that the shipping companies in the Baltic made wise decisions when they invested in ro-ro traffic instead of containers, and that ro-ro services will have a good future for the transportation of passengers and goods in the Baltic in the 1980s and 1990s. Another key to the Port's success is its labor force. Tacoma longshoremen, ILWU Local 23, have achieved a worldwide reputation for quality work and high productivity.

In shipping, we realize that time is money. Tacoma's excellent rail and truck connections can help shippers save both. The Port was the first on the West Coast to build an intermodal yard in its terminal area for fast transfer of containers from ship to rail. Served by both the Burlington Northern and the Union Pacific Railroads, the Port can unload containers from a vessel, put them on a railcar, and have them heading across country all in the same day.

Another advantage, at the Port, is the quick and convenient highway access. Located just off Interstate 5, the Port offers three noncongested direct interchanges with the interstate highway system. This assures fast turnaround time for trucks and their cargoes.

Ample land available for development is another key to the Port's success, as it continues to grow and develop for the future. Of the Port's 2,400 acres, over 800 acres are still available for development. This was a major factor in bringing Sea-Land to Tacoma — the Port could offer them room for expansion.

During 1983, the Port worked to improve its container handling capabilities. In addition to expanding its container storage space in Terminal 4 to 30 acres, the Port also built a \$278,000 gatehouse between Terminals 4 and 7. The three-story gatehouse, with three lanes in and three out, is computer-equipped to provide Port customers with faster, more efficient service and up-to-the-minute cargo information through the computerized control of data.

The Port's data processing department is currently setting up direct computer links with various shipping offices to improve the flow of cargo information and the service which the Port offers its customers. Long-range plans for the computer system include using it to track breakbulk and other types of cargo in addition to containers.

The Port continues to gain a reputation for being an ideal import-export distribution center for a variety of electronics and computer firms. Early in 1983, the Port opened a 151,000 square foot warehouse which it leases to Panasonic for use as a warehouse/distribution center. Over 90% of Japanese-made Panasonic consumer goods in the U.S. come in through this warehouse. Recently, Nippon Electric Company, Ltd. (NEC), opened a center in Tacoma to handle distribution of its computer printers in the western third of the U.S. Tacoma's many advantages – excellent labor force, liveability, and transportation connections, should continue to attract additional companies of this type.

Overall, 1983 was an exciting year for the Port. In addition to its numerous trade developments, new construction, cargo increases, Foreign Trade Zone #86, and container expansion, the Port gained greater recognition throughout the shipping and maritime industry for being a world class port. More and more people are beginning to realize the "Tacoma Advantage."

Cargoes

An upturn to shipping activity in a number of cargo areas helped the Port realize a 31% overall cargo increase for a total of 7.8 million tons. On the export side, grain was up an impressive 68%, to over 3.8 million tons. The Port was also the site of a record shipment of grain during 1983, when the "Jade Phoenix" left Tacoma bound for Egypt with 110,000 metric tons of wheat. The shipment set a world record for the largest shipment of grain ever transported on a U.S. flag ship.

Evidence of renewed activity in U.S. industry was shown by major increases in two import commodities at the Port – gypsum and ore. Domtar, a major sheet-rock manufacturer which leases a plant site from the Port, imported over 155,000 tons of gypsum rock from Mexico, an increase of 332%. Ore imports, ranging from lead and copper to zinc, were up 42%. These ores, along with alumina from Australia, are vital to a variety of major Northwest industries.

> Richard Dale Smith Executive Director

Port Profile

The Port of Tacoma was established in November, 1918, by an overwhelming vote of the citizens of Pierce County. As a public corporation operating under state-enabling legislation, the Port is engaged in the acquisition, development, and operation of harbor improvements; rail, motor, and water transfer and terminal facilities; commercial transportation and storage facilities; and harbor improvements. The Port has established the Commencement Bay Terminal and the Frederickson Industrial Development Districts within Pierce County to further pursue these responsibilities. Over the years, the Port has grown from its original 240 acres to a prosperous seaport and industrial complex occupying over 2,400 acres. The Port is located in Commencement Bay, which is considered one of the five best natural harbors in the world. Located in the Puget Sound region of western Washington State, Tacoma is a rapidly growing Gateway Port, ideally situated for Pacific Rim trade.

Balance sheet

as at December 31, 1983

	1983	1982
	\$000 ` s	\$000's
Assets		
Land, Facilities and Equipment	165,005	155,678
Less accumulated depreciation	38,216	34,159
	126,788	121,519
Construction work in progress	11,238	8,913
Total land, facilities and equipment	138,027	130,432
Sinking, Redemption and Special Funds	36,385	14,538
Current Assets		
Cash	285	12

Temporary investments, plus accrued		
interest	21,618	19,590
doubtful accounts (1983-\$210.000)		
1982; \$180,000)	3,921	3,914
Taxes receivable	350	389
Bond redemption funds, current portion	5,649	2,105
Contracts receivable, current portion	203	203
Prepayments and other current assets	2,829	1,143
1 otal current assets	54,858	27,357
Deferred and Other Assets	4,854	4,187
Total Assets	214,125	176,515
Equity and Liabilities		
Equity		
Operations	65,843	56,500
Taxation	43,934	41,591
Grants	9,044	9,253
Total equity	118,822	107,345
Long Term Debt		
General obligation bonds	33,240	7,835
Revenue bonds	52,410	53,815
Other	1,267	1,465
Total long-term debt	86,917	63,115
Current Liabilities		
Outstanding warrants	214	245
Accounts payable	1,569	879
Payroll and taxes	657	585
Retainage under construction contracts	257	34
Accrued interest	1,296	649
Current portion, long-term debt	2,198	2,116
Total current liabilities	6,823	4,510
Operating Reserves	1,562	1,544
Commitments		
Total Equity and Liabilities	214,125	176,515

Statements of operations

for the year ended December 31, 1983

	1983	1982
	\$000's	\$000's
Revenues		
Terminal services	18,498	20,122
Property rentals	9,468	9,309
Total revenues	27,966	29,431
Operating Expenses		
Operations	9,908	10,297
Maintenance	2,567	2,672
Administration	3,560	3,256
Total before depreciation	16,037	16,226
Depreciation	4,372	4,159
Total operating expenses	20,409	20,386
Income from Operations	7,556	9,045
Other Income (expense)		
Interest income	5,240	5,214
Interest expense	(3,293)	(3,856)
Gain on disposition of land, facilities		
and equipment	3	5
Other income (expense) – net	(372)	80
Total other income		1,443
Net Income	9,134	10,489
Disposition of Net Income		
Net income	9,134	10,489
Plus credit arising from transfer of depreciation on assets acquired		
from grants	208	208
Net Income transferred to		
Equity from Operations	9,342	10,697

International maritime information: World port news:

ISO poster for 15th World Standards Day – 14 October 1984



Each year on October 14 many countries, mainly members of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), celebrate World Standards Day. The opportunity is taken to communicate something of the general advantages of standardization to a wide audience. Seminars, exhibitions, literature and posters often feature in the celebrations.

The ISO Central Secretariat, Geneva, traditionally produces a World Standards Day poster which emphasizes the contribution made by standards to a varied selection of subjects and activities. It reflects as many of the overall objectives of standardization as possible - safety, convenience, quality, economy and good communication for example. In this year's poster each image represents at least one international standard:

- Wine taster. Standards for grape harvesting and vinifying machinery as well as standard sensory testing procedures and associated equipment.
- Cameraman. The complete range of international stand-

ards for cinematography hardware and the use and presentation of film.

- Protective helmets. Standard tests and requirements for road users' helmets and other protective clothing for recreation and work.
- Screw thread gauging. Screw threads are standardized through ISO as to profile, range of dimensions, accuracy and performance.
- Valves. General requirements, testing, marking dimensions, etc. for valves, actuator attachments, steam traps and similar equipment.
- Diver's watch. Standards relate to the technical essentials of watches for the purposes of quality control and trading descriptions.
- Diskettes and computer terminal. Standards for this and other data processing hardware and for an increasing number of software topics ranging from high-level computer languages to systems interconnection architecture.
- Saw logs. Specifications for the condition of timber in all stages and as intermediate products for construction, and wood-based products.
- Skier. Design and performance for skis and ski boots, alpine and cross country.
- Rubber collection. The requirements for raw latex, vulcanized rubber, synthetic rubbers and a great many rubber products are codified in international standards.

Each of these topics is representative of a wider field for example raw materials, recreational equipment, agricultural produce and industrial components. There are now some 5,500 ISO International Standards alone, serving these and many other technical fields.

Jakarta to host 1985 meeting of World Ports and Dredging Experts

Over 300 ports and dredging experts from some 25 countries will meet in Jakarta next March, an opportune time to assist the Asia-Pacific region's port development, which has a budget of US\$16.56 billion allocated.

The occassion next March is "Seatec V" and "Portec II" conferences, being held together with a trade exhibition at the Jakarta Convention Hall, with the approval of the Ministry of Communications and Directorate General of Sea Communications.

"Seatec" deals with dredging and port construction, of particular relevance to Indonesia where 47 ports are presently under development. The shipbuilding industry also benefits as dredgers are the main tool for port construction; and are increasingly being built by local shipyards under technology transfer deals from Europe, America and Japan. "Seatec" is the bi-annual meeting of the Eastern Dredging Association (EADA), whose Chairman is Ir. M. Simatupang. EADA is affiliated to the World Organisation of Dredging Associations (WODA). "Portec" is concerned with port operations, management and cargo handling, subjects of critical importance in improving the efficiency of shipping and freight movement both internally throughout the Indonesian archipelago and other Pacific Basin countries; and for import/export trade.

In addition to the Indonesian Sponsors and the Eastern Dredging Association; long-standing assistance comes from Sponsorship by United Nations ESCAP; the International Association of Ports and Harbors; the ASEAN Ports Authorities Association and ICHCA, the International Cargo Handling Co-ordination Association. UNCTAD will also be participating at the Conference.

Whilst the Conferences provide a platform for academic and practical discussion between ports and dredging experts and users, the associated exhibition gives commercial opportunities to over 100 companies who will display a wide range of related products and services. The Netherlands, Japan, and United Kingdom, main centres of portindustry technology, will be among nations strongly represented at the show from March 26 - 29, 1985.

The Organisers are the MarIntec Group, headquartered at MarIntec House, #02-210, Lavender Street, Singapore 1233 Tel: 2928288 Telex: RS26418 MARTEC.

Publications

"Container Terminal Leasing/Pricing Methods and Their Economic Effects" is the title of a perceptive, thoughtful but highly readable report authored by Professor Thomas J. Dowd of the University of Washington's Institute for Marine Studies. Professor Dowd describes the basic terminology, the underlying economic concepts, relevant port experiences and then suggests possible leasing and pricing strategies. He rightfully underscores the financial consequences of these alternative strategies, but also makes the point that each port tends to approach the subject in its own way-"There is no average or typical lease." Nor for that matter, he emphasizes, is there necessarily a "best" leasing method or "best" pricing approach. What a port does or how it responds, must obviously be tailored to its own goals and objectives. "The key to success in any leasing program," concludes Professor Dowd, "is to ensure that the port's leasing and pricing strategies are supportive of its goal and objectives. A clearly defined destination is allimportant." The report should be enlightening, not only to port professionals, but anyone with an interest in port matters and a desire for a clearer understanding of this complex subject. For a free copy, write Tom Dowd, Institute for Marine Studies (HF-05), University of Washington, Seattle, WA 98195. (AAPA ADVISORY)

"Recent Expansion and Improvement of Major European Waterways" is a timely and highly readable report prepared by Col. Herbert R. Haar, Jr., assistant executive port director, Port of New Orleans and published by the National Waterways Foundation. The report is a 32-page overview of current major European waterway development, specifically the Rhine-Main-Danube, the Rhone-Rhine link, and the channelization of the Danube River.

The report analyzes each program as to organization, methods of financing, and its ability to reach the intended objectives. The report discusses the historical background and administration of each project in trying to evaluate the efforts being taken in Europe to develop waterways systems of national and international importance. The information and observations were compiled by Col. Haar from official documents and background data during inspection trips of the waterways in question.

The progress on the Rhine-Main-Danube (RMD) Waterway, also known as the Europa Canal, is described by Col. Haar as a "unique, innovative and technologically advanced project." Construction has drawn the interest of the U.S. Army Corps of Engineers and contains much that can be applied to improvements in the organization and management of U.S. waterways, according to Col. Haar.

The channelization of the Danube River, as part of the Europa Canal, illustrates the potential for international cooperation between widely divergent political systems. Connecting the Rhone and Rhine Rivers, on the other hand, is seen by Col. Haar as a successful example of private and public involvement in financing and managing a project combining economic development with the waterways construction.

The report can be purchased for \$6 from the National Waterways Foundation, 3800 N. Fairfax Drive, Suite 7, Arlington, VA 22203. (AAPA ADVISORY)

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"Four-language port lexicon"

A revised edition of P. Versnel's port lexicon "De Haventolk" will be published in September. This port and transport dictionary consists of two volumes. The first lists Dutch terms with their English, German and French translations, and the second volume the English, German and French terms with their Dutch equivalents for the convenience of foreign users.

The new "Haventolk" (Harbour Interpreter) will number over 1300 pages in two spiral bindings (A5). If ordered before publication, it costs f75.- (plus postage). It can be ordered from the 'Dr A.J.T. Stakenburg' Rotterdam Port Transport College, Soerweg 31, 3088 GR Rotterdam, Holland. (NEWSLETTER, Port of Rotterdam)

Port of Halifax heads for record-breaking year

The Port of Halifax may be headed for a new container handling record by the end of 1984, if the second half of the year keeps pace with the first six months. Container traffic broke the million-tonne mark from January to June, setting the stage for the port to exceed its all-time record high set in 1979.

Figures recorded at the end of June, 1979 showed Halifax had handled 1,080,705 tonnes of container traffic, and that number swelled to 2,082,688 tonnes by year-end. Already in the first half of this year the Port of Halifax has handled 1,016,172 tonnes of container traffic, and Bob Kaye, Director of Marketing for Halifax Port Corporation is confident that the two million tonne mark will again be broken by the end of the year.

This year's traffic volumes are especially notable in light of the comparatively low figures recorded for 1983, as various sectors of the economy struggled to recover from the recessionary period. By the end of the first half of 1983, 647,827 tonnes of container traffic moved through the Port - 36 per cent less than was handled in the equivalent period this year.

Part of the reason for such increases is the continuance of a strong demand for imported consumer goods. Another factor is the addition of extra shipping capacity on the port. Atlantic Container Lines (ACL) has vastly expanded its capacity with the addition of large, new third generation container ships to its fleet. Several other lines, such as Sea-

Land and Atlanttrafik Express Service (AES), comparative newcomers to the Port, are continuing to build up cargo levels. (Port of Halifax)

Dennis E. Johnson elected Chairman: Port of Thunder Bay

Dennis E. Johnson has been elected Chairman of the Board of the Lakehead Harbour Commission effective July 27, 1984. He succeeds Mr. Patrick J. Gilbride.

Mr. Johnson is a third-term City of Thunder Bay appointee to the board. He is a lawyer and partner in the firm of Gordon, Carter & Johnson. He sits as a member of the Constitution and By-Laws Committee of IAPH and the Canadian Port and Harbour Association. Mr. Johnson is active in the Thunder Bay Marina Advisory Committee, a member of the Great Lakes Historical Society and an officer in the Naval Reserve.

Nanaimo to become container port

\$1 Million Expenditure

A major development for the Port of Nanaimo has been announced by the Nanaimo Harbour Commission. At a cost of more than \$1 million the Commission is making a bold move to introduce containerization to Vancouver Island, using the new Duke Point Terminal.

Construction of a steel barge ramp at a cost of \$150,000 has been given the green light. Hafer Machine Co. Ltd. of Victoria will be constructing and installing the 200-tonnes ramp which is expected to be ready for use by the end of September this year.

Purchase of mobile equipment for efficient handling of containers is included in the \$1 million expansion program. Two 80,000 pound forklift trucks, costing a total of \$500,000 will be used for moving containers.

Multi-purpose Ramp

The barge ramp will accommodate the largest transportation units now in use on highways thus making the new facility a multi-purpose, roll-on roll-off type ramp. The ramp and equipment is the first container handling facility for Vancouver Island.

According to Port of Nanaimo Port Manager Lloyd Bingham, "We feel we have identified sufficient volume to justify the cost.'

He also said, "The trend towards containerization cargo, particularly in the forest products sector, warrants the expenditure." (Nanaimo Harbour News)

Port of Saint John traffic jumps 38% in first six months

Port of Saint John cargo showed an impressive 38% jump in the first six months of 1984. At the end of June 1983, shipments through the Port totaled 3,577,560 tonnes. The figure for the same period this year is 4,964,247 tonnes.

According to Gordon C. Mouland, General Manager, there were improvements evident in most cargo sectors. Leading the way were bulk petroleum products. Fuel oil showed a 71% improvement, from 677,808 tonnes to 1,162,774 tonnes in the first six months; gasoline ship-

The Americas

ments increased from 261,226 tonnes to 454,231 tonnes, up 73%; and crude oil jumped from 1,176,731 tonnes to 1,664,449 tonnes, an increase of 41%.

Forest products shipped through the Port of Saint John also showed a substantial gain, up 20.7% from 314,000 tonnes to 379,000 tonnes.

According to Mr. Mouland, a good increase was also recorded for container traffic through Brunterm, which showed a gain of 10.9% in the first six months of 1984, from 395,000 tonnes to 438,000 tonnes.

Port officials look forward to a continuation of the present trend. The advent of a new, non-conference container service to Europe by Sylvan Shipping Company Inc. appears to be very timely, and large increases in the shipment of potash will be evident with the commencement of full production from the PCA mine late this year and the start-up of the Denison mine in mid 1985.

Saint John's Rodney Container Terminal plans unique floating Ro/Ro ramp

The latest container-roll-on/roll-off (Conro) vessels calling at this Eastern Canada port will soon have a unique facility at their disposal. A special floating ro-ro ramp designed to accommodate either stern or quarter loaders should be ready for operation in 1985.

The ramp will be the third ro-ro facility in the port.

Port officials have received approval for engineering and marketing studies for the ramp, which will be part of the terminal expansion at Brunterm Ltd.'s. Rodney Container Terminal which will be \$5 million.

The port of Saint John will pay for the civil work required to accommodate the ramp. The ramp itself will be acquired by the terminal operator, Brunterm Ltd. Construction may begin this fall.

The ramp, 250 feet long and 50 feet wide at its end, will be in the slip berth at the Rodney Terminal. The inboard end will be situated in the bulkhead between Rodney and Pier 3. Both stern and quarter loaders will use the ramp as it lies along-side the container terminal slip berth.

Long-term planning calls for the ramp to be movable to other locations within the Port. The ramp can accommodate loads up to 180 tonnes.

Saint John is already port of call to variety of the most modern ro-ro vessels in world trade. The newly planned facility will greatly improve the available ro-ro handling.

Record year for Port of Savannah

Containerized cargo passing through the Port of Savannah during fiscal year 1984 exceeded the 2.25 million ton mark, surpassing last year's most optimistic predictions, Georgia Ports Authority officials announced recently. A jump of 560,000 tons over last year's figures for an increase of 33 percent, the growth in volume was fueled by a strong surge in the latter two quarters.

Breakbulk cargo also reached a new benchmark at 1.8 million tons, a highly unusual phenomenon in today's container rush. The port's diversified cargo base included a large number of commodities which, for reasons such as

size and handling requirements, do not lend themselves to containerization.

Liquid bulk cargoes rebounded 21 percent from 700,000 tons in FY'83 to 845,000 tons in FY'84.



Port of Savannah, Garden City Terminal

Port of Houston statistics reveal dramatic upturn in business

The volume of general cargo shipped through the Port of Houston increased sharply during the first half of 1984, according to figures released by the Port of Houston Authority.

The report showed an increase of 45 percent in Port Authority revenue tonnage, from 6.1 million tons during the first six months of 1983 to 8.8 million tons for the first half of 1984. Overall, port tonnage increased 6 percent, from 37.6 million to 40 million tons for the period.

Approximately 85 to 90 percent of the Port of Houston's general cargoes are handled at the Port Authority's facilities. Private terminals handle primarily bulk cargo, such as crude oil, petroleum products, petrochemicals and grain. The per-ton economic impact of general cargo is much greater than that of bulk cargoes because more handling labor and documentation are required.

Figures showed that shipments of steel into the United States over Port Authority wharves climbed by 131 percent, from 828,000 tons in 1983 to 1.9 million tons this year. Auto imports were up from 110,472 units to 154,399, and container movements increased from 148,405 TEU to 178,822.

Shipments of grain through the Houston Public Elevator climbed by 133 percent, from 98,644 tons to 229,833, though grain shipments port-wide declined for the period.

The Port Authority's Bulk Materials Handling Plant also increased its totals; 617,960 tons of dry bulk were moved during the first half compared to 415,378 in 1983, for an increase of 49 percent.

Port officials attributed the upturn in activity to improvements in the general economy.

New Terminal proposes automated bag facility at Port of Houston

New Terminal Warehouse, Inc., is seeking an agreement with the Port of Houston Authority for joint construction of an automated bagged goods facility for the handling of import/export agricultural products.

New Terminal has submitted a detailed plan to Port Authority staff, which, if approved by Houston Port Commissioners, could result in the world's largest bagged goods operation, according to company executives.

The company proposes to install ultra-modern machinery for the operation if the Port Authority will lease to New Terminal docks 18 through 22, and approximately half of dock 17. As part of the lease proposal, the Port Authority would be responsible for making certain repairs to the docks, and the adjacent Houston Public Grain Elevator for the purpose of storing bulk grain (to feed the bagging system).

In return, New Terminal would install sophisticated machinery including: Bagging machines, rail car unloaders; automated palletizers; conveyors; a large gantry operation and two shiploading towers.

The U.S. exports approximately five to six million tons of agricultural bagged goods annually through Gulf ports. Labor intensive bag handling operations have not changed significantly in the past 50 years in the U.S.

"It seems like we have escalated our bulk handling capabilities dramatically in the past decade, but our ability to handle bagged cargo has remained in the stone age," said New Terminal Vice President, Paul Allen. For example, said Allen, a modern export grain elevator can load in excess of 100,000 bushels per hour onto a vessel, with a crew of 10 or 20 men (5,000 bushels/man-hour). The present loading rate for bags is 63 bushels/man-hour. The automated facility will increase productivity per man-hour to 1,333 bushels.

"The tremendous savings through increased productivity that an automated system provides would enable the U.S. farmer, and the flour and rice miller, to be more competitive in the world market. This (an automated bagging and handling operation) is potentially the greatest change in the shiploading industry in the past 20 years," said Allen.

New Terminal has the support of labor, said Allen, and in cooperation with them, the facility will be more efficient, provide previous casual labor regular employment, and offer a tremendous improvement in working conditions and surroundings. He estimated that 90% or more of the injuries experienced in the past would be eliminated.

The facility would create more than 100 full-time jobs once fully operational, said New Terminal management. Research conducted by New Terminal personnel points out the proposed facility would also boost Port Authority income, state and local tax revenues, and help to reduce the present U.S. trade deficit.

Frederic A. Heim elected Port President : Port of Los Angeles

Senior Harbor Commissioner Frederic A. Heim has been elected President of the Board for the 1984–85 term. Heim, who was recently reappointed to the Harbor Commission, served 1973 to 1976, when he was named to the Water and Power Commission. One year later he was reappointed to the Harbor Commission. He has served four previous terms as president, the most recent ending in 1980.

Heim, a resident of the San Fernando Valley, is a senior vice president of Computor Memories, an electronics firm

in Chatsworth.

Richard G. Wilson elected Chairman of the Joint Powers Authority : Port of Los Angeles



Father Arthur Bartlett (far left), member of the Los Angeles Board of Harbor Commissioners, congratulates Long Beach Harbor Commissioner Richard G. Wilson (center) on his election to a new term as chairman of the Joint Powers Authority (JPA) for the Intermodal Container Transfer Facility under development by the Port of Los Angeles and Long Beach. Wilson was elected during a recent meeting of the JPA, the first with the full five-member board seated. Other JPA members include James McJunkin (second from left), Executive Director of the Port of Long Beach; Jeffrey H. Tamkin, a real estate developer, and Dr. E.L. Perry (far left), Executive Director of the Port of Los Angeles. The railyard facility will be operated by Southern Pacific and should be operational in 1985.

Dundalk Terminal mid-year cargo volume increases

A total of 2,617,843 tons of cargo was handled by the port of Baltimore's Dundalk Marine Terminal during the first half of 1984. This was a 31.49 percent increase over the 1,990,857 tons of cargo handled by the terminal for the same period last year, the Maryland Port Administration reports.

Container cargo handled by the 550-acre Dundalk terminal reached 2,065,004 tons during the first half of 1984. Similar cargo handled for the same period last year stood at just 1,578,892 tons.

General cargo handled by the terminal during the first half of 1984 stood at 210,305 tons. Comparable trade for the same period last year reached just 147,691 tons.

Maintenance dredging begins; Project's cost estimated at \$20 million: Port of Baltimore

The U.S. Army Corps of Engineers has begun maintenance dredging of Baltimore's harbor channels, a project that will allow ships to load cargo to a deeper draft.

The two- to three-year project is expected to benefit shippers of grain, coal, ore and other bulk cargoes. Vessels now carrying these bulk commodities must often plow through sediment in the channels.

The maintenance work is the first project of its kind in the port of Baltimore since 1968. It will cost in excess of \$20 million. "While the port is functioning, it would be functioning more efficiently with a deeper draft," says Jeffrey A. McKee, the Corps' project manager for the maintenance dredging.

Baltimore's shipping channels have authorized depths of 42 feet. Some areas, however, are only 38 feet, 6 inches deep due to silting.

The maintenance dredging project marks the first disposal of channel spoil into the \$53 million Hart-Miller Island containment site located at the mouth of Back River in the Chesapeake Bay. Hart-Miller was built by the Maryland Port Administration to hold 53 million cubic yards of spoil from the eventual deepening of Baltimore's shipping channels from 42 to 50 feet. About 9 million cubic yards of spoil from the maintenance dredging will be deposited into Hart-Miller.

About 97 million cubic yards of material dredged from the port of Baltimore and its access channels during the next 20 years will require containment under existing regulations. The Hart-Miller facility alone will meet 55 percent of that 20-year need, according to MPA estimates. (Port of Baltimore)

Legislation supports load centers

By David Ziolkowski Traffic Manager Maryland Port Administration

The rapid growth of containerization since the mid 1960's and the age of intermodalism which it spawned seems to have reached a plateau. A feeling that it's already being done, or has already been tried, prevails in the transportation industry. But creative pressures are building and the Shipping Act of 1984 may provide just the outlet for innovative minds to push intermodalism to a higher level of sophistication.

Intermodalism is a concept of transporting freight by more than one form of conveyance, usually some combination of ship, rail and truck. It's dynamic rather than static and it provides fertile soil for new ideas. The new shipping act will allow ocean carrier conferences to try new ideas, such as conference intermodal rates, rationalization of liner services and port load centers. The Shipping Act of 1984, which became effective last month, will clearly permit conferences to have intermodal rate authority coupled with antitrust immunity. Under the present act, without intermodal authority and antitrust protection, survival of the conference system was questionable. Individual carriers were leaving the conferences to enter intermodal rate wars, offering point to point rates which often were lower than port to port rates. In general, instability prevailed particularly in the North Atlantic.

A strengthened, born-again conference system is certain to emerge under the new shipping act, which can be expected to stabilize rates in the North Atlantic, eliminate over-tonnaging by rationalizing service and increase all water intermodal service from the Pacific.

To rationalize their services, ocean carriers will engage

in activities such as pooling arrangements, joint services, space chartering agreements and scheduling of vessel services only as needed by the trade. Carriers will seek to maximize use of vessel cargo space and reduce or eliminate overtonnaging (too many ships and not enough cargo). In short, rationalization means increased production through increase utilization. It's the application of modern production/management techniques within a specific market system to get more out of whatever you're trying to do.

The Maryland Port Administration and port Baltimore used those very techniques to bring this port into the container age and the intermodal era. Port Baltimore has become synonymous with intermodalism and is prepared to host the new class of container/roll on-roll off vessels whose container capacities exceed 2,000 20-Foot equivalent units (TEU's): some of the new vessels may exceed 4,000 TEU's. The use of these new larger vessels as well as conference inter-modal authority and rationalization of carrier service by the conferences is certain to accelerate the use of load center ports under the new shipping act. Ports which do not become load centers but have huge investments in container facilities and equipment may become underutilized and will have to develop new markets and services. The ability of those ports to adjust to these changes will be critical to their viability as deepwater ports.

Ports have always been party to the chicken and egg paradox. Do vessel services draw cargo to a port or does cargo availability at a port draw vessel service? Ocean carriers and conferences of carriers using load centers and intermodal inland rates may, under the new act, impose a synthetic answer to the question. Cargo could become port blind and be directed to those ports where it is handled most efficiently and economically by the carriers.

Service rationalization and the use of load centers does not appear to offer much help to hard pressed longshore and merchant marine labor. The use of faster, larger and more mechanized vessels with smaller crews and less time in port may further erode merchant marine jobs. Reduced vessel activity at non-load center ports and intensified activity at load centers may result in a shift in longshore man hours worked from one location to another. The new result, however, will probably be a reduction in longshore employment.

All parties will agree that shipping act reform is needed. It will be up to shippers, carriers, ports and labor through participation in the Federal Maritime Commissions rule making process to ensure a successful implementation of the new act for all segments of the maritime industry. (Port of Baltimore)

Port of Boston sees growth in 1983 exceeding the national average

More than 970,750 tons of general cargo were handled in the Port of Boston in 1983, all 11 percent increase over the previous year, Massport Executive Director David W. Davis announced recently.

The 1983 general cargo tonnage, valued at \$2.6 billion, is the greatest volume of general cargo handled in Boston since the onset of the recession in 1980. That increase compares favorably to a nation-wide increase of only 2.8 percent.

Not only did the amount of growth in the Port of Boston exceed the national average, the general cargo tonnage handled was the most valuable in the nation. "The cargo passing through our facilities is valued at an average of \$3,000 per ton, nearly twice the national average," Davis said.

The Port's strong performance – fueled by a strong New England economy and the recovery of U.S. markets included growth in inbound and outbound general cargo. "There's no question that the economic recovery led to our growth in inbound cargo in 1983," Davis said. "Our exports increased as well, but that growth was dampened by the strong U.S. dollar and slower recovery abroad, particularly in the European markets so important to New England exporters."

The growth in inbound tonnage was 14 percent; outbound tonnage growth was 5 percent.

"These figures show that the Port of Boston has a bright future," Davis emphasized. "Foreign trade is of vital importance to New England," he continued, "and we are convinced that the volume of foreign trade can only grow. The tonnage that moved through our Port facilities represents less than half of all New England cargo that is moved by water."

Davis pointed out that it is in the interests of New England business and consumers to keep New England cargo in the region, and not in New York or Canadian Ports. The Port of Boston is a valuable resource because it saves cargo shippers an estimated \$40 a ton in trucking costs over more distant ports. That represents a savings of \$20 million annually to New England companies and consumers.

Davis said that Massport now has modern and efficient cargo handling facilities which represents an investment of more than \$50 million in the last five years. "Boston also has a stable labor environment now, and we are proud of our improved service on the vital North Atlantic route," he added. "It is our responsibility to serve as a catalyst for commerce within the commonwealth and the region and a revitalized Port of Boston will help us to meet that goal."

H. Wayne Goodroe elected Port President: Port of Oakland

Oakland attorney H. Wayne Goodroe has been elected president of the Oakland Board of Port Commissioners.

Currently the Board's First Vice President, and a member of the Commission since July of 1982, Goodroe succeeds Patricia Pineda, who is also an attorney, as president. Ms. Pineda continues to serve as a member of the Commission.

Goodroe said the first priority for the Commission during the coming year will be to determine the Board's role in property development.

"We want to take a good hard look at what we want to do and how we want to do it, and then get moving just as fast as possible," he said.

The Board is currently studying plans for the development of Jack London Square. At issue is what the Board's posture should be in respect to real estate development and whether it should take a more active role in promoting and controlling development of the land entrusted to it by both the State Lands Commission and the City of Oakland Charter. The Port is responsible for the commercial development of some 22,000 acres of land, extending 19 miles from the Oakland Bay Bridge to the San Leandro city line.

"At the same time," Goodroe said, "we do not want to neglect our major investment in marine terminals. Income from maritime operations is slightly higher this year after a couple of fairly flat years. We need to increase it by attracting more shipping lines and increasing our tonnage – particularly for imports.

Portland voters approve terminal modernization

A supportive tri-county Port of Portland District approved the \$40 million proposal by the Port to modernize the northern half of Terminal 2.

The project is expected to cost \$46.6 million, with the difference between the bond issue and the cost accounted for by interest earnings on the \$40 million.

The bond sale is expected to be completed by August, concurrent with permit applications and review, soil exploration and testing and the selection of a consultant.

Demolition of a warehouse, freezer storage facility and the old piers will begin this fall, with the modernized terminal scheduled to be completed in mid-1987.

Specific improvements will include two modern ship berths, a new warehouse, a crane and 18 acres of paved backup storage.

What Portland's marine-minded community and the Port will be offering shippers will be a fully modern, multipurpose facility which will effectively accommodate current modes of ocean transportation: containers, rollon/roll-off, pass/pass, breakbulk and neobulk vessels.

During construction, the Terminal 2 project will generate about 150 jobs. In addition to serving many regional firms, the Terminal 1 and 2 complex provides import and export services for nearly 500 local tri-county companies, employing about 11,000 persons and directly generating some 1,000 marine-related jobs. (Portside)

Study to chart course into 21st century : South Carolina State Ports

A strategic plan to guide the South Carolina State Ports Authority from 1985 to 2000 is currently being developed by the consulting firm of Cresap, McCormick and Paget.

Using the results of a University of Tennessee study, the project team will be analyzing competitive ports and evaluating the geographic, financial and marketing resources of the Port of Charleston. While the university study focuses on container movement, it also considers commodity mixes and inland transportation costs.

From the consulting firm's study, ways to maintain the port's competitive edge and means to best exploit the investment the Authority already has in port facilities will be formulated into an "action plan." (PORT NEWS)

Option agreement puts ICTF one step closer : South Louisiana Port

The South Louisiana Port Commission has agreed to purchase an option on a 2,000-acre site on the west bank of the Mississippi River in St. Charles Parish for the construction of an Intermodal Container Transfer Facility.

The container facility will be part of the Port's proposed Foreign Trade Zone estimated to cost some \$343 million.

The Commission took the action to purchase the option in July. At the time there were several minor matters to be resolved between the Commission and the landowners but these were expected to be taken care of without delay.

The site is one of eight studies by the SLPC and is owned by St. Charles Holding, Inc. and Eddie Dufresne, Jr.

The site is served by two railroad lines and three major highways. It straddles the new Mississippi River bridge at Luling. It is located at the gateway to the South Louisiana Port jurisdiction, the farthest downriver site possible in the river parishes area.

When all approaches and linkages are completed, the site will offer excellent interchange facilities to rail or truck, providing uncomplicated, direct and cost effective transportation interchange.

Immediate access to the federal highway and interstate system will allow virtually unrestricted traffic to the Midwest and both east and west coasts.

Commenting on the Commission's action, Dr. Ray Matherne, Port Director said, "This decision by the Commission to purchase this option puts us one step closer to realizing our container facility. I believe when it is completed it will usher in an era of economic progress unparalleled in the history of the river parishes." (PORT VIEW)

New TOTE site opens at Port of Tacoma

The new \$10.5 million terminal facility for Totem Ocean Trailer Express (TOTE) opened recently at the Port of Tacoma. TOTE, a major shipper to Alaska, has been operating at the Port of Tacoma for eight years. Previously operating out of Seattle, TOTE relocated to Tacoma in 1976, attracted by Tacoma's room for growth and cooperative and productive longshore labor force. In 1979, the Port built a \$5 million, 25-acre facility for TOTE's operation. Their new facility covers 33 acres, and has room for 1,380 trailers, compared with 800 at their previous site.

The new TOTE terminal, designated as "The Alaska Terminal," is part of the Port of Tacoma's \$40 million of new terminal construction, the largest in Port history. The new TOTE facility was built to give TOTE a larger, more modern terminal.

Bremen Ports with good half-term results; Growth especially from modern sea-traffic systems

In the first half-year of 1984 the Bremen ports were able to improve their handling figure for general-cargo by nearly 1 million tons (12.5%) over that of the same period for 1983 - to nearly 9 million tons. Bulk-commodity traffic also increased, by 4.7%.

Borne by a strong exportation development the result was, above all, attained with the modern transportation systems which, in increasing measure, form the heart of the Bremen ports' business.

For this reason some 160 liner services - comprising nearly 200 shipping companies - call at Bremen/Bremerhaven. Of these, about 55 are full-container and 85 semi-container services, with 19 Ro/Ro, as well as two Lash and Seabee lines, respectively.

The trading is mainly on the North Atlantic - with the Far-East then following. From the Bremen ports approximately 20 feeder-lines are serving other ports to which the large containerships do not call. In this manner the Scandinavian area in particular is supplied from the Weser.

Favours more 'market' in international ports-competition : Bremen International

Competition between the maritime ports of Europe should be more determined by market-economic elements and, as far as possible, should at least take place within the framework of politically-dispositioned carefully-balanced skeleton provisions.

Nearly all the speakers at this year's 9th Transportation Forum in Bremerhaven who represented political and traffic economic interest groups supported this demand. The theme 'The Future of the European Ports' was elucidated in a series of professional lectures from the points of view of Europe and the Federal Republic, as well as of shipping companies and shippers and, finally, from the angle of the ports themselves.

The centre-theme, which ran like a thread through all the presented contributions, was the political-disposition divisions in the European transportation markets. These result in artificial disadvantages for the German seaports due to an inflexible nationalistic tariff system - in comparison with the competition from, above all, Rotterdam and Antwerp. For, the inland-waterway traffic to and from those ports enjoy more liberal conditions and favourablyconstituted charges than exist for the German seaports. The demand for harmony in the skeleton provisions of EEC transportation policy was supported also by the lecturer from the maritime trading port of Rotterdam.

1st phase of deepwater bulk terminal to be ready at end of year : Port of Amsterdam

The first phase of Amsterdam's new deep-water dry bulk terminal outside the sea-locks at Ymuiden is expected to be ready at the end of this year. This will permit bulk carriers drawing up to 48 feet to be accommodated. Next May, the approach channel will have been deepened to accommodate vessels drawing up to 52.5 feet. There has been a strong trend recently towards the transport of coal – and ore, to a lesser degree – in vessels in the 100,000 to 160,000 dwt range.

As a result, Amsterdam decided that a deepwater terminal was essential to maintain the port's competitiveness in the future. The Port of Amsterdam itself is accessible to ships drawing up to 45 feet, the depth limitations are imposed by the locks and a tunnel.

The new project involves a deep water terminal to serve both the Hoogovens steel plant at Velsen-Noord and Overslagbedrijf "Amsterdam" (OBA) the port's largest dry bulk terminal operator. The new terminal will eventually have an annual capacity of 7.5 million tons of coal for OBA as well as being able to meet the coal and ore demands of Hoogovens. The OBA storage yard at the new terminal will be able to handle five million tons a year; the additional 2.5 million tons is accounted for by ship to ship or ship to barge transhipment.

The terminal involves rearranging Hoogovens berths and the extension of the storage yard there by 20 hectares (48 acres). Two harbour basins are to be filled up for this extension and a third deepwater berth will be added to the existing 700 metre quay. The approach channel will have been deepened to accommodate 52.2 foot vessels in a year and one of the berths will have been adapted by then. The other berths will be readied afterwards. It is expected that the approach channel will be deepened to 55 feet in the long run. (HAVEN)

125 million tonnes of cargo in first half year: Port of Rotterdam

In the first half of 1984, the port of Rotterdam handled nearly 125 million tonnes of cargo from or into sea-going ships. This volume is more than 8 million tonnes or over 7% up on the same period of 1983. Growth was scored in all cargo categories, except agribulk and mineral oil products. But as oil products declined (-16%), crude arrivals picked up (+14%). Stark increases were in ores (+31%), coal (+16%) and containers (+17%). (NEWSLETTER)

Lower port charges for container ships in force : Port of Rotterdam

The port of Rotterdam cut port charges for container ships with effect from July 1. The cuts range between 10%for liners landing or loading containers at Rotterdam in addition to other cargo, and 35% for full-container ships. The extent of the rebate depends on the size and kind of vessel and the number of containers loaded or unloaded. (NEWSLETTER)

Britain's first freeport begins operations

Britain's first free trade zone opened its doors to overseas manufacturers and investors recently when Southampton Freeport Limited officially began operations.

Located on Britain's South Coast, in a prime position for European and UK distribution, Southampton Freeport is a new 13 hectare warehousing, processing and manufacturing complex, with 44,000 m² of covered storage and light industrial units immediately available.

Locating within the freeport area, which is treated as being outside the Customs territory of the UK, offers big advantages to overseas companies wishing to trade in European and UK markets. It is also likely to attract companies wishing to process or manufacture goods for re-export to countries outside the European Economic Community (EEC).

Goods processed, manufactured or held within the free zone can benefit from the suspension of EEC and UK Quotas, Licences and Agricultural Levies. They may also qualify for British Certificates of Origin.

Southampton Freeport Limited, is owned in partnership by four leading British companies: Associated British Ports, the UK's leading port owner; Trafalgar House, whose wide interests include construction and engineering; McGregor Cory, warehousing and freight specialists; and Kleinwort Benson, the merchant bankers.

Record week at Tilbury Terminal

The Port of London Authority's container terminal in Tilbury Docks has just experienced the busiest ever week in its 15 years of operations. Over 4,600 containers were handled across the quay, an increase of over 600 containers on the previous highest weekly throughput.

Trade through the 50 acre terminal has continued to increase during 1984 and is attributable to a growing awareness of Tilbury Docks' geographic advantages. With the vital sections of the London Orbital Motorway (M25) complete, Tilbury Docks has direct motorway connections to all the UK's major industrial and distribution centres. Container traffic to and from the Midlands, the North West and as far north as Glasgow now has direct links via motorway class roads with Tilbury Docks. This makes Tilbury the best placed port for the UK's motorway network.

PLA's Tilbury container terminal operates a round-theclock service at its three non-tidal, fully paved ship berths. Each berth has an authorised depth of water of 11.6 metres alongside a continuous 792 metre quay. The terminal is served by four Paceco Vickers container cranes.

Port of Geelong reports healthy 1983 results

The Port of Geelong Authority has reported subdued but still healthy results for the financial year to December 31, 1984.

The Authority's Annual Report shows that the Port achieved a net profit for 1983 of \$2.6 million - a drop of \$1.2 million from the record 1982 result.

Provision for bad debts of \$606,000 (mainly due to the failure of Protean Holdings Ltd), increased operating expenses, and an abnormally low level of trade were the major reasons for the lower profit, according to the Report.

Grain exports fell by 1.4 million tonnes as a result of the 1983 drought, and crude oil imports returned to normal levels after an unusually busy year in 1982. Together, those two products accounted for 90% of the 2.1 million tonnes decline in the volume of trade.

"Under all the circumstances, our profit result was very satisfactory," reported then Chairman Gordon Murray.

After capital expenditure of \$5.9 million, the Authority still has liquid investment funds of more than \$10 million available for development works. These funds will form the basis for the progressive implementation of the Port Development Plan through to the year 2010. (Portside)

The Australian government scrutinises cost of centralization arrangements

The Australian Government is reviewing the nation's onshore shipping costs — which can, in some cases, account for up to 70 pc of total door-to-door costs — and is making a special examination of centralisation practices because of growing complaints from an increasing number of shipper groups.

This was revealed at the July seminar on onshore costs, organised by the Bureau of Transport Economics for the Federal Department of Transport.

In his opening address, the Federal Minister of Transport, Peter Morris, said he had received numerous representations on the issue and there was a need for the commercial future of centralisation arrangements to be considered carefully.

"Australia is a major trading nation, and our high standard of living depends upon development of our overseas markets. In 1982–83, Australia's overseas trade was valued at \$42B, representing about 26pc of gross domestic product. Of this, exports were valued at about \$22B and totalled 174m tonnes", the Minister said.

"Our jobs and our incomes are critically dependent on this export performance. A recent study showed that a 5pc increase in export income would result in 30,000 jobs being created in the production of those additional exports.

"The distances to Australia's major markets and the intense competition from other countries supplying those markets demand maximum efficiency in our transport performance if we are to gain both from exporting and from supplying transport services.

"Success in our export markets demands that our export trade be served by competitive, efficient and reliable transport. This means both shipping and the shore-based activities which complement it.

"Unnecessarily high costs at any stage of the production, processing and transport chain prejudice markets and limit job opportunities.

"Of course, our main imports are also subject to the same problems. While we are obviously concerned at improving the competitiveness of our export trades, we must not lose sight of the fact that improvements in efficiency directly benefit the Australian consumer of imported goods, and also support employment in a wide range of industries in Australia.

"It is fair to say that the main focus of attention in recent years has been on what I call the "blue water" costs - the costs of running ships from "outside the heads" of origin to "outside the heads" of destination. This is obviously an important area. We need modern, efficient ships and efficient, reliable services to carry our trade.

"But this is only part of the story - and, in many cases, not the biggest part.

"We need to look at the total transport system and to ensure that each link is efficient in itself and that it contributes to an efficient transport chain.

WOOL COSTS

"In the wool trade with Europe, the cost of shore-based

transport operations at both ends of the link can be as high as 70pc of total door-to-door costs. For many other commodities it is up to 50pc, depending on distance travelled and complexity of packing and unpacking operations.

"Unfortunately, the Australian land-based component of shipping our overseas trade generally tends to be higher than that of many of our competitors.

"The reasons for this are complex - and we are not here to apportion blame to any particular group - or to engage in fruitless witch-hunts. Too many years and too much effort have been wasted already searching for scapegoats.

"The blame rests with all of us for not having come to grips earlier with the problems on a joint cooperative basis - for having let them fester for so long.

"The purpose of this seminar is to try to identify the problems, to give them an airing, to put them under the microscope, and to come forward with practical remedies to those problems.

"The future wellbeing of Australia demands that the interested parties get together and examine closely what is happening and what can be done about it. That is why we are all here today.

I firmly believe that, together, we can achieve improvements which will be in the interests of all Australians.

"Let me quickly cover a few aspects of shore-based costs incurred by our international trades.

COMPONENTS

"On one hand, we have the relatively efficient movement of iron ore from mine to ship where ownership and control of the transport chain is frequently vertically integrated, and dedicated to a single task with very high volumes of throughput.

"At the other end of the scale, we have the movement of general cargo and all-purpose containers from a large number of origins.

- to a wide range of markets
- by privately-owned trucks on public roads
- or by State (and Federal) railways (also carrying passengers and other goods)
- into publicly-owned ports subject to varying degrees of autonomy
- in which private stevedoring operations are largely owned by overseas shipping consortia
- through terminals that are often heavily under-utilised
- and in volumes from less than one container load on a truck to large numbers on a train.

"It is at this end of the scale that many of our vital and high value exports are carried – particularly wool, meat and our manufactured goods.

"It is here that the tangled web of often contradictory interests seems to debilitate any effort to improve efficiency. An improvement in one area is blunted by lack of coordination with another.

"It does not take much effort to identify some of the problem areas, many of which are quite popular with the media.

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"There is the oft-repeated claim that the productivity of our container terminals lags behind that achieved overseas. This is an area for experts and statisticians, but I will say that we do have some of the most modern equipment available. Some would say we have too much - a possible case of over-investment.

"If we are not making the best use of what we have, then we should. We need to know the facts. We need to be sure we have the right balance of equipment in the right places. Money is too scarce for governments, companies and consumers to waste it on expensive equipment that is used ineffectively.

"Unfortunately, it is often true that, whilst the outcome is costly to the nation and the consumer, there are profits to be made by exploiting monopoly power.

"Of course there are problems to be addressed and further efficiencies to be achieved. But our record is not all bad.

"The number of hours lost due to disputes on the waterfront has declined dramatically to historically low levels. Ship days lost in 1983 declined by some 50pc, while manhours lost fell by 36pc. This is a significant achievement.

"That is not to say we cannot look to further improvement. We can and we must.

"Workers in our ports and hinterland have coped with the major revolution in technology - the introduction of containers.

"By sensible management and good co-operation, the Waterside Workers Federation of Australia has reduced its numbers by two-thirds over the last 10 years. Redundancy arrangements have achieved this with a minimum of disputation. There have been major changes in work practices in conjunction with these changes. Productivity rates have improved dramatically.

EFFICIENCY

"Containerisation has now been introduced. We need to seek further gains in efficiency and we need to look at the totality of the operation.

"There are many factors which determine the productivity of our ports, beyond labour practices, labour management and technology.

"There are logistic problems associated with the great diversity of cargo types and origins. There is the restricted space available in some older berths and terminals, and the problems associated with container depots separated from terminals.

"Yet the performance of our more modern terminals in times of brisk trade does compare favourably with similar ports elsewhere in the world.

"Having said that, there is still a pressing need for improvement. The cost of Australian stevedoring operations is too high. The cost of container exchange on the Australian waterfront can be twice as high as in Europe or North America.

"Employers, unions and governments need. to work constructively together to reduce the handling cost a container and to achieve improved ship turnaround times.

"To do this we need to look beyond the falling demand for labour to make sure that our cost structures are not being inflated to protect mistaken investments, surplus capacity or otherwise impede efficiency. "Often, port performance is the end product of a chain of poor coordination.

"While shipping and stevedoring are 16 to 24 hours a day operations, land-based activities usually only operate about eight hours a day. With such a mis-match, bottlenecks are inevitable. Queues form at port gates and costly extra storage facilities are needed.

"Synchronisation of rail movements with ship schedules is another complex area in which cooperation and coordination are an essential, but an all too often lacking, component of efficiency.

"Delays can and do occur through the mis-matching of customs and other regulatory procedures and through the time-consuming processing of a morass of documentation.

"In this regard, recognition must be given to the efforts of bodies such as the Marine and Ports Council of Australia and the Association of Australian Port and Marine Authorities in improving co-ordination of policies and practices.

"The port gate is served by a vast network of roads and railways. This government has already greatly increased its roads development program to \$1267M in 1983-84 - an increase of 49pc over the amount spent in 1982-83.

"This expenditure is making significant improvements to the national highway system linking main centres, and also to the arterial road system. These road developments will help to reduce the transit time of road freight operations, improve the efficient use of road vehicles and help reduce costs.

"The National Road Freight Industry Inquiry, under the chairmanship of Tom May, is due to report to me soon.

"It is not only considering specific matters of concern to the industry, but also addressing the complex issues of land transport pricing, including road/rail competition.

"It is an essential precursor to the development of an Australia-wide land transport strategy to take us into the next century.

"The government also looks to the further improvements of our national rail system, which is, and will remain, a vital part of the infrastructure supporting our international trade.

"Railways are facing major changes and, I believe, must move forward and embrace the benefits of new technology. No doubt this will give rise to a need for redeployment and retraining — sensitive issues, but issues which must be addressed. Australian railway management must work with the labour movement to achieve improvements which will ultimately benefit all Australians.

"Finally, although we are here to focus on land-based costs, I should at least mention some of the government's initiatives in the "blue water" area. We now have tax legislation which will allow Australian shipowners to have a comparable financial based to that available to overseas owners.

"We have given ANL a capital injection, a new top management team, more independence and more flexibility to operate commercially.

"We have initiated continuing consultations with the seagoing unions, aimed at improving productivity, from which the "ACTU package" was developed and which was recently presented to government.

"The package represents a genuine effort to address the complex issues which face the maritime industry and I congratulate the Australian Council of Trade Unions and the seagoing unions on their initiative. The government is currently considering the package.

"I think it is fair to say that the Federal Government has "bitten the bullet" over the last 16 months and made a determined effort to address the major transport problems that face Australia and to seek workable solutions.

"We are establishing the foundations for the development of an efficient Australian shipping industry, able to compete on its merits in international trade. We are establishing a sound basis and it is now up to those in the industry to work together to take advantage of the opportunity in front of them.

"Let's now extend the process into related shore-based activities". (South Australian Ports & Shipping Journal)

Bell Bay – Industrial base with a big future : Port of Launceston

The Bell Bay port area will be the springboard for more industrial expansion, says the Warden of George Town, Councillor Jim Mooney.

The George Town Council has had more inquiries about industrial sites in the past three months than it had in the previous three years.

Councillor Mooney said: "It's the port facilities and the cheap industrial sites which have brought the inquiries.

"An industrialist could not buy or lease land for light or port oriented industries anywhere in Australia as cheaply as at George Town or Bell Bay.

"At George Town and close to Bell Bay, the Department of Lands have established subdivisions for light industries with fully serviced blocks in the half to one acre size.

"At Bell Bay, the Port of Launceston Authority has extensive land reserved for port oriented industries and will discuss reasonable terms with prospective industrialists.

"All the blocks are adjacent to the State's rail system, connected to the main highway network and linked with interstate and overseas ports through Bell Bay.

"There's also ample fresh water, electric power and commercial assistance available from the Tasmanian Development Authority."

"Other attractions for industries include a skilled labour force, with many local women seeking work, and the George Town Council's rate remissions for labour intensive industries until they become established," Councillor Mooney said. (PLA NEWS)

Bid to make port safer : Hong Kong

The Marine Department is evaluating a sophisticated multi-million dollar computerised radar network and communications system for controlling shipping.

A recent study of shipping routes and vessel movements in HK waters, conducted by the Marine Department and the Canadian Commerical Corporation, showed a high mathematical risk of accidents in some areas, such as Green Island or just west of Tsing Yi.

And the risk is expected to grow as traffic increases. Last year 22,959 ocean-going vessels entered and left HK. By 1994, this figure is expected to have risen to some 33,000.

The Marine Department's preliminary design for its vessel traffic management system is intended to reduce the risk to vessels, lives and the environment, and to improve traffic flow. It would feature radar, VHF radio direction-finding and VHF radio equipment and computers to analyse the data and present them on monitors. Six radar stations would be needed with a control centre.

The electronic aids would increase safety by offering captains advice on traffic flow and reduce delays at berths, anchorages and pilot stations. They would also have a valuable role in search and rescue operations.

"Nagoya Port Building" — a new symbol of the Port



At the Port of Nagoya, a new symbol has recently appeared in the shape of the 63 m-high Nagoya Port Building, seen as "a white sailboat floating on the blue sea," which was opened to the public on July 20, 1984.

On the previous day, the opening ceremony was held at the "Recreation Plaza" on the Port's "Garden Pier," to which some 400 people from Japan's political, economic, port and transportation circles were invited.

The completion of the building had long been awaited, not only by the citizens of Nagoya but also the sailors who use the port, since until recently the port had been somewhat short of attractive sights and recreation facilities.

The Nagoya Port Building boasts excellent facilities and it also houses the "Nagoya Maritime Museum," one of the most prestigious of its kind in Japan. The museum, which is regarded as the central attraction of the building, consists of three parts. The first is the "Port of Nagoya Today" section, where visitors can learn about the various roles played by the port, maritime transportation, trade as well as the relations the port has with its citizens. Then comes the "Sea and Ships" section, which deals with the physical aspects of the sea and ships. The third part is entitled "History of the Port of Nagoya," and consists of presentations of the historical development of the Port of Nagoya in relation to the natural features of Ise Bay.

In each section, visitors can learn about the functions of

ports, harbors and maritime enterprises in general, in a most effective way. The displays of the respective sections are all arranged in such a way that the visitors feel as if they are actually "seeing," "touching" and "hearing" the various features with the aid of computers, visual and sound systems and other up-to-date technology.

On the first floor of the building, there is a spacious lobby where people visiting the Port of Nagoya can rest. Waiting rooms for group visitors and souvenir shops where people can buy various marine-related accessories are also provided. When passenger vessels are in port, passengers can obtain the necessary information concerning their cruises as well as buy souvenirs.

On the top floor of the building -53 m above the ground - there is an observation room, where people can look over the entire port and view the large ships from various countries anchored there.

The building also includes facilities such as restaurants, conference halls and auditoriums, which can be used for various kinds of exhibitions, events, film presentations or lectures.

Let us look at the background to the construction of the Port Building. In 1977, a group of experts was formed to consider the future of Nagoya Port. The group, whose members represented academic circles, local trade unions, and other port-related businesses, submitted to the President of the Nagoya Port Authority their recommendation concerning the development of the port into a place more attractive for its citizens. In accordance with the recommendation of the group, the Nagoya Port Authority established the "Green Park" – oriented port redevelopment plan for what was then called the "No. 2 Area" (later renamed the "Garden Pier"), and began the development of the project in 1978.

Following the development of the Green Park and the design of the Port Building, the construction of the latter commenced in 1982. For the Port Building, a design competition was opened to those who worked or resided in Aichi Prefecture. Seventy-three entries were received and the chosen design was that of an architect of Nagoya City. The winning designer wanted to create an image of "a white sailboat floating on the blue sea" in an attempt to inspire in people a fascination for the ocean. He succeeded in bringing the image into being, and indeed his design won the highest acclaim as being the most appropriate symbol for the Port of Nagoya.

The 7-story building covers 2,800 m/sq. of land and was finally completed 10 years after its inception, at a cost of 3.5 billion yen.

To coincide with the completion of the Port Building, a fountain has been laid out. It depicts the geographical features of the Port of Nagoya, thus adding a final touch to the Green Park on the Garden Pier.

Because of the newly-opened Port Building the number of visitors to the Port of Nagoya has dramatically increased. Moreover, with the school summer vacation in progress, daily totals of 5,000 on weekdays and up to 10,000 on Sundays have been recorded.

With this new symbol, the Port of Nagoya is rapidly moving into the spotlight as Nagoya's new place of interest.



Fireworks display over Port of Nagoya on festival night

Record port cargo year likely : Lyttelton Harbour

Lyttelton handled 1.47 million tonnes of cargo in the seven months ended 30 April 1984. That was 26 per cent more than in the same period during the Lyttelton Harbour Board's previous financial year.

However, the major contribution to the increased tonnage this year is attributable to the Wellington, coastal and overseas roll-on, roll-off services, as well as the container terminal and bulk cargoes.

Lyttelton looks set to handle a record tonnage this financial year, which will close on 30 September.

The Port handled about 2.1 million tonnes in the 1982-83 year and that was within 170,000 tonnes of the 1974 record which was achieved when the Lyttelton-Wellington inter-island steamer express service was still operating. (PORTSIDE)

Quality Circles Seminar for ASEAN ports : Port of Singapore

A seminar on Human Resource Development through Quality Circles held at the World Trade Centre from 30 Jul. - 1 Aug. '84.

The seminar was organized for the ASEAN Port Authorities Association (APAA) by the Port of Singapore Authority, National Productivity Board and Civil Service Institute.

Top executives from the three organisations presented papers at the seminar.

Thirty-three port officials from Malaysia, Indonesia, Brunei and Singapore attended the Seminar. They were acquainted with the philosophy, concepts, techniques, training implementation and experience of the Quality Circle movement in Singapore and the PSA.

There were also group discussions and presentations by two of the Port's quality circles.

Mr. Wong Hung Khim, General Manager of PSA, and Chairman of APAA opened the seminar on 30 Jul. '84 at Hall 2 of the World Trade Centre. Opening address of Mr. Wong Hung Khim, Chairman, ASEAN Port Authorities Association & General Manager, Port of Singapore Authority



It is my pleasant duty as Chairman of APAA and General Manager of PSA to deliver the opening address at this Seminar on "Human Resource Development Through Quality Circles". This Seminar is organised by PSA with the assistance of the National Productivity Board and the Civil Service Institute of Singapore. On behalf of APAA and PSA, I wish to thank these two organisations for their readiness to help in the development of human resources in the ASEAN ports.

Going through the Seminar programme, I note that the three days you are required to spend at the Seminar will be well worth the while. The agenda is comprehensive and individual items promise to be infomative, interesting and of practical value. The array of speakers who will be making their presentations have distinguished themselves in the QC movement of Singapore. They include some promoters of the QC Movement at the national level as well as some practitioners from the PSA. To maximise the interaction between speakers and participants, we have kept the number of participants to a manageable size. Altogether we have 33 participants comprising 15 from Indonesia, 13 from Malaysia, 1 from Brunei, 3 from the PSA and 1 from NPB. I wish to extend a very warm welcome to our overseas participants including those from across the Causeway.

APAA was founded 10 years ago in Manila. In the early days of APAA, our attention was focussed on how and in what manner we could, as a regional body, use our collective strength to obtain from the highly developed countries financial and technical assistance to modernise and develop the facilities and services of our ports. The scenario is slowly changing as APAA grows with maturity and self-confidence. Our new emphasis is on identifying areas where we can share expertise and experience among ourselves and help each other in a spirit of "gotong royong". This Seminar is a good example of the spirit of regional cooperation and goodwill that exist very strongly in APAA. It is a befitting forerunner of our 10th Anniversary celebrations which will be held in Bangkok during the 10th APAA Annual Meeting in September this year. Over the years, technology has been advancing at a rapid pace in the developed countries and the developing countries have been making strenuous efforts to avoid falling too far behind.

However, progress in dealing with human resources has been less spectacular in the developed countries and far less productive in the developing countries. I suspect that the simple explanation for the different rates of progress in these two fields is that machines do not talk back while people do. Consequently, there has been a general awakening in the Asia Pacific Region towards the need to develop human resources to achieve higher levels of productivity thereby enabling better rewards and living standards.

In the circumstances, the advent of the QC movement is both unique and timely in that it teaches us how to optimise the efforts of our own people as well as to make the best improvements possible to suit our own particular environments. In other words, internal resources could provide us with the means to our progress.

The improvement of quality and productivity in an organisation is always an admirable and desirable objective. However, let me caution you that while the learning of QC tecnniques is not difficult, putting it into practice is. The problem is getting the employees to accept the concept, adopt the right attitude and participate in the movement as though their lives depended on it. For example, in Singapore it has taken the best part of 3 years of deliberate and concerted effort from the national level right down to the company level to get to where we are. And we are still very much in the infancy of the QC Movement. During the Seminar, some notable examples of applications of QC techniques in the PSA will be presented to you to give you a taste of what has been achieved. They help to highlight not only the fact that it can be done but also what could be done. Nonetheless I wish to stress that for the OC Movement to succeed, you must devote considerable time and effort and this seminar only hopes to give you a glimpse of what lies ahead.

It is my fervent hope that this Seminar would sow the seed that would germinate and grow robustly and bear fruit in the form of successful QC movements in all ASEAN ports. I look forward to the day when prize-winning QC presentations either in person or on video-tape from the various ASEAN ports would embellish the agenda of the APAA Annual Meetings of the future.

With these thoughts, it remains for me to say how happy I am to declare this APAA Seminar on Human Resource Development Through Quality Circles open and wish all its participants fruitful deliberations.



Presentation by Mr. Koh Juan Kiat, Director, Labour Management Relations Group, National Productivity Board





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