

**Price: £15.50**

# Containerisation International Yearbook 1978

**Editor**  
**R. F. Gibney**

**Compiled by Leo Denton and the staff of *Containerisation International***

National Magazine Co Ltd • London

**TALK TO**

*about containers.*

**YORK**

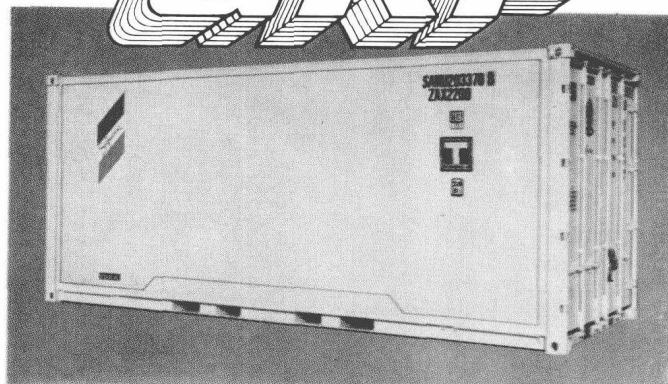
Y016

**STEEL OR GRP**

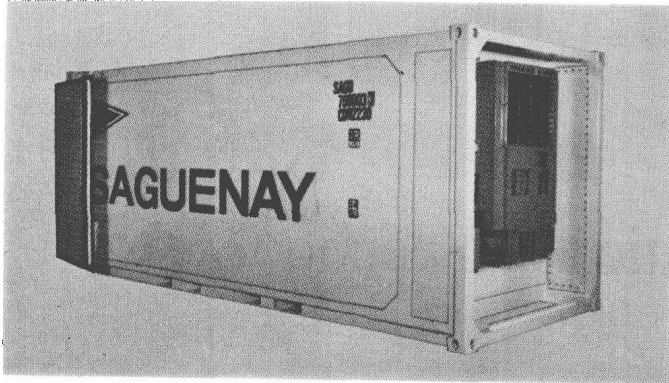


**York CG series all-steel containers.**

All York containers are protected against corrosion by our 3-year paint guarantee.

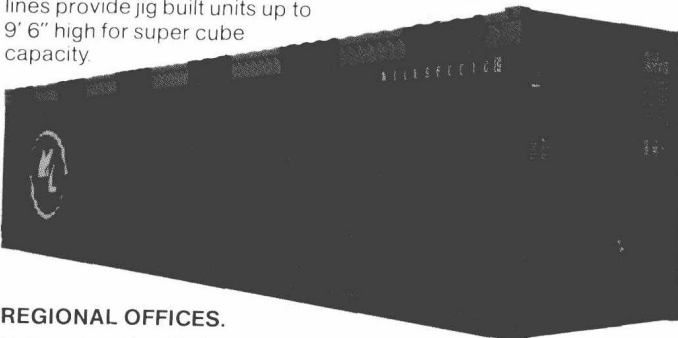


**York GRP series.** Built with an all-steel frame with front, side walls and roof of one-piece panels of Glass fibre Reinforced Plywood (known as FRP in North America).



**Refrigerated Containers.** Complete controlled temperature transportation for perishable cargoes, in steel or GRP. Diesel or electrically operated units.

**Hi-Cube Containers.** York's volume production lines provide jig built units up to 9' 6" high for super cube capacity.



**REGIONAL OFFICES.**

**Rotterdam.** York Trailer Europa B.V., Noldijk 113, Barendrecht. Telephone 01857-1444. **Telex 21510.**

**Toronto.** York Transport Equipment Limited, 10 Kelfield Street, Rexdale 604, Metropolitan Toronto, Ontario, Canada, M9W 5A2. Telephone (416) 247-7421. **Telex (807) 21-06-965732.**

**Hamburg.** Carl Tiedemann, 2 Hamburg 11, Rödingsmarkt 20/26. Telephone 040/36 14 41. **Telex 2-12524 CT-D.**



**Open Tops.** Most of the world's biggest users have York open tops at work 20 fts. 40 fts and gooseneck-tunnel types.

It will pay you to talk to York when you are shopping for containers and equipment.

Besides steel and GRP (or FRP) York containers are built in aluminium alloy too. In dry freight, insulated or refrigerated form.

And if you value a one stop deal, there are SK chassis, tipping skeletons, bulker containers and dockside trailers as well as service parts and repairs all from one integrated manufacturer—York.

Add to this range York's highly competitive Export Lease plan and you have what must be the finest proposition around.

We would like to tell you about it. Let us send you a telex quote by return.

**Talk to York—you'll be glad you did.**

**YORK**

**York Trailer Company Limited, Northallerton, Yorkshire, England.**  
Telephone: Northallerton 3155. Telex 58600.

# Contents

- 1. SOLVING THE INTERMODAL PUZZLE** *p7*  
Assesses progress in container transportation to date and highlights the problem areas that combine to make a puzzle of the intermodal dream.

- 2. WORLD CONTAINER PORT TRAFFIC LEAGUE** *p16*  
World container terminals and their comparative traffics expressed in TEUs.

- 3. COUNTRY-BY-COUNTRY SURVEYS** *p37*  
**Europe** *p38*  
**North America** *p86*  
**Far East and Asia** *p115*  
**Australasia** *p131*  
**Middle East** *p140*  
**Caribbean and Central America** *p146*  
**South America** *p150*  
**Africa** *p152*  
**World container ports** *p157*

- 4. SERVICES** *p181*  
**(i) Deep-sea operators** *p181*  
Guide to company operations and fleets; route analysis.  
**(ii) Short-sea operators** *p213*  
Company information, vessels and routes served.  
**(iii) Combined transport operators** *p233*  
A representative guide to current international transport operations, listing companies and routes served.  
**(iv) International rail services** *p250*  
Services linking countries in Europe and Asia.  
**(v) Landbridges and minibridges** *p255*  
Landbridge services to the Far East across Siberia, and via the US. Minibridges from Europe to the US West and Gulf coasts, Far East to US East and Gulf coasts.

- 5. 'CONTAINERISATION INTERNATIONAL' REGISTER OF CONTAINER-CARRYING VESSELS** *p262*

A detailed vessel-by-vessel register of ships in service and newbuildings.

- 6. EQUIPMENT GUIDE** *p311*  
**(i) Containers and trailers** *p312*  
**(ii) Container handling** *p328*  
**(iii) Container stowing** *p346*  
**(iv) Components and ancillary equipment/services** *p352*  
**(v) Shipboard equipment** *p362*  
**(vi) Swop body systems** *p365*  
**(vii) Trade names** *p366*  
**(viii) Manufacturers' A-Z listing** *p368*

## APPENDICES *p403*

- 1. UNIT LOAD DATA** *p403*  
International standards for freight containers and pallets; constructional ratings, dimensions and loadings.  
**2. LEASING COMPANIES** *p407*  
**3. REPAIR COMPANIES** *p417*  
**4. CONTAINER CERTIFICATION** *p424*  
Requirements for safety in handling, customs approval and food transport, with a guide to certification organisations.  
**5. INSURANCE** *p428*  
Guide to risk cover available.  
**6. GLOSSARY** *p432*  
Abbreviations and shortened forms of company and organisational names in common usage.  
**7. INTERNATIONAL ORGANISATIONS AND ASSOCIATIONS** *p434*  
**8. INTERNATIONAL BIBLIOGRAPHY** *p436*  
Books; major reports and statistics; periodicals.

## SHIPS INDEX *p441*

## GENERAL INDEX *p445*

Index to advertisers *p451*

# Acknowledgements

The compilers express their appreciation to those organisations and individuals who have, by their ready assistance or use of their material, contributed to this edition of the *Yearbook*.

These include:

British Standards Institution

Department of Employment: Health and Safety Executive

Department of the Environment

HM Customs and Excise

International Standards Organisation

Herbert Lass

Society of Motor Manufacturers and Traders

M. Sundaresan

Truck Trailer Manufacturers' Association, USA

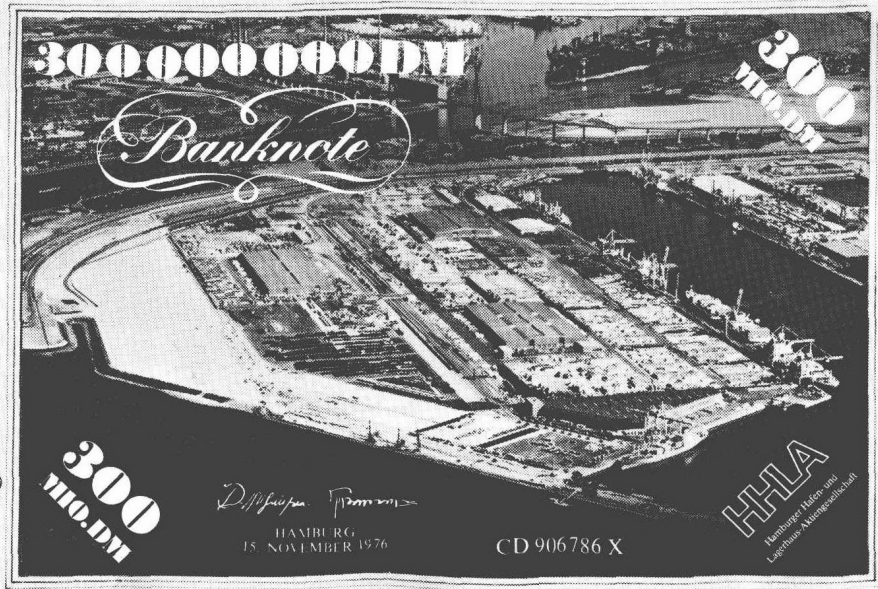
ISBN 0 85223 130 x

© Copyright 1978 by  
The National Magazine Co Ltd  
Chestergate House, Vauxhall Bridge Road  
London SW1V 1HF

Printed in Great Britain by  
Ebenezer Baylis and Son Ltd  
The Trinity Press, Worcester and London  
and bound by  
G & J Kitcat Ltd  
London SE1

**HHLA  
CONTAINER  
TERMINAL  
BURCHARDKAI**

1,300,000 SQ.M., WITH QUAY  
LENGTH OF 2.2 KMS, 8 CON-  
TAINER CRANES, 2 RO-RO  
BERTHS, PACKING SHEDS OF  
143,000 SQ.M., 3 TRANSTAINERS,  
35 VAN CARRIERS, 3 MOBILE  
CRANES, TRACTORS, CON-  
TAINER REPAIR SHOPS, EDP.



## ...this is what we have spent on making containers flow smoothly.

Technology costs money. Especially at the start. But it pays in the end. By increasing speed, service and safety. We believe our calculation is correct. And will be to your advantage.

Your general cargo will also

move faster by container. Particularly if you ship it through our Burchardkai terminal. 1¼ million "boxes" have passed through this terminal since the first containership berthed there in 1968.

All have fared well. The

flow couldn't be smoother, for the HHLA Container Terminal ranks as one of the world's foremost container complexes - by virtue of its size, equipment and facilities, and the 1,000 container "professionals" who operate it.

# HHLA

**Hamburger Hafen- und Lagerhaus-Aktiengesellschaft**  
Bei St. Annen 1, 2 Hamburg 11, Tel.: (040) 30 88-1, Tlx.: 02 161 209

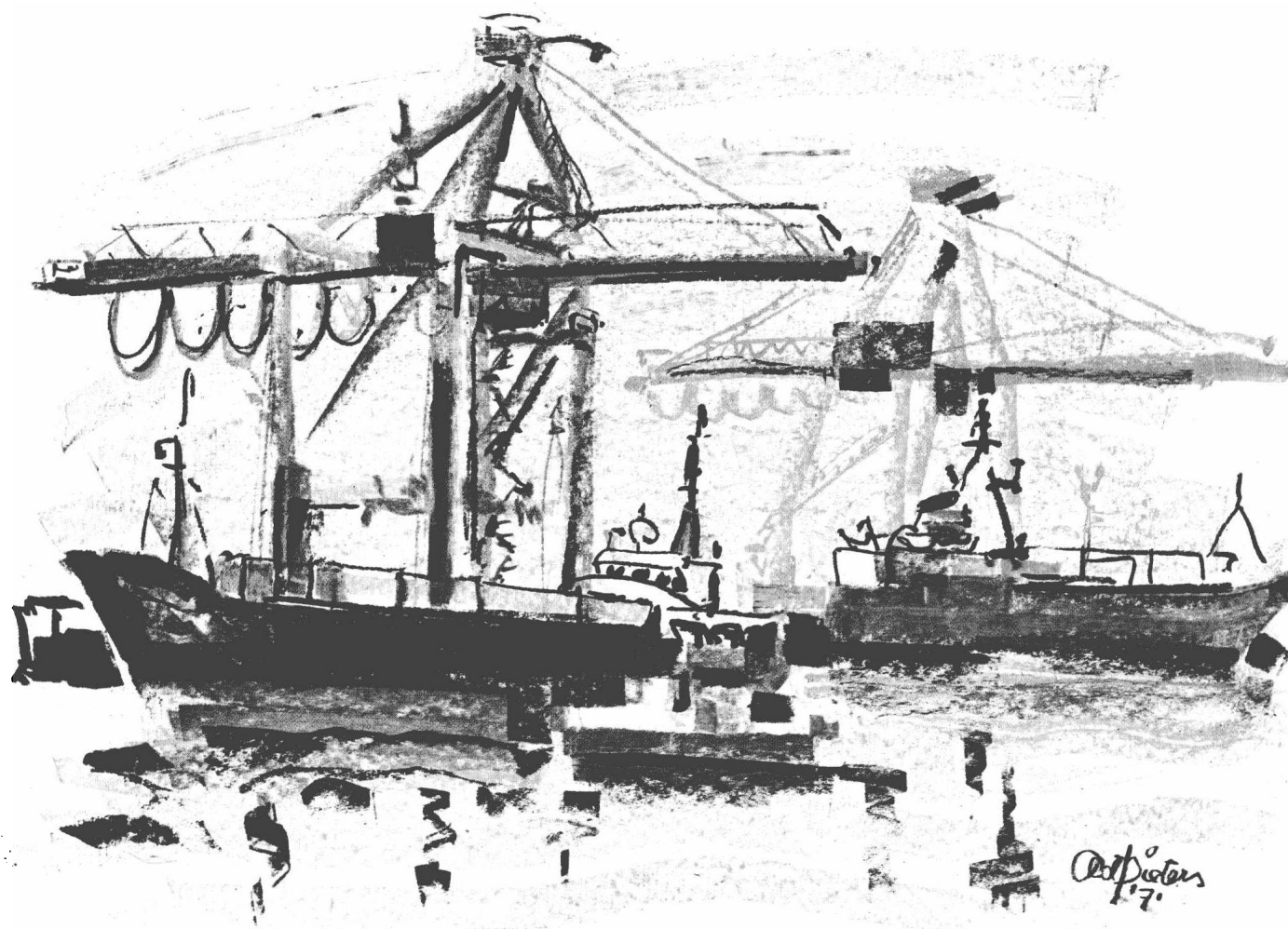


Situated in Rotterdam, gateway to Europe, our container terminal handles hundreds of thousands of containers without difficulty. Guided by a unique control system we provide fast throughput, efficient storage and high productivity.

- 7 Seattleweg - 3000 HK Rotterdam
- P.O. box 7400
- Phone 010-31.69.11
- Telex: 28056
- Cable Euroconter

# ect

**europe container terminus b.v.**  
**rotterdam**



# I. Solving the intermodal puzzle

*Although world trade failed to recover as much in 1977 as had been forecast, the year as a whole was a good one for containerisation. True, a number of lines, mainly Scandinavian, persisted in their preference for ro-ro and ordered new tonnage accordingly but they were the exception rather than the rule. And 1977 certainly saw the laying to rest of the Lash dream with carriers abandoning the barge-carrying concept in both transatlantic and transpacific liner trades.*

*Growth was fostered by the containerisation of many new routes. The most significant development in this context was the mushrooming of services to the Mid-East from all parts of the world. Expansion, though, was not limited to that sector. 1977 saw the start-up of the long-planned-for Europe/South Africa service as well as growth on newer routes, such as Europe/New Zealand and Europe/Caribbean, and the more established ones like the transpacific. As for long term prospects, the*

*most interesting event was undoubtedly the promised start of a US/South America container service.*

*This growth has not been without its share of problems either: one of the most critical being the strain it has placed on port infrastructures in some parts of the world. This difficulty is being solved but other more intractable ones remain. One of these continues to be the kind of role that governments, especially that of the US, should play in shipping and how this affects the intermodal concept. Concern also continues to be expressed by Western shipowners over the developing Soviet presence on many key routes.*

*Among other factors seen as posing a long term threat to shippers being able to take full advantage of containerisation are the questions of dock labour's attitude to the box and the vexatious topic of freight rates, neither of which looks like being resolved in the near future.*

1977 was an expansionary year for international container trades, not because of a massive upswing in the world economy as a whole, although pockets such as the Mid-East and Japan continued to do well, but largely because several new routes were containerised. Of equal significance in this picture of growth was the increasing hegemony of the cellular vessel on major liner trades. This dominance is being achieved at the expense of other new shipping technologies such as the Lash vessel and the ro-ro ship.

Research carried out by *Containerisation International* shows that by October 1, 1977, there were only 117 pure ro-ro container carrying vessels of over 250 TEU capacity apiece either in service or on order. At that time there were 62 vessels offering 42,000 TEU of theoretical container space in operation and a further 55 such vessels aggregating 47,000 TEU on order.

These figures compare with the 669 cellular and/or lo-lo container carrying vessels of over 250 TEU capacity in service on October 1 last year. Of these, 406 ships aggregating 432,000 TEU were fully cellular, 232 vessels of 101,500 TEU were semi-containerships, either cellular and/or lo-lo, and 31 ships totalling

25,000 TEU were cellular with added ro-ro capability. On October 1 last there were a further 224 cellular and/or lo-lo container carrying vessels of over 250 TEU on order. The capacity of these vessels is 186,000 TEU. Thus, an overall comparison shows that 902 cellular and/or lo-lo ships totalling 750,000 TEU will be in service by 1980 as against 117 pure ro-ros of 89,000 TEU combined capacity.

Moreover, it is also worth noting that a high percentage of the ro-ro orders continue to come from the Scandinavian camp - notably Bröströms, Transatlantic, ScanAustral and Wilh Wilhelmsen. These companies are all longtime supporters of the ro-ro concept because of its supposed ability to carry their major exports, such as forestry and allied products, more efficiently. It is also significant that a large number of other ro-ro newbuildings will be deployed on Mid-East services either out of the US or North Europe. If these two categories are discounted the ro-ro ordering picture looks considerably bleaker, with only the Australia/Straits trade, arguably a shortsea route, and the Europe/Indian Ocean/Far East/Pacific and Europe/South Africa routes figuring.

### Bad year for Lash

This disparity between the growing popularity of cellular vessels and other modern forms of cargo liner tonnage is even more apparent in the case of ocean-going barge carriers which, with the exception of Lykes Bros' Seabees, means Lash. 1977 was not a good year at all for the supporters of Lash. Waterman's US order for two were the first contracted since 1972. Worse still, some that were already in service are in the process of being converted to cellular container-ships. Thus Pacific Far East Line (PFEL) demonstrated the inability of Lash to compete in a major liner trade like the transpacific by its decision to convert its four Lash vessels to containerships. This step meant that there were only 23 barge-carrying vessels in service at the end of 1977.

Although the booming Mid-East market initially took to ro-ro with a great deal of enthusiasm, the balance there is now increasingly moving in favour of containers. As of mid-1977 there were over three times as many TEU running each week into the Mid-East on lo-lo vessels as ro-ro. This phenomenal and largely unplanned expansion was certainly one of the most positive developments last year, although how long it can be sustained at its present pace remains to be seen.

### Consortorial plans

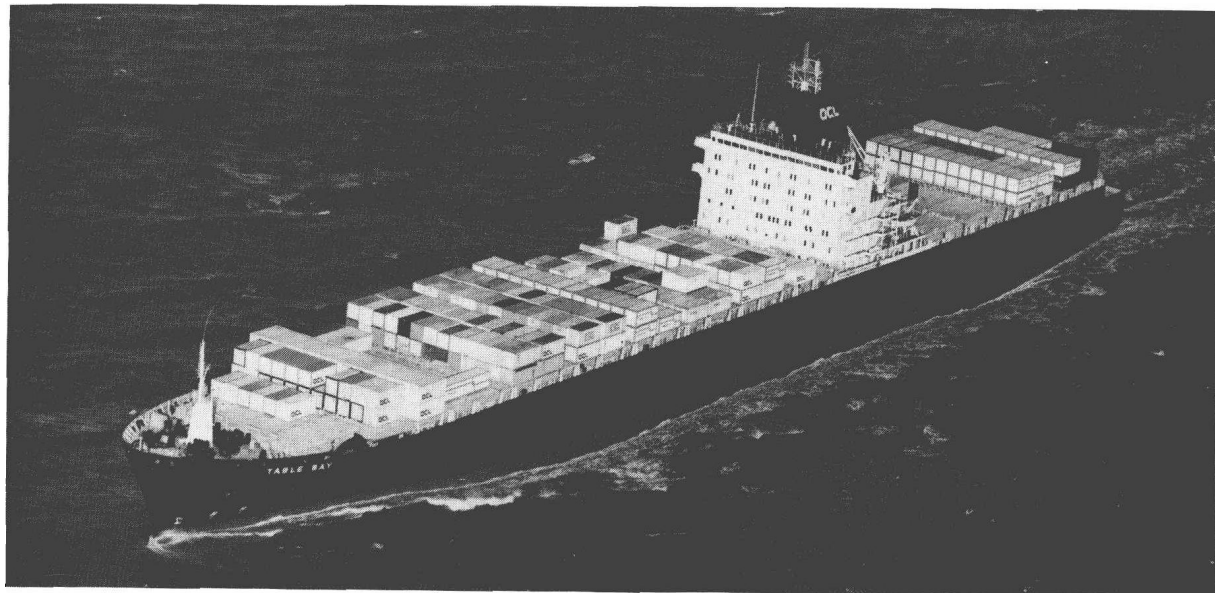
Expansion on other trades was of a more planned nature in 1977. In many instances it featured the now well-tried and proven practice of consortorial ordering and operating of containerships by long-established conference carriers. A classic example of this studied approach has been the South Africa/Europe trade, where a number of lines with traditional interests on the route have come together to form Southern Africa

Europe Container Service (SAECS). A total of twelve containerships has been ordered for this trade and 1977 saw the arrival of the first three; the final nine are being phased in during this year and into 1979.

Their début is not being made at the most auspicious time though as a combination of factors, including political uncertainty in southern Africa as a whole, the imposition of import restrictions on certain goods by the South African Government, and a slow rate of growth in the Republic's economy, have combined to reduce the volume of trade on the route. For this reason there has been talk of having to charter out some of the new ships or, worse still, lay them up even rather than introduce them to service. Nevertheless, all the parties concerned are hoping that the current stagnation in the South African economy will be ended and trade picks up; if not they will be left with some mighty large tonnage on their hands, as nine of the vessels have capacities of 2,450 TEU.

Another new container service planned by a group of conference lines that got underway in 1977 was the Australia New Zealand Container Service (ANZECS). This service is in reality an extension of the well established Australia Europe Container Service (AECS). The latter has been operating eleven vessels on the Europe/Australia run, but Anzecs will ultimately be deploying fourteen ships to serve Australia and New Zealand. Like the South African venture, this operation has not been without its share of problems but this time the difficulty has centred on congestion at New Zealand's ports and not on a lack of cargo. The congestion was expected to last well into this year. In a way the ANZECS' member carriers have only themselves to blame, as their dithering between 1969 and 1974 as to whether or not they were actually going to serve the New Zealand trade with containerships has

*The first of ten 2,436 TEU cellular containerships for the Europe/Southern Africa trade, OCL's Table Bay, entered service in November 1977*





**Table 1:** Annual container carrying capacity of vessels over 250 TEU introduced to service since 1967; cumulative growth of fleet; and rate of increase in new capacity added to existing fleet each year

Year	New ships added	Capacity in TEU	Cumulative fleet (ships)	Cumulative world fleet in TEU	% TEU growth on preceding year's total
1957/1967	71	34,430	71	34,430	—
1968	45	30,129	116	64,559	87.5
1969	57	45,981	173	110,540	71.2
1970	45	42,072	218	152,612	38.1
1971	52	45,884	270	198,496	30.1
1972	83	110,424	353	308,920	55.6
1973	76	73,993	429	382,913	23.9
1974	56	36,796	485	419,709	9.6
1975	55	33,645	540	453,354	8.0
1976	68	50,094	608	503,448	11.1
1977	154	121,811	762	625,259	24.2
1978	183	146,969	945	772,228	23.5
1979	64	57,162	1009	829,390	7.4
1980	10	9,515	1019	838,905	1.1

been one of the factors inhibiting the development of specialist facilities by that country's numerous harbour boards.

Port congestion problems and other difficulties associated with a lack of facilities have had to be faced by another new major consortorial service out of Europe that swung into top gear last year, Carol. By March/April 1978, this operation will have six ships in service providing weekly sailings between north Europe and a number of Caribbean destinations. The Carol members had hoped to get round the problem of a lack of container facilities at some Caribbean ports by equipping their ships with gantry cranes but this has not been sufficient to overcome the difficulties encountered at harbours such as Port of Spain, Trinidad. There an expanding economy, based largely on oil revenues, has encouraged an influx of imports, the volume of which sometimes proved too much for Port of Spain to cope with. As a result vessels were obliged to queue up. In this context the container situation should have eased a little as Trinidad took delivery of two Portainers in 1977.

This tale has of course been an only too familiar one in the Mid-East and West Africa but in both of these areas the situation eased during 1977 as outside consultants were brought in to advise local port authorities on the best ways of easing the congestion. However, until modern container and other facilities are completed in these areas and the respective countries' general transport infrastructures improve, congestion will continue to be a recurring problem.

#### West African boom goes on

In the case of West Africa, the trade to that area, especially from both Europe and North America and, to a lesser extent, the Far East, continues to be buoyant. Growth, as in the Mid-East, has been a spontaneous reaction to a market situation rather than a planned development by major conference carriers. True, conference groupings on the various trade sectors, ie the

UK, continental Europe and North America, show no signs of stagnating, but the dynamic market conditions have encouraged a host of independent, non-conference operators to test the water and, having found it to their liking, swim with the tide. How long this growth can be sustained remains to be seen, but from mid- to late-1977 there was no sign of a let-up in the number of new carriers wishing to serve West Africa from Europe, the US and even the Far East. Many of these new ventures have been ro-ro but, as in the Mid-East, the container bandwagon continues to roll faster and faster.

Expansion of container activity in 1977 was also sustained by growth in the areas where the box is now well established, such as the Pacific Basin. Here yet again the dominant factor proved to be the continuing strong performance of the Japanese economy and the ever-improving export activities of places such as Hong Kong, Taiwan and Korea. Thus even on the volatile and imbalanced transpacific trades (trade is stronger eastbound than westbound), many carriers were able to boost their capacities and new lines such as Hapag-Lloyd planned to enter the fray. Many transpacific lines continued to extend their services into South East Asia, mainly through the use of feeders (either their own or those of other carriers). New operations also developed between Australia and, more recently, New Zealand and the Orient as a whole.

On the North Atlantic there has been little expansion by the conference lines, although towards the end of last year West Germany's Hapag-Lloyd began the process of introducing larger vessels and ACL planned to put two more ro-ro/containerships into the Canadian trade. Apart from the big question mark hanging over the conference status of the Soviet Balt-Atlantic Line for much of 1977, one of the major bones of contention continued to centre on the cross-border diversion of containers between the US and Canada.

On the one hand there are the Canadian gateway carriers contending that they are losing Canadian

freight to the US gateway lines, while on the other hand the reverse is claimed by the American operators, who believe a great deal of valuable US Mid-West freight moves via Canadian ports. In fact figures issued by the Ottawa-based Canadian Ports & Traffic Development Committee for the first three months of 1977 show that Canada came off better – to the tune of 943.5 TEU over the US on the East Coast. This figure was less though than the 1,696.5 TEU surplus noted for a similar period in 1976. Overall Canada is the loser; its total deficit was 6,872.5 TEU for the first three months of last year, a situation that is accounted for by a large Canadian deficit of 7,816 TEU on the West Coast.

### **South American promise**

Among all of these various developments, probably one of the most exciting decisions of 1977, and one that could have far reaching implications for containerisation, was Sea-Land Service's August announcement that it planned to start a container service between the US and Brazil/Argentina by the end of 1977/early 1978. At the time of writing, Sea-Land had been accepted as a member of the conference covering the trade, although it still had to settle certain pool matters relating to the trade. Nevertheless it was confident that a satisfactory conclusion would be reached and was still aiming to start the new service in 1978. Sea-Land plans to use three 15-knot, 600 × 35 ft capacity, C4 JC class ships to provide fortnightly sailings out of the US East Coast via Puerto Rico (interchange point for boxes to/from the US Gulf and Pacific Coasts) to four unspecified ports in Brazil and Argentina. The type of vessels it will be using are self-

sustaining, an essential feature as container-handling facilities at most South American ports are at best thin on the ground.

This US carrier's move is interesting because it is Sea-Land more than any other line that has been a catalyst in achieving the containerisation of various trades. Thus, this latest move could well do for the South American routes what Sea-Land's début in the mid-Sixties did for the North Atlantic trade and many others. The containerisation of the South American trades, especially from Europe, has been a much-talked about possible development for some time and it will be interesting to watch the response to Sea-Land's step not only of carriers on the US/South American route but also of those on the European run.

### **Port congestion**

As instanced in this article so far, one of the major problems being encountered as containerisation spreads to more trades is port congestion. To date this has been most critical in areas where services have mushroomed unexpectedly overnight to meet a strong market situation, such as in West Africa and the Mid-East. In such places vessel waiting times have been measured in weeks, even months, rather than days, because growth has been so fast that the ports and associated transport infrastructures have been unable to cope. In other areas, most recently New Zealand, congestion has resulted from a different set of factors. In the case of New Zealand, for example, the respective harbour boards were indeed aware of the expansion plans of the lines. In that country though the problem has been one of timing more than anything else. Expansion plans are underway at the main centre of congestion, Auckland, and at other ports as well but they will not be completed until well into 1978, by which time the main thrust of service development will have taken place. The simple fact is that the number of ships and services calling at New Zealand have multiplied at a faster rate than either the lines or the port authorities forecast. This situation has not been helped either by the way in which port expansion programmes are funded and implemented in New Zealand, a process that does not make for fast decisions.

As in many countries the central government plays a key role in determining port policy, and this has inevitably had a delaying effect. The overall problem of government involvement, indeed not only in port policy, but also in transportation as a whole throughout the world, is a question that continues to cause a great deal of concern to the shipping community, operators of other transport modes and the users of such services. At present their concern would appear to be channelled in two directions which, at first sight, have little in common, but on closer inspection are related since they basically call for less government intervention in transportation. The first train of thought involves the now perennial pre-occupation of ship-owning interests in the so-called 'free-world' over the threat to their free market shipping system posed by

*Congestion at the New Zealand port of Wellington has not been as critical as that experienced by Auckland. However, Wellington's Thorndon terminal is being expanded*



**Table 2:** Analysis of world fleet of container carrying vessels over 250 TEU by type and TEU capacity

Type of container carrying vessel	In service Oct. 1 1977		On order Oct. 1 1977		Total in service and on order		Percentage of total TEU
	No of ships	TEU capacity	No of ships	TEU capacity	No of ships	TEU capacity	
Fully cellular vessels	301	354,656	109	117,158	410	471,814	56.24
Converted to fully cellular	105	77,158	8	9,872	113	87,030	10.37
Semi-container (cellular and/or lo-lo)	232	101,538	89	46,632	321	148,170	17.66
Cellular with ro-ro capability	31	24,740	18	12,318	49	37,058	4.42
Barge carrier with cellular space	9	5,445	0	0	9	5,445	0.65
Pure ro-ro multi-deck	62	42,092	55	47,296	117	89,388	10.66
Total	740	605,629	279	233,276	1,019	838,905	100.00

what they see as the subsidised might of the Soviet merchant marine.

### Western concern

The second train of thought again expresses the concern of Western transportation interests but, this time, the source of their frustration is the US Government and its regulatory maze. This rules system encompasses not only shipping but also transportation as a whole and its strangling effects are, ironically enough, preventing the full benefits of containerisation from being realised in the country which gave the system to the world in the first place.

On the question of growing Soviet non-conference involvement with sophisticated tonnage, often containerships, in major shipping routes such as the North Atlantic and the transpacific, or Soviet participation in other still conventionally served trades such as Europe/East Africa, the approach of most Western shipowners continues to be predictable. Nothing new has been added to the dialogue during 1977 and there seems little chance of anything new being contributed by either side during 1978. Thus the owners have pursued their two-pronged strategy: on the one hand making every effort to get the individual Soviet lines concerned to join the appropriate conferences; while at the same time asking their respective governments to take some action. On both counts the going has been slow, with the Soviets being prepared only to make statements of their future intentions, while in the meantime going about getting trade in an appropriately capitalist marketing manner.

True, delegations from a number of Western shipping countries have met with the Soviets during the past year, one of the most recent to do so being British. This UK sortie, like many before it from other nations or national groupings, was unable to achieve any tangible results although it was hoped that some draft of general principles governing relations between liner conferences and the USSR would eventually result. Just how realistic and worthwhile such an aim in fact is remains to be seen, in the light of the now ill-fated Leningrad agreement concluded between the US and the USSR in 1976.

Ironically enough, while on the one hand berating the Soviets for their government-supported shipping activities, Western shipowners have turned to their respective governments and asked them to pass legislation to protect their (the lines') interests against the Soviet threat. Although this clamour has been heard in the UK, West Germany, France, Japan and Australia, to name but a few countries, some of the loudest and longest wails have come from the US. There, possibly inspired by moves to try to pass legislation designed to eventually reserve 9½% of all oil imports for American-flag ships, a few shipowners have asked for similar cargo preference measures to protect cargo liner traffic. Such opinion is still in the minority and, in view of the fact that the oil preference legislation was thrown out by the House of Representatives towards the end of 1977, it seemed unlikely that measures would be adopted.

Not surprisingly such measures would not be popular abroad, being viewed as yet another instance of the US Government interfering in the shipping activities of other nations. Indeed, Censa (Council of European and Japanese Shipowners Associations) had already attacked the oil cargo preference legislation. However, the US merchant marine looks like getting some protection from foreign and, above all, Soviet lines, through the so-called third flag bill which was re-introduced to Congress in 1977. In Japan too there looks like being some action as the country's transport ministry officials are said to have begun studying plans to curb non-conference shipping activities through the application of existing maritime law.

On the more particular problems of getting individual Soviet lines to join specific conferences progress has been dismal. In the transpacific arena, for example, the Soviet minister for merchant marine, Timofei Guzhenko, said in London in June, 1977, that Fesco would not be prepared to join the transpacific conferences as full members until it had its full fleet of five, fast 'K' class ships in service. On the North Atlantic, where a settlement over Soviet conference membership had to all intents and purposes been reached in 1976 it was, ironically, not the Soviets but other parties that eventually stymied the agreement.

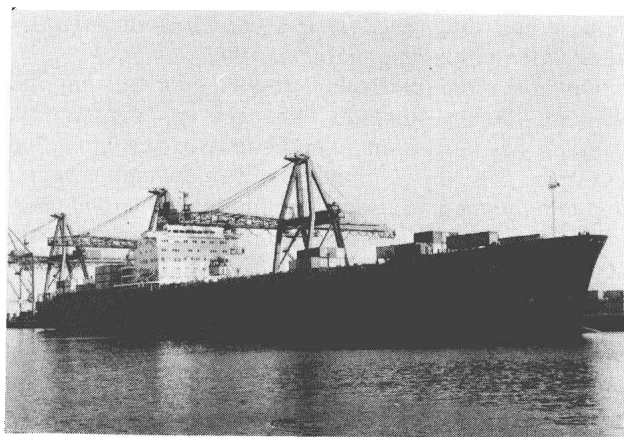
In fact the two-tier pricing structure agreement, designed to allow Baltic Shipping Co's (BSC) Balt-Atlantic Line's membership of various transatlantic conferences was withdrawn during 1977 by those that had campaigned for it in the first place, the Continental North Atlantic Westbound Freight Conference and the North Atlantic Continental Freight Conference.

The two-tier system agreed upon would have allowed Soviet membership in those conferences through the concept of Class A and Class AA membership. Balt-Atlantic would have been allowed to quote at a 10% discount differential to conference levels for one year and then at a further 6.5% advantage for a further year. This concept (the details were different at that time) was first filed with the US Federal Maritime Commission (FMC) as long ago as May 23, 1975, and subsequently refiled on October 22, 1976, to include various changes. After the FMC said that it intended to approve the agreement, objections were raised by a number of parties, including the US Departments of Justice and Transportation. Subsequently on April 4 of last year, the FMC ordered an investigation and hearing, a process that the conferences felt was likely to take anything from 18 months to two years. Consequently, in view of this time span and the expected steady build-up of Soviet vessels which led the conference lines to believe by late 1979 that BSC would be able to match their services, the conferences withdrew their application to the FMC.

### **US Government's role**

This saga demonstrates, among other things, the effect which the intervention of various US Government bodies can have on shipping matters affecting not only US operators but also those of other countries. It is such regulation, participation or intervention, call it what you will, that many Western shipowners resent and want abolished. This intervention is all-pervasive, for not only does it relate to general matters of shipping policy but it also extends down to the minutiae of rate agreements and other day-to-day matters.

*The world's largest refrigerated containership, OCL's 1,950 TEU Resolution Bay, began life on the Europe/New Zealand run during November 1977*



To deal with the more general sphere first, concern here has centred of late on the investigations being carried out into illegal rebating and other malpractices by a number of government bodies in the US, including the FMC. These inquiries have already resulted in one US carrier and a large shipper having to pay fines, but no foreign lines have yet been so affected. This is largely because, backed by their respective governments, they have simply refused to let the US agencies investigate their accounts and activities. Although this resistance has proved effective to date, the carriers involved still resent what they see as US interference in their private affairs.

This situation could change though, as Senator Daniel K. Innouye, of Hawaii, has introduced a bill designed to put new teeth into the enforcement of provisions against illegal rebating practices in US foreign trade involving both US and foreign flag ships. Senator Innouye's legislation calls for an amendment to the 1916 Shipping Act which would require common carriers, shippers, consignors, consignees, forwarders and brokers in foreign commerce of the US to respond fully to an FMC hearing and investigation order to determine whether they are engaging, or are seeking to engage, in rebating or other malpractices. If this response were not forthcoming the FMC would be directed to suspend all of that carrier's tariffs and deny US port entry to its vessels.

Clearly such legislation is not destined to receive much support outside of the US. Another branch of US Government activity which is the source of much wonder elsewhere is the Justice Department, and what is viewed as its paradoxical behaviour. This seems to blow alternately hot and cold; on the one hand advocating a free market situation for shipping, while on the other hand in practice the department seems to interfere on every possible occasion in the running of the US transportation system. For example, it is felt that the views expressed by the Justice Department in its January 1977 report 'The Regulated Ocean Shipping Industry', in which it calls for the virtual abolition of the conference system do not make sense in the current trading situation, especially in view of the Soviet threat. In fact, legislation has now been introduced by Representative John M. Murphy, of New York, chairman of the House Merchant Marine and Fisheries Committee, that would permit closed conferences, similar to those prevailing in other liner trades, in the routes to and from the US. Such closed conferences are at present not permitted in the US.

According to Murphy, such legislation could not be introduced until the oil cargo preference and third flag cargo bills have been passed by Congress. What chance the conference legislation has in practice remains to be seen; it is not only the sceptical who wonder whether or not the Justice Department would tolerate such legislation. In its January report that department concluded: "Examination of the premises underlying regulation has revealed that a competitive shipping industry could yield the same benefits thought to be achievable only under the conference system. A

competitive system could supply these benefits in a more efficient, and less costly manner. Conferences do little more than fix rates. There is nothing inherent in the conference system that insures a given level of service or rate stability. Capacity, sailing, service, and marketing decisions are made on a carrier-by-carrier basis, not by conferences. Furthermore, conferences do not guarantee stable rates; conference rates change frequently, and mainly upward. To the extent that stable rates are desirable, they could be achieved in a competitive ocean shipping industry by contractual arrangements between carriers and shippers."

### Justice looks set

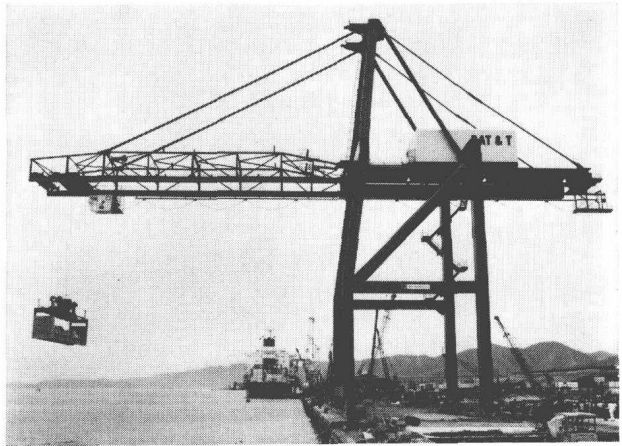
Since the report was submitted in January of last year, this philosophy has been upheld by the Justice Department as is evidenced by its intervention in a number of cases and agreements brought before the FMC. The Department of Justice has consistently upheld the principle of the free market economy to what many believe to be the long term detriment of the US maritime and transport industry as a whole. There is no reason now to conclude that the US Justice Department leopard is going suddenly to change its spots.

Nevertheless, there will be increasing pressure for this to happen from all sections of the transportation business. Concurrent with this there is a growing body of opinion that favours a major rethink of US maritime policy as embodied in the 1916 Shipping Act and subsequent legislation. The move to introduce closed conferences can be seen as part of this. Former FMC chairman Karl E. Bakke had called frequently during his term of office for such changes. Whether or not his successor Richard J. Daschbach will follow a similar course had by late 1977 yet to become apparent.

It is not only at such general levels that US regulations appear to act against the long term interests of transportation. More specifically, and probably with more immediate detrimental effects to the shipping public at large, this regulatory red tape has acted against the realisation of the full potential of the container system.

Thus until some enterprising transpacific operators started to test the situation and began filing their so-called microbridge rates with the FMC earlier this year (some carriers on other trades have followed suit), there were few, if any, intermodal rates on file with that body between interior points of the US and points overseas. True, minibridge broke new intermodal ground in the early 1970s through the establishment of a combination of land/sea rates, but these tariffs were port-port, and therefore justified in the eyes of the US regulatory agencies concerned, the FMC and the Interstate Commerce Commission (ICC), since they were seen as a substitute for an all-water service.

For the benefit of those that are confused by the proliferation of all these 'bridge' type services it is as well to explain the difference. Microbridge connections provide for through rates to/from inland points in the US (primarily the Mid-West, but also states such as



*The first of two Paceco Portainer gantry cranes was erected at the port of Trinidad during 1977*

Texas), and a Far East, or other, destination. Unlike minibridge these through rates are not made up of divisions allocated to participating ocean and land carriers respectively, but are based on the actual sum total of the ocean and land operators' existing tariffs on file separately with the FMC and the ICC respectively. A full explanation of minibridge and landbridge is given in the special section dealing with these services later in this book.

### US regulatory muddle

Even more illustrative of the regulatory muddle over who can and cannot quote through rates, is the state of legislative limbo in which many US freight forwarders presently find themselves in when it comes to quoting through rates. Since 1969 the freight forwarding community in the US has been sparring with the ICC concerning the inclusion of nvoccs (non-vessel operating common carriers) in its joint rule ex-parte 261 and ex-parte 261 sub number one. Despite the 1975 finding of the sub-committee of the House of Representatives on small business in allowing the nvoccs (regulated by the FMC) to enter into joint rate agreements with ICC carriers (railroads, truckers and domestic water carriers) because they would provide a service particularly helpful to small exporters, the ICC held in February 1977 that nvoccs and part four ICC carriers (domestic freight forwarders) should not be included in the joint rate rule.

Thus, as of now only vessel operators and ICC carriers are permitted to enter joint rate agreements or offer a through service on one bill of lading, quoting one charge (ie single factor rate). As a result US freight forwarders and nvoccs cannot offer minibridge or microbridge services, and cannot quote the kind of through rates that their European and Far East counterparts, the so-called ctos (combined transport operators) have been doing with so much success. Freight forwarders in the US understandably enough feel bitter about this; but they are not the only ones. Many smaller shippers in the US feel that their ability



*Not all dock workers go about their business as cheerfully as this Seattle longshoreman*

to compete effectively in overseas markets in competition with the larger companies that can make use of the single factor rate door/door services offered for FCL shipments by the ocean carriers has been hampered by this decision. They would like to see the nvocc and the freight forwarder free to establish similar joint through rates on a scale to be of benefit to the LCL shipper.

Much has been made in this article of some of the US Government's regulatory shortcomings that have inhibited containerisation in particular, and more generally concern many Western shipping companies. There are of course similar restrictions, both all-embracing and petty, that have placed constraints on containerisation in other countries but nowhere, in the free-world at least, do they assume the same proportions. Moreover, since nearly a third of all international container moves begin and end in American ports, it is clear that the situation in the US is one of prime concern to the container business as a whole.

#### **Labour problems too**

Another ever-present problem area on the intermodal front is labour. With a few exceptions dock workers throughout the world have fought long and hard to protect their job security in the face of the ubiquitous, labour-saving container. Certainly, there have been exceptions, but at even the most well organised of West German and Dutch terminals it is as much managerial prudence in dealing with a potentially volatile situation as anything else, that has achieved a relatively stable transition from conventional to container dock working. Such instances

though are the exception rather than the rule. Consequently, at most container ports throughout the world overmanning, the price paid for industrial peace, as well as other restrictive practices designed to preserve port jobs at the expense of intermodal efficiency, are rife. This holds good for ports where the box has been a begrudgingly-accepted way of dock life for many years, such as the US, the UK and Australia, or for countries like New Zealand where it is a relatively recent arrival.

Such a situation was demonstrated in the final quarter of 1977 with the strike that tied up containerships, ro-ro and barge carriers at US Atlantic and Gulf Coast ports. This action, which was selective since the union concerned, the International Longshoremen's Association (ILA) continued to handle conventional tonnage, followed on the breakdown of protracted talks between the ILA and various employers' associations, but principally the Council of North Atlantic Shipping Associations (Conasa). These discussions, which went on all summer, had been called to negotiate a new dock work contract, the old one having expired on September 30, 1977. At the root of the impasse, the issue that was causing most concern among the longshoremen was that of job security and how the container affected this. Thus, after nearly 20 years of living with containers (the first container rules were drawn up by the ILA and the New York Shipping Association and most employers between Maine and Florida as long ago as 1959), the ILA is still concerned about the effect containerisation is having on the job prospects of its members.

This mentality, which has often been treated with a generous degree of sympathy by many on the em-



players' side, has been perpetuated in country after country once containerisation hits the ports. The dock workers' sentiments, though understandable, have nevertheless worked to the longterm disadvantage of the container industry as a whole. Neither are there any signs of a solution. Apart from last year's stand in the US by the ILA there was for example industrial action in 1977 at several key UK ports such as London (Tilbury) and Southampton over the specific issue of containers and manning. It seems that every time a major new container terminal or service opens labour is keen to use the vulnerability of the new operation to protect its interests.

Most recently, in New Zealand for example, one step that would help ease congestion at some ports, round-the-clock working, is opposed by the dock workers' union. At present the ports are manned for 15 hours a day by two 7½-hour shifts. Negotiations are in hand to try and achieve 24-hour working, but many feel that this will be bought at such a price, probably four 6-hour shifts, as to make any settlement too expensive. Although the direct costs resulting from such settlements (not only in New Zealand) are generally borne in the first instance by the steamship lines, it is ultimately the shipper that pays. In fact the poor old shipper could be forgiven for feeling that he is clobbered at every turn. In reality, instances of any carrier actually passing on any of the cost savings that it contends it should achieve through containerisation have yet, with one possible exception, to be given to shippers. The one exception to hand was in the case of Fred Olsen Seasppeed Svedel (Foss) which passed on the benefits it realised through putting bigger vessels into service between Europe and the Mid-East by announcing freight rate reductions in August, 1977.

### Still no FAK rates

Containerisation has been established on major international trade routes now for more than a decade, yet in all this time there has been little if any response on the freight rates issue from the conferences concerned. They have not altered their tariff structures to take account of the uniformity of the box by introducing FAK or box rates. The traditional conference rate structures have for the most part remained unchanged. They continue to be based on two principles which most shipping lines look on as virtual articles of faith. Firstly rates for low volume, high value cargoes are set as high as the market will bear, and conversely those for high volume, low value commodities are pitched as low as the lines can bear. The other principle has been formulated to take into account the freight flow imbalances that exist on many trades. This means that rates on the strong leg of a trade are generally maintained at a higher level than those on the weaker run, where there is less freight moving.

This philosophy, which is soundly based on nineteenth-century laissez-faire economic principles, shows no signs of being altered. True, some of the conferences such as the Far East Freight Conference (FEFC) have simplified their complex tariff structures, but not even

the most progressive and container-oriented of these institutions have been prepared to take a leaf out of the truckers', railways' and airlines' FAK rate book. The one major exception to this is the Europe/Mid-East trade. Here the prevailing general freight rate levels are so high that conference and independent carriers alike can afford to quote box rates.

Whether or not the firmly entrenched commodity tariff system of ocean freight rates will ever be changed remains to be seen. Surprisingly, it is in some cases supported by shippers as well as carriers. For example, Cast, an independent carrier on the Europe/North America trade, started off by quoting a box rate that related to what it calculated it actually cost it to move a 20 ft steel container between two points. Inevitably, this service was well supported by shippers of high-value, low-volume items, but shippers with medium-priced and, of course, low-value products by-passed the service, because Cast's box rates were higher in some cases than the conference charges. To broaden its market base and achieve full utilisation of its hardware, Cast was reluctantly obliged to abandon the pure FAK rate and introduce a simplified banded system of charges.

### Transib difficulties

One route of course where something approaching an FAK, or at least a simplified tariff structure, has been operating is on the Transsiberian service between Europe and the Far East, and more recently the Orient and the Mid-East, mainly Iran. This operation has long been a thorn in the side of the FEFC, whose members have seen their higher-rated goods slipping away to the Transsiberian landbridge, a trend that left them with the lower-rated items. Now it seems though as if even the popular Transsiberian route is suffering. Figures show that runs from Japan to Europe and the Mid-East remained below 4,000 TEU a month for a large part of 1977. This compares with monthly carryings of anything from 4,000 TEU to 6,000 TEU in 1976. The main reason for the decline was the weakness of the Iranian market, the result of a rate hike introduced early in 1977. European carryings remained strong at around 3,000 TEU a month. Long term limited rail capacities, and delays in the computerisation of the box tracking and control system, will place an annual ceiling of 100,000 TEU on the service. This total was nearly reached in 1976 (95,493 TEU Japan/Europe/Japan and Japan/Iran figure), but the 1977 performance was weaker, leaving a greater capacity margin for the time being at least.

It is ironic that a socialist state such as the USSR should have afforded that bulwark of the capitalist system, the freight forwarder, a greater opportunity to benefit from containerisation than does the US system with all its regulatory checks. Hopefully though, the situation there, and in other areas where government restrictions hamper intermodalism, may change; for this above all else is seen by many as being one of the major challenges facing the container business in 1978.

## 2. World container port traffic league

Forty-nine ports around the world reached the 100,000 TEU annual traffic level in 1976. Had official returns of container throughput been made available by Los Angeles and Belfast the total of such ports would have been 51. In 1973 there were 41 ports that reached the 100,000 TEU level. In that year only 15 ports achieved a 300,000 TEU annual throughput. By 1976 the number had risen to 21 (22 if Los Angeles was included). Moreover, four ports hit the one million TEU a year mark in 1976. In 1973 New York was the only world port to achieve this distinction.

On a world scale container traffic totalled 20.3 million TEU during 1976 as against 15.0 million TEU in 1973. In that year the leading 100 world container ports handled over 14.8 million TEU between them. By 1976 the top hundred were handling containers at a combined rate of 19.7 million TEU. Thus, the big container ports are getting bigger. Conversely, containerisation is spreading fast. For 1973 the Yearbook received data from 30 additional small container handling ports which between them achieved a throughput of little over 200,000 TEU. In 1976 over 50 smaller ports reported a combined traffic level of over 550,000 TEU.

Country by country the US naturally continues to dominate. In 1973 its ports (including Los Angeles) handled 5.1 million TEU. The figure for 1976 (excluding Los Angeles) was 5.7 million TEU. Over the same period Japan's ports have increased their annual throughput from 1.84 million TEU up to 2.38 million TEU. The UK, which remained in third position on a national basis, has witnessed a stagnant level of container traffic over the period with the 1976 level of 1.87 million TEU barely ahead of the 1.84 million TEU throughput achieved during 1973.

The really dynamic growth areas have been the Orient (excluding Japan) and Mediterranean Europe. In 1973 Hong Kong, Taiwan, Singapore, Philippines, Malaysia and Thailand between them handled 0.96 million TEU. By 1976 their combined container traffic level had risen to 2.27 million TEU. Moreover, South Korea, for which no figures were available in 1973, handled a further 264,000 TEU during 1976.

In the Mediterranean the picture is similar, if less dynamic. In 1973 ports eastwards of Cadiz handled 589,000 TEU. During 1976 Mediterranean ports handled 1.08 million TEU between them. To a lesser degree, South Africa and the Caribbean are burgeoning too, though the boom in South Africa has yet to start for real. Throughput at the country's ports rose from 62,643 TEU in 1975 to over 114,000 TEU during 1976. Excluding Puerto Rico, container traffic at Caribbean and South American ports moved from 70,000 TEU in 1973 to over 150,000 in 1976.

Major ports to register a fall-off in container traffic during 1975/76 were Honolulu, Zeebrugge, Anchorage, Halifax, Esbjerg and Helsinki. Table 6 accompanying this article shows the ports that made the biggest headway individually during 1976, with the Far Eastern ports of Kobe, Hong Kong, Tokyo, Keelung,

*Text continues on page 14.*

**Table 1 – World container port traffic by country 1975-76 in TEU**

Country	1976 TEU	1975 TEU
US	5 722 924	5 270 127
Japan	2 380 431	1 867 762
UK	1 535 345	1 393 246
Netherlands	1 298 221	1 138 713
Hong Kong*	1 029 059	802 293
West Germany	877 600	736 008
Puerto Rico*	875 360	877 400
Australia	755 144	744 753
Taiwan	655 876	471 050
France	542 619	393 317
Belgium	523 668	492 128
Canada	490 875	438 145
Italy	445 107	317 719
Spain	333 286	267 099
Singapore*	311 772	221 148
South Korea	263 516	189 151
Sweden	234 499	204 716
Eire	225 324	207 085
Denmark	200 661	208 647
USSR	173 476	167 109
Israel	168 918	133 932
Portugal	134 226	100 134
Philippines*	133 694	95 176
South Africa	114 314	62 643
New Zealand	88 028	71 039
Malaysia	82 920	65 994
Norway*	80 598	65 284
Greece*	78 774	64 184
Thailand*	58 878	13 563
Poland	57 304	36 304
Canary Islands*	56 320	50 433
Brazil	55 913	43 760
Finland*	51 018	58 741
Iceland*	43 890	20 816
Nigeria*	41 273	23 132
Bahamas	31 299	31 412
Others	110 488	66 158
<b>Total</b>	<b>20 262 618</b>	<b>17 410 321</b>

Note: Countries marked \* are represented by only one port's throughput.



**Table 2**  
**Container traffic of world ports 1975-76 expressed in TEU**

1976		1975	
Position	Port	TEU	Country
1	New York	1 720 000	US
2	Kobe	1 245 491	Japan
3	Rotterdam	1 224 725	Netherlands
4	Hong Kong	1 029 059	Hong Kong
5	San Juan	875 360	Puerto Rico
6	Oakland	602 877	US
7	Seattle	574 850	US
8	Tokyo	469 517	Japan
9	Bremen/Bremerhaven	466 360	West Germany
10	Long Beach	448 605	US
11	Baltimore	422 809	US
12	Hamburg	411 240	West Germany
13	Melbourne	386 275	Australia
14	Yokohama	341 546	Japan
15	Keelung	338 883	Taiwan
16	Antwerp	335 440	Belgium
17	Hampton Roads	330 385	US
18	Le Havre	327 910	France
19	London	317 148	United Kingdom
20	Kaohsiung	316 993	Taiwan
21	Singapore	311 772	Singapore
22	Sydney	267 882	Australia
23	Southampton	254 077	United Kingdom
24	Busan	237 946	South Korea
25	Felixstowe	235 084	United Kingdom
26	Jacksonville	215 436	US
27	Genoa	184 276	Italy
28	Houston	183 273	US
29	Charleston	179 506	US
30	Honolulu	179 423	US
31	Zeebrugge	177 279	Belgium
32	Osaka	168 235	Japan
33	Anchorage	166 273	US
34	New Orleans	164 225	US
35	Göteborg	159 264	Sweden
36	Harwich P.Q.	151 744	United Kingdom
37	Liverpool	147 531	United Kingdom
38	Dublin	145 430	Eire
39	Manila	133 694	Philippines
40	Montreal	132 473	Canada
41	Haifa	131 406	Israel
42	Marseille	122 261	France
43	Nagoya	121 954	Japan
44	Leghorn	113 537	Italy
45	Halifax	109 374	Canada
46	Esbjerg	109 000	Denmark
47	Barcelona	107 920	Spain
48	Philadelphia	106 940	US
49	Vancouver	104 400	Canada
50	Boston	91 004	US
51	Clydeport	89 911	United Kingdom
52	Saint John N.B.	87 743	Canada
53	Lisbon	87 387	Portugal
54	Oslo	80 598	Norway
55	Hull	79 614	United Kingdom
56	Piraeus	78 774	Greece
57	Savannah	78 543	US
58	Bilbao	72 399	Spain
59	Nakhodka	71 284	Soviet Union
60	Port Kelang	68 728	Malaysia