

'MOST EFFICIENT SERVICE POSSIBLE AT LOWEST COST'

Interview with Roy Davis, Marketing Manager ACT(A)

Question: Last year, ACT(A) placed orders for new tonnage. Can you say when these vessels will be phased into service, on what routes operate and by what percentage they will increase your container capacity in the respective trades?

Answer: Orders were placed for two new 29,000 ton containerships, each with a capacity of 1,800 containers in July 1974.

The first one, owned by A.N.L., is expected to be phased into service in March, 1977 and the second, owned by ACT(A), in July 1977.



R. L. DAVIS

Both vessels are intended to operate in the ACT (A)/ANL Service between Europe and Australia/New Zealand.

However, with the flexibility of our combined operations these vessels could sometimes be switched for use in our PACE Service between East Coast North America, Australia and New Zealand. The total number of our own vessels in the ACT (A)/ANL fleet is presently 8—4 in the ACT (A)/ANL Service, four in the PACE Service plus, of course, *Remuera* which we have on long-term charter under an arrangement with P&O.

The addition of these two vessels to the ACT(A)/ANL fleet will increase our own container capacity on the Europe/Australia/ New Zealand routes by approximately 60 per cent.

Q. Can you tell us what your broad marketing objectives for 1975 are?

A. Simply to give complete customer satisfaction consistent with company profit targets.

I believe we have a dual duty to discharge: a duty to our shareholders to secure an adequate return on capital employed, and a duty to our customers to provide the most efficient service at the lowest possible cost.

These will continue to be our aims in 1975.

Q. Because ACT(A) is one of two British consortia involved in the UK/North Europe/Australia trade, there has been some tendency to confuse your services with those of OCL on occasion. What do you consider are the main points of difference between the two companies?

A. I think that without doubt the major significant difference lies in the fact that we are independent, ie: not part of the consortium of consortia — the Australia Europe Container Service. This enables shippers to exercise a *real* choice between two different services, thus creating greater competition which must be in the ultimate interests of our clients.

This independence enables us to discharge our duties referred to above more efficiently through the inherent flexibility of our ship operating and by exercising more direct control over our own decision-making which enables us to be more responsive more rapidly to customer requirements and to fluctuation in Trade demands.

Another major difference is the fact that we serve two terminals in the UK — Tilbury and Seaforth — and also, of course, we are able to offer space on all sailings out of the UK including those operated by AECS.

We are ever conscious of who provides our daily bread (and sometimes a little butter) and although our users must be the final arbiters, we certainly endeavour in ACT(A) to achieve greater personal contact and to be in greater sympathy with the requirements of shippers, whether they be direct exporters or forwarding agents.

Q. Can you say something of the progress of the service which ACT maintains between Australia and the North American East Coast ports, and also the service which connects Australia with US West Coast ports?

A. I think it fair to say that both these Services have progressed in line with expectations.

The PACE Service, operated by ACT(A) in conjunction with ANL, between Australia/ New Zealand and East Coast North American ports, which commenced in mid-1971, has gained a very strong foothold on this route, has been operating at maximum capacity during the last two years and is now responsible for approximately 30 per cent of the total trade.

The extension of the reefer carrying capacity of vessels in the PACE Line together with those in the ACT(A)/ANL Service result in ACT(A) becoming the largest operators of reefer

Continued on page 2

H. R. MacLeod Appointed ACT Chairman

MR H. R. MacLeod has been appointed Chairman of Associated Container Transportation Limited in succession to Mr M. F. Strachan. He will continue in his position as a Managing Director of Ben Line.

He is also a Director of Ben Line Containers, Containerbases Limited, Solent Container Services and Modern Terminals (Hong Kong) Ltd.

After graduating from Cambridge University in Law in 1953, Mr MacLeod joined Ben Line in Edinburgh. Following a training period, which included the Far East, he was made a partner in the managing company in 1959. Shortly thereafter he stood in for a time as the General Manager of Ben Line's Eastern offices based in Singapore.

Mr MacLeod took an early interest in containers, both from Ben Line's point of view and in relation to the Far East trade. When ACT was established in 1966 he became a Director. He led the original study group and working party which considered exactly what ACT's aims would be, what areas they would cover and investigated market possibilities. The group decided Australia would be their first main target, and ACTA was formed.

FAR EAST

During the development of the Australian trade, Mr J. G. Payne headed the ACTS Board. After the ACTA service had started, it became clear that the next trade to go into containers was the Far East trade. BLC was formed and Mr MacLeod took over from Mr Payne.

The Far East container operation is now well established; the South African trade has entered the development stage, and Mr R. A. Lloyd has taken over the main ACTS Board responsibility from Mr MacLeod.

During the last five years Mr MacLeod has been heavily engaged in container developments. His main responsibility has been to set up and run the Ben Line Container organisation throughout Europe and the Far East, from the Company's head office in Edinburgh.

Continued on page 4



H. R. MACLEOD

BLC SPIRIT AWAY THE SCOTCH



CHESTER the Shire horse draws a "wee dram" of Black & White Scotch Whisky alongside a Ben Line container which will carry the cargo 14,500 miles from Glasgow to Tokyo.

Chester is being held by Margaret Watson of BLC's offices at Coatbridge containerbase, while Alec Peill of Ben Line Head Office, looks on. This now rare form of transport contrasts sharply with the modern container concept.

The Black & White cart, belonging to James Buchanan & Co Ltd of Glasgow will be shipped with the Scotch Whisky, and is due to go on exhibition at the Keio department store in Tokyo.

New Port of Call for BACS

Ben Asia Container Service has started a new service between Singapore and the Japanese port of Moji, which is saving time for shippers and consignees.

The container ship, *Moira*, calls there with general cargo and electronic products. It also calls at Port Kelang.

'MOST EFFICIENT SERVICE POSSIBLE AT LOWEST COST'

Continued from page 1

containers in the world.

The PAD Service, operated in conjunction with Rederiaktiebolaget Transatlantic of Sweden and Pad Shipping of Australia, between Australia and West Coast ports of the USA and Canada, commenced in the Spring of 1971 and is now operating three ro/ro vessels on a successful and profitable basis. The PAD Service carries a wide variety of manufactured and bulk commodity products Southbound and there is an increasing amount of refrigerated cargo being lifted northbound in addition to the traditional dry cargoes.

Q. Both ACT and OCL were fiercely — and sometimes unfairly — criticised for allegedly failing to anticipate the demand for container space. Would you care to repeat your answer to this charge?

A. There were two main reasons for the shortage of container space which I forecast back in October would be over by the end of 1974 and was reported in the last issue of *ACT News*. (i) An unprecedented, and I might say unheralded, upsurge in the volume of cargo. (ii) A severe reduction in carrying capacity, both of which were beyond the control of the Conference and the Shipping Lines who are members of that Conference.

Firstly, the increase in volume — an increase from the UK to Australia to the order of some 35 per cent over the normal level of exports. This was brought about mainly by the favourable relationship of the £ sterling to other currencies, and to the across-the-board reduction of import duties of 25 per cent in Australia, thereby making British exports that much more competitive.

Forecasting is not an exact science — it is based on historical data, updated by current market intelligence — and whilst we had the first, we were sadly lacking in the second. As good as our communications are with shippers and their representative bodies, nobody could, or did, forecast sufficiently far in advance this dramatic increase in overseas requirements.

Unfortunately it is just not possible to build new ships and put them into service at the drop of a hat — it takes three years from the time one is first commissioned. Neither would it be desirable, even if possible, because when the peak inevitably subsided those same ships would be sailing empty, which would be entirely uneconomical and the costs therefore would inevitably have an influence on rates of freight and would add to the cost of exports and so become self-defeating. This upsurge in cargo was paralleled with a reduction in capacity — the

second reason. Again due to factors outside our control and mostly associated with labour and union problems.

There were several factors which contributed to this reduction in capacity: (i) Tug strike at Tilbury in April 1973. (ii) A Union ban in Australia on the French vessel *Kangourou* because of the nuclear test programme in the Pacific. (iii) The energy crisis leading to the reduction of speed in vessels to conserve fuel. (iv) A dramatic increase in turn-round times of vessels as a result of rolling strikes on the Australian coast and congestion in Australian ports.

The Conference Lines concerned not only sympathised with shippers but also made considerable efforts to combat the shortage by chartering additional vessels, both container and conventional, at considerable extra cost directly out of their revenue, since the problem was world-wide and charter rates were at an almost penal level. Although this fact unfortunately often went unrecognised, the Lines chartered as many as 22 additional vessels in 1973 in an effort to make up the deficiency and an even greater number in 1974.

In addition ACT(A) also chartered space in vessels across the Atlantic to connect with our PACE Line Service from the USA ports to Australia, which clearly demonstrates the flexibility of the services we offer, referred to earlier.

Q. Can you tell us something of the centralised administrative and computerised container control systems which ACT(A) has set up?

A. ACT(A) has computers installed at its nerve centres in Southampton, Sydney, Wellington and New York. Systems are in operation at each centre to aid control of the complex cargo documentation procedures of a container shipping operation and to monitor the world-wide movements of containers.

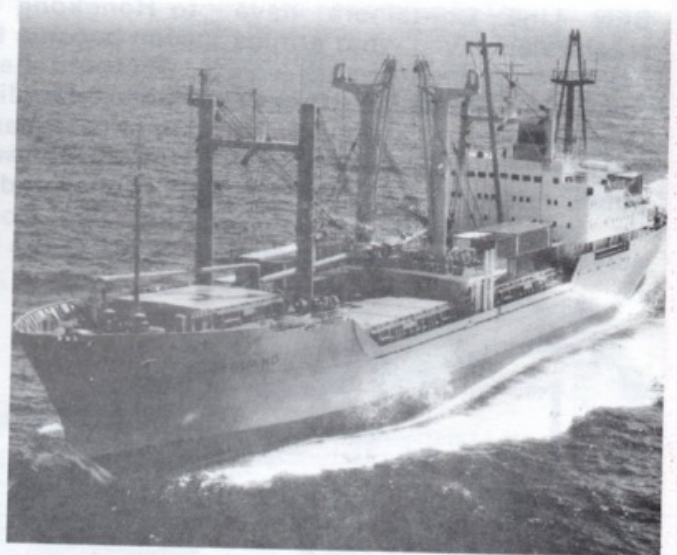
Each installation processes the export and import documentation of cargo according to the domestic requirements of shippers, importers, government agencies and its own in-house management, and maintains a link via the compatible exchange of computer data with the other overseas centres of ACT(A). In a similar manner each centre controls and monitors by computer the movement of containers within its own "zone" and exchanges in a computer readable form details of container movements between zones with the other ACT(A) computer centres. In the UK an "overseeing" computer control system enables Head Office management to monitor the world-wide movements of ACT(A)'s container fleet and to maintain a tight inventory control over containers — the company's largest asset after its ships.

ACT(A) CARES ABOUT ITS CUSTOMERS

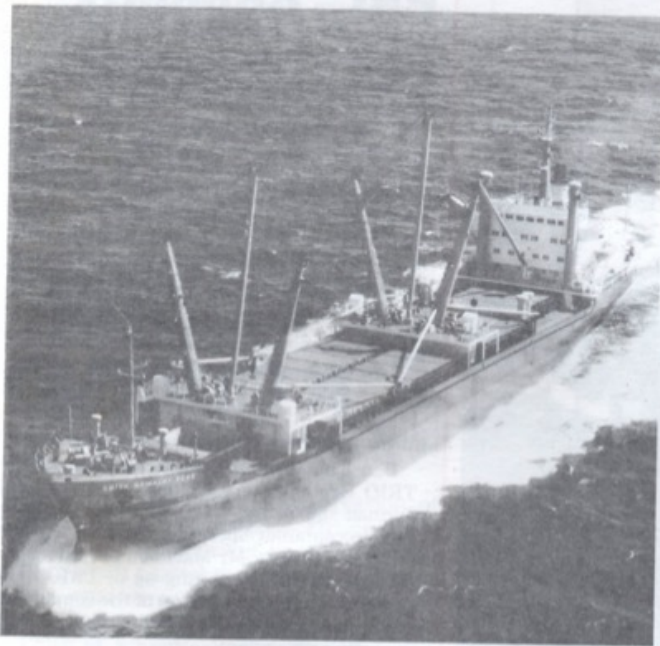
During the acute shortage of container space to Australia and New Zealand, ACT(A) chartered a number of vessels to help alleviate the problem and meet the needs of shippers. Every effort was made to accomplish this and among those vessels chartered by ACT(A) were:



VISURGIS (Austrian Flag)
6,000 tons gross
430 containers



FLEVOLAND (Dutch Flag)
10,000 tons gross
307 containers



EDITH HOWALDT RUSS (German Flag)
8,329 tons gross
403 containers



MONSUN (German Flag)
9,000 tons gross
368 containers

THE GUARDS ARE SENT PACKING

BEN Line Containers have recently achieved what armies have been trying for years — to send the Grenadier Guards packing.

After several months of public duties at Windsor Castle, the 2nd Battalion Grenadier Guards have been posted

to Hongkong where they will soon become familiar figures.

Pictured here is Drummer Hudson handing his drum to Lance Sergeant Wilkinson at Victoria Barracks, Windsor, to be packed and loaded aboard a Ben Line Container for the voyage to the Far East.



ACTA HELPS BRING HOME THE WOOL

ACTA is helping Britain's wool importers reap the advantages of containerisation when bringing wool from Australia and New Zealand.

Containers are being used extensively for the carriage of this important cargo, and at the height of the season, each vessel is bringing in over 20,000 bales every nine days, with the major part destined for the UK.

Besides a reduction in direct transportation costs, one of the principal advantages of the service is the speed with which money spent can be recovered. This can work in two ways:

Due to the speed of the service compared to conventional shipping, the importer can delay his buying by two or three weeks and will get his wool here at the same time as he would have by conventional ships.

If he needs the wool in a hurry he can get it here two or three weeks earlier, thereby saving bank interest by being able to process and sell quicker.

At the main ports in New Zealand served by ACTA, wool broking and dumping facilities (known as CWF's — Central Wool Facilities) enable wool to be pre-sorted to final destination and loaded into the containers in the most efficient manner.

BBC Appoints BLC Director

Mr James Young, a Director of Ben Line Containers, was one of the four new members appointed to the Broadcasting Council for Scotland by the BBC.

The others are: Sir Robert Grieve, former chairman of the Highlands and Islands Development Board; Major Allan Cameron, chairman of Ross and Cromarty education committee; and Mr Farquhar Macintosh, rector of the Royal High School, Edinburgh.

New Chairman

Continued from page 1

Ben Line Containers is a member of the TRIO Group, where British, Japanese and German shipowners have combined to run a 17-ship container operation between Europe and the Far East. Mr MacLeod played a substantial part in the setting up of TRIO — in particular he was Chairman of the committee which worked out the TRIO financial and operating agreement.

An enthusiastic sportsman, Mr MacLeod played squash rackets for Cambridge and for Scotland. His other interests include music and manual labour out-of-doors. His father was born and brought up in the Isle of Skye and Mr MacLeod retains many links with the island. He is married, and has three children — two boys 15 and 9 and a girl 11.

Scottish Trade Mission to Australasia

A 20-STRONG Trade Mission sponsored by the Scottish Council for Development and Industry will be visiting Australia and New Zealand in April.



R. McLEAN

The mission, headed by Mr Robert McLean of Microwave and Electronic Systems Ltd, leaves London early in April and their first stop is Auckland.

From there, they move to Wellington, Sydney and Melbourne before returning to London on April 26.

A wide cross-section of Scottish industry will be represented with products ranging from cashmere, motor accessories, electronic components, jewellery, carpets, and book-binding materials.

ACTA is one of the major shippers to and from Australia and New Zealand and have offered full co-operation and assistance to the mission during their tour.

In addition to Mr McLean, the other members of the mission are:

T. J. A. Christie,
W. E. Bryce,
J. W. Wright,
P. J. Hart,
D. P. Muir,
J. D. Bateman,
E. M. Robertson,
C. Halliwell,
J. E. Ballard,
J. P. Yorke,
M. J. Seddon,
J. M. Hepburn,
I. F. Cordial,
D. F. Hardie,
J. B. Leslie,
A. R. Mackie,
A. D. Montgomery,
D. G. Simmons,
I. Meldrum,

Alexander Engineering Co Ltd,
The Ballantyne Sportswear Co Ltd,
The Barrhead Kid Co Ltd,
Beckman Instruments Ltd,
Brown Brothers & Co Ltd,
John Brown Engineering (Clydebank) Ltd,
Carrick Jewellery Ltd,
Eadie Brothers & Co Ltd,
W. L. Gore & Associates (UK) Ltd,
Govancroft Potteries Ltd,
Henderson, Hogg & Co Ltd,
William Paton Ltd,
Patons & Baldwins Ltd,
H&A Scott (Holdings) Ltd,
Hugh Smith (Glasgow) Ltd,
Wm R. Stewart & Sons (Hacklemakers) Ltd,
Templeton Carpets Ltd,
R&W Watson (Converters) Ltd,
Barton Abrasives Ltd.

SHIPPING TERMS

GROSS TONNAGE is expressed in tons of 100 cubic feet each and represents the total volume of enclosed space in a ship. For instance, a ship of 25,000 tons gross means a total enclosed capacity of 2,500,000 cubic feet.

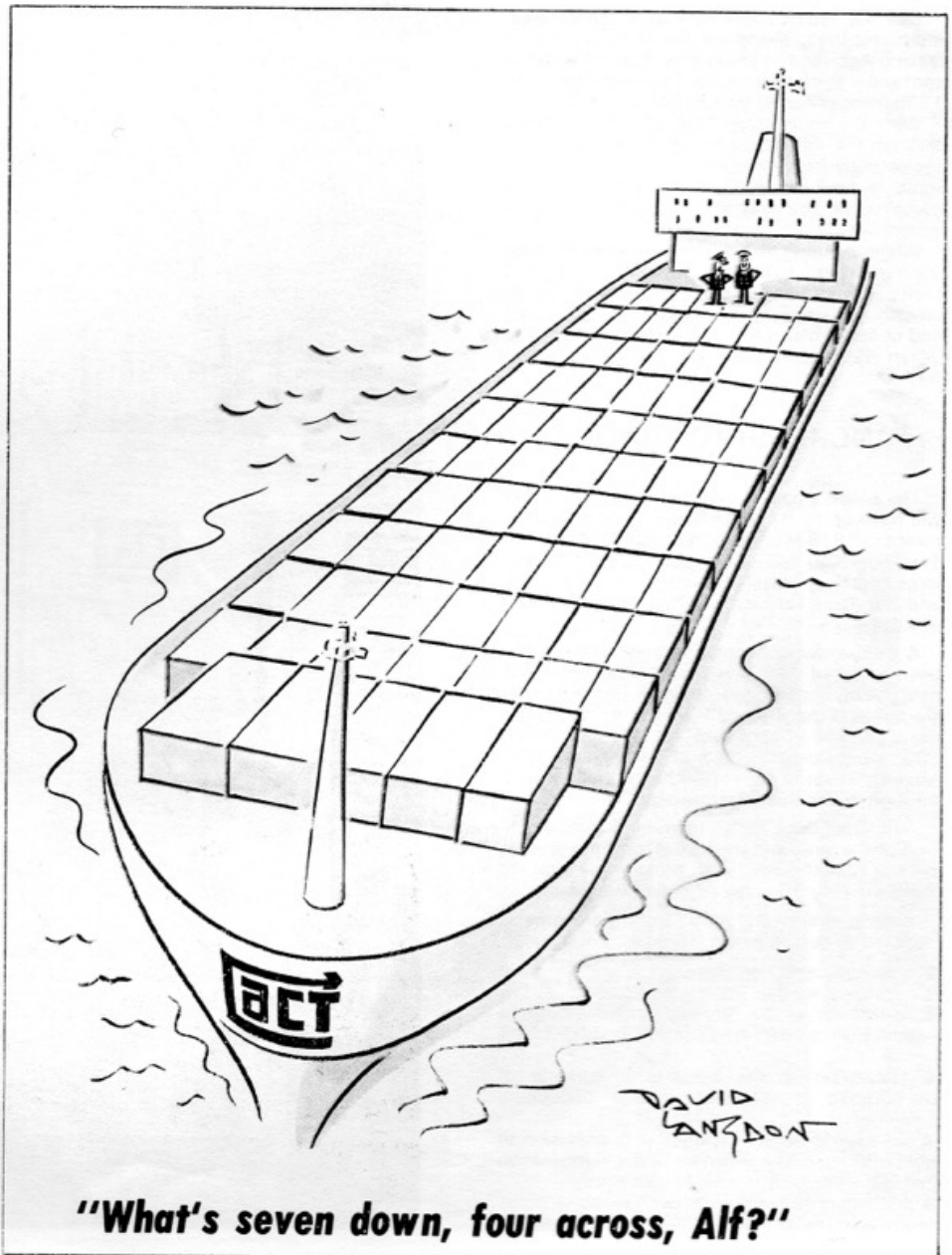
NET TONNAGE is also expressed in tons of 100 cubic feet, and represents the volume of enclosed space which can be utilised for cargo or passengers. This tonnage does not give a correct idea of the size or importance of a ship.

DISPLACEMENT means the total weight of the ship, and is expressed in tons of 2,240lb (in France, Belgium, Spain, Italy and Germany 1,000 kilos).

DEADWEIGHT TONNAGE is the difference between the displacement of a vessel loaded to its "summer" loadline and the displacement light, i.e. it is the weight that the vessel can carry. The "summer" deadweight tonnage is not all available for cargo as the weight of bunkers and stores is included in the measure.

SPEED. The knot is an expression of speed and not of distance. Originally it meant the numbers of knots of the log line which passed through the hands of the quartermaster in 30 seconds or 120th of an hour. Each knot represents 120th of a nautical mile. Therefore, 16 knots in 30 seconds means 16 nautical miles an hour, 20 knots means 20 nautical miles an hour.

DISTANCE. The statute mile used on land is 5,280 feet. The nautical mile is 6,080 feet or 1.15 statute miles. The kilometre is 3,280 feet or 0.63 of a statute mile.



"What's seven down, four across, Alf?"

PORTS OF CALL Number 10

Dual Berthing at Fergusson Wharf by 1978

THE BUILD-UP of traffic through the Fergusson Wharf container terminal has been growing steadily since it was opened in the Autumn of 1972.

In the first nine months of 1974 a total of 111 vessels used the terminal, involving a container turnover of 37,241 boxes of which more than 9,000 containers were fully loaded import containers and over 11,000 were fully loaded export containers.

Half the export containers were refrigerated, indicating the growing volume of farm produce leaving Auckland in containers. Full refrigerated containers shipped from the port in the previous 16 months of operation totalled only 6,277.

With the impressive flow of unitised cargo through the roll-on roll-off berth this means an increasingly heavy proportion of the port's total trade is now being handled by the terminal complex at the eastern end of Auckland's waterfront.

While the berth and terminal facilities handled the growing number of ship calls and multiplication of containers with as much efficiency as possible, it was plain long before the end of 1974 that full development of Fergusson Wharf was becoming a matter of urgency for the Board.

INCREASING TRADE

The Board's plan is that the terminal complex will have up to 1,900ft of quay when it is completed in 1978 instead of the 1,500ft at present. This extension will allow easy berthing of two large container vessels for simultaneous working and will make Fergusson Wharf one of the best in Australasia.

A 45-ton twin-lift container crane has already been installed and 1,800ft of breastwork has now been constructed together with related storage and marshalling facilities. Approval has been granted to construct a permanent break-bulk containerbase shed of 80,000 sq ft at Monash Street to cope with the increasing trade through the container terminal.

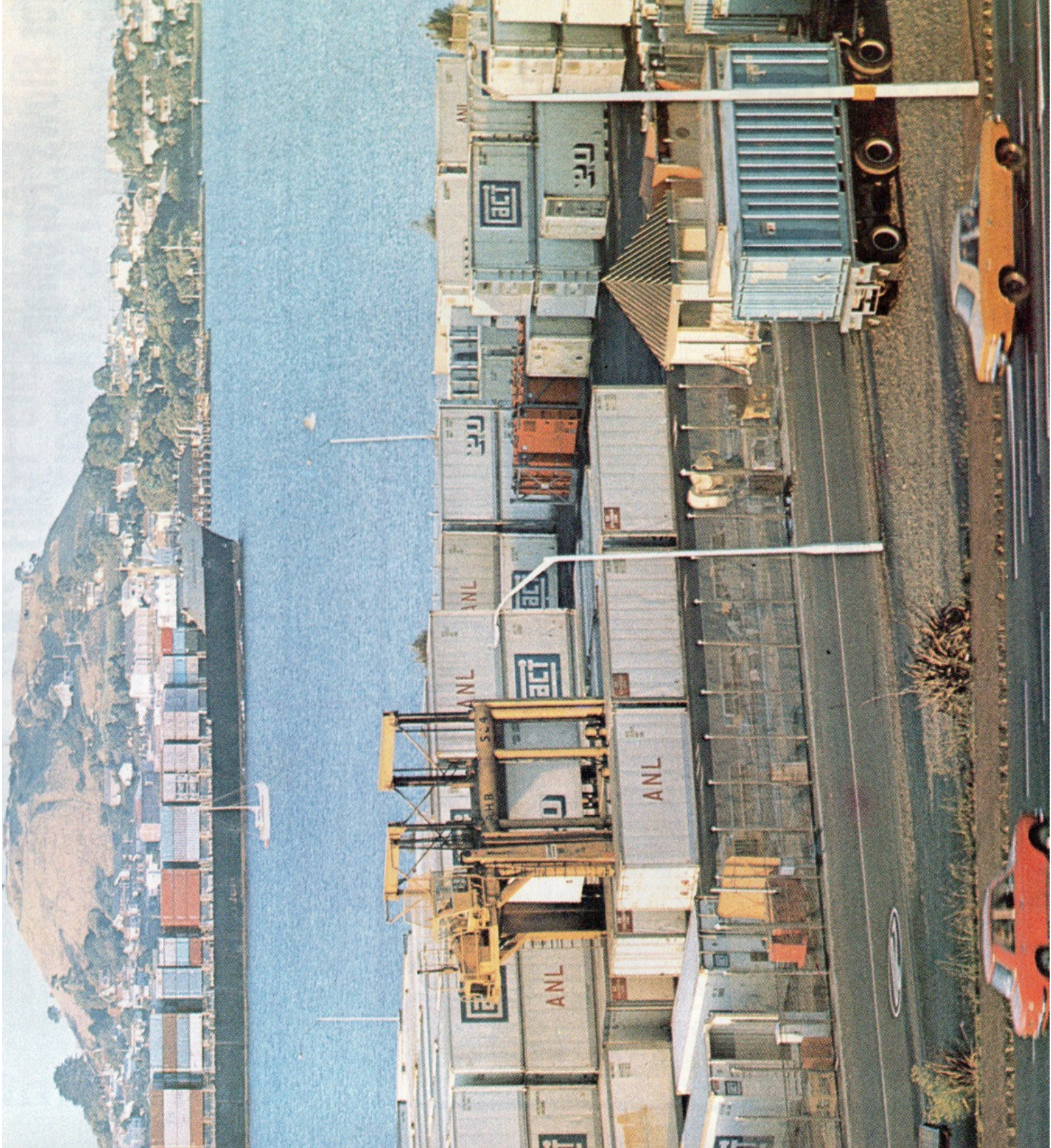
Additional back-up land resulting from extension of the quay and the inclusion of the present roll-on roll-off area will bring the total to approximately 35 acres adjoining the berth.

Among major additions and improvements required to complete the terminal complex are:

- A second container crane
- Additional modern mobile equipment
- Conversion of the former Air New Zealand building to a terminal control and servicing centre
- Completion of the break-bulk building of 80,000 sq ft for packing and unpacking containers
- More refrigeration facilities with provision to hold up to 1,000 containers under refrigeration instead of the 558 maximum previously
- Rail siding facilities with four lines serviced by overhead gantry crane

AUCKLAND — NEW ZEALAND GROWING





Ben Line and Ocean Transport Merge Far Eastern Services

BEN LINE Steamers and Ocean Transport Trading have agreed to operate conventional cargo liner services of Blue Funnel, Glen Line, Nederlandsche Stoomvaart MIJ "Oceaan", and Ben Line as one unit in the trade between the Far East, (Indonesia included) and Europe. The new service will be called the Ben Ocean Service and came into operation early this year.

Conventional services will be required in the Far East trade on a continuing basis in addition to the container services provided by OCL and BLC. The establishment of container services has resulted in a reduction of the number of conventional vessels in the trade and of conventional services individually operated by Blue Funnel, Glen Line, NSMO and Ben Line.

This has made it difficult for the four lines individually to provide services attractive to their customers in terms of frequency and coverage.

Ocean and Ben jointly aim to continue to provide, and to adapt and develop conventional services in the trade. Joint operation will give greater flexibility in programming sailing schedules resulting from the large number of ships at the disposal of the joint service, and will enable a single commercial operating unit to provide schedules giving the required frequency and coverage. In many cases it is hoped to improve passage.

JOINT SERVICE

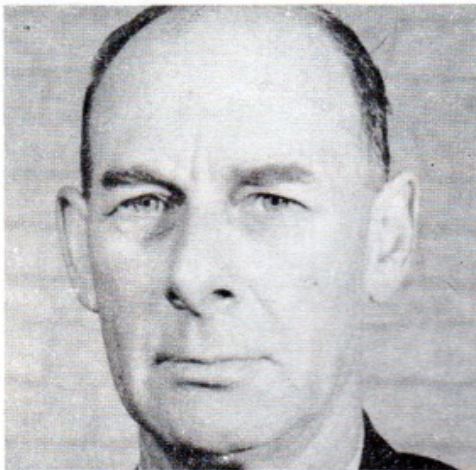
Ben and Ocean will continue to own, man and technically manage their respective ships in the joint service.

The day-to-day commercial management of the service will be carried out on behalf of Ocean and Ben, by Ben Line in Edinburgh. The existing roles and staffs of Glen Line and McGregor, Gow and Holland in London will be merged with Killick Martin & Co Ltd who will be the principal UK agents for the joint service.

Work is now proceeding on the conventional sailing schedule for the joint service which, together with a full list of agency appointments, will be published as soon as possible.

New Appointments for Blows, Foreman Morter and Sutherland

MR R. A. BLOWS, Commercial Manager of ACTA, has been seconded to Ellerman Lines from ACTA to help with their South African container trade development and will begin his duties in August.



R. A. BLOWS

The new Commercial Manager, responsible for the ECNA and PAD services, will be Mr A. Foreman, who is taking over from Mr Blows. Responsibility for the Commercial Planning Department, which has been Mr Foreman's position, will be assumed by Mr G. Morter, presently Financial Controller ACT (NZ) Ltd.

Mr I. S. Sutherland has been appointed Financial Controller at ACT (NZ). Mr Sutherland, who has been Trade Accountant ACTA/ANL, arrived in New Zealand at the end of February.

He is succeeded by Mr D. Batten, whose position as PACE Trade Accountant has been taken by Mr J. Pottinger.



Home Safely

LORD Brooke inspects some armour which has been on display in Japan, at the Hankyu Store Promotion in Osaka, and was brought back to Warwick Castle by Ben Line Containers.

Lord Brooke said that the Container provided an excellent method of transporting this unique cargo. The man's armour is Italian jousting armour made in about 1540. It differs from battle armour in that it has special reinforcements on the helmet, on the left breast, elbow and gauntlet. The Bard or horse armour is German, of the same period, but the saddle was made in Augsburg in 1523 and is a particularly fine example, he said.

The armour was last worn by one of the Dymocke family, who are the Hereditary Champions of England, at the Coronation of William IV in 1830.

Swans Flock to Japan by Container



A container load of swans was the unusual cargo aboard the containership 'Benalder' recently.

The swans, destined for Japan from Bremerhaven, are pictured here being admired by Mr Roderick Roberts, 1st officer of the 'Benalder' and seven-year-old Myles Brown, son of the senior second engineer officer.

NORTHEN JOINS ACT(A) BOARD

MR Michael B. Northen, president of Associated Container Transportation (USA) in New York, has been appointed to the Board of Associated Container Transportation (Australia) Limited.

Mr Northen, who has been responsible for the PACE service between the east coast of North America and Australia and New Zealand for the past 12 months, joined ACT(USA) at its inception in February 1969 and has played a key role in developing and co-ordinating the new intermodal, international container service. He was named president of ACT (USA) in November 1970.



M. B. NORTHEN

Prior to his association with ACT, Mr Northen held various positions of responsibility with the UK-based Blue Star Line, with particular emphasis on the Australia/New Zealand/North America trade. He joined Blue Star in London in 1949 after serving with the Royal Navy.

In 1956, Mr Northen was appointed to the Line's Wellington, New Zealand office and he transferred to New York in 1964 to establish and manage Blue Star Line's East Coast North America services.

Mr Northen has been active in a number of committees involved in studies of international shipping. He is President of the Containerisation Institute of the United States, an organisation of shippers, inland and ocean carriers involved in the furthering of intermodal containerisation.

ACTA Sales Conference

ACTA will hold their annual Sales Conference on May 2 in London. It will be presided over by Mr Roy Davis, Marketing Manager of ACTA.



BEN'S FIRST CHEMICAL TANKER MAKES A SIDEWAYS SPLASH

BEN Line's first chemical tanker, 'Benvenue', has been launched at Groningen, Holland. After the launching ceremony it was announced that two more had been ordered for delivery during 1976.

The 'Benvenue' was built by Nieuwe Noord Nederland Scheepswerven BV Groningen in compliance with the Inter-Governmental Maritime Consultative Organisation (IMCO) code for the construction and equipment of vessels carrying IMCO Type 2 chemicals.

The vessel has a deadweight of 2,440 tonnes with a length o.a. of 80.77 metres, a breadth moulded of 12.70 metres, a depth to main deck of 6.56 metres, and a summer draught of 5.41 metres. Propulsion is by a Smit Bolnes 307 HDK engine with an output of 2,340 bhp and giving a service speed of 13 knots.

She has been chartered for one year to BP Chemicals International Ltd.

Her tank capacity is 2,565.48 cubic metres and all tanks can be heated to 60 deg C by means of hot-water ducts under the tank bottom. All tanks can connect with the vapour return line and nitrogen is available to maintain inert atmosphere in the cargo tanks.

There is a fixed-tank washing system and mechanical ventilating/dry-air installation. All tanks and cargo pipelines are coated with Dimetecote 4.

As the Benvenue has large ballast capacity in separate ballast tanks, it is not normally necessary to ballast the cargo tanks. Bends are connected as required from tanks to appropriate main lines, giving maximum

flexibility coupled with ability of handling up to four totally segregated grades through main lines with further grades handled with minimum of line-washing or individually direct to the tank.

Each tank has one hydraulically-powered Deepwell Pump capable of 100 cubic metre per hour at 85 metres head.



Containership Chippie Retires

Sir David Thomson (left), Joint Managing Director of Ben Line, presents "Chippie" Johnson Crichton with a cheque from the Company on his retirement from active service. Mr Crichton, 65, joined Ben Line as a carpenter in 1943 and has served on board the 73,000-ton containerships 'City of Edinburgh' and 'Benalder', as well as cargo passenger liners 'Benloyal' and 'Benwyvis'.

It's a Long Way from Sugar

—and this is the start of the long journey



Gathering cut cane for transporting to raw sugar factory.



A tractor train loaded with cut cane begins its long trip which will take it first to the factory and then 12,000 miles to the supermarket shelves in Great Britain.



Cut cane arrives at the factory and is washed down in the first stage of the process.

"Sweet sand" (raw sugar) being unloaded from the hold of "Flevoland" at Liverpool Docks. In one trip it transported sufficient raw sugar to be refined into more than 11½ million two-pound bags.



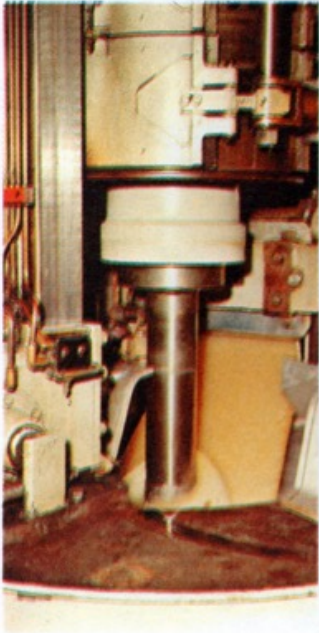
After taking a giant bite, the jaws open and the sugar is dropped into a hopper and onto the conveyor belt.



The sugar arrives in a huge silo where it is stock-piled.



Cane to the Shopping Chain



Molasses being spun off raw sugar.



Raw sugar en route to ocean-going vessel by barge.



ACTA-chartered vessel "Flevoland" brings raw sugar from Australia.



In a matter of seconds the dumper truck is loaded and heads for the refinery.

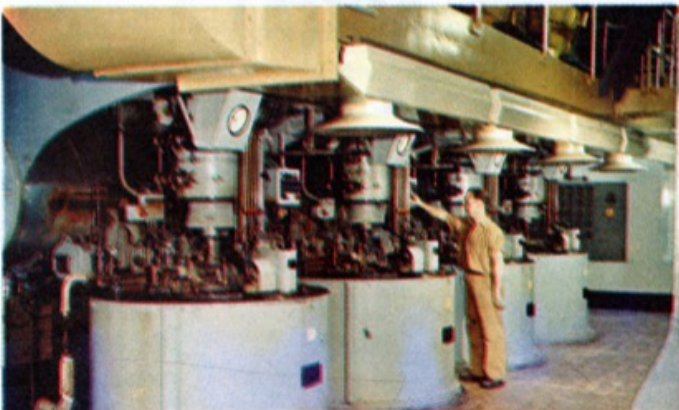


At the refinery the sugar is boiled in these large vacuum pans, each one holding 60 tons of granulated sugar.

The long journey is almost over as the sugar is taken by a housewife from the shelves of the chain store.



White sugar centrifugal machines spinning off unwanted syrups from crystalline in Tate & Lyle's sugar refinery.



ACT(A) EXPANDING REEFER CAPACITY

Four vessels included in new programme

ACT(A), the world's largest transporter of reefer containers, have signed contracts to increase the reefer capacity of four of their vessels in line with their efforts to meet shippers' demands and provide the best possible service.

The first vessel to be included in this new programme will be the "ACT 5" which will go into the Bremer Vulkan shipyard in Bremen in late April. On completion it will have capacity for an additional 102 reefers, increasing its present total of 556 to 658.

The work will take approximately a month and she will be followed in late May or early June by the "ACT 4".

The "ACT 3" and "Australian Exporter" will have their reefer capacity similarly expanded towards the end of the year.



"ACT 4" will have its reefer capacity increased under ACT(A)'s new programme. It is shown entering Wellington harbour.

NEW HAMBURG TUNNEL SAVES TIME FOR SHIPPERS

ACT(A) and BLC are among the 65,000 daily users of the new tunnel under the River Elbe in Hamburg and save valuable time moving their containers.

This tunnel, which was officially opened in January, is a new link in the road stretching from Scandinavia to Portugal.

The river Elbe passes through the southern part of Hamburg which in-

cludes the dock area and previously had to be crossed either by two road-rail bridges or the first Elbe tunnel.

The original tunnel was built during 1906-1911 and the entrance and exit can only be reached by elevators which have a limited lifting capacity and therefore could not be used by lorries and other heavy vehicles.

The new tunnel was first planned in

1958 to relieve congestion in the centre of Hamburg caused by the through traffic driving to and from Scandinavia. Work eventually started on the project in 1968.

The tunnel, 27 metres below water-level is 2,653 metres long and is made up of three inner tunnels each with two lanes of traffic.

The middle part consists of eight concrete segments which were prefabricated in a special dry dock near the tunnel. When they were ready they were made airtight and floated into position. Each segment is 132 metres long 41.7 metres wide 8.4 metres high and weighs 46,000 tons.

This centre part of the tunnel is panelled with roughly 2½ million ceramic tiles.

ACT(A) Agents in Europe

ACT(A) agents on the Continent include:
Belgium: "Conship", Keizerstraat 14.B2000 Antwerp.

West Germany: Menzell & Company Schiffsmakler, 2000 Hamburg 11, Alterwall 67-69.

Holland: "Conva BV", Houtlaan 12, PO Box 149 Rotterdam.

Denmark: E. A. Bendix & Co Ltd 17 Adelgade, DK-1304, Copenhagen K.

Sweden: Aktie Bolaget - Nordisk Express, Kronhusgatan 28,411-13 Gothenburg.

