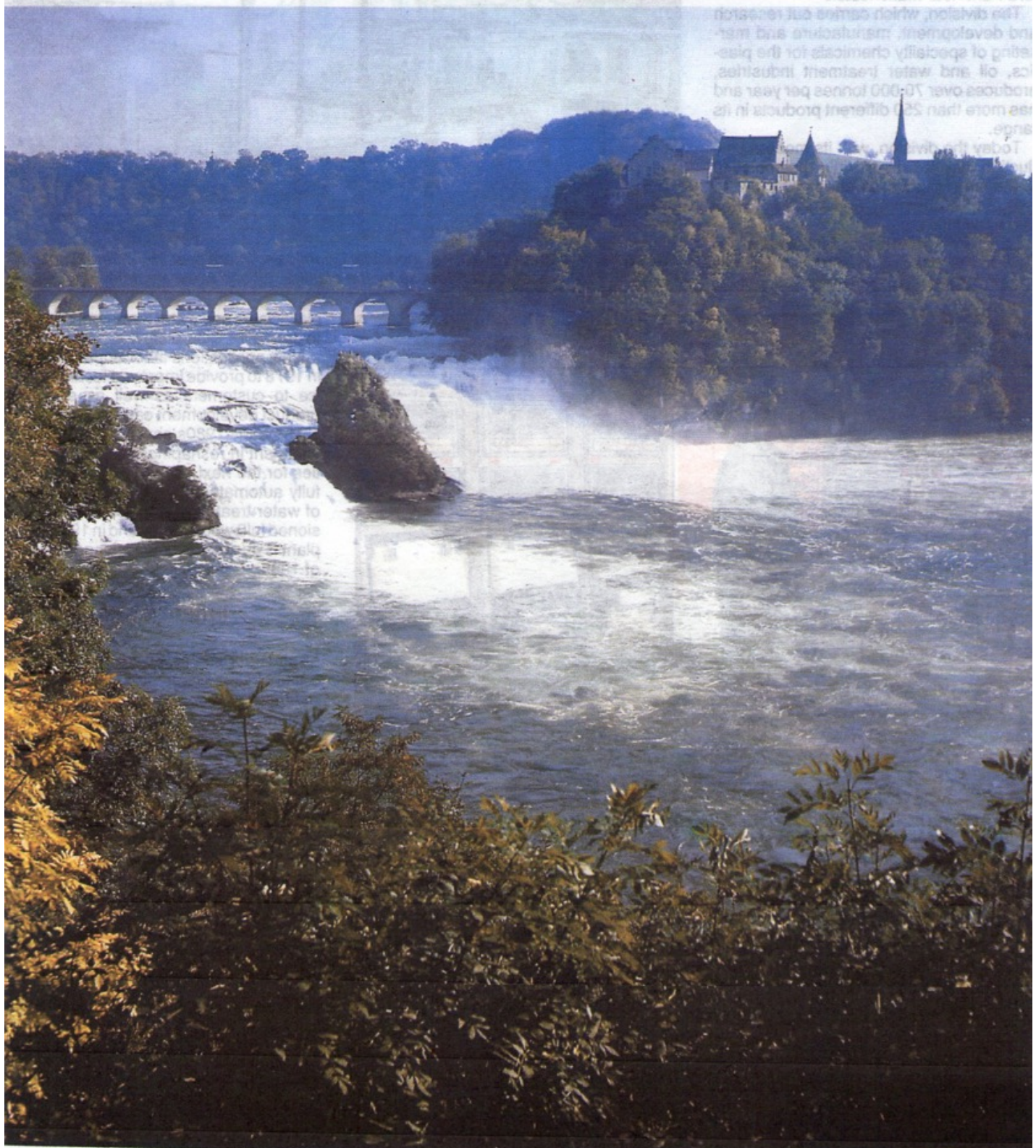


act NEWS

AUTUMN 1989



BEN



**Harrison
Line**

CIBA-GEIGY INDUSTRIAL CHEMICALS
50th
 Anniversary

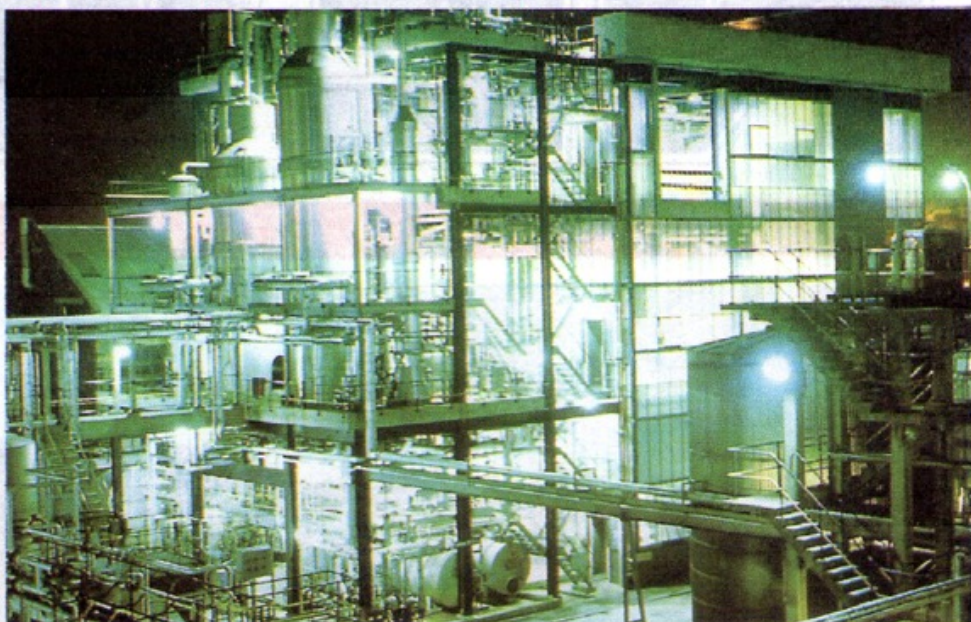
Ciba-Geigy Industrial Chemicals, a division of Ciba-Geigy plc, are celebrating the 50th Anniversary of their opening at Trafford Park near Manchester.

The division, which carries out research and development, manufacture and marketing of speciality chemicals for the plastics, oil and water treatment industries, produces over 70,000 tonnes per year and has more than 250 different products in its range.

Today the division, with its modern production facilities, bears little resemblance to the small production sheds which were typical of a chemical works in the forties and early fifties.

Landmarks in the development of the site include the opening of a new plasticiser plant in 1964 for the manufacture of diesters,

IN THE PURSUIT OF



Work goes on around the clock at Industrial Chemicals, where over 250 different speciality chemicals are manufactured for use by the plastics, oil and water treatment industries.



Sophisticated modern technology is used to continually monitor production processes and control the quality of the products manufactured at Industrial Chemicals.

polyesters and triaryl phosphates. The new plant heralded the division's gradual establishment as one of the world's leading manufacturers of plasticisers.

This business was further strengthened when a new plant for the manufacture of triaryl phosphates came on stream in 1977

Our Cover

Clean water is an important concern of Industrial Chemicals and they manufacture products for the treatment and purification of water worldwide. Our cover shows a view of the Rhine Falls in Switzerland, not far from the International Headquarters of Ciba-Geigy in Basle.

with a capacity of over 40,000 tonnes, making the division the world's largest manufacturer of these products.

The division has gone from strength to strength with over two-thirds of its annual production by value exported to some 70 countries. Member Lines of the ACT Group are frequently called on to ensure that the products are carried efficiently to their destinations.

ACT(A) carries plasticisers and water treatment chemicals and additives to Australasia, Harrison Line takes water treatment chemicals to the Caribbean, EHCL transports industrial chemicals and plasticisers to Southern Africa for use in the manufacture of cling film, food packing, flame retardant materials, cable casings, fridge door seals, etc., and Ben Line ships

plasticisers and water treatment chemicals to Japan for Ciba-Geigy.

New applications laboratories were built in 1978 to provide improved technical service to customers as well as enhancing product development capabilities.

The early 1980s saw a considerable investment in reshaping the division's facilities for the next decade. In 1983 the first fully automated plant for the manufacture of water treatment products was commissioned followed by a second in 1986. A third plant is due to be commissioned at the end of 1989.

INTEGRAL PART

Industrial Chemicals are part of the international Ciba-Geigy Group, which has its headquarters in Basle, Switzerland, and affiliate companies in some 60 countries as well as agencies in many others throughout the world. The division forms an integral part of the Ciba-Geigy plc group of companies in the UK, who constitute a major force in the British chemical industry and are an important part of the Group's international operations.

Annual sales of Industrial Chemicals are in excess of £100 million and the Ciba-Geigy Group employs almost 6,000 people in Britain alone.

Ciba-Geigy Group's origins go back more than 200 years and it is engaged in the worldwide manufacture and sale of colours, chemicals, pharmaceuticals and agricultural chemicals based on original research and technical innovation.

Industrial Chemicals' products are manufactured in modern computer-controlled plants which are built to its own specifications. They have developed a quality assurance system which ensures that their finished products meet the highest standards. The division is registered to British Standard 5750 for Quality Systems and its international equivalent, ISO 9000.

QUALITY AND EXCELLENCE



Partial view of Ciba-Geigy Industrial Chemicals at Trafford Park near Manchester which began operations 50 years ago.

Products manufactured at the Trafford Park site include additives for plastics which help ensure the safety of plastic products; products for the oil industry which help to provide maximum fire resistance whilst maintaining other important properties such as lubrication and resistance to corrosion; and a range of additives to conserve and protect water and water systems against the ever-present problems of scaling, microbiological fouling and corrosion, in an ecologically acceptable and safe way.

Says Managing Director of Ciba-Geigy Industrial Chemicals, Dr. J. Grigor, OBE, "We believe that business is not simply an end in itself but must serve people and fulfill real needs. This fundamental concept governs our actions and behaviour."

This policy is another indication that Ciba-Geigy Industrial Chemicals is a good place to work, that the staff take pride in their jobs and make every effort to ensure top quality products, maintaining the highest standards.

This is the spirit that will undoubtedly see the Division through its second 50 years at Trafford Park and on into the future.



Storage and distribution of products from Trafford Park is controlled from modern, efficient warehousing areas. A view of a typical storage area is pictured above.



Inspecting a shipment of chemicals at Trafford Park (photo at left) before being loaded into an ACT container are (left to right) Tony Woodiwiss, Distribution Manager, and Martin Walker, Export Officer, of Ciba-Geigy and Keith Riley, North-West Regional Sales Manager of ACT(A). Pictured right is the loaded container leaving Industrial Chemicals' premises bound for Australia.



Whitbread Round the World Race Begins

The yachts taking part in the Whitbread Round the World Yacht Race sailed from Portsmouth Harbour on September 2nd on the first leg of the 35,000 nautical mile event, bound for Punta del Este in Uruguay, a distance of 6281 nautical miles.

Tipped as one of the favourites in the race is the "Fisher & Paykel New Zealand", which is being sponsored by ACT(A). Designed by internationally respected Bruce Farr, the maxi yacht is the world's first computer driven, ketch rigged yacht.

Skippered by Grant Dalton, the vessel won the Rothmans' Transatlantic Race which took place in June, starting from Newport, Rhode Island (USA) and finishing at the Royal Cork Yacht Club at Crosshaven in Southern Ireland, the oldest yacht club in the world, founded nearly 270 years ago.

GREATEST TEST

The "Fisher & Paykel New Zealand" took part in the Rothmans' Transatlantic Race to test herself against strong competition and to "show her paces" in preparation for the Whitbread, which has become the greatest test for man against the world's major oceans.

Following her sensational win in the Rothmans', "Fisher & Paykel New Zealand" continued on to Plymouth, England, where she spent nearly three months, with the crew sharpening their skills until they became even more finely honed.

Skipper Grant Dalton and his 17-man all Kiwi crew, are full of confidence and ready to meet any challenge. He said, "We definitely expect to lead into all the ports on the race and don't be surprised if we cut a day or more off the projected dates of arrival at each port!"

With that kind of fighting spirit who can doubt that the "Fisher & Paykel New Zealand" will do well in the Whitbread Round the World Race. She will be backed by ACT(A) all the way - and that's a winning team if there ever was one!



Congratulating the Skipper of the "Fisher & Paykel New Zealand", Grant Dalton (second from right), on winning the Rothmans' Transatlantic Race, are Peter Taylor (second from left), UK Marketing Manager of ACT(A); Jan de Bruyn (right), Marketing Director of CAS, ACT(A)'s agents in Ireland; and Kevin Breen, CAS' Agent in Cork.



Skipper Grant Dalton (left) explains some of the sophisticated navigating equipment on the "Fisher & Paykel New Zealand" to Peter Taylor (centre) and Jan de Bruyn.



After relaxing for a few days at Cork, the crew of the "Fisher & Paykel New Zealand" sailed to Plymouth, England, where they meticulously prepared for the Whitbread Round the World Race. In the photo at left the crew go out for one of their frequent practice runs and at right, after returning to Plymouth Harbour, they carefully stow away their gear.

Rally Cars for World Championship

Two Ford Sierra Cosworths were carried to Auckland by ACT(A) to take part in the World Championship Rally held in New Zealand. The stunning and powerful vehicles were making their first appearance in the Southern Hemisphere and the drivers were a well-known British father and son duo, each in competition with the other.

The father, Jimmy McRae, five times British Open Rally Champion and renowned for his lightning fast pace on the Tarmac, has won the prestigious "24 Heures d'Ypres" rally in Belgium and has also won the Circuit of Ireland a record six times.

REMARKABLE SUCCESS

His son Colin is following in the footsteps (or tyre tracks) of his famous father and the 20-year old Scot has already achieved remarkable success in his own right. In 1986 he won the 1600cc class of the Scottish Rally Championship in his first year of driving a Sunbeam TI. The following year he won the British National Championship (0-1300cc class) in a Vauxhall Nova SR – the same year his father won the Overall British Championship in a Ford Sierra Cosworth.

Last year Colin moved into the 1600-2000cc class driving a Peugeot 309 GTI. He won the British Group N Championship in class, in both the National and Open Series and then topped off an exceptional year by also winning the Scottish Rally Championship in a Ford Sierra Cosworth.

FIERCE BATTLE

The World Championship Rally in New Zealand, which took place during July, saw a fierce battle for honours between father and son. Jimmy McRae and his co-driver, Rob Arthur, were pushing for the lead most of the way when they suffered an horrific crash, but luckily escaped with only minor injuries.

Young Colin McRae was hailed by the New Zealand press as one of the most promising young drivers in the race, with the talent to become a World Champion. He fought hard throughout the gruelling race, which tested both men and machines.

He and his co-driver, Derek Ringer, finished fifth overall and Colin obtained his "B Seeding", the youngest person ever to have gained it.

"ACT(A) is proud to have helped sponsor the McRaes in the World Championship Rally in New Zealand," said Peter Taylor, UK Marketing Manager of ACT(A). "They made a tremendous effort and gave a great deal of enjoyment to the crowds," he declared.



Making a final adjustment before his car is loaded is Jimmy McRae (second from left) assisted by his co-driver Rob Arthur (left) observed by Graham Dickinson (second from right), Assistant Regional Sales Manager—Southern Region— of ACT(A) and Terry Bradley, Engineer at the Ford Competition Workshop in Essex.



The World Championship Rally in New Zealand was a gruelling test of stamina. In the photo above Jimmy McRae fights against the elements while below young Colin McRae comes flying through the mud.



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BEN LINE - PROVIDING THE

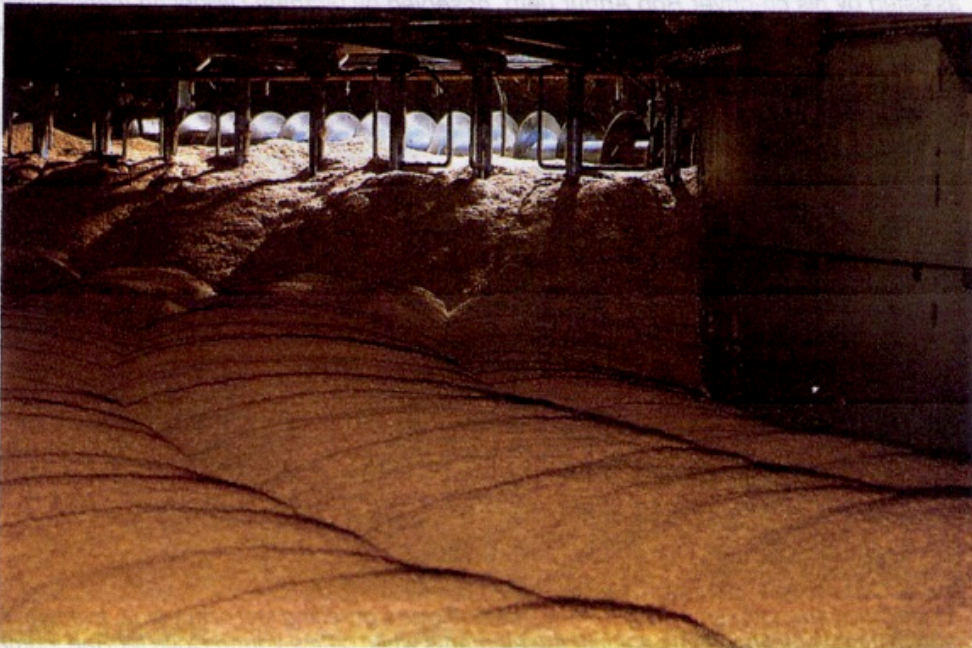
Malt is one of the major commodities shipped in containers from Europe to South-East Asia and Japan. Ben Line have led the way in developing the expertise required to ship this cargo in general containers.

The Ben Line bulk containment system provides for hygienic, safe and cost-effective shipments. It involves the use of general-purpose 20-foot dry containers fitted with a special polythene liner and steel bulkhead. The bulkhead was designed and developed by Ben Line Containers in liaison with ACT Services, whose associated company, Container Repairs Ltd, has been involved in its manufacture.

Once fitted with the liner and bulkhead, the container may be loaded by a variety of methods, including single screw conveyor, twin screw conveyor, tipper truck loading from a conveyor, and thrower. On discharge the malt is unloaded simply by tipping the container over a ground hopper and slitting the bottom of the bag to allow the malt to fall into the hopper.



Quality starts with the raw material and farmers are given all possible help by the maltsters in producing barley that will command the best price at harvest time.

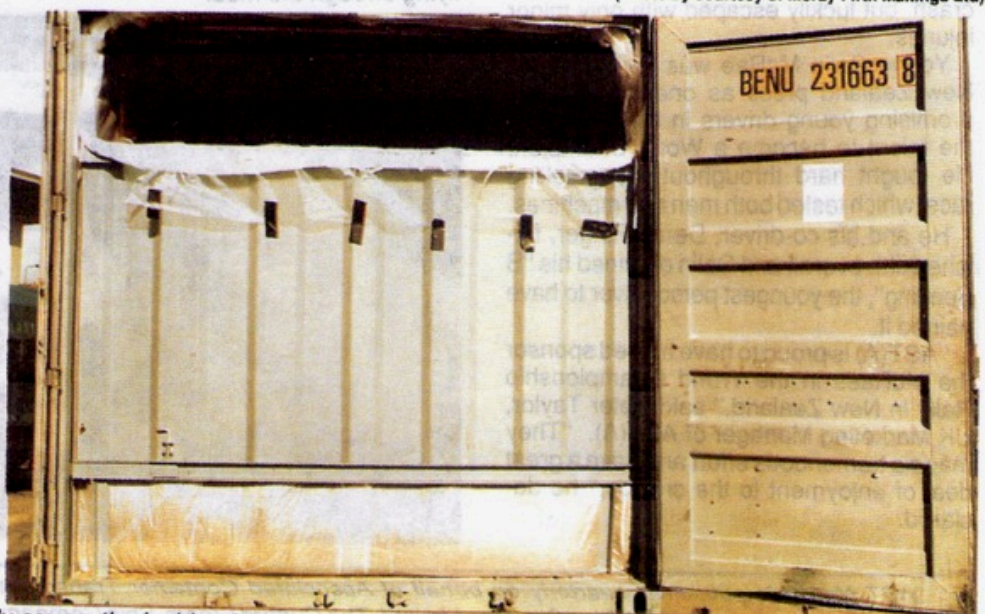


As well as enabling fast and efficient loading and discharge, the Ben Line system reduces the cost of through transport, when compared with shipping by bulk container (due to higher payload), minimises the risk of tainting and ensures load security and safety for personnel involved in loading and discharge. The system, with suitable modifications, can be used for any dry bulk product shipment and is currently used to ship china clay to Japan and Taiwan and Terephthalic acid crystals used in the manufacture of Terylene to Malaysia, South Korea and Indonesia.

Malt, made from barley, is used primarily in brewing and whisky distilling but also has

The malting process imitates the same natural conditions as when the barley is sown in the ground as seed. The water, air and warmth start the process of germination to convert the barley into a form in which it can be used by the distiller.

(Photo by courtesy of Moray Firth Maltings Ltd)



A strong 700-gauge polythene liner completely covers the inside of a standard container (above left) so that the malt cannot come into contact with any metal or wooden part of the container. The specially developed steel bulkhead (right) holds the malt in the container while allowing space for loading and discharge.

VITAL LINK IN THE CHAIN



After it has been fitted with the special bulkhead and polythene liner, the container may be loaded by one of a number of different methods — by twin screw conveyor specially trailer mounted (above left), pictured at Pauls Malt Ltd., and by single screw conveyor (at right) with end T-piece spreader, which is taking place at Crisp Malting Ltd.

a wide variety of uses in the food and confectionery industries.

In its raw form, barley is not suitable for brewing because the basic food store in the grain, the endosperm, is not soluble. The maltster is therefore concerned with breakdown of the endosperm and the accumulation of enzymes.



Another method of loading is by tipper truck from a specially constructed conveyor, which is seen at Moray Firth Maltings Ltd.

The transition from a field of golden ripe barley to the end product of a glass of beer or whisky is a long and complex one. The maltster's expertise is employed in turning the barley grain into malt — a precisely regulated process using water, air and heat.

The process includes mixing the grain with water in the steep room to encourage the germination process, then putting it into a germination box, where it is encouraged to grow for three days or more before going to the kiln where the malt is cured and the germination process stopped.

Each process is carefully controlled and monitored by sophisticated equipment. The

germination room, for example, is air conditioned to keep the malt at 58-60 degrees Fahrenheit. The malt is analysed every 24 hours in the germination room to monitor its progress.

The brewer or distiller has an equally skilful task in using the malt to create a quality end product. By ensuring that the malt is transported in perfect condition, Ben Line provide a vital link in the chain.

One of these expert maltsters is Pauls Malt Ltd., Europe's largest malting com-



pany. They produce enough malt annually to make over five thousand million pints of beer. Over 40 per cent of their production is shipped to overseas markets, and Ben Line and other Lines in the ACT Group play an important role in its transport.

Apart from the brewing industry — and beer is by far the largest single use to which malt is put — malt is used in whisky, malted milk drinks such as Horlicks and Ovaltine, bread, vinegar, malt extracts, flavouring and speciality products.



After loading the malt is further protected by a flap (above left) which is tied up to close the loading aperture. When the container arrives at the discharge point (right) the malt is unloaded simply by placing the container on a tipping chassis, positioning it over a ground hopper, and slitting the bottom of the bag to allow the malt to fall into the hopper.



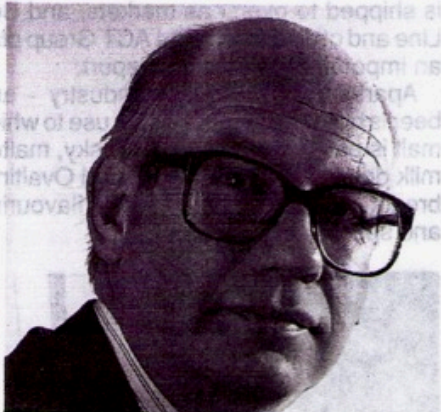
Two Millionth Trio TEU at Rotterdam



The two millionth TEU of the Trio consortium to be loaded/discharged at Rotterdam's Unitcentre Container Terminal is pictured just before loading aboard the "Tokio Express" at the new Pier 6 Terminal of Unitcentre. Ben Line is a founder member of the three-nation Trio consortium which was set up in 1972 to offer shippers a regular service between the Far East and the UK/Continent and now provides 27 ships for that trade.

(Photo courtesy of Aeroview-Dicksellenraad and Unitcentre Terminal)

FEFC Chair for Ben Line Chief



William Thomson, Chairman of the Ben Line Group, has been appointed Chairman of the Far Eastern Freight Conference (FEFC). He succeeds Sir Kerry St Johnston.

Mr. Thomson, who took over as Chairman in September, said that his objectives were the same as those of his predecessor. He will try to improve the stability of freight rates on the eastbound and westbound legs of the trade between Europe and the Far East.

Mr. Thomson is concerned that rate stability does not exist at the moment but while it was difficult to achieve, it would be largely a matter of discussion between shipowners and shippers.

He told "ACT News" that one of the main issues to be tackled was the relationship between the amount of tonnage available and the size of the trade.

Mr. Thomson is from the sixth generation of the well known Edinburgh shipping family. He trained as a chartered accountant, and serves on the boards of a number of companies.

TRUCKS TO AID MOZAMBIQUE

EHCL has been called on by TIM (UK) Limited to carry ten 6.5 tonne trucks to Mozambique where they will be used in the distribution of aid through the CARE charity organisation.

The Leyland DAF Comet BH620 trucks were shipped on the "Nedlloyd Rotterdam", one of three ro-ro vessels operating in the Southern Africa Europe Container Service (SAECS), of which EHCL is a member.

"Mozambique is continuing to grow in importance both as a trading partner with Europe for EHCL and as a vital transit point for goods to and from central Southern Africa," said Mike Butler, Sales and Marketing Manager of EHCL. "We and TIM, the leading clearing and forwarding agents in the Mozambique trade, have built up a close relationship," he declared.



One of the 6.5 tonne trucks being shipped by EHCL for use in the distribution of aid in Mozambique is driven up the ramp of the "Nedlloyd Rotterdam" at Southampton.



Inspecting one of the ten Leyland DAF trucks shortly before loading is Eric Russell, Southamton Terminal Regional Manager of ACT Services.

South African Sprint Cars Take Off in the UK

Hotrod Racing enthusiasts in the UK have been introduced to South African sprint cars and have been thrilled by these V8-powered fuel injected vehicles that are capable of speeds in excess of 200 kilometres per hour on a 400-metre oval track.

The British Hotrod Association invited South Africa's six top drivers of this class of vehicle to participate in events during the summer around Britain. These sprint cars with 500-700 horsepower engines had not been seen in Europe before.

The team manager is Johan Cronje, who is the defending South African Tar Sprint Car Champion, and he and his team-mates plainly enjoy this exciting (and noisy!) sport and communicated their enthusiasm to the crowds.

NEW CLASS

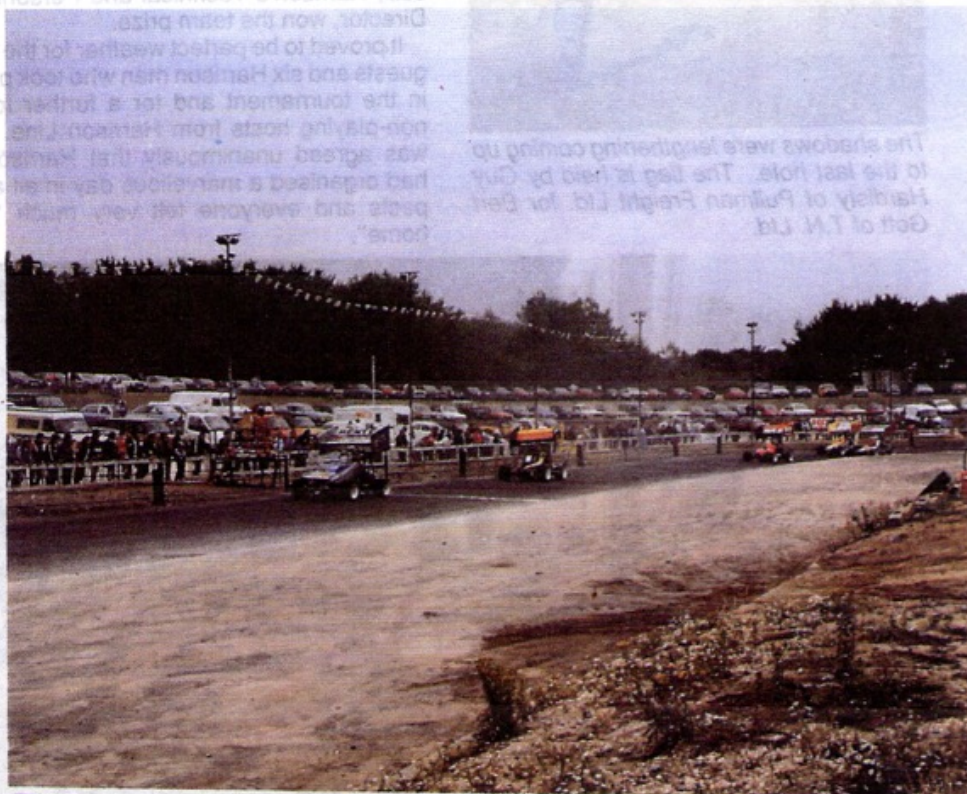
The six sprint cars were shipped from South Africa by EHCL through their agents, Ellerman & Bucknall Pty. Ltd., and Constantine Wingate handled the Customs clearance in the UK. The vehicles created a tremendous amount of interest wherever they went and it is hoped that this tour will be instrumental in starting a new class of racing in Britain.

The speeds attained by the sprint cars with their giant Chevrolet engines, which develop up to 700 horsepower, literally results in a single-seater light chassis becoming airborne if it were not for the aerodynamically designed wings to prevent it.

When the cars have completed their exhibitions around the country, they will be shipped back to South Africa by EHCL, along with spare parts and equipment.



Discussing the shipment of the sprint cars from South Africa (above) after they were unloaded at Matchams Park Stadium in Southern England are (left to right) Johan Cronje, Team Manager; David Bell, Manager of Constantine Wingate's Southampton Office; and Mike Butler, Sales and Marketing Manager of EHCL. Messrs. Bell and Butler (below left) get an explanation of the car's operation from Johan Cronje and (below right) they inspect the cars shortly before the race begins at Matchams.



The South African sprint cars racing at Matchams (photo at left) where they thrilled the crowds as well as at other venues in the UK. In the photograph at right one of the cars comes off the track, but no harm was done and it continued the race.

Harrison Line's 'At Home' Golfing Day

When Harrison Line held their Annual Golf Tournament at the Wallasey Golf Links near Liverpool this summer, it must have seemed as if they were hosting an "At Home" Day for their customers and members of staff.

That is because the golf course and the surrounding area have been intimately linked with the Harrison family for over a century.

The Wallasey Golf Links, which are located on the Wirral across the River Mersey from Liverpool, were created in 1891 on land rented from - but subsequently sold by - the Harrison family, "Ship Owners of the City of Liverpool".

They also provided the funds to build the Club House in 1899 and to this day the oldest trophy played for at the Club is the Harrison Medal.

Across the road from the Club stands St. Nicholas' Church (St. Nicholas being the Patron Saint of Seafarers) which was built by Mr. Frederick and Sir Heath Harrison, Bt., as a memorial to their parents. The church, which was completed in 1911, together with the Vicarage and Parish Hall



Ready to tee off are (left to right) David Hope of Harrison Line, Gordon Rowan of ICI and David Marsden of Hardwood Dimensions Ltd.



Photographed shortly before beginning play at the Wallasey Golf Links near Liverpool were (left to right) Tony Shields of Guinness Exports plc, Peter Lloyd of Unichema Ltd, who finished a close second, and Peter Geoghegan of ICI.



It was all smiles for (left to right) Alan Hobson of Monsanto plc, Dennis Martin of the Fyffes Group and Brian Dawson of Harrison Line.

were a gift that the Vicar and parish thankfully acknowledged as "relieving the parish of a good deal of anxiety as to the ways and means of providing the necessary money!".

Approaching the Golf Links, nearer the Wirral shore line, runs Harrison Drive and Harrison Park is not far away.

With the family so well remembered in Wallasey, it seems fitting that the Harrison Line Golf Days should take place at these fine championship Links. It is also quite convenient that the organiser of the event, Harrison's regional sales co-ordinator, David

"The 19th Hole" and some welcome refreshment after the tournament which was played in perfect weather. A toast was drunk to Harrisons for organising a delightful golf day for the guests.



The shadows were lengthening coming up to the last hole. The flag is held by Guy Hardisty of Pullman Freight Ltd. for Bert Gott of T.N. Ltd.

Hope, should be a Member of the Club and past Chairman of the Greens Committee!

Apart from maintaining an outstanding golf course, Wallasey Golf Club is well-known as being the home of the internationally used Stableford points system since Dr. Frank Stableford, who devised the system, was a Member of the Club and its Captain in the 1920s.

Colin Langford of Constantine Wingate won the tournament, closely followed by Peter Lloyd of Unichema and Rob Goodall of Linwood Freight. Colin Langford, Tony Woodiwiss of Ciba-Geigy and Peter Rosselli, Harrison's Technical and Personnel Director, won the team prize.

It proved to be perfect weather for the 23 guests and six Harrison men who took part in the tournament and for a further four non-playing hosts from Harrison Line. It was agreed unanimously that Harrisons had organised a marvellous day in all aspects and everyone felt very much "at home".



Harrison Line

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GLORIA TO MAP THE GREAT UNKNOWN

A revolutionary seabed mapping system is to be used to unlock the secrets of the deep waters of Australia's Great Barrier Reef in what oceanographers hope will open a whole new frontier.

The unique system, which was developed by the British Institute of Oceanographic Sciences and has been built by Marconi Underwater Systems, is formally known as Geological Long Range Inclined Asdic or GLORIA. This sleek torpedo-like scanner is towed behind a ship and will build up

ment of Geology, will cover 150,000 square kilometres of the sea floor - half the land area of the UK - in a region east of the Great Barrier Reef.

It is expected that the survey will reveal unforeseen opportunities for the offshore oil industry and will discover new horizons for scientists and defence planners as it plots structures lying hidden beneath thousands of metres of water. Also, details of offshore movement of nutrients and how this affects the behaviour of schools of fish should benefit the fishing industry.

"This could herald a new area of exploration," said Dr. David Johnson, "as we are at the same stage in the marine realm that we were 200 years ago on land in Australia. We know nothing about the deep ocean floor around the Great Barrier Reef and

unless we get an idea of what is underneath all that water, we are never going to be able to exploit it properly," he explained.

GLORIA sends out high frequency sonar pulses or "pings" across the ocean floor and the return time of the echoes and their strength are digitally recorded and printed out as sonographs, resembling an oblique aerial photograph but with an important difference - the images recorded by GLORIA will indicate the nature of the bottom, as individual rock forms resound like different shaped bells when they are hit by the scanner's sound waves.

Dr. Johnson hopes in the long term to produce detailed maps of the ocean floor ringing Australia between the break in the Continental Shelf and the boundary of the 200 kilometre economic zone.



Ready for launching. The torpedo shaped GLORIA is towed behind a ship and emits pulses of sound in a fan-shaped beam on either side at right angles to the ship's track.

amazingly precise images of geological structures across a width of 60 kilometres while being towed at eight knots, operating at full ocean depths.

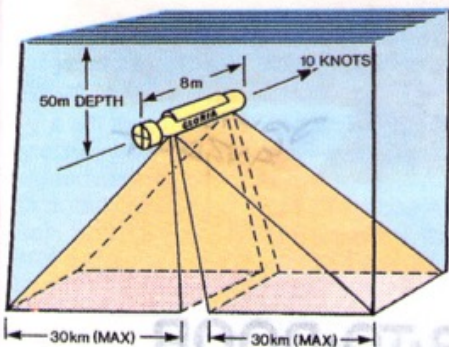
GLORIA and the equipment for the survey was shipped to Australia by ACT(A)



A container load of auxiliary equipment to be used in the mapping of the deep waters of Australia's Great Barrier Reef by GLORIA is loaded at Marconi Underwater Systems' premises at Watford.



Shortly before GLORIA was loaded at Tilbury Docks by ACT(A), the project is discussed by Andrew Tizard (right), Systems Manager-Ocean Systems Division, of Marconi Underwater Systems, with Graham Dickinson (centre), Assistant Sales Manager-Southern Region, of ACT(A), and Graham Godwin, Tilbury Terminal Controller of ACT Services.



GLORIA can survey over 20,000 square kilometres a day. The echoes from the sea floor are recorded on an acoustic image (a "sonograph") built up by successive scans as the ship moves forward.

and the system will be fitted to HMAS Cook, an Oceanographic Research Vessel in the Royal Australian Navy.

The survey, which has been commissioned by James Cook University in Townsville, North Queensland and will be led by Dr. David Johnson from the Depart-