

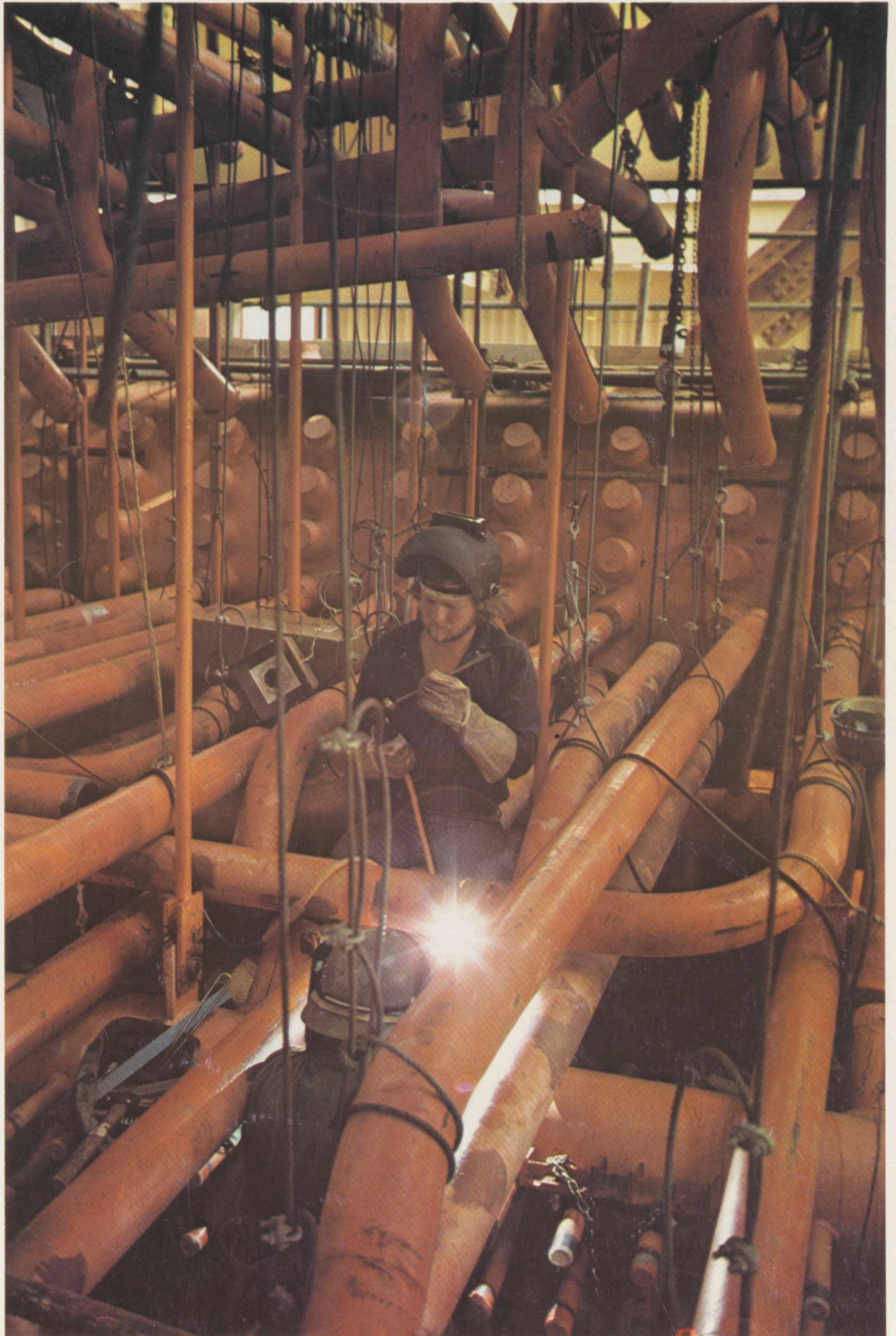
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The magazine of the Fletcher Organisation

WINTER 1978



FLETCHER CHALLENGE
ARCHIVES





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ABOVE: The chimneys of Marsden A and B have become familiar Northland landmarks.

COVER: Work has passed the half-way stage in construction of the Marsden B power station near Whangarei. The \$40 million contract is being carried out by the Fletcher-Downer-Wilkins & Davies consortium. The cover picture shows welders installing pipes high up in the boiler house. See the following pages. (Photos by Brian Brake)

Produced for Fletcher Holdings Limited, Private Bag, Auckland, by David Brett Limited. Editorial Address: P.O. Box 37-388, Auckland. Phone 793-154.

The Half-Way Mark For Marsden B

Construction work on the multi-million dollar Marsden B power station has passed the half-way stage.

The 250-megawatt station, being built for the New Zealand Electricity Department, is due to feed into the national grid in December 1979. It will double the electricity output from the Northland power complex.

The project workforce is approaching its peak, with more than 500 now employed on the site.

Project design and management is in the hands of the Los Angeles-based Bechtel Pacific Corporation Ltd. The \$40 million construction contract is being carried out by the New Zealand consortium of Fletcher Construction, Downer & Company and Wilkins & Davies, which was also prime contractor on Marsden A.

Already the station has taken a recognisable form. Well under way are the turbine building and boiler house, and the control centre housing the laboratory, computer room, air conditioning and electrical equipment.

The 120-metre high reinforced concrete chimney has reached its full height.

In addition, some 100 residential homes for construction staff and their

families have been built, an operation which has more than doubled the size of the original Marsden A village.

Says construction manager Ken Wischusen, an Australian construction engineer, employed for the project:

"Residential housing was preferred to the traditional single men's camp type accommodation. The houses will become available for NZED and Housing Corporation purposes when the job is completed.

"As with Marsden A, the new station is built on sand, and a deep-well system was used to remove the ground water.

"We shifted about 100,000 cubic metres of sand to lay the foundations and cooling water pipes.

"The major plant equipment, supplied from Japan, came in four ships, which were unloaded at Marsden Point. Included in these items were the turbine, boiler, generator, three transformers and the condenser, all supplied by Mitsubishi Heavy Industries, and material for the four massive fuel storage tanks, which are being constructed by Chicago Bridge and Iron, U.S.A.

"We needed acres of storage space, both indoors and outdoors," Mr Wischusen recalls. "It was a big job

transporting 200-tonne loads from the wharf to the site, and handling them into position."

Marsden B, a 250-megawatt oil-fired unit, is being built adjacent to the Marsden A station at Ruakaka, 35km south-east of Whangarei.

Both stations are fuelled by "residual fuel" — the residue after the refining process has been carried out — which is piped from the nearby Marsden Point refinery.

Marsden B differs from its sister station in that it generates power from a single 3000rpm turbine, as opposed to Marsden A's two smaller turbines.

The steel-framed turbine building houses the turbine generation unit and auxiliary equipment. A 45-tonne bridge crane which travels the full length of the building is being used in construction, and will remain in service for maintenance purposes when the station is operating.

BELOW: The smoothly tapering columns of the Marsden chimneys stand out in sharp contrast to the jagged mass of peaks at Whangarei Heads.



The steam-driven turbine is coupled to the generator and exciter, giving the unit a total length of 35 metres.

The contractors estimate that 23km of piping, 350km of electrical cable, 1100 light fittings and 14,000 litres of paint will have been used by the time the work is finished.

On the administrative side, the pay office will have issued 90,000 pay envelopes. And some six tonnes of tea, coffee and soup powder will have been consumed by construction staff.

RIGHT: Construction manager Ken Wischusen pictured in front of the turbine building and boiler house of Marsden B.

BELOW: A view of the vast turbine hall as a piece of the turbine equipment is moved into position.

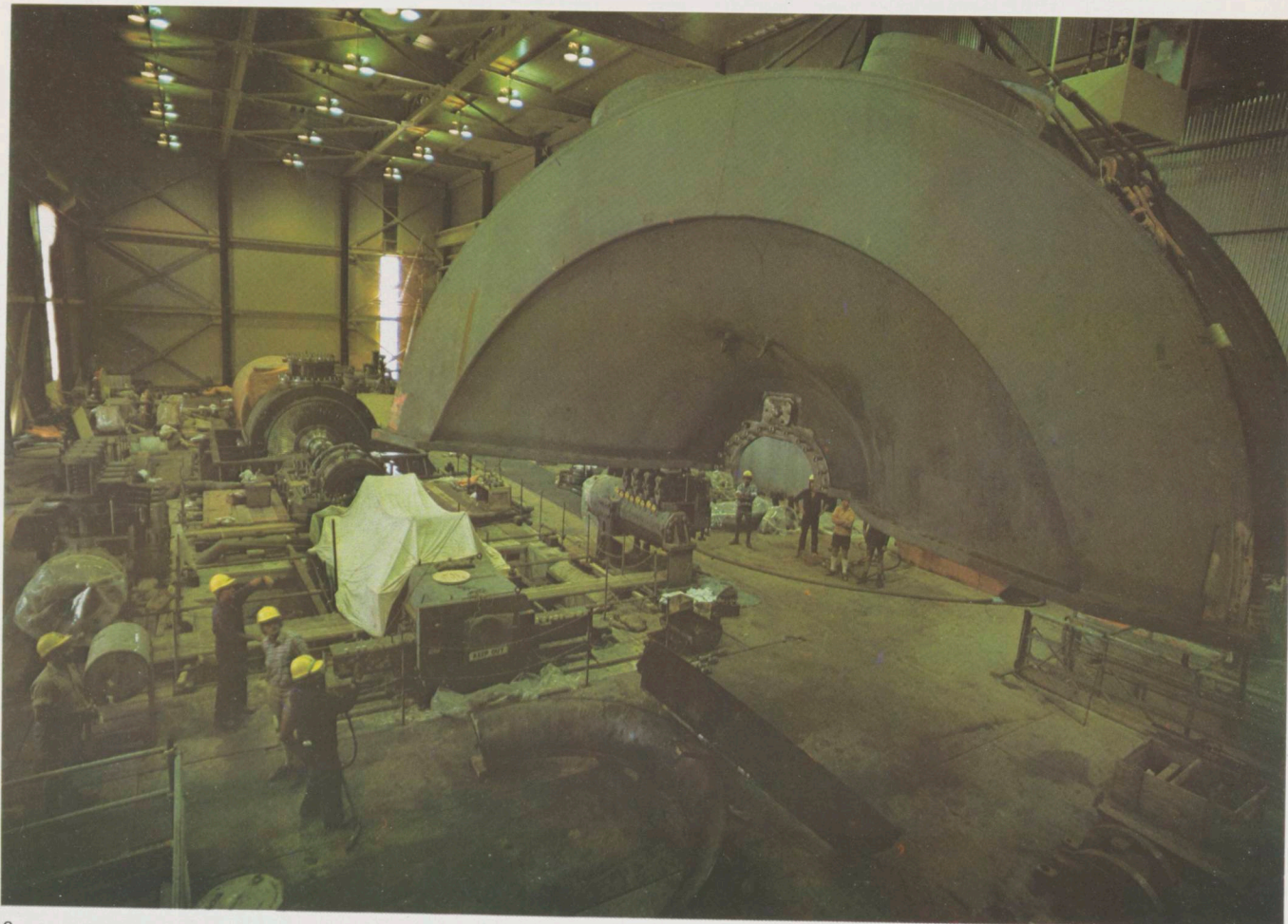
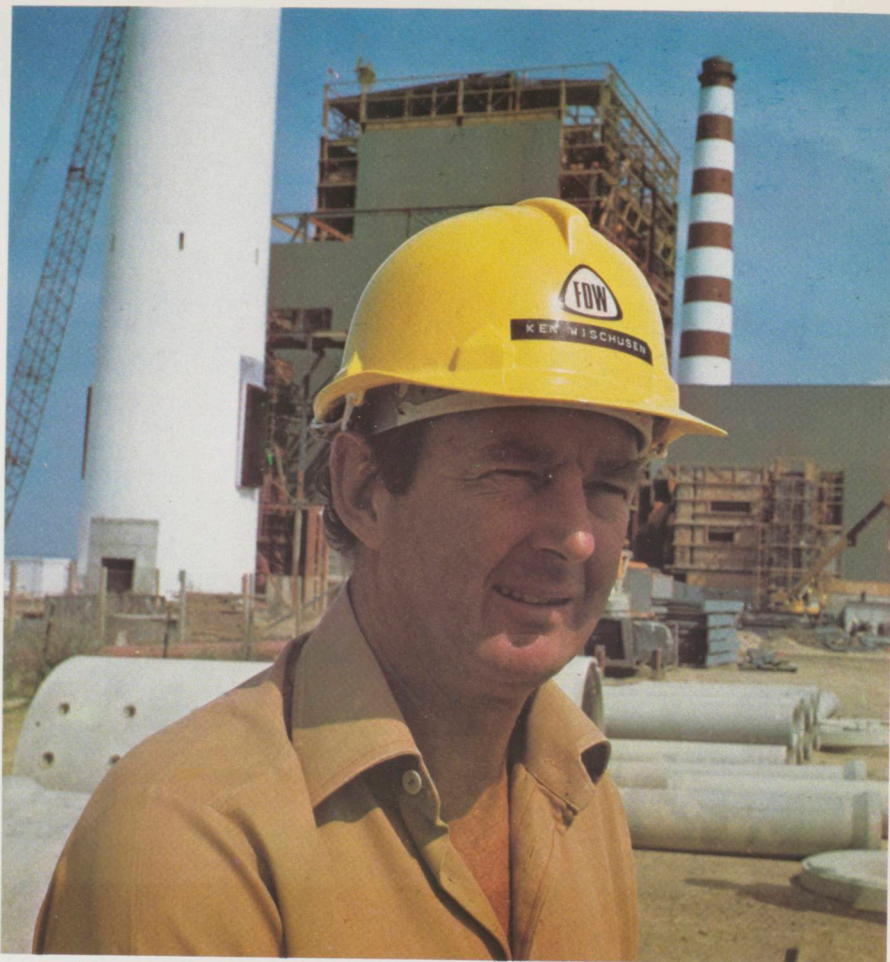
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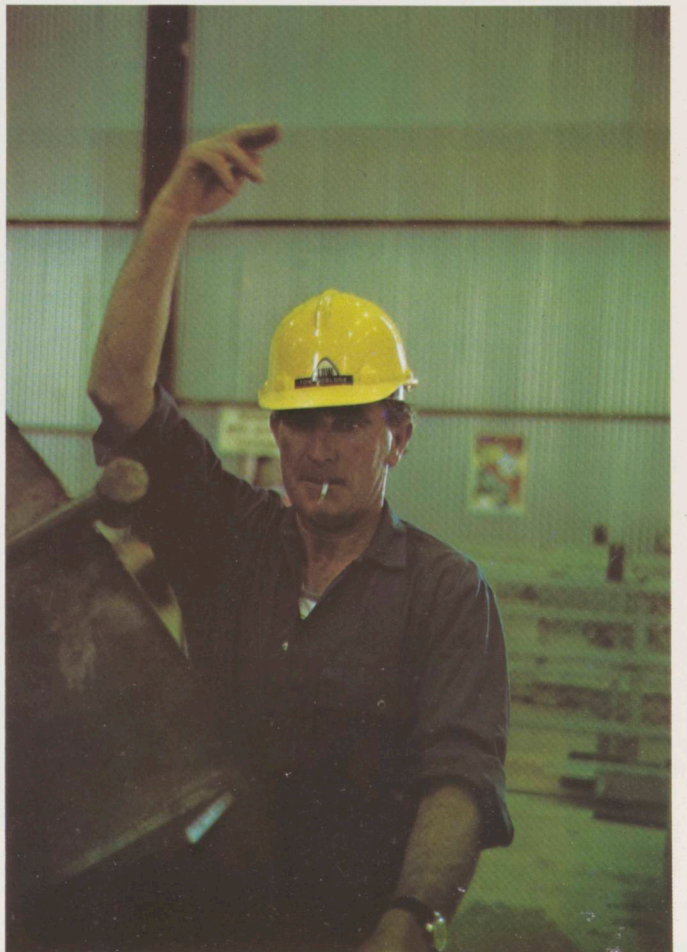
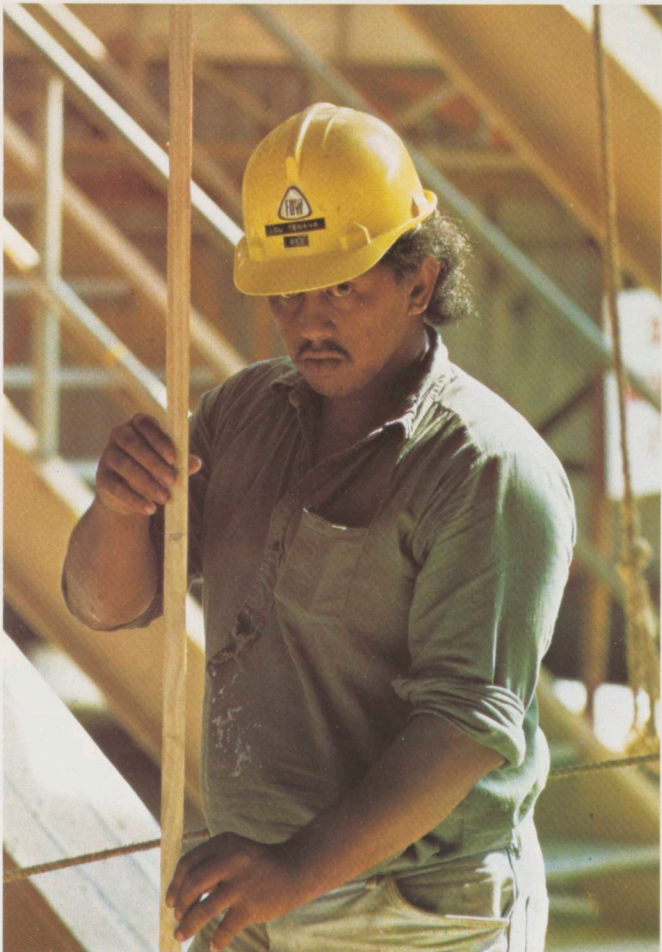
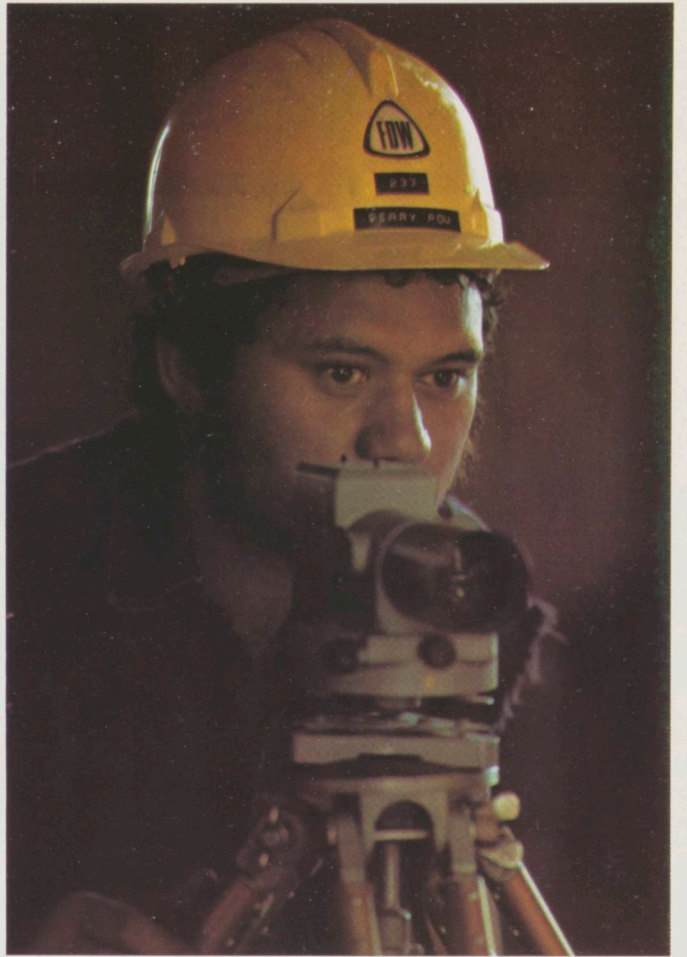
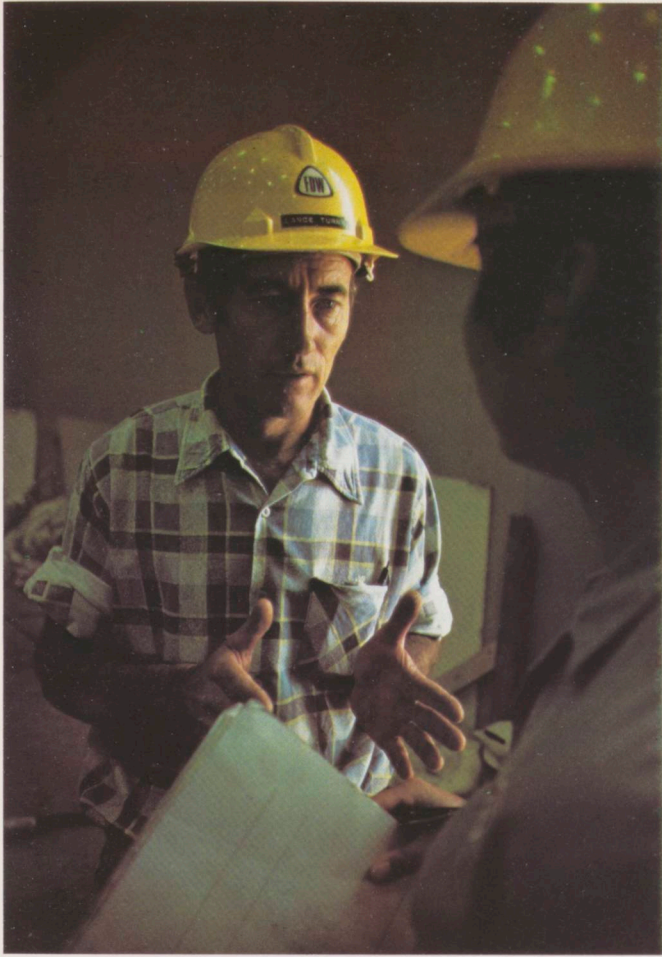
TOP LEFT: Mechanical foreman Lance Turner explains a point to one of his men.

TOP RIGHT: Carpenter Perry Pou.

BOTTOM LEFT: Carpenter's labourer Lou Tenana.

BOTTOM RIGHT: Rigger Tom McGlone directs a crane operation.







Up goes a Fletcher banner in preparation for opening day.



Part of the Fletcher pavilion was itself a successful export product — a Greenhouse sheathed in Duro-lite and designed and marketed by Fletcher Brownbuilt. A workman is shown (above) completing the roof installation. RIGHT: New Zealand Wire Industries Ltd's stand was strikingly futuristic.



ABOVE: Duroid sales manager Mr Richard Gardiner (right) discusses Duralfoil insulating foil with his company's Indonesian agent, Mr T. Setjo, who brought his wife and son to New Zealand for the fair.



TOP RIGHT: Mr Clive Currie, sales manager for Fletcher CSP — Galvanizing, emphasises the strength of an Armco steel culvert to Mr Y. Shirawi, the Minister for Development of Bahrain.

RIGHT: All the exporting divisions and subsidiaries of Fletcher Holdings were represented in the Group's pavillion. This is part of the display erected by Fletcher Steel.



Fletcher Group Trebles Export Sales

The Fletcher Group's planned commitment to growth of export business is reflected in the greatly increased volume of sales achieved last year.

The chairman of Fletcher Holdings Limited, Mr J.C. Fletcher, announced in May that direct overseas sales of the Group's products and services in the year to March 31, 1978, totalled \$15.9 million.

This figure compares with \$11.4 million in 1976-77 and \$5.3 million in 1975-76.

Mr Fletcher noted that, in a time of generally reduced economic activity, the Group had trebled its export sales in the last two years, and had achieved a 39 per cent increase over 1976-77.

A sound base had now been established for significant

expansion in a wide range of items, from timber to housing, from steel to project management, he said.

"With other countries becoming increasingly self-sufficient in food production, not just our continued prosperity but our very survival depends on the ability of New Zealand industry to augment earnings from primary production with an ever-increasing volume of manufactured and processed goods.

"The Fletcher Group regards the winning and servicing of new export markets as a central business objective," said Mr Fletcher. "It is to be hoped that in Export Year other New Zealand companies, regardless of size, will encourage and insist upon export-consciousness from the factory floor right through to senior management."



Tiffany Kitchen Units Combine Glamour with Simplicity

Kitchens being what they are, everyone has her — sometimes his — own design tastes.

A system currently being used by Peerless Industries in its range of Tiffany kitchens caters for all tastes.

The assembly system is called Loklip and is based on a simple corner joint which makes the construction of a box from flat panels and metal clips a simple matter.

It originated from a method of container manufacture, and has been adapted by the Hamilton-based company for use in kitchen unit manufacture.

As Peerless Industries' general manager, Mr John Tattley, says, "Generally, kitchen fittings are only boxes with openings in them."

Here's how the system works. A Loklip box is made up of specially machined panels locked together by a patented metal clip system. The clip is roll formed from zinc-coated steel of extruded alloy. Being made in a wedge shape of less than 90 degrees, the clip is able to be 'clicked on' to the two board edges.

It sounds complex, but it's an extremely efficient method of making a box — or cupboard.

By using standard materials — 12mm thick particle board, 400mm modules, treated clips — Peerless has refined the system to volume kitchen production while retaining the opportunity for individual flair.

Insides of cupboards are pre-finished and the range is offered in various stages of completion as well as a number of different styles to suit the individual buyer.

"The system originated in Australia," Mr Tattley told *Arrowhead*. "Some Fletcher people, realising its potential, brought the idea back to New Zealand.

"The system has been a reasonable success in container manufacture, giving transport, storage and weight savings, good protection and easy replacement of parts.

"We've invested in a new 750 sq m (8,000 sq ft) factory with new plant and machinery since starting manufacture in Hamilton three years ago," he said.

"Fletcher Group companies provide the materials. We roll-form the metal clips and Plyco supplies us with the Superfine particle board."

A full range of kitchen units including both above- and below-bench cupboards and pantries are made using the Loklip

system. They are strong, versatile, leave a tidy job and, most importantly, can be assembled by unskilled labour.

"We're looking towards the Pacific Basin for export sales," says Mr Tattley. "There is a large market in this area that can benefit from the system because of its simplicity of design.

At this year's Exporters' Fair in Auckland, the Peerless display drew a number of inquiries from Pacific Basin countries, and even one from Australia, where the Loklip system originated.

In New Zealand too, Mr Tattley says, there is a do-it-yourself market waiting to be serviced.

He sees the home handyman — beach bach owners for instance — appreciating the fact that he'll need only a hammer and screwdriver to assemble his Tiffany kitchen units.

The company has also conducted a survey, in conjunction with Fletcher Wood Panels, of the potential market in Hong Kong.

Peerless Industries is a division of Peerless Homes Limited, a Fletcher Holdings associate company.

Serious About Safety

Greater love had no man for his beard than Peter Fraher.

So when he told his team of 63 men and women he'd shave off his whiskers if they chalked up a further 100,000 hours of work without a lost-time accident, it was clear that he, like the Fletcher Group as a whole, is serious about reducing accidents.

Whereupon, having already recorded their first 100,000 accident-free hours, the staff of Fletcher Wood Panels' PB3 plant at Taupo carried on to complete a second 100,000.

Then they carried a giant 'safety' razor into Peter's office and hung it over his desk — a gentle reminder that in one respect their gain was to be their bewhiskered production manager's loss, and how about it?

So a magnificent beard was lost. Said Peter: "It's a small price to pay for such a tremendous achievement, and I'm proud to be beardless now as a result."

Shortly after the 200,000-hours mark was reached, Fletcher Wood Panels' operations manager Mr Graham Ogilvie joined a celebration function at Taupo to present Mr Fraher and his team with a letter of congratulation to commemorate the second 100,000 accident-free hours.

The letter will be reproduced as a silver plaque, and it will hang alongside the



bronze plaque PB3 won for its first 100,000 hours.

Making the presentation, Mr Ogilvie praised the team for the pace-setting role it had played in Fletcher Wood Panels' total safety performance improvement. He said Wood Panels had reduced its lost-time injury frequency rate from 9.4 to 2.5 per 100,000 man hours worked over the last twelve months.

The Auckland door factory, under Ray Trimble, had a year free of lost-time injuries, but every factory in the company had improved its safety performance over the year and so played a part in achieving the overall improvement.

Incidentally, Peter Fraher's beard was not the PB3 team's only incentive to achieve 200,000 hours without an accident. At the celebration function, several cheques were presented to staff

Graham Ogilvie (left), operations manager, makes the presentation to Peter Fraher to mark the achievement of 200,000 accident-free hours by the staff of Fletcher Wood Panels' PB3 plant.

members, while a sum of \$600 was set aside by the team as a donation to a local charity; the choice this time was the Society for the Intellectually Handicapped.

FOOTNOTE. The work safety programme is making its mark in other areas of the Fletcher organisation. For example, Mr Lin Stoddart, managing director of Fletcher Timber Ltd, reports that in the first five months of 1978 the accident rate over all Fletcher Timber operations dropped to less than a third of the previous year's rate — "the result of a concerted effort at all levels."

Children in the Forest



Children from Taupo's Hilltop Primary School recently donned hard hats to take a close look at the forestry industry.

As guests of Fletcher Forests Ltd, the youngsters saw logging gangs and pruning teams in action in the Tauhara Forest, and for a time helped Fletchers' forest fire lookout man on Mount Tauhara keep a watch on thousands of hectares of the company's pines.

Forest supervisor Mr Jim Shaw, who accompanied the group, said the visit was designed to show pupils the various stages of forestry work as part of Hilltop School's continuing project on looking at people and the work they do.

He said the visit was of special interest to several of the children because their parents worked in forestry or related jobs in the districts.

Our photo shows the children in a block of young pines being shown how and why trees are pruned. Mr Shaw said it was hoped that this block would be regularly pruned in future by Hilltop pupils, who would plant seedlings in the forest as well.



Fine New Sports Facilities

New recreation facilities at two of Auckland's oldest institutions of learning have recently been completed by Fletcher Development and Construction.

They are the Auckland University's splendid new recreation centre in Symonds Street and a more modest but no less handsome structure at Auckland Grammar School.

It took two and a half years and \$2.2 million to transform a small carpark into New Zealand's finest indoor sporting complex (see back cover picture).

But for Auckland University, the money spent and the time taken have been well worth while.

When construction began, the area was being used as a faculty carpark and its confined nature presented the designers and Fletcher Development and Construction with a novel problem.

Because the carpark was surrounded by University buildings, it became necessary to adopt a seldom used excavation technique. Holes were drilled at regular intervals round the perimeter of the site and concrete was poured in to form piles.

More than 6,000 cubic metres of earth was then removed to a depth of eight metres — the piles actually extend a further four metres deeper — and concrete sprayed on the bare earth between each pile. Inside these retaining walls, another wall was built to form the shell of the building.

According to Fletcher D. & C's contracts manager, Mr Graham Roper, challenges such as this made the job a most interesting one.

"Small problems that we encountered were overcome through excellent industrial relations on the site, and the high standard of finish required was obviously a help in ensuring a high degree of satisfaction amongst the staff," he told *Arrowhead*.

The structure is impressive in itself. Covering a massive 4,650 square metres over four levels, it is capable of catering for up to 15 different sports activities.

To the visitor, first impressions are of size and busyness — with hundreds of students and staff members using the facilities from early every morning until late in the evening.

The main gymnasium occupies 900 square metres and there are two smaller gyms, both of which are bigger than what the University had before — a makeshift gym housed in an old physics pre-fab.

The reinforced concrete frame of the building has a concrete sub-floor at the lowest level and Stahlton pre-cast floor planks at levels 2, 3 and 4. These are covered with Granwood flooring in the gyms and wooden floors in the squash courts.

The special Granwood tiles were imported from Britain and laid in small blocks — nearly two million of them — sanded and coated in polyurethane.

Ceramic tiles have been used in the changing rooms, features of which are the under-floor heating and separate saunas for men and women.

The roof is sheathed with Brownbuilt longrun galvanised steel, supported in the main hall on steel trusses and over the entry foyer and lounge by laminated beams. Exterior walls are of steel frame and mesh, coated with concrete to give a textured finish.

Ceilings are of Woodtex to absorb noise and there is an additional ceiling layer of monoacoustic tiles in the main hall.

Another feature is the telescopic stays embedded in the gym floors which can be raised to support nets and gymnastic equipment.

The main gym has an illuminated scoreboard and the basketball baskets can be raised out of the way automatical-

ly. Changing room facilities cater for 280 men and 200 women.

Seven squash courts are built through two levels, with a mezzanine gallery. Two of the courts have tiered seating for championship play, and one has a back wall and door made of armour plate glass.

Other activity areas include a modern dance studio and separate spaces for weight training, table tennis and pool. There are clubrooms and lounge foyer areas, all carpeted, a first aid room and staff offices.

Architects were the JASMaD Group.

Fund Raising

The major part of the \$400,000 cost of the Auckland Grammar School's new physical recreation centre was raised by old boys, parents, staff and present pupils during a fund raising campaign commenced in 1976.

Donations from business houses and Government grants helped ensure that the target was reached.

The complex was built in a year, and opened by the Prime Minister, Mr Muldoon, in March.

A spacious gymnasium (pictured above) is the central feature, with international basketball, volleyball and badminton courts.

The building has special access facilities for those with serious physical disabilities, who will be able to use the building for remedial exercises as well as recreation.

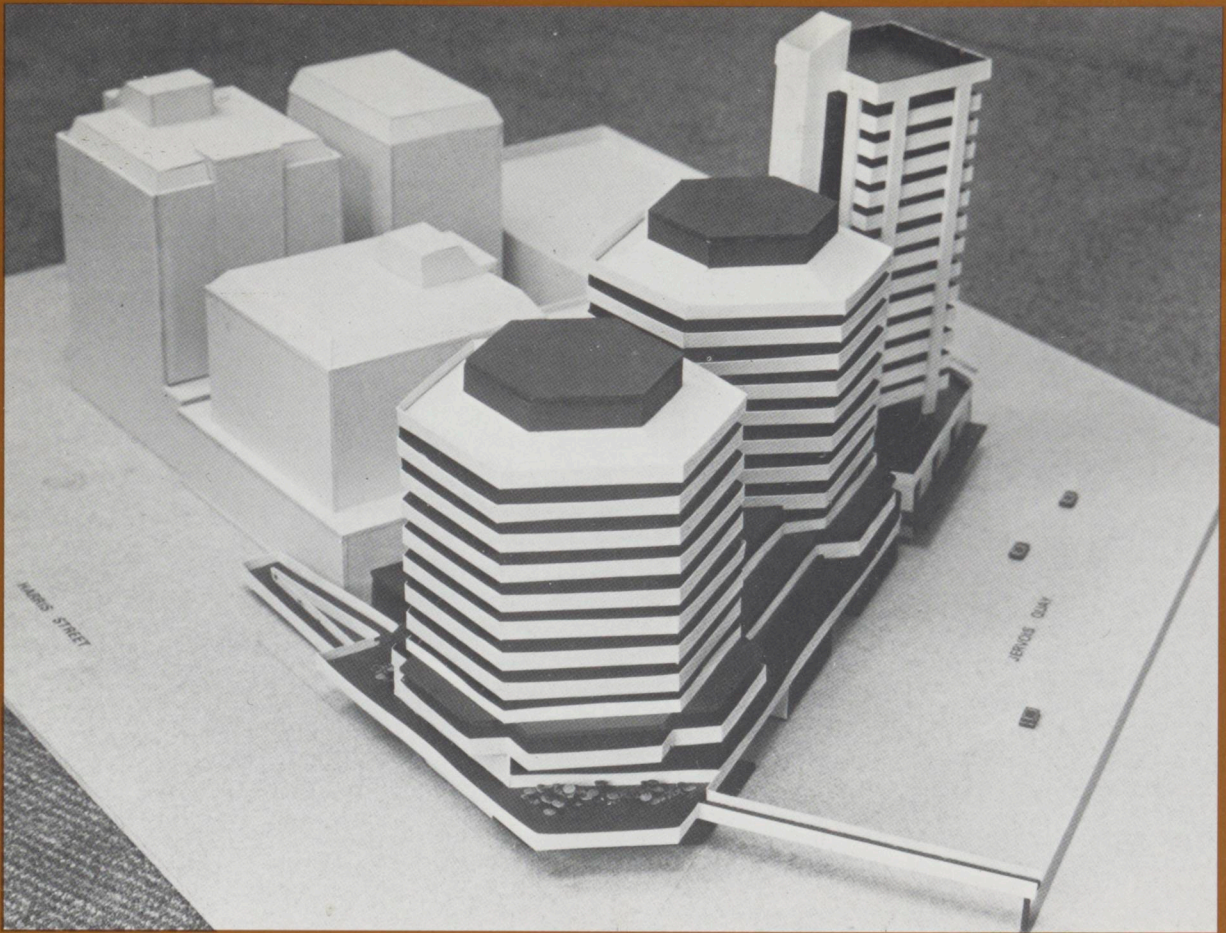
The 650 square metre (7000 square feet) gymnasium has a steeply pitched Brownbuilt roof and walls with painted concrete block exterior and brick paved entrance steps and terrace.

The roof is a steel space-frame construction with contrasting colours, adding to the spaciousness of the large matai timber floor area.

According to Mr Ron Smith, contracts manager for Fletcher D. & C., the complex has a far higher timber content than most buildings because of the large floor area.

"This, combined with the complex shape of the roof, has led to a most interesting and satisfying finish," he said.

Architect was Barry C. Robinson.



Engineering Know-How Reinforces Building Skills

A management approach which blends engineering know-how with traditional building skills has paid off to the tune of nearly \$70 million of work either in hand or close to signing for the Wellington regional branch of Fletcher Development and Construction.

The regional general manager, Mr John Sewell, a qualified civil engineer, applied engineering management techniques for better control of projects when he arrived from Australia to take up his position three years ago.

Several other executives of the company also have professional qualifications, including the construction manager, Mr Bill Webb, an engineer.

"We still need all the traditional construction skills we can get," says Mr Sewell, "but the effective blending of key disciplines — engineering, quantity surveying and building — has been important in lifting our performance as a company and making us more competitive.

"In addition, we have enthusiastic on-site project management and skilled foremen and tradesmen to keep up on-the-job standards."

At a time when the building industry as a whole is faced with either reducing its staffing levels or struggling to maintain

ABOVE: An architect's model of Britannic House, being built in Wellington for BP Pacific Investments Ltd.

them at current levels, F.D. & C.'s Wellington branch expects to increase its staff over the next 12 months to cope with the volume of work on hand.

At Kaiti, near Gisborne, it is building a \$7.2 million Fletcher-designed mutton slaughterhouse for the Gisborne Refrigerating Company Ltd.

An office in Palmerston North, under the management of Mr Ian Opie, is responsible for several projects nearby, including a \$252,000 two-storey office block for the South British Insurance Co. Ltd and a \$453,000 contract to build amenities for the Turoa Skifields project near Ohakune.

Other current construction projects include:

- the \$8.5 million Kenepuru General Hospital at Porirua;
- the 15-storey, \$11 million O.&G. block at Wellington Hospital;
- a multi-million dollar fisheries research laboratory complex for the Ministry of Agriculture and Fisheries at Evans Bay;
- the new \$4 million total-energy centre at Wellington Hospital;

- a \$2 million, design-and-build, six-storey office block on The Terrace for the Public Service Association;
- a \$600,000, six-storey extension to the South British offices in Lambton Quay;
- a \$670,000 printing works in Ngauranga Gorge for Williamson Jeffery Ltd;
- several smaller develop-and-design projects worth in total well over \$1 million.

One of the more exciting projects recently negotiated is the \$10.7 million Britannic House, being built on a prime Wellington site near the waterfront for BP Pacific Investments Ltd.

The distinctive 11-storey building will have two hexagonal tower blocks rising out of a three-storey podium and will take three and a half years to complete.

Another major central city project will be the \$16 million luxury Mannix Hotel complex, which is expected to commence late next year.

F.D. & C. is also acting as consultant contractor to the A.N.Z. Bank for its 18-storey head office building, which is to be built at an estimated cost of \$12 million on land bounded by Lambton Quay, Featherston and Grey Streets.

Brownbuilt Fosters Pottery



Form is the topic as Rick Rudd (right), judge Shigeo Shiga and Trevor Hunt discuss Mr Rudd's winning entry in this year's Fletcher Brownbuilt Pottery Award.

Potters from around the country submitted works for the second annual Fletcher Brownbuilt Pottery Award presented in Auckland in June.

The award is to encourage excellence in ceramics in New Zealand and is run in association with the Auckland Studio Potters.

A theme is chosen each year to highlight a different aspect of the diverse range in the ceramic field.

Each potter this year was invited to submit one entry — whether one pot or an integral set of pots — which embodied the theme of simplicity.

The judge, well known Japanese potter Shigeo Shiga, selected a raku bottle with undulating lines of black and white by Rick Rudd of Herne Bay as the \$1000 winning entry.

Two merit awards, each worth \$250, went to Campbell Hegan of Albany and J. Gaye Long of Whangaparaoa.

The exhibition hall at the Auckland War Memorial Museum was the venue for the award presentation, attended by a capacity crowd including many entrants.

The judge praised the standard of entries and com-

plimented Fletcher Brownbuilt on its initiative in fostering the medium of ceramics in New Zealand.

"It is through sponsorship such as this that potters in New Zealand will be able to expand their horizons," he said.

Pots from the award were displayed at an exhibition lasting two weeks, with a percentage of sales going towards assisting the Auckland Studio Potters' centre at Onehunga.

According to Mr Trevor Hunt, general manager of Fletcher Brownbuilt, the award is more than a public relations exercise.

"I feel that industry has a moral responsibility to foster the arts, particularly those that are feeling the financial burden so often evident in this day and age of professionalism," he said.

"And, of course, the award helps to bring together many of our own staff out of the daily eight-to-five office routine. I have consciously tried to involve many staff members in the organisation of both the award and the exhibition."

Facelift for Champion



A change of name means a change of colours in the competitive world of 18-footer sailing. New Zealand champion skipper Russell Bowler (centre) watches signwriter John McCracken completing a livery change on the rechristened Fletcher Brownbuilt. Looking on is for'ard hand Simon Ellis.

The boat (formerly Benson & Hedges) and crew are being sponsored by Fletcher Brownbuilt in association with the Auckland Sailing Club to represent New Zealand at the world open Flying Eighteens contest at Plymouth, England, in July.



26 Miles and 385 Yards...

There was not much fear of loneliness for the long-distance runners who competed in the 14th Fletcher Marathon around Lake Rotorua.

A record field of more than 1000 starters ensured that, except for the few who burst ahead early in the race, and for the rather more who were left to straggle in some hours behind the leaders, there was always a bunch of fellow-sufferers nearby to help sustain one's spirits.

After the race, for those who had breezed home in two and a half hours as for those who had plodded on for twice that time, there was the joy of achievement to be shared with clubmates or new-found friends.

Incredibly, for the awards ceremony and social that evening, new reserves of energy were found for exhausted bodies and aching feet. More than 2500 people crowded into the Rotorua Sportsdrome for dinner, speeches, prizes and dancing that — for some — went on into the small hours.

The 1978 Fletcher Marathon was in just about every respect the most remarkable race of its kind ever held in New Zealand. No fewer than 1148 entered, nearly 1100 actually faced the starter and 934 finished.

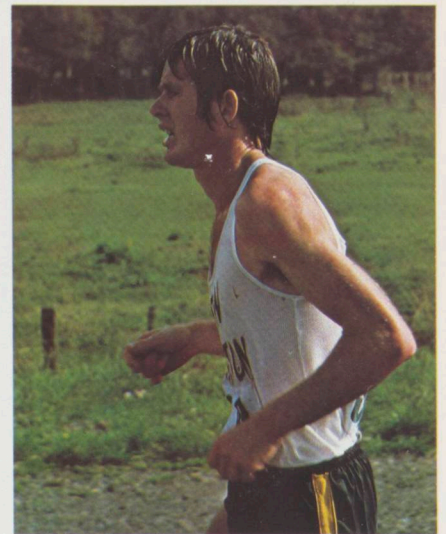
The extraordinary growth of interest in long-distance running is shown by the fact that these figures are roughly double those of the previous year, and many times greater than for the first Fletcher Marathon in 1965, when 16 started.

Thirty-six of the starters were over 50 years of age and 13 over 60. There were 26 women in the race (it was only in 1973 that it attracted its first-ever female competitor).

Four started in the veteran (over 35) women's class and the best of these, Karen Hunter of the Auckland YMCA, completed the course in 4hrs 16mins 32 secs. There were more than 200 behind her.

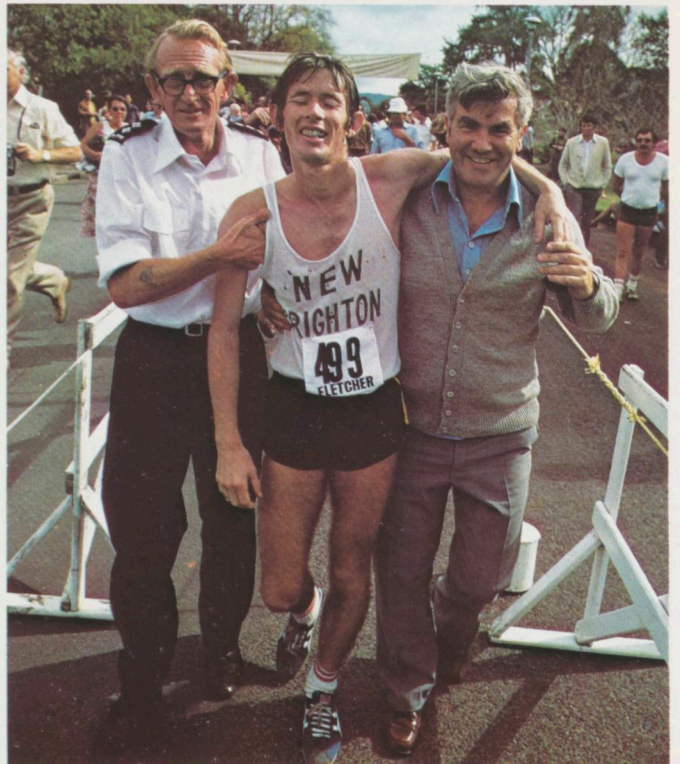
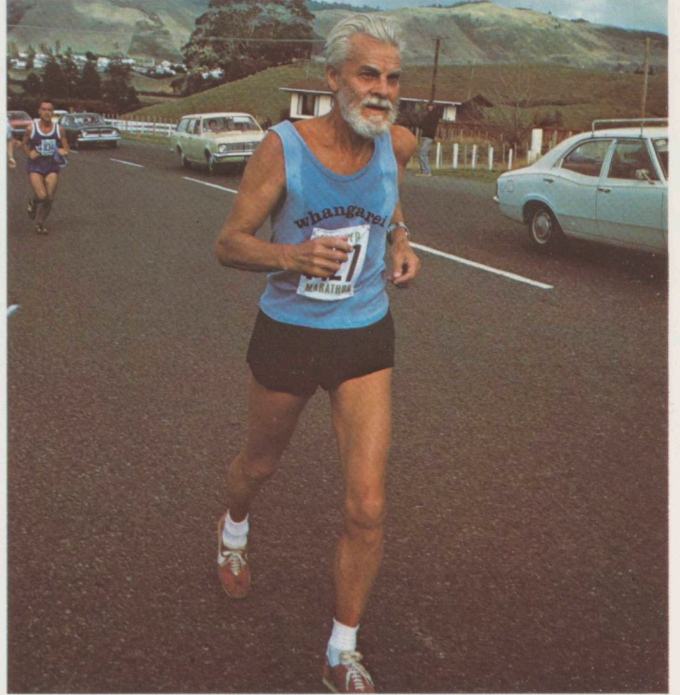
The fastest woman of them all, attractive Christine Munro (Owairaka), returned a time of 3hrs 20mins 11 secs. Sixty-year-old A. Bearsley (Takapuna) was the best of the veteran men and his time of 3hrs 36mins 20 secs put him comfortably up in the top half of those of all ages who finished the course.

For the record, the race was won by 27-year-old Mel Radcliffe from the New Brighton club, Christchurch, in a time of 2hrs 22mins 11secs, with another of the South Island runners, Colin Hicks (Toc H, Christchurch) just three minutes behind.



TOP: The Fletcher Marathon field streams out of the picturesque Government Gardens at Rotorua — with about 26 miles to go!

ABOVE: Three miles to go and the strain is starting to show on the face of front-running Mel Radcliffe, the eventual winner, who said later he ran the last four miles on instinct.



Jim's Wife Thinks He's Mad

As well as an armful of trophies, Radcliffe won a trip to Honolulu to compete in that city's marathon later this year.

The Manurewa club proved to be the strongest marathon club in the country. It had five runners in the first ten to easily win the teams race.

The event has always been run on the picturesque course around Lake Rotorua which, with a small diversion into Government Gardens, fortuitously measures a precise 26 miles and 385 yards.

Rotorua is the location of one of Fletcher Timber Limited's biggest operations, the processing and manufacturing plant at Ngongotaha, and Fletcher Timber people are closely involved in organising the race. Scores of them worked long hours of their own time in helping to make the event a success.

So too did many others — most notably officials of the Rotorua Amateur Athletic and Harrier Club, the Rotorua Round Table and the Rotorua Motor Cycle Club, to name a few.

Though runners came from all parts of New Zealand and from several overseas countries, the marathon was first and foremost a Rotorua community effort. It is one that is putting Rotorua on the map as the home of one of the great marathons of the world.

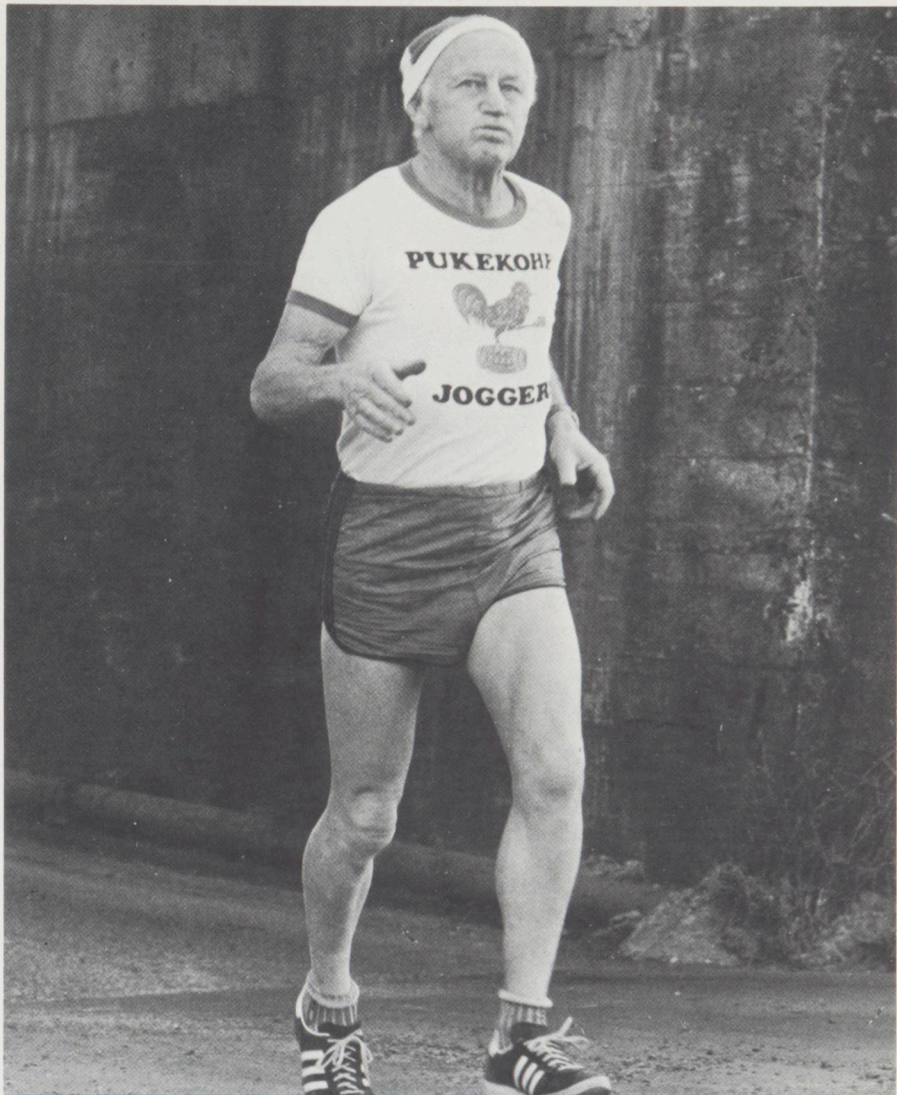
OPPOSITE PAGE

TOP: The Fletcher Marathon can be a family affair. In this group photographed before the start 64-year-old Andy Curteis (Owairaka) pins on his number while his daughter Jenny speculates on her prospects in her second marathon run. For Andy it was "about my 50th". Four-year-old Katrina (left) is the only member of the Hunter family of Massey who isn't into long-distance running. Her big brother and sister are harriers and her Mum and Dad both ran at Rotorua. Running for the Auckland YMCA team, Mrs Karen Hunter (shown holding Katrina) won the veteran women's class.

LEFT: It's all smiles at this early stage as the field climbs one of the hills on the outskirts of Rotorua.

UPPER RIGHT: The spirit of the Fletcher Marathon . . . 66-year-old C. Thomson of Whangarei.

LOWER RIGHT: A distressed Radcliffe is helped to the dressing room after his gallant victory. He took over an hour to recover from exhaustion.



Once a year, about four hours after the crack of the starter's rifle has launched another Fletcher Marathon, the familiar figure of Jim Jamieson comes pounding across the finish line.

Jim has been jogging for ten years, has run in three world championships, and has missed only one Fletcher race since 1969.

In January he will celebrate his 70th birthday.

Jim, a member of the Owairaka club in Auckland, ran his first marathon, a club event, in 1968.

"I suppose you'd call it a hobby," he said. "It's something I got interested in, and found that I really enjoyed it. My wife thinks I'm mad."

Jim was not particularly athletic in his youth. He made the Counties (then South Auckland) senior rugby team as a five-eighth, but was forced to retire from the game because of injury.

Now he runs in marathons and long-distance races whenever — and wherever — he can. His fastest time to date: 3 hours and 33 minutes.

For several years now, he has been the oldest starter in the Fletcher Marathon. This year he finished fifth in the over-60 section, 787th overall.

His achievements include a fifth in the marathon (65-69 age group) at the world championships in Toronto in 1975, a fourth in the world veteran championships in Coventry, 1974, and a remarkable steeplechase performance at the world masters championships in Gothenburg, Sweden, last year.

"I entered for the marathon (finished 21st), the 5000 and 10,000 metres, and the 3000 metres," said Jim.

"But by mistake they put me in the 3000 steeplechase."

"I wasn't going to run at first, but then I decided to give it a go . . . and I finished second!"

Jim still works, as an architectural draughtsman, from his Pukekohe home, and has no ideas of retirement yet.

"If I retired I'd have to go on the pension. And that sort of money certainly wouldn't pay for me to go to places like Gothenburg for a few runs around the stadium."

The "Highest" Building

A project to create a world-class ski area on the south-western slopes of Mount Ruapehu looks set to spark off a remarkable transformation to the small town of Ohakune.

Work began on the \$5 million, four-year Turoa skifields development scheme early this year. And already the 1500-strong community at the foot of the mountain is quivering in the shadow of things to come.

Old boarding houses are being stripped and refurbished and a variety of new businesses to cater for visitors' needs will be opened as the skifields develop.

On the outskirts of Ohakune, 20 hectares of peaceful pasture are destined to become a bustling skiing community with hotel, restaurants, squash and tennis courts, saunas, swimming pools and club ski lodges.

The Turoa story goes back some 25 years. In 1953 the people of Ohakune and district formed the Ohakune Mountain Road Association. Their objective — to build a road to the Turoa skifields above Ohakune to ensure a more promising future for the rural area.

Thirteen years of hard labour, fund raising and personal sacrifice followed and finally, in 1966, the road, built by local people, was officially opened.

The years that followed saw several unsuccessful attempts to develop the skifields, culminating in the granting of a licence to Alex Harvey Industries Limited in 1977.

Now, at last, things are on the move. A \$453,000 contract for the first year's development was awarded to Fletcher Development & Construction. The contract is for two end-of-road buildings

which will house a first aid post, takeaway bar, ticket office, toilets, a snow-clearing machine and an office for the skifields manager, and a midfield building for similar uses, all of which are well under way. Additionally, two treble chairlifts are being installed by Dopplemayr New Zealand Limited.

The last 1.5 kilometres of public access road leading up to the terminus is currently being upgraded. Car parking — for 520 vehicles initially — is being constructed.

Because of the relative isolation of the site, and the nature of some of the equipment being used, helicopters are needed to fly in much of the materials, an operation highly dependent on weather conditions.

A 25-man Fletcher team, stationed at Ohakune, is carrying out the construction work.

"We've been working at a hot pace to beat the winter freeze-up," said Mr Ian Opie of Fletcher's Palmerston North office, the controlling branch for the project.

"We ran into some unexpected difficulties with ground conditions. The buildings are being erected on mass concrete footings anchored into solid rock, and excavating was difficult. Also, the buildings are of a rather complex construction, which created a few problems.

"The midfield site is at about 6000 feet — 1000 feet higher than the Top of the Bruce on the other side of the mountain.

"In fact," said Mr Opie, "I believe it is the highest commercial building site in New Zealand."

The skifields will be officially opened in

1979 but unofficial use is encouraged during the 1978 season for intermediate and advanced skiers, and competent beginners.

In 1979 three additional lifts, ski hire, repair and instruction facilities, a ski shop and public cafeteria will be added. Two further lifts are planned for 1980.

Skifields manager Mr. Andreas Hefti, a former Swiss national slalom champion and Olympic team coach, sees a great future for Turoa in the years to come.

"I am particularly impressed with the range of slopes," he said. "The top of the field is steep and interesting but, just as importantly, it has very good beginners' slopes of varying difficulty."

Mr Hefti toured New Zealand skifields with the Swiss team in 1964 and was chosen for the Turoa job ahead of applicants from all over the world.

Every effort will be made to encourage private development in the business and commercial areas of Ohakune, in keeping with the growth of the skifield and resort area, though accommodation will continue to be a problem throughout the 1978 and 1979 seasons.

To help overcome the shortage, the developers have provided 126 fully equipped and insulated caravans which will be let to visitors this season through an accommodation bureau.

Ohakune's Mayor, Mr John Gould, sees the Turoa development as a "dream come true. I've personally worked hard

BELOW: Architect Neville Price discusses a detail in the plans with site architect Terry Mansfield, while Fletcher carpenters work on the roof of the end-of-road building.



for this for a long time," he said. "Eventually I hope to see Ohakune as an international tourist area.

"Already the town is being affected, with development on both the commercial and domestic scenes. Land values are starting to rise. It will be good for the area in the sense that social, sporting and recreation facilities will improve greatly."

The developers hope to attract up to 5000 skiers a day during the peak season.

International recognition of the skifields is another aim, with Australia, Japan and the United States subjects of a planned marketing drive.

Above all, a rekindling of public interest in skiing is desired.

Says Mr Ian Meyrick, Turoa's promotion officer: "The public now have two choices in the National Park area — Turoa, or the existing fields on the Chateau side of the mountain.

"We sincerely hope that this will induce more people to come skiing, rather than just attract them away from other fields. Congestion will be avoided with the introduction of the second ski area, and this should encourage people who have in the past stayed away because of peak-time overcrowding.

"Skiing is a growing sport. What we are doing at Turoa will ultimately assist that growth to the fullest possible extent."



TOP RIGHT: The Sikorsky helicopter lowers a chairlift pylon into position.

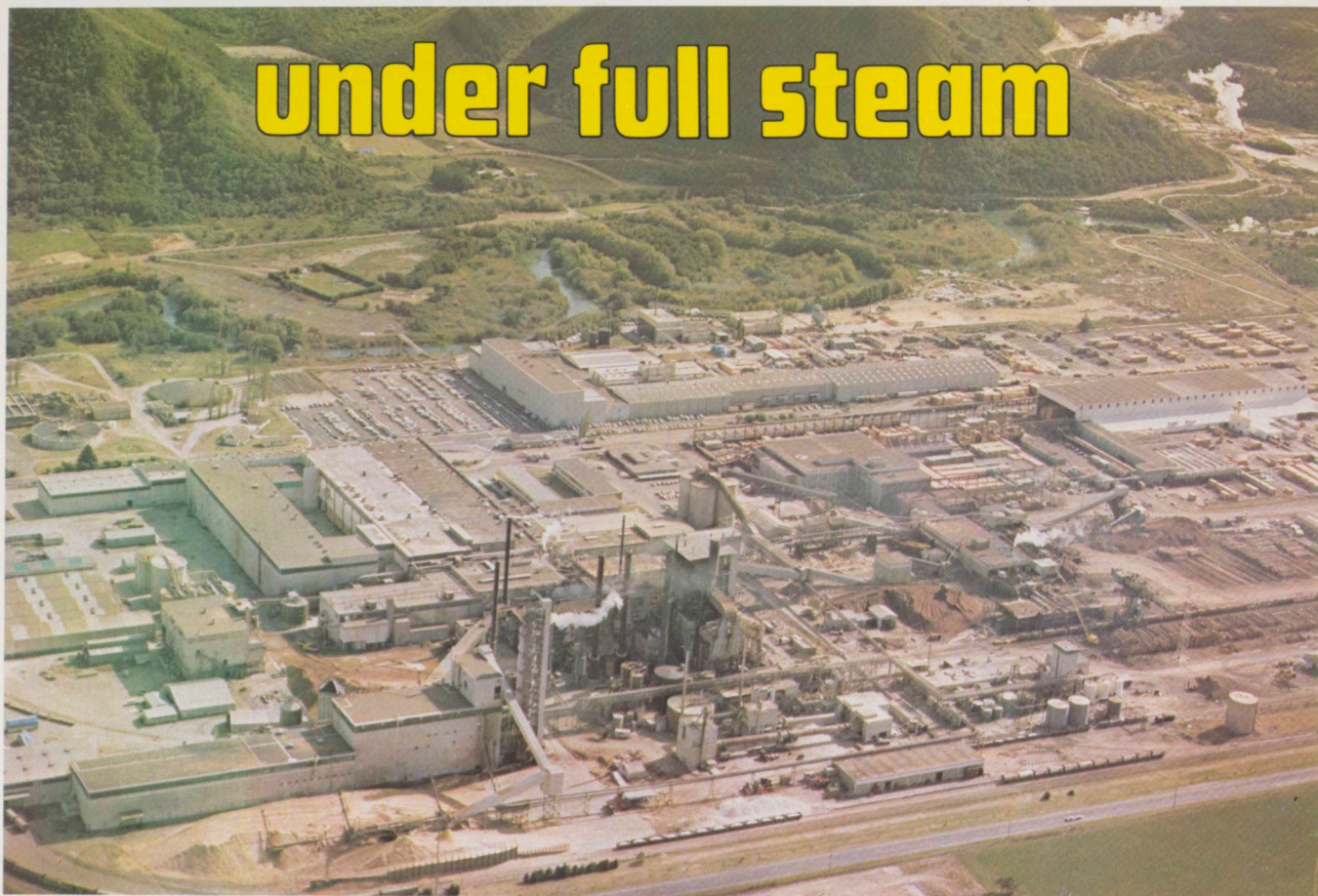
BOTTOM RIGHT: This structure is for the loading station at the foot of the chairlift.

BELOW: High in the thin cold air, workmen secure the crossbar section ("yoke") to one of the pylons.



Tasman

under full steam



The Tasman Pulp and Paper Company Limited, New Zealand's biggest exporter of manufactured products, is again a predominantly New Zealand-owned enterprise.

The purchase by Fletchers early this year of Reed International Limited's holding in Tasman means that for the first time since 1954 the giant enterprise at Kawerau is no longer an "overseas person" under the definition of the Overseas Investment Regulations.

Overseas holdings, mostly owned by Australian Newsprint Mills, are now well below 25 per cent of Tasman's capital, while Fletchers, which has been closely involved with Tasman since its formation, holds some 33 per cent of total capital.

The New Zealand Government holds 40 per cent (including its 4 million preference shares) and the remainder is held by private investors.

The plant employs more than 2200 people. With their families, timber workers in the nearby forests, and those in related service industries and businesses, together with *their* families,



perhaps ten times that number have a vital interest in the company's operations.

And for New Zealand as a whole, Kawerau is of major importance. Last year the plant earned more than \$100 million from exports of newsprint and pulp, as well as supplying virtually all of this country's newsprint requirements.

With its sawmills, groundwood and chemical pulp mills and three paper machines, the Kawerau plant is a large one by any standards.

Every day eight log trains arrive at the mills from Murupara and four trains carrying newsprint or pulp are loaded out. In one 24-hour operation the plant has the capacity to produce 3000 kilometres of newsprint in a sheet 6.8 metres wide — sufficient to provide a "paper road" extending almost twice the length of New Zealand.

LEFT: This motorised hammerhead crane straddles two sets of railway lines to unload logs received from the railhead at Murupara. The crane unloads each wagon in a single lift.



Reels of newsprint cut and wrapped to publishers' individual size requirements ready to be railed out of Kawerau.



The wood chip storage area. From here the chips to be processed into long-fibred chemical pulp for export are fed by conveyor to the continuous digester.



Paper machine tender John Wright watches closely on No. 3 paper machine as the sheet is formed on a bed of synthetic felt moving at 800 metres a minute. Behind him is the first press felt of the drier section. INSET LEFT: Papermaker Harry Blissett lowers a jumbo reel of newsprint into position for cutting and winding on to cores. INSET RIGHT: Peter Whata, a utility man in the pulp mill, at the sheet-cutting end of one of the two pulp driers.

N.Z. Wire at the Fieldays



For the 10th successive year New Zealand Wire Industries Limited has helped make the Agricultural Fieldays at Mystery Creek, Hamilton, an exciting and fruitful event.

As well as its highly popular International Farm Fencing Championships, N.Z. Wire Industries had an information centre at the Fieldays site to answer inquiries on wire handling and fencing techniques, and organised a Farm Fencing Forum.

The Forum was held at Waikato University's new lecture theatre complex, and was attended by about 75 farmers, fencers, farm advisers and manufacturers.

Its purpose was to promote discussion on fencing techniques, to foster ideas and improvements in the fencing field, and to educate farmers and fencers in handling techniques for wire.

The forum was chaired by Dr Gordon Edgar, director of the Ruakura Agricultural Research Centre.

Guest speakers included Mr Keith Humphries, senior technical officer of the Agricultural Engineering Institute at Lincoln College, and Mr Albert Schuler, four times winner of the N.Z. Wire Industries singles fencing title, and six times doubles winner.

Mr Schuler decided to stand down this year and was retained as a judge. The singles competition was won by John Fagan, a Te Kuiti farmer, while Leith Chick and Dave Gillman of Galatea took the doubles.

Part of Mr Fagan's prize was a sponsored trip to the Gippsland Fieldays in Australia, and entry to the fencing competitions there.

This year's championships drew 45 entries from throughout the country.

Mr Bill Reidy, managing director of N.Z. Wire Industries, told *Arrowhead*:

"The purpose of this company sponsoring the Farm Fencing Competition has been to try to improve the overall standards and efficiencies of fencing to the ultimate benefit of the farming community, and also to maximise efficient use of our products.

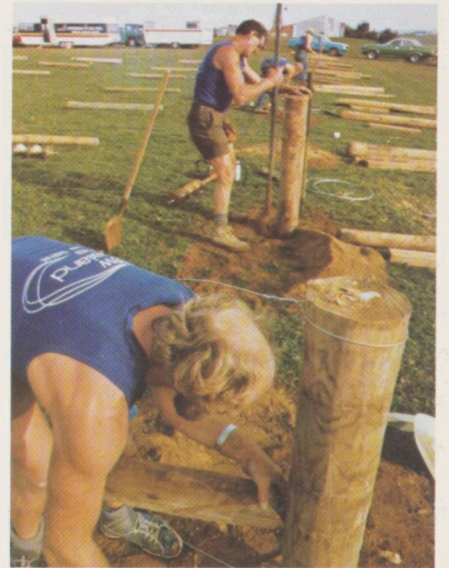
"Although we know most of our competitors over the years have improved the speed and quality of their work, and presumably spectators have gained

useful tips from watching, we will be restudying before the next Fieldays in 1979 the overall Farm Fencing Competition activities to determine to what degree the competitions are achieving the original objectives.

"In this regard we will be seeking the advice and assistance of past competitors, judges, farm advisory people and farmers as to what could be or needs to be done to improve or even alter the activities so that the farming community gains maximum benefit.

"I congratulate the winners of the 1978 competitions and commend the efforts of all who entered."

Competitors are shown (right) at an early stage and (below) nearing the end of the singles competition in the international Farm Fencing Championships at Mystery Creek.





The University of Auckland's recreation centre, recently completed by Fletcher Development and Construction. Appearances are deceptive as much of the spacious interior is below ground level. This view is from Symonds Street and in the background are the multi-storey buildings of the University's Science complex.