

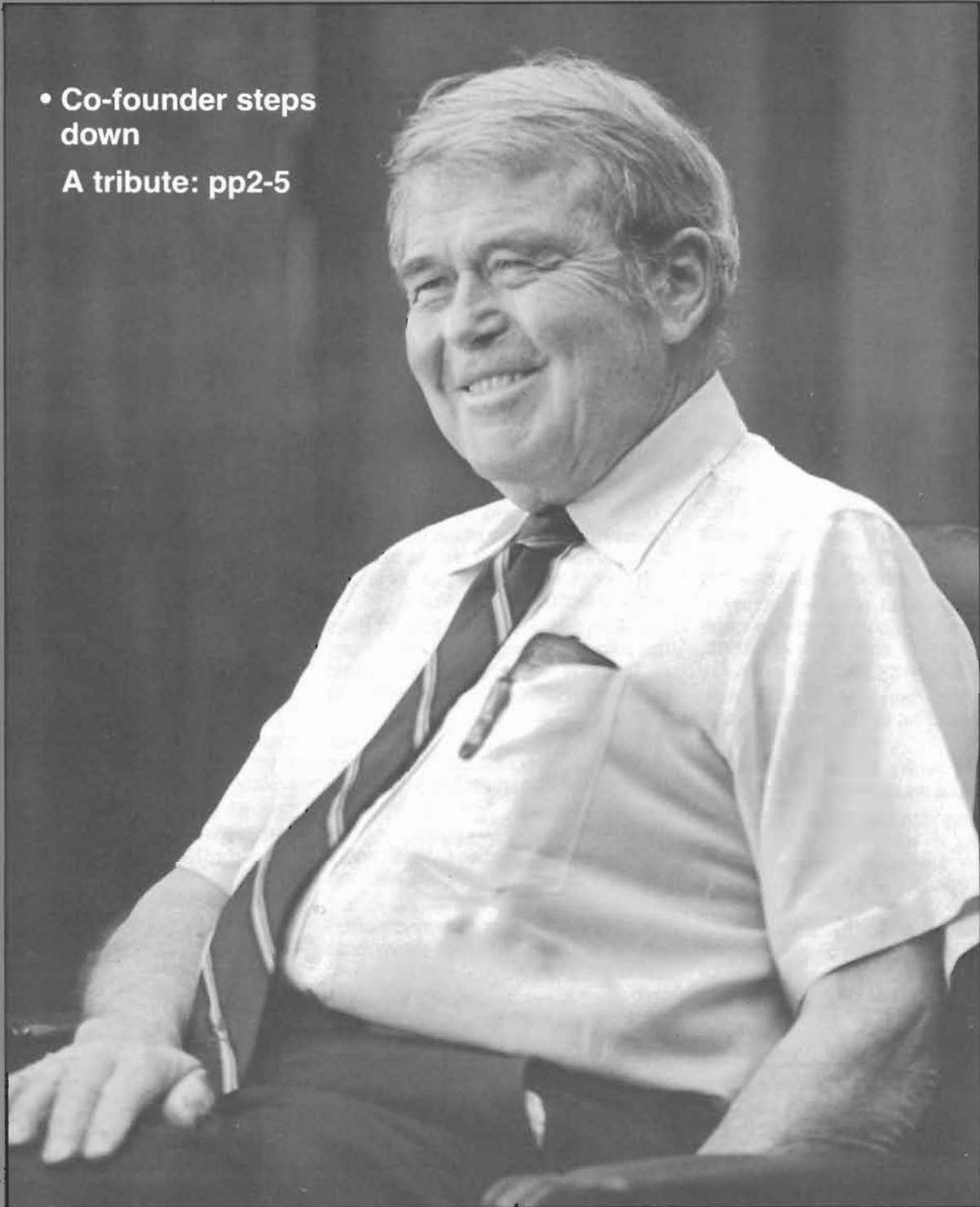
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FOR AUSTRALIAN AND NEW ZEALAND  
STAFF AND FAMILIES OF HEWLETT PACKARD  
No 28 April 1987

- Co-founder steps down

A tribute: pp2-5



- Bill Hewlett ... a living legend ... a living genius.

## Co-founder steps down but stays as Director Emeritus

Those who knew him were not the least surprised at **Bill Hewlett** being slow to talk about himself when the United States media interviewed him in February.

Yet he was half of the duo who in 1939 had started a manufacturing business in a suburban garage and built it to be an electronics industry leader in nearly 70 countries, with more than 82,000 employees.

And with his partner **Dave Packard** he had fashioned *The HP Way* — a formula for doing ethical business and for developing and rewarding people that half a century on is emulated by companies around the world.

### “... doing ethical business”

It was clear that Bill put more store in what *The HP Way* had achieved for the well-being of employees, customers and the wider community than profit statistics and his own financial worth.

Bill told reporters that his retirement on 24 February at 73 as an active director and Vice-Chairman was a “non-event.”

In spite of his unpretentious personal style, Bill Hewlett is part of an American legend and the media had gathered for a rare chance to capture something of his personality.

At first it wasn't easy to reconcile the legend with this affable man — informally dressed in short-sleeves and very much at ease.

Questions came thick and fast. What would he do now that he was retiring?

“Oh, life won't be much different from what it was before,” he assured.

“I'll come into the office on one or two days a week. I do very little company business these days. I'll talk to people if they want to talk to me.

“I'll be around as director emeritus and things will go on as before. I've never seen a time when one vote would change a decision of this board.”

And he would continue his lifelong enjoyment of the outdoors, skiing in winter and spending time at his family's old cabin in the High Sierra during summer.

“It was just that Dave and I decided on a policy some time ago that we'd retire at 72; then we moved the age

up to 70 for outside directors, with Dave and me grandfathered in. For personal reasons, I stayed another year,” he said.

“The obvious question is why Dave isn't retiring also. I think the answer is very clear. We both feel **John Young** and **Dean Morton** and their team are doing a good job of running this company and we don't want to interfere.

“But the position of board Chairman is really honorific and Dave is certainly much better known nationally than I am. If our positions had been reversed, he'd have retired at 72 and I would have stayed on a little longer.”

### “... orderly progression of events”

Bill was surprised at the attention given his move because he saw his final withdrawal from active involvement with HP as part of an orderly progression of events.

In November 1977 he turned over the role of President to John Young as the first stage of passing basic management of the company to other hands.

“Within a few months John also was given the responsibility of Chief Executive Officer and Bill became Chairman of the Executive Committee.

In 1983 came his shift to a newly created position as Vice-Chairman of the board of directors.

Bill Hewlett's leaving was creating waves of fond memories throughout the company.

HP people remembered him, ever the engineer, turning up at display booths and on the manufacturing floor to ask detailed questions about HP gear.

And the time he accepted an invitation to join some Cupertino employees at their favorite neighborhood lunch place. When they got back to the site, the guard

refused to let Bill in until he found a badge.

Just recently he dropped into the plant in Waltham, Massachusetts, for a visit because he was in the neighborhood — giving the commencement address at MIT.

There were remembrances of Bill's unerring instinct for treating people with dignity and for operating an ethical business.

The interview session started casually, with Bill protesting mildly that the seat left for him was at one end of the table. He'd rather sit along the side; it made for better communication.

“I don't like talking down from the head of the table,” he said.

One reporter remarked that it was characteristic of “your way of relating to people, *The HP Way*.”

Bill immediately set that straight, substituting “our” for “your.” The style of Hewlett Packard derived from both co-founders. In fact, they had always thought alike.

“People would come to one of us for an answer and, if they didn't like it, go to the other and always get the same response,” he said.

His sister, a psychiatrist, teased him that in her practice the families who claimed to have no disagreements were the ones in deep trouble. But it hadn't worked that way with Dave and him.

Pressed for the achievement that meant the most to him, Bill thought it would be Hewlett Packard's management style.

In a career that includes the National Medal of Science, a long list of professional and civic honors and nine honorary doctorates, that's saying something.

“I'm really proud that we created a way to work with employees and let them share in the profits while still keeping control,” he said.

### “... captain better be up there”

“Of course, when things get tough, it's sometimes necessary to decree certain changes. I understand why people don't like that but they realise, when the ship's in the middle

of a storm, the captain better be up there."

The co-founders set the philosophy of *Management by Objectives* when HP was still quite small "because we felt that fundamentally people want to do a good job; they just need guidelines on how to do it."

It pleased Bill that MBO was now popular in business schools: "We proved that it works."

The interviewers were curious about the second generation of the Hewlett and Packard families coming onto the board.

Bill said he'd taken the position with his children that while he was working at the company "there should be no doubt in anybody's mind why you're promoted."

So, while the five Hewlett children had received a scientific education and worked summers at HP, they'd all gone out on their own.

### “... listen for a while”

"And that makes sense," Bill said. "It's very hard to expect generation after generation to be the same. The sure way to get a company in trouble is to have it always run by the family — with the exception of the DuPonts, perhaps."

But now it was appropriate for his son **Walter** and Dave's son **David Woodley Packard** to come on the board of directors. They represented "a fair number of shares" and each had a scientific background.

"Computers aren't new to them; they're new to me," he said.

And his advice to Walter as a director? "Listen for a while."

Bill accepted a question about his personal wealth, not one of the things he has liked talking about.

"It was probably hardest on the kids," he thought, "because of the way you're regarded. But it isn't as though it happened overnight. It occurs gradually and you live with it."

"Both Dave and I live relatively simple lives, no yachts and stuff. But you can do things like making a gift to Stanford that you couldn't do otherwise."

Bill takes quiet satisfaction in the William and Flora Hewlett Foundation which now makes more than \$US30 million in charitable dona-

### Board changes

Hewlett Packard Company announced on 19 January that co-founder **Bill Hewlett** would retire as vice-chairman on 24 February but continue to serve as director emeritus.

Also retiring as a director was **Shozo Yokogawa**, president and chief executive officer of Yokogawa-Hokushin Electric Corporation and a member of the HP board since 1983.

He was first president of the joint venture company Yokogawa-Hewlett-Packard Ltd in Japan, becoming chairman in 1974.

Three new directors of the HP Company are:

**Donald E Petersen**, chairman of the board and chief operating officer of Ford Motor Company;

**Walter B Hewlett**, an independent researcher involved with computer applications in the humanities; and

**David Woodley Packard**, chairman and president of Ibycus Corporation, a computer research firm involved with ancient languages.

Donald Petersen began his career with Ford in 1949. He played a sub-

stantial role in development of one of the company's most successful cars, the Mustang.

stantial role in development of one of the company's most successful cars, the Mustang.

He holds a bachelor's degree in mechanical engineering from the University of Washington and an MBA from Stanford University.

Walter Hewlett, Bill's son, holds a bachelor's degree in physics from Harvard University, a master's degree in engineering science from Stanford University and a PhD in musical arts from Stanford.

He has served as a trustee of the William and Flora Hewlett Foundation since its founding in 1966 and is currently vice-chairman.

David Woodley Packard, son of co-founder Dave, has been a professor of classics at the University of California in Los Angeles, University College in London and the University of North Carolina.

He currently serves on the boards of the David and Lucile Packard Foundation, the Monterey Bay Aquarium and the American School of Classical Studies in Athens.

He holds a bachelor's degree in classics from Stanford University and a PhD in the same field from Harvard.

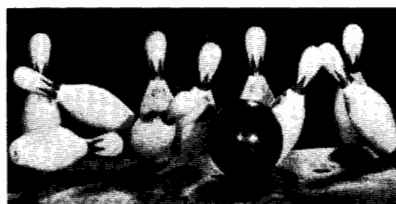
He played a sub-

tions each year. He has worked closely with the Foundation president **Roger Heyns** to establish its direction.

His will provides for the remainder of his estate, with a few exceptions, to go to the Foundation ("I've already set up my kids, they're all right").

A reporter suggested HP played a major role in the development of Silicon Valley but Bill demurred: "We're just the oldest engineering residents. We're not responsible for Silicon Valley. Silicon is."

He recalled those earliest days of 1939: "When I talk to business schools occasionally, the professor of management is devastated when I say we didn't have any plans when we started — we were just opportunistic."



"We did anything to bring in nickel. We had a bowling foul-line indicator, a clock drive for a telescope, a thing to make a urinal flush automatically and a shock machine to make people lose weight."

"Here we were with about \$500 in capital, trying whatever someone thought we might be able to do."

"We really didn't know if this audio oscillator I'd made as part of my thesis was any good. We simply put one together that worked pretty well, sent a letter out to universities and others and got three or four orders, and tried again."

"Then we thought, 'Gee, if you need a source of sound, you ought to have something to measure it,' so we put out a voltmeter and that was successful. We got into this thing not by design but because it worked out that way."

Bill and Dave patterned their young company on General Radio (now Gen Rad), then the dominant company in radio with excellent employee relations. Its president **Melville Eastham** believed in an open-door policy with competitors.



## **“... open door with competitors”**

"He showed us around the plant, letting us see what they were making — although not what they were thinking," Bill remembered. "We've encouraged other companies in the same way. You both gain."

It was good that he and Dave had a long period with no outside pressures and a free hand to develop their business.

"Some venture capitalists today have a negative effect," Bill said. "They don't provide management help and companies grow too fast. They come up fine but the company deteriorates afterward."

"By comparison HP grew at a snail's pace. We didn't want to grow on borrowed money; we wanted to grow on our own from day one."

"Since we didn't go public for some 20 years, Dave and I had a long period with a free hand."

## **“... wanted to grow on our own”**

"We went public because we needed something to live on besides our salaries. And we wanted a way our employees could share in the company through buying stock."

Asked for an assessment of the past and future of the electronics industry, Bill said: "I was thinking the other day that I've met or known just about every major figure in electronics from **Lee De Forest** on down."

When he and Dave started out, there was no electronics industry but "radio engineering," used primarily for telephone communications, phonographs for home entertainment, motion pictures and geophysical prospecting.

World War II changed all that, demonstrating that electronics had many applications beyond those narrow fields.

"As for the future, if you can look ahead five years, you're lucky. Things change that fast," Bill said.

Certainly there were more and more computers in unexpected places such as the humanities. He'd been intrigued by David Woodley Packard's Ibycus system for the classical languages.

"David said, 'I've got everything ever written in Greek on this thing. What do you want to know?'"

"So I said, 'How about something from Xenophon?', and David said, 'Which one? There are four Xenophons.' People are finding the knowledge and use of computers essential to their work," Bill pointed out.

Certainly, going into the computer business had meant some internal changes for Hewlett Packard as a company:

"The instrument divisions had been like independent fiefdoms but, when you're in the computer business, you must have an integrated program."

"Some folks say, 'The company isn't the same. We used to be able to go off and do what we wanted. Now there's much more direction.' But with computers you have to operate to a total plan."

Would *The HP Way* survive the departure of Bill and Dave?

"The problem is not our involvement but the size of the company today. What we consider *The HP Way* doesn't just happen from the top; it's built into the organisation."

"When I go to retirement events I tell HP people, 'You're really the propagators of *The HP Way* You're where it resides.'"

Bill played a key role in the company's early move into overseas manufacturing and international sales, anticipating what later became an industry-wide trend. He thought there was an implied responsibility.

"The innovation of *high tech* — a term I don't like very well — separates the US from developing countries," he said.

## **“... share some of our wealth”**

"I remember hearing **Lord Frank** in the sixties say that, if we expect the developing world to progress, we have to expect them to share some of our wealth as a nation, which means our standard of living can't grow quite as rapidly."

Bill said "the Japanese threat is vastly overrated". It had been successful where the US industrial counterpart had been soft in the mass markets of cameras, steel and automobiles.

He considered the last group to be "the most arrogant of all businesses in the US (and I used to sit on the Chrysler board)."

But when the Japanese entered the computer business, they ran into people like IBM and that was a different situation. IBM might be having problems now but they were not Japanese-driven.

In Bill's opinion, it did not help that government in the US had an adversarial relationship with industry, rather than providing the support found in Europe and Japan.

There was no question that "we're not really competing on a level playing field."

Changes were needed in US industry. He welcomed the announcement about a new centre being developed in Southern California to study the theory of production and process improvement.

He was proud that quality techniques Yokogawa-Hewlett-Packard had developed in going for the Deming Prize were now spreading throughout the company. And HP was actually paying vendors more to guarantee high-quality parts delivered on time.

Bill admitted that pocket calculators were his favorite among HP's many products — and he'd had every model.

"I told the lab they ought to be able to design a pocket calculator you could put in a pocket and they came up with the HP-35. You know, they actually checked my pocket size," he said. ■

## **Malcolm: "A sad day."**

"Bill Hewlett was an extremely well-organised person," **Malcolm Kerr** recalls.

"He worked hard, scheduled regular breaks for his favorite sport of skiing and was a good social mixer."

"Often people were surprised when someone pointed out the man in a group as Bill Hewlett, 'the living legend'".

Malcolm still remembers how understanding all the top managers were, but particularly Bill and Dave, when he nervously made his first presentation of ICON's computer strategy just two days after his arrival in the US back in 1972.

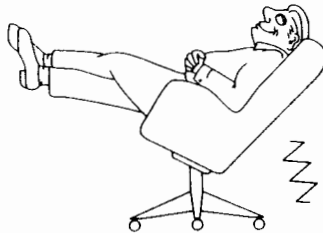
"In everything he did, Bill was an organised person," Malcolm remembers.

"In Singapore, he would buy three dozen shirts — long sleeves and short — and then have a symbol added to the label.

"It was so he could tell at a glance, when they were folded, what shirt he was selecting.

"Once in Hong Kong, he was taken shopping by Barbara, my wife. They found a Chinese artifact Bill liked and he asked Barbara if she had any money with her — 25,000 dollars Hong Kong.

"No? Well, I guess my credit's good in the office," Bill said unfazed."



A tendency to drop off for 40 winks at meetings, or even at a meal, was part of the very human side of Bill Hewlett.

"That in itself wasn't disconcerting because those close to him knew it might happen. The disconcerting thing was that Bill seemed to know whatever was said during his nap."

Bill was widely admired as an engineer's engineer.

Malcolm agrees: "We were in trouble with the 2100A computer . . . almost defying the laws of physics trying to put a certain capacity of power supply into a cubic foot of space.

"So **Barnett Oliver** became the R&D engineer and Bill the project leader to get it right. It showed the ability of our founders to get in and do things.

"They didn't meddle when others were on top of the project or problem but they could come in when their special skills were needed.

"Bill and Dave displayed the wonderful characteristics of energy and innovation. They focused on the effectiveness of things.

"About Bill, **Lee Iacocca** said it all when he described him as 'a living genius'.

"His retirement has been inevitable but it is a sad day. Hewlett and Packard are part of folklore, not just of the electronic industry. It amazes me that the *HP Way* they fashioned half a century ago is still at the forefront of management science." ■

## HP gear fights crime

Victoria's forensic scientists had long struggled to keep pace with the increase in crime, hampered by outdated premises and inadequate equipment.

From 3 April, however, this chapter is behind them. At Macleod the Victorian Government has opened Australia's most modern forensic laboratories.

And HP gas chromatographs and mass spectrometers are playing an important role.

The Analytical section sold additional equipment valued at more than \$500,000 through the efforts of FE **John Lynch**, Region Analytical Support Manager **Leong Tan**, and Analytical CEs **Bill Thalmeier** and **John Holford**.

Sales Secretary **Barbara Williams** pitched in by typing a tender document nearly 3cm thick.

Because no one at HP would ever dream of solving the mortgage problem with a fire, there's no point in telling what Leong knows about defeating the forensic sleuths.

Even if you did ask, he'd say he's

forgotten what substance leaves no trace. But he'd remember that kerosene and petrol are no good.

"They could even tell you what brand you used because the residue leaves fingerprints," he told Depth.

"With designer drugs, they can analyse a sample bought by undercover agents and, by matching its characteristics against later samples, tell who made them and which pusher sold them."

Macleod will speed up and improve the accuracy of blood tests for alcohol, heroin, marijuana, cocaine, arsenic, etc.

The gas chromatograph gives a quick answer on the family a substance belongs to and the mass spectrometer narrows it down to the precise substance.

The HP team have seen some pretty gruesome sights in their work with the labs.

"Seeing pathology tests on the blackened lungs of some smokers, you would never want to light up again," says Leong.

Because the labs are ahead of facilities elsewhere in Australia, latter stages of the Azaria Chamberlain forensic tests were done at Macleod. ■



- HP's gas chromatograph, mass spectrometer and peripherals were the major analytical equipment purchased for the new State Forensic Science Laboratories.

They were a focus of interest for senior police, judges, lawyers and others who inspected the building.

Premier John Cain (left) talks with HPA Managing Director Malcolm Kerr.

Leong Tan and John Lynch were also guests at the opening.

## New Training Centre

Relocating warehousing activities in the new Distribution Centre at Joseph Street offered options, including converting the old space to offices.

However, the decision was taken to give it over to an Internal Training Centre.

Savings from not hiring external facilities made it a good commercial proposition. Also, cost was kept down by a lot of effort by Facilities Manager **Warren Jones** and his team.

Field Development Manager **Russell Warmington**, Region CEO Training Manager **Paul O'Brien** and Training and Development Manager **Ray Gerwing** looked at all the costs of external training.

They were able to justify a major cost recovery purely on savings that an internal training venue promised.

Ray explained that the objective was a truly educational climate for internal development activity — an off-site facility on-site.

Even though not yet fully operational, wags are calling it a "Claytons" training facility — the off-site facilities you have when you don't go off-site.

But Ray pointed to the design features which isolated it from the main Blackburn work area.

There is a separate entrance so that those on course don't have to run the gauntlet of walking through the main building and someone intercepting them with the words, "Just the person I needed to see."

There's only one phone — wall type — in the whole training area and that's for emergency outward calls, not for outsiders ringing in.

The cafeteria will also supply light meals for consumption within the centre — again to prevent work distractions and also to avoid the afternoon slump in concentration that can follow an indulgent lunch.

Because the facility was designed exclusively for learning, the rooms have been named after Australian universities and CAEs.

Ray expressed appreciation of the effective work of Warren's team, which made it possible to conduct a number of programs by mid-March — notably some of the MTS courses. ■

## Newcomers

**Glen Doherty**, Warehouseperson (Sydney)

**Ian Gaunt**, Sales Development Engineer-Mktg/ASO (Melbourne)

**Chris Griffiths**, Sales Representative/PC Sales (Sydney)

**Sue Herrod**, Contracts Administrator/Support Admin (Melbourne)

**Phillip Merricks**, Systems Engineer/AEO (Melbourne)

**Kerry Meyer**, Order Co-ordinator/OP (Sydney)

**Jennie Raymond**, Secretary/MDM Group Sales (Melbourne)

**Sharon Redford**, Secretary/Region Sales (Melbourne)

**Peter Sullivan**, Contoller/ASO (Melbourne)

**Margaret Thompson**, Customer Education Co-ordinator/AEO (Melbourne)

**Norika Traue**, Secretary/PC Sales (Melbourne)

**Janine Wilson**, Sales Secretary/MDM Group Sales (Melbourne)

## NEW ZEALAND

**Sean Carroll**, Customer Engineer/CEO (Wellington)

**Brent Davidson**, Assistant Accountant/Accounts (Wellington)

**Edward Vos**, Computer Operator/EDP (Wellington)

## Transfers

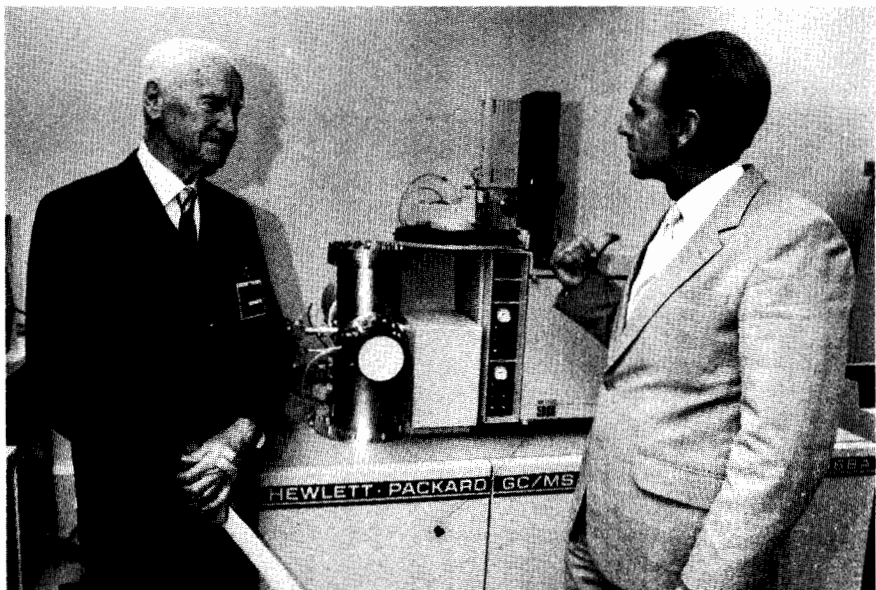
**Ian Clarke**, Systems Engineer/Response Centre to Product Support Engineer/ASO (Melbourne)

**Geoff Jones**, Customer Engineer (UK) to Customer Engineer/CEO (Melbourne)

**John Schmidt**, Marketing Development Manager (Melbourne) to Marketing Development Manager (Hong Kong)

In the last list of Transfers, **Greg McCoy** was shown as a Systems Engineer moving from Canada to Wellington.

More correctly, he was a Response Centre Engineer (USA) moving to SE/Support (Auckland). ■



- **Mr Fred Hobley, 88**, never dreamt police would acquire the high technology resources they have today when he founded the State Forensic Science Laboratories half a century ago.

At the opening of the new laboratories at Macleod, he remembered Victoria baulking at 66 pounds as its contribution to buying a microscope for sharing by all Australian police.

He posed with Premier John Cain against HP equipment valued at more than half a million dollars.

Mr Hobley was a special guest at the opening.

## Worth celebrating

Completing 10 years' service with HP was a real occasion for the Auckland office to celebrate.

Receptionist **Remonde Claridge** started on 26 September, 1966, and is the longest-serving woman employee in New Zealand.

Colleagues toasted Remonde at an office gathering.

In the picture below, the suggestion of firecart-red noses and stars around the eyes came from party masks; they had nothing whatever to do with over-indulgence.

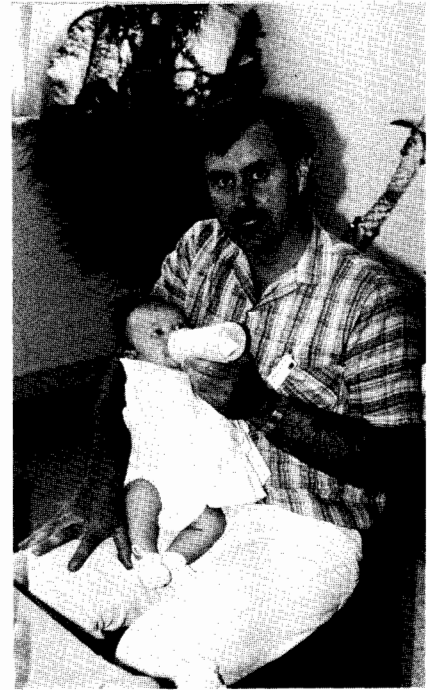
The white slash is a giant computer printout listing but a fraction of Remonde's sterling qualities. ■



• Bruce McCormick (left), Remonde, Sue Potter, Simon Molloy, Lois Numans and Steve McConnel.



• Clockwise (seated): Sue Potter, Anne Double, Carol Woods, Lois Numans, Sue Shaw and son Blake, and Robert Numans. Standing: Gillian McCormick and Simon Molloy.



- Chops and sausages were a bit rich for two-months-old Ashley so his dad, Auckland GM Bruce McCormick, found a quiet corner to administer blander fare.

## Births

Computer  
Museum

Perth Senior SE **Bob Hepple** has got things together again but stress of fatherhood showed when he *Desked* details of the birth of Robert Alexander.

He dated his message 19 March and said the event took place on 28 March.

Almost like promising a customer to call bright and early yesterday.

A check with more reliable sources elicited that the birth was on 28 February (3771gr/8lb 5oz); and Erika and Robert were both well.



- Anna Rose, daughter of Australian S/Ware Program Manager **John Cromie** and Jean, at St George's Hospital, Kew, on 10 February (3175gr/7lb).
- Talia Joy, daughter of ASO S/Ware Test Engineer **Michael Cartier** and Heather, at home on 28 February (3572gr/7lb 14oz).
- Bianca Maree, daughter of Melbourne Staff CE **Frank Van Grieken** and Carolyn, at 6.30pm on 2 March at Royal Women's Hospital (2722gr/6lb).
- Joel Michael, son of ASO S/Ware Development Engineer **Clifford Heath** and Laura, at Box Hill Hospital on 13 March (3374gr/7lb 7oz).

## First 65 retiree

Confidence takes a dive when your employer goes out of business and at 52 you're faced with getting a new job.

That was the experience of **Alex McKean** 13 years ago. But morale soon lifted because Alex had warhousing experience that takes many years to acquire and Hewlett Packard recognised it.

Now he's out of a job again but this time to go into retirement.

He's the first to go through to retiring age in Australia. But last year **Frank Wilson** did it in New Zealand.

Alex started his working life with a Flinders Lane softgoods house. He left for service as a sergeant of artillery in New Guinea and the Solomons.

Back at Flinders Lane, he was in charge of communications (orders to foreign suppliers were by cable and you had to take a tram down to the OTC office to despatch them; a few months later the goods would arrive by ship).

"Today you can sit at your terminal and type out an *HPDesk* order to the States which, with help from the time difference, can be on a plane the same day," he recalled just before signing off on 19 March

Office manager of the graphics arts section was his next position, from which he made contacts that led him to join a paper supply company.

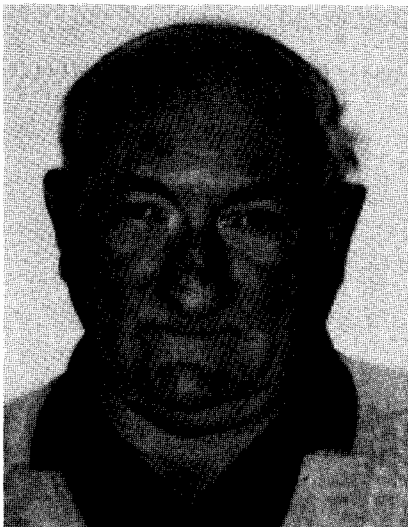
Then on to Bill Patterson Motors in charge of the service division's office and spare parts.

His introduction to the world of electronics came with his next job at Fairchild Semi-Conductors. When that company ceased operating in Australia, he came to Joseph Street.

As Repair Parts Co-ordinator, it's been his responsibility to know exactly where a component was available — on his own shelves, interstate, the US or any HP branch around the world.

On occasions he's been summoned from bed to locate a part for despatch by the first morning plane out of Tullamarine.

On one memorable occasion, the security guard was sure he'd caught a midnight burglar rummaging through the stock but it was only Alex making up a parcel following an emergency call from one of the branches.



• Alex McKean . . . reaches 65.

"HP in Australia is a young company with young people given much responsibility but I was never made to feel my age," Alex said.

"At some places, at 40 you're too old to be given a job. I knew I had plenty of experience but I've always been grateful that HP took me on.

"You'd be hard to please if you couldn't enjoy working in the environment HP provides and with the type of people it attracts."

Alex is pretty sure that after he tidies some loose ends in Melbourne he will move to Anglesea, where he's holidayed for several years (losing a caravan in the Ash Wednesday bushfires). ■

## Excellent news

Marketing Manager **Bruce Marsh** was justifiably exuberant when he penned an *HPDesk* message that reported HPA's success in the Arthur Hoby and Associates' industry survey.

For the third year running we were ranked No 1 in Overall DP Support.

The survey covered 1400 companies.

Customer satisfaction was rated on a scale of 1 to 5 (1 to 2 was very satisfied and 4 to 5 was very dissatisfied).

HPA was rated 1.62, followed by IBM (1.92), DEC (2.12), ICL (2.25), AWA (2.26), Data General (2.32), Control Data (2.32), Olivetti (2.34), Prime (2.42), NEC (2.43), Honeywell (2.46), Wang (2.50), Fujitsu (2.53), NCR (2.58), Concurrent Computer (2.63), Burroughs (2.80), Nixdorf (2.82) and Sperry (2.96).

The 17 categories considered by respondents and HPA's ratings were:

Overall support on DP (1.62); hardware performance (1.53); hardware reliability (1.38); price-performance (2.17); quality of software (2.24); ease of use of software (1.82); ease of using applications software (2.36);

Sales representatives (2.40); software support (2.34); systems engineering personnel (2.05); hardware maintenance (1.88); overall training (2.56); terms and conditions of contracts (2.21); business practice (1.79); product delivery times (2.48);

Current product upgrade path (1.98); and, "all things considered, your overall satisfaction with your supplier's products and services" (1.60). ■

## Brisbane golf day

Customers and value-added partners were invited in December to Ashgrove Golf Club, just across the road from HP's Brisbane office, for a day of sport, fun and good cheer.

Fifty played and others acted as caddies and waiters. HP staff were on hand to make the program run smoothly.

Applied Micro Systems PL donated an elegant trophy for annual competition.

Winner of scratch was **Ray Sutherland**, of the Auditor-General's Department. ■



• SSM Bob Keers presents trophy to Ray Sutherland.