

ICL AllStars Magazine

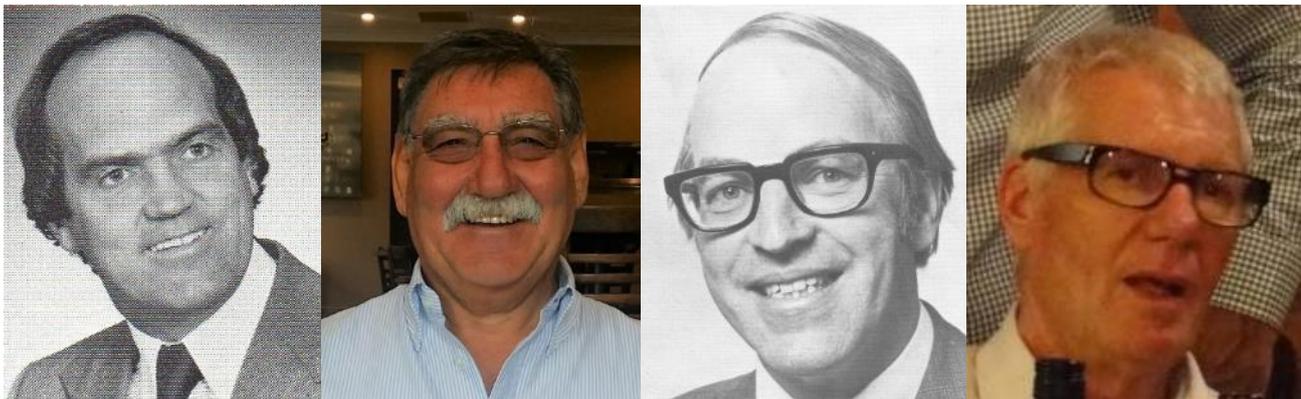
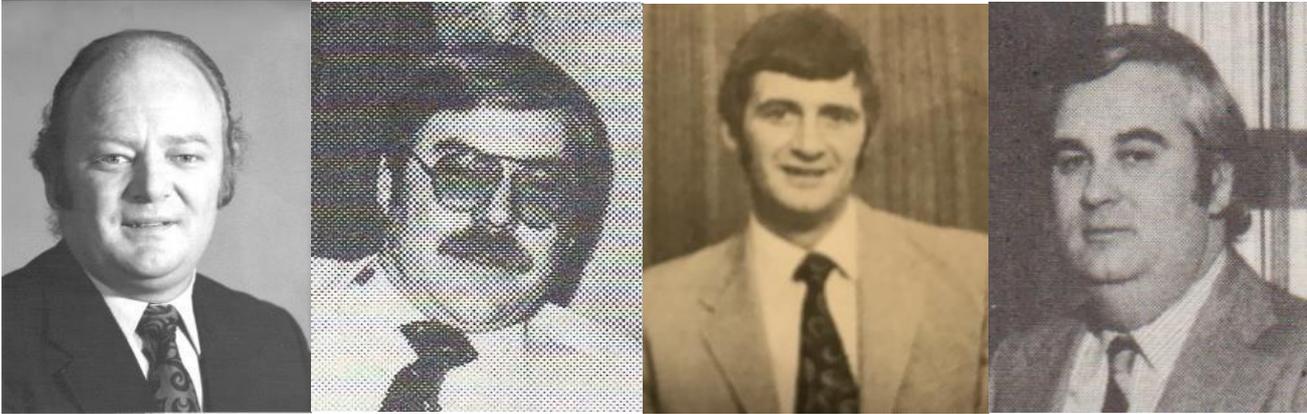
Issue 71 **Autumn 2021** Keeping the ever-great ICL community in touch, in contact and informed

Welcome to our next 'under new management' Autumnal edition of the *AllStars Magazine*. Huge thanks to all who have made such invaluable contributions. We do hope that you all find something to tickle the fancy and to bring back some superb memories.

This time around, we begin with a splendid item from **Richard Freemantle**, who reflects on what he has been up to since leaving the old firm. Included in the article are some great shots of cars he has restored (and kept): eat your heart out, **Ian Bone** at the fantastic Queensland Motorsport Museum. It's then on to **Gary Quan Sing**, who deliciously entertains us with details of his working life before, at, and after ICL. He recalls many an AllStars colleague including **Rob Holloway**, **Raf Dua**, **Val Mickan**, **Bill Meeke** and **Barrie Peters**.

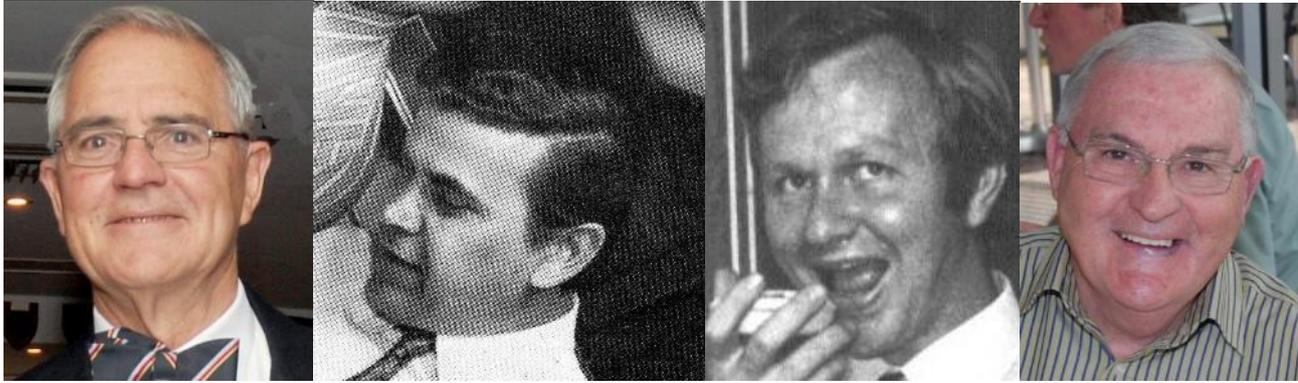


Also mentioned by Garry were (below) **Chris Joint**, **Gil Thew**, **Malcolm Hudson**, **Barry Ross**, **Bill Pringle**, **Peter Hobday**, **Wallace Weaving** and **Bob Kalkman**.



Its then over to **Ian (Scottie) Pearson**, who continues with his review of his marketing career with ICL. Such reflections include reference to and pictures of many, including **Sue Stringer, Tony Joyce, Cliff Oldham, Jan Havercroft, Trevor Batten, Dianne Busbridge, Roger Birch, John Farrell, Joe Pavlich, Alan Cox and Bob Shaw.**





Which is certainly not to forget **Scottie's** reference (below) to **Lynlee Watson**, 2903 champion, **Angus Chalmers**, **Arthur Humphreys**, **Judy Sinclair (McNaught)**, **John Hyland**, **Isabel Woodhead** and **Pat Magee**.

Ian devotes a good deal of his item to the subject of ICL's election coverages for ABC radio and TV. And here, we include our regular 'ring-in face' for this issue ... **Mal Fraser**.



Later in the edition, we hear from **Phil Sugden**, whose intriguing article includes references to **Cedric Dickens**, **John Marshall**, **David Stafford** and **Bill Leakey**. **Yvonne Bulluss** tells us of a paint and sip (quaff) exercise that also involved fellow-Warhols **Lynda Tate** and **Suzanne Pattie**.



Not pictured here are fantastic items from **Steve Hunt** and **Clive Davies**.

Well, that's about all folks. Over to you. Enjoy.

...ooOoo...

PEOPLE

MY LIFE AFTER ICL

- RICHARD FREEMANTLE

Your editor has persuaded me to write a few lines about what I have been up to since leaving ICL in 1979. So much has transpired since then.

If truth be told, for the most part I was really happy being with ICL. For me and for many others, it was a kind of substitute family. Nice people with common values and aspirations, with real challenges to be met, and a sense of purpose.

However, circumstances changed, and I found myself reporting to a manager who made life miserable. This unlucky situation turned out to be a stroke of luck because it led me to “leave home” and launch into the next phase of my working life.



Let's do lunch: Richard and his wife Jan with Steve Rudlin.

I embarked on a number of start-up solo ventures which can best be described as “broadening my experience”. These included advertising, consulting, and representing a couple of Silicon Valley technology companies, which led me to Lionel Singer. Lionel was then attempting to recreate his success with Prime Computer with a new product known as WICAT! We got together and discussed what could be done to give this machine a competitive communications capability. Spending time in Silicon Valley, I found a couple of products that I thought could help, but I was struck by the idea that what businesses wanted were “network solutions”, where one company brought together all the elements needed and

“owned” the communications problem. This led to the formation of Network Solutions. This business grew in 7 years to be the largest local area network company in Australia, with offices in each state and roughly a hundred staff. Lionel taught me so much about the process of building a company and making an impact with innovative marketing, managing distribution agreements with US manufacturers and much more. I wanted to expand Network Solutions further, whereas Lionel continued to search for the “next big thing”. We decided to go our separate ways.



Well, that beer went down well: Richard with the venerable Raf Dua.

Around this time Bridge Communications was acquired by 3COM. In the six months following the acquisition, 80% of the Bridge Communications staff left the company. I had a good relationship with many of the ex-Bridge employees, as I’d represented their product through Network Solutions.

At about this time a start-up technology company called cisco (back then it had to be lower-case “c”) began to expand and recruited many of the displaced Bridge Communications staff. Cisco had no direct international representation, and the newly recruited ex-Bridge VP International came to me and asked if I would represent them.

I established Cisco in a serviced office in the Zenith Centre in Chatswood in late 1990. It was the first Cisco office outside the USA. My experience at Network Solutions equipped me to get things moving very quickly, and Australia became one of the most successful subsidiaries (by market share) in the world. In 1995, following some difficulties with our European Operations, I was asked to relocate to the UK and take over our operations in most of Western Europe, including South Africa, and with Australia and New Zealand added for extra frequent-flyer miles! My expectation from there was that I would then go over to San Jose. As things transpired, after three years I was given the task of taking over the rapidly expanding operations in

Asia. I came back to Australia as President of Asia Pacific and spent much of my time in China, Korea, and India, but based in Australia.

My travel load was unrelenting. I looked at the growth numbers involved in Cisco's rise and felt the law of big numbers would eventually catch up with us. After ten years with Cisco, I decided to retire and when I "hung up my boots", the employee numbers had grown from 150 when I started to around 40,000 in January 2001. As we will all recall, the technology crash came about in around March 2001. Timing is everything!

Aged 47 and retired ... what to do? Initially I did not want to do anything ... I was exhausted. Being at the helm of the fastest-growing region of the world's fastest-growing technology company had taken all I could give. I felt guilty for not being there for my colleagues as things turned sour, and I took many months to rebalance my life. I realised I had been jet-lagged for years, and I had not spent the time I wanted to with my family.

In the wake of this readjustment, a number of projects presented themselves. I was involved in the successful public float of EServe, the start-up of a FinTech business called Moneyswitch, now known as Tyro. I also had non-executive involvements in an Optical Networks business and a Radio Network. Ultimately, these non-executive involvements in businesses proved to be unsatisfying. As it was described to me by an experienced director: "You have little influence, ultimate responsibility and, if it all goes wrong the authorities take your house." Yet I did not want to get back onto the corporate merry-go-round on a full-time basis again. Coincident with this realization, I happened upon the opportunity to acquire an Austin Healey 3000 in need of a lot of care and attention. This was a car I remembered from my childhood, and which "spoke" to me. I decided to restore it - totally.

This was the beginning of a journey that has consumed my spare time, apart from golf at Elanora, for 10 years now. Predictably (those who know me say this), I have not gone about this half-heartedly. I now have two workshops and have gone on to completely restore two Maseratis, a Porsche, a Jensen Interceptor, Mercedes, and the beloved Austin Healey. None of these has been sold. There is just too much love and sweat in each of them. Given the opportunity, I can talk at great length about almost any aspect of their construction. My wife **Jan** ensures I don't get that opportunity very often!

The workshop has now become a place where like-minded people come to chat and to get advice. Some bring their own cars along to show, and some like to get their hands dirty in actually doing manual labour. For me it has become the ultimate men's shed. Unfortunately, there is no money to be made doing this, or I might have spent my whole career messing around with old cars!

If any of you are similar car fanatics and would like to drop into my workshop to 'kick the tyres' and chat about cars you have or would like to have, then I'd enjoy seeing you.

For the record, here is a handful of pics of my wonderful charges.

Editor's Note: I would like to document my heartfelt thanks to **Richard** for submitting this story. He is, by nature, a private person, and has stepped outside his comfort zone in so doing.

I had the pleasure of representing Cisco and enjoying leadership positions in Networking Companies that received Cisco "Partner of the Year" a number of times during **Richard's** tenure at the helm. During this time, I maintained a friendship with him, born and strengthened from within ICL that lasts until today.

This friendship, nurtured within ICL, allowed us to work with each other with complete honesty, integrity and mutual support as supplier and reseller, and achieve many mutual successes.

Thanks, Mate.









MY DAYS AT ICL BY GARY QUAN SING

Reading all the *ICL AllStars Newsletters* has prompted me to put my great memories with a great company, full of great people, into print so here we go: a glass of good Margaret River Red, a sip to start and a good slurp to follow, mind in gear, memory loaded and fingers ready on the keyboard.



Time for a pasta bite: Gary in Perth. Our pic from **John Farrell**.

I arrived at ICL Melbourne in 1972, I think. Anyone who has these sort of employee records can assist by supplying the correct date.

Following a Bachelor's and post-graduate degree in Mathematics and Computer Science at the University of WA, my professional career in Information Systems and Information Technology was spent successfully developing a medical laboratory system at the Alfred Hospital in Melbourne, and mining industry technical systems with Mount Isa Mines in Mount Isa, Queensland. MIM, at that time, were big ICL users with a large-scale 1904A, plus a large room full of all sorts of processing units and peripherals. Being in the outback of remote Queensland, the '4A was naturally serviced out of Brisbane – sales and support – with the smooth **Rob Holloway** the sales executive and **John Marshall** the state manager. As it was a large remote site, ICL had a team of engineering and software support personnel living and based in The Isa.



Beautiful one day, terrific the next: **John Marshall** and **Rob Holloway**.

Having spent five years doing exciting things at Mount Isa, I was naturally looking for a new challenge in a new location. Well, scanning *The Australian* on a Tuesday, as you did, there was an ad that one could have 'cut and paste' into my CV. ICL and Melbourne ticked those boxes, so I completed an application, and it was in the post to the personnel manager. Well, I got the gig, so it was off to Melbourne with the family.

I arrived at 425 St Kilda Road, and there was even a desk for me in amongst all the support people, a great gathering of competent and brainy people. 'Why am I here?' I questioned. My role, as I remember, was to promote the use of technical-type packages such as Linear Programming, PERT (apologies to **Raf Dua**), Structural Analysis, Prosper, Mathematical Statistics and the like in a sales role, with both existing users and new business prospects. Names like the Housing Commission of Victoria, Dunlop, APPM and Melbourne Harbour Trust come to mind. I also recall doing an overall MIS Planning project with the *Adelaide Advertiser* in South Australia. **Val Mickan** was the state manager, and **John Farrell** was the boss of Dataskil. Can't swear to remember the name of the bureau manager – **Glen Gooma** (I think): someone who drove a green Merc as I recall!



Melbourne matters: **Val Mickan** and **Garry** with **John Farrell**.

Chris Joint was the sales manager of the non-government area. Well, **Val** decided that I should join **Chris Joint**'s team, and I have vivid memories of Day 1. **Chris** said: "Well, Quondong (as I was often called), now that you are part of my team, let's go for lunch". For those who don't know, the Quondong is an Australian native tree that grows in the semi-arid areas, and it produces a nut with a thin fruit skin. Both the nut and the fruit are very yummy, and are a great food source for the indigenous people and others who wish to harvest.



You want to eat as well! **Chris Joint** and the *College Lawn*.

So down to *The College Lawn* would you believe!! Now, I don't mind a beer or two on a warm day, or any day for that matter. Well, we front the bar and **Chris's** pot is already on the bar, and "Why not make it two", I say. I had barely sipped mine when the second arrived for **Chris**. I managed to down mine, and quickly reduced the size of my glass. I handled two or three beers and, being a bit peckish, I said to **Chris**: "Shall we order a feed?" To which he replied: "What! you want to eat as well?" We did eat: lamb shanks with white sauce and parsley plus veggies as I recollect.

I spent some enjoyable months with **Chris's** team with the likes of **Gil Thew**, **Jim Holtz** and **Malcolm Hudson**. I remember **Jim Holtz** had a Bentley motor, a grand vehicle of royal significance. Well, we would do the royal drive: **Jim** would put on his royal drivers' cap, and we would set off to a customer site or just down the road to a restaurant, giving the passing people a Royal Wave. It was a hoot.



Thew and far between: **Malcolm Hudson** and **Gil Thew**.

Thinking about cars brings back a memory of a bloke, **Brian Magill**. He was the proud owner of a Ferrari, a RED one! In what other colour do they make them? I said to **Brian** at *The Faulkner Arms* pub one day: "I wouldn't mind a spin in the red demon one day". "OK, let's go!!" he replied. Well, off we went for a spin - but I must admit clipping along the freeway at a good pace with my arse six inches from the tarmac was a thrill but nerve-racking. Fun, but not for me.



Top gear: Brian Magill (right) with Graham Mail, Glyn Homer, John Walton and Brian Exton.

Well, the stay with **Chris's** team came to an end for it was about this time ICL acquired Singer Business Systems and the famous System Ten, with an application software package called STARS (Still To Arrive Ripper System). Along with the System Ten came a team of sales and support people headed by **Barry Ross**. Some of the other ex-Singer people I recall were **Bob Kaulkman**, **Henri Mouletlet**, **Alan** (support), **Black Jack** (support), **Margaret** (support), and **Karen** (support).

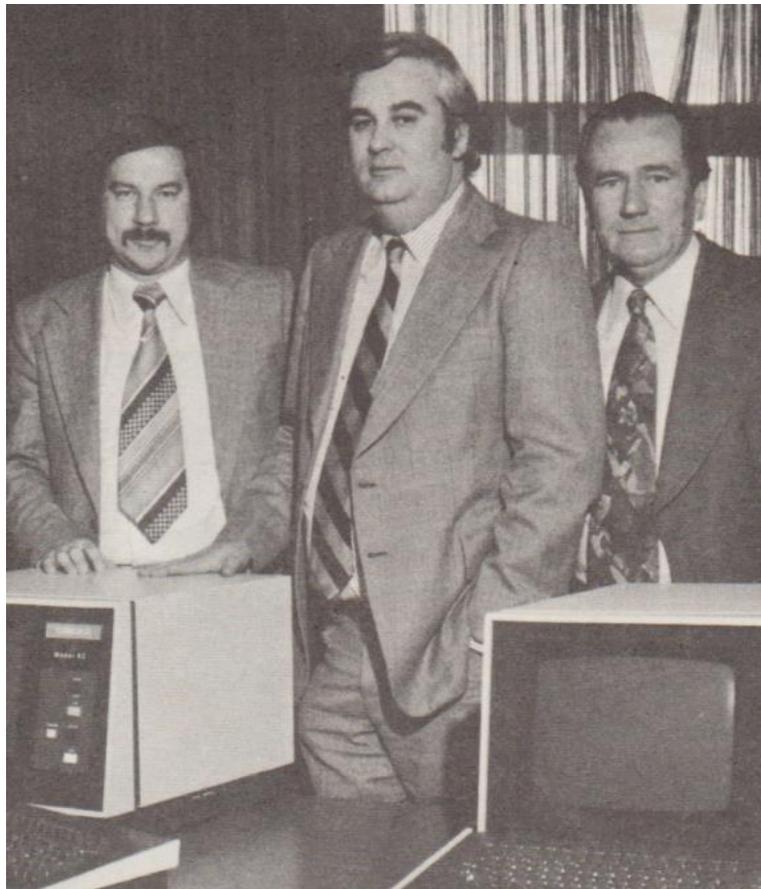


A post-prandial chat: Bob Kalkman with Pauline Spry and Geoffrey Howell.

Val in his wisdom decided that I should join the Singer mob, so I packed my desk and moved downstairs to join the System Ten Team. Well, if my introduction to **Chris Joint's** bunch was memorable, it was exceeded by the Singer team

introduction. The venue changed to *The Anchor and Hope*, with Port, 'truth serum' as it was called, being the poison.

Editor's note: *It's recalled that young **Barry R** never did anything by half, including the consumption of port wine. He preferred that this libation be served in large claret glasses. And hence the all-too-regular order for a "Ross of Port". The NSW luminary similarly favoured copious pourings of Glayva. A favoured waitress at the restaurant in question gave her name to a 'Jo' of that magnificent liquor scotch.*



Any port in a storm: Barry Ross (centre), accompanied by Val Mickan and Jim Williamson.

But back to **Gary**, who reports: "At that initial session we did eat; but after a flagon or two of that port, the memory failed to retain this information." My time with the Singer team was short-lived, however, as the delicious position of state manager for Tasmania was in the offing. So, once again I packed up my desk, and with the family in tow off to Hobart we all went. Now this was a magic move as ICL was very strong in the Tasmanian market with a good customer base. On top of this we had top people: **Graeme King**, the best of support both pre- and post-sales, **Steve Coombs**, sales supremo, **Bill Pringle** sales king, and later **Peter Hobday** joined the team. Engineering support was also tops, with **Ted Moule** and his team. An old archive pic certainly brings back such very fond memories.



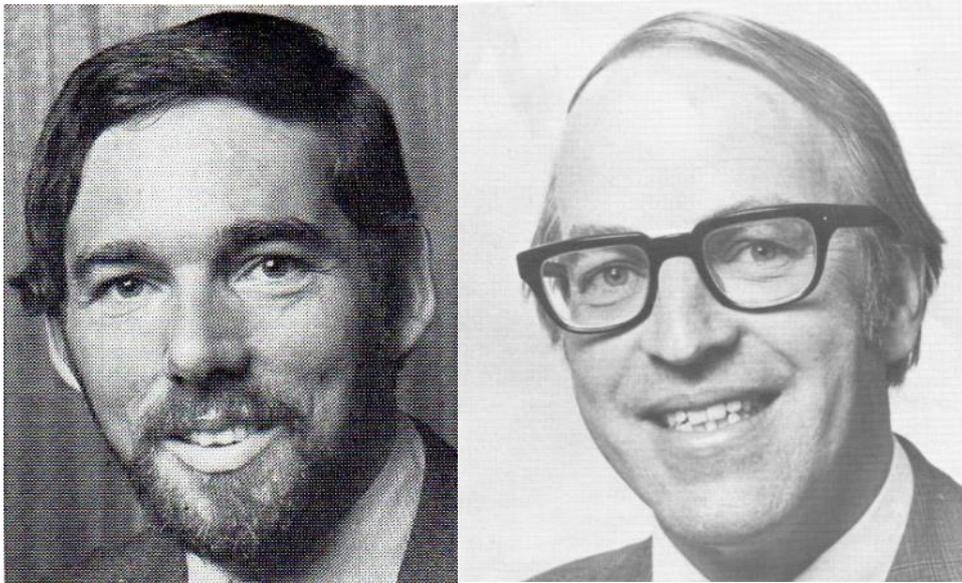
Part of the Tasmanian Devils team: With Gary Quan Sing (seated) are Evonne Slingsby, Stephen Coombs, Rialk, Peter Hobday and Peter Shaw.



Mentioned in despatches: Bill Pringle, Malcolm Hudson and Raf Dua.

After a couple or three years based in Hobart, it was back to Melbourne in a marketing role. Among so many magic memories, there is another which I must pass on. It occurred at a marketing and sales conference in the Adelaide hinterland; I

don't remember the name of the town, but it was naturally in the Barossa Valley. The gig was the brainchild of **Wallace Weaving**, then marketing manager (I think), and we all gathered for the event, greeted with a splendid array of fine wine and food. **Barrie Peters** could not contain himself, indulging with elegant gusto, along with other less classy plonk heads like me.



In conference: **Barrie Peters** and **Wallace Weaving**.

Then the conference started in earnest and out came the programme for the proceedings and projects, with tasks for each and every one to prepare. Well, **Bill Meeke** from South Australia and I drew the team titled "Multiply". Our task/objective was to prepare a presentation on an ICL product and mention/say "multiply" as many times as possible. The scoring was simple: the team that mentioned/used their 'team word' the most times would be the winner.



Go forth and multiply: **Bill Meeke** (left) with **Barry Ross** and **John Farrell**.

Well, we tried but nothing came to mind on how we could achieve the goal. So **Bill**, being a great lateral-thinking salesman, said: "Quondong, why don't you become Mr Multiply, and we will get a score each time I address you during the presentation".

“OK **Bill**; great idea, so let’s do it.” We prepared a flip-chart presentation, and out we went to do our thing as the programme listed. Well, we brought the house down and easily won the count. But we were disqualified, for whatever reason, but Mr Quan Multiply reigned supreme.

Here is another top memory of this event. As I recall, the social and mingling event was held in a big hall with robust benches and tables for dining and drinking. Well, a few people were requested to get up on the main bench table, on some sort of raised area and tell their success stories. I don’t remember who actually stood up there and told their success tales, as they were overshadowed by what followed. After a few good short yarns, **John Farrell** thought this was too good an opportunity to miss. So up he got to do his thing. Unfortunately for **John**, all the previous people were less than six feet tall, and there was a huge structural timber beam at about the same two yards above the bench on which he was to stand and do his thing. Being some 6 feet 6 ins tall, “whack” goes his head into the beam with some considerable force. It didn’t knock him out, but it certainly took the edge off his introduction.

The other memory I have of this event was the fact that an innocent-looking young female member of the catering staff decided to get up on the table and tell a joke/story while **John** was standing supreme. Well, what she narrated made even an old, hardened joke-loving person like me blush: too rude to publish, I believe.

The return to ICL Melbourne was short-lived, as the desire to return to Perth for family reasons and a great offer from Prime saw me and my kin back in Perth. I am, without doubt, indebted to ICL and the people I worked with for a great working and social experience. Salute: as I raise my glass, and all the best to those who made my experience what it was.

While with Prime, I put together one major deal with Metro Industries Ltd, a major national player in the corporate world. They had a large network of users in a number of different industries and businesses.

I left Prime after a short tenure, but this gave me a chance to set up my own consulting business, G.D Quan Sing & Associates, in Perth, which was always my career plan. Metro decided to use G.D Quan Sing & Associates as consultants to make the Prime deal happen (“You sold this to us, so you make it work”). We did succeed, but once again that was with the help of others – here two top-flight consultants. This exercise strongly reinforced my belief that the industry I worked in is NOT a technology industry BUT a people industry.

Prime was also a short tenure, but this gave me a chance to really set up my own Consulting Business, G.D Quan Sing & Associates, in Perth which was always my career plan.

This enterprise operated successfully, mainly in the mining industry, both nationally and internationally. In the mining industry, I had particular success with a solution based on the combination of a plant and equipment maintenance planning and management system called Mainpac, and Sun Systems accounting, which was ideal for the small- to medium-sized mining operations in Australia and Internationally.

A couple of my bigger consulting projects were with Smorgon Steel in Melbourne and Western Mining Corporation in WA. While I was involved with Smorgon, I had

the opportunity to catch up with a few ICL'ers of my era, and I really enjoyed the memories and their company. I also became an ICL Trader in Perth and had success selling and installing the ICL Clan, with the Pick operating system and Online 2000 applications suite, on many sites. I was again, very fortunate, to have a couple of very smart and capable people working with me, who could make the applications do marvellous things in a variety of businesses and industries. It was not only successfully implemented, but also on time and within budget! What else do you need?!

A GREAT CAREER IN MARKETING – TAKE 2 **FROM IAN PEARSON**

In the last highly and totally self-indulgent review of my life in marketing, the far-too-long diatribe ended with the export of **Pearson** from Melbourne to Sydney, and a totally new job; in the heady world (at least in my humble opinion) of marketing.

I have no idea (well, not much of one) about the experience of others, but for me, I had a career blessed by great mentors and sponsors.

Here I really acknowledge the early backing of the likes of **Warren Hodges**, **John Hyland** and **Peter Gygell**. In Sydney, this stellar support was taken up by the ever-great **Cliff Oldham**. And for the record, I owe a huge amount of my career development to the oft enigmatic head of our International Division, **Chris Wilson**, and the irrepressible corporate Deputy Chairman, **Arthur Humphreys**.



Is there a doctor in the house? At left is **Dr Chris Wilson**, while in the picture at right: **Arthur Humphreys** (seated left) and **Cliff Oldham** (seated right), with **Roy John** and standing, **Kyle Matheson**, **Keith Woodmass**, **Lance Collins**, **Cedric Dickens**, **Tom Geddes** and **Neil Lamming**.

So, I arrived in Sydney, and was immediately presented with a raft of sizable and potentially notable projects that warranted pretty potent attention. All of these could well have been an example of the lamb to the slaughter. But with more arse than class, things actually did happen. And happen quite well, if I do say so myself.

Top of the agenda was negotiating with the ABC for ICL to provide (some suggest the world's first) an on-line election reporting system for the network's Oz-wide TV and radio coverage. The very first application of this was slated to cover the memorable 1972 contest in which Gough Whitlam came to office.



A timely pic: Gough with the ever-special Little Patti.

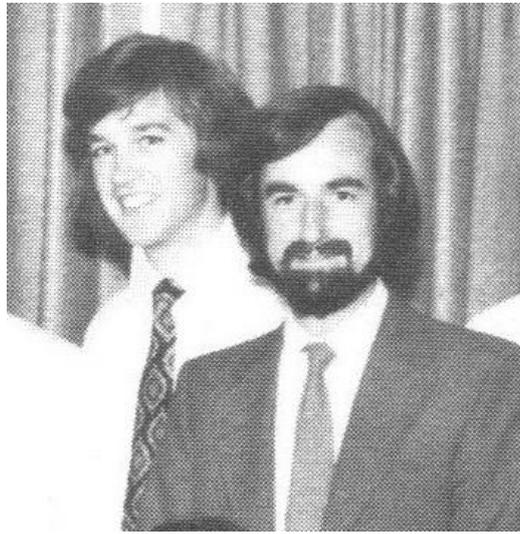
Of course, it was one challenging thing getting the absolute agreement of the ABC that they should commit to ICL, but the huge opportunity had to be turned into actual reality.

Here the old firm owes a huge heartfelt vote of thanks, and carries a massive debt, to the most incredible **Roger Birch**, who meticulously developed the impeccable system that made it all happen.

He spent endless hours with election commentator and psephologist Malcolm MacKerras. And the system he developed is still the basis and guiding light for present-day elections.

In recent years, I've had numerous moments, at post-polling day party-faithful gatherings, when all and sundry are gathered around the TV reports on progressive results (OK let's be honest, it's the TVs or the bars). Notably the commentators start to call results at a pretty early stage, and the cynics at such gigs constantly question the efficacy of this reporting. To be honest, I have become a tad bored with explaining how the computer's allocation of preferences works. And how this makes the predictions generally valid.

On the acknowledgement front, sincere compliments as well to the Customs Department (AKA BACA) who graciously lent us their System-4 for this Whitlam vs McMahon election and subsequent projects.



Bring back the Birch: Roger Birch (left) seen here with John Hoey.

As an essential aside to all of this, in 1972, 'Auntie' realised that none of its scheduled on-camera presentation team could type, and thus the effectiveness of the installed VDUs was potentially reduced. The solution to this challenge was my brilliant, wonderful and indispensable PA, **Sue Stringer**, who emerged from stage right. She was part of the on-air panel all evening, and certainly made her own valued vocal contribution to the fast-evolving proceedings, as well as ensuring all IT reports were presented immediately on demand. As ever, she was stunning.



And now direct from Canberra: The incomparable **Sue Stringer** (standing left) with **Tony Joyce, Jim Drummond, Joe Pavlich** and **Dave Oswald**: seen with the ABC's James Dibble, Robert Moore, Victor Prescott and Malcolm MacKerras, as all was about to go to air.

Our next Federal Election involvement with the national broadcaster was in 1975, when Gough Whitlam was defeated by Malcolm Fraser. A popular cartoonist of the

day (and a great friend of ICL) depicted the contest in somewhat churlish style, as you can see. At day's end, Fraser was victorious. But on a very different (marketing) plane, so too was ICL, who had yet again derived an immense amount of invaluable publicity.



Anything you can do ... Malcolm and Gough.

From the early and heady ICL/ABC election reporting days, our involvement with 'Auntie' evolved to even more national polls, to the Victorian State Election for example, and thence to Brisbane and Adelaide. In Melbourne, the inimitable **Jan Havercroft**, ever so admirably, took on **Sue Stringer's** on-camera role as someone who could touch-type and really contribute to the telecast's presentation.



And now we cross live to Melbourne for the 1973 Victorian State elections: Jan Havercroft brilliantly doing the on-air honours.

While our high-profile election coverage usually went like total clockwork, there were one or two scary moments, when everything looked like resembling a total disaster. Take the NSW 1973 State Election. All was set to 'happen', but (and it was a very big but), the ABC had absolutely forgotten to apply to Telecom for the necessary IT terminal connections. The result was no link between the central computer and the displays on the broadcaster's desk. Kaput! The ABC was devastated, and at ICL, we too were far from delighted ... another great PR opportunity going down the drain. But back home at the ranch, our team was certainly not giving up. The solution was

admirably provided by a team headed by the amazing **Pat Magee**, working with the huge talents of **Wayne Norton**, **Dave Nolan**, **Paul Beckhaus** and the magic **Dianne Busbridge**.



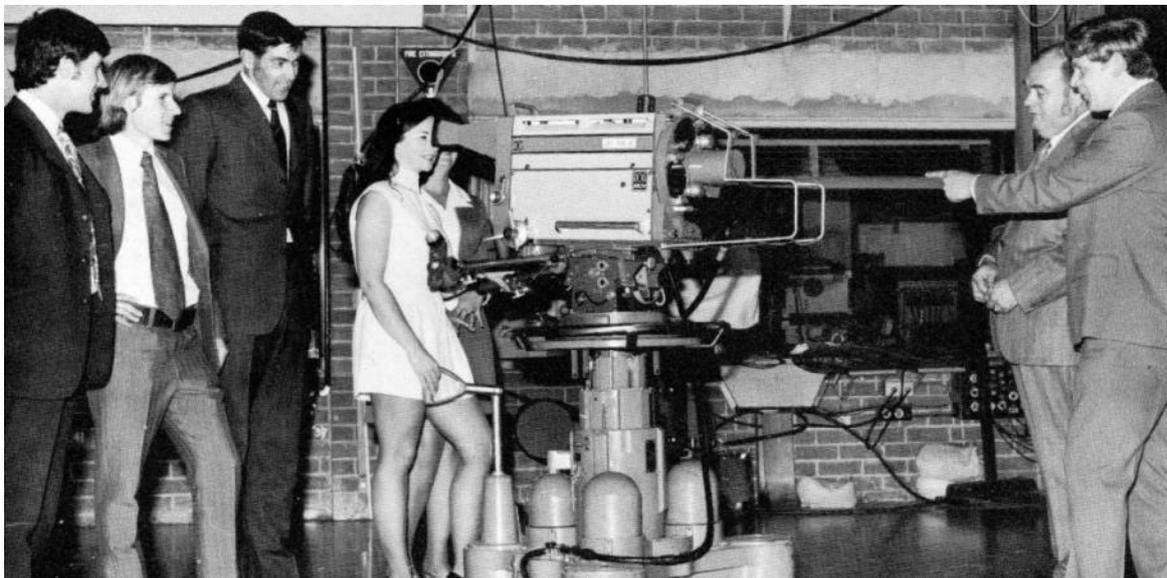
Solving Auntie's problems: Suggesting two rather unusual ICL system peripherals (a pair of outside broadcast vans): **Wayne Norton**, **Pat Magee**, **Dianne Busbridge**, **Dave Nolan** and **Paul Beckhaus**.

The wisdom of this convocation was far from broadcasting simplicity. But it worked ... big time. The solution (far beyond my modest intelligence and far too complex to explain) was centred around outside broadcast (OB) vans. How our brilliant colleagues understood OB capabilities and then managed to design a work-around using these will be left to history. The point is it worked - marvellously. We beat the ABC techies at their own game. The broadcaster was 'over the moon' with ICL's solution, and personally, I wore a huge smile for quite some time as I pondered on our team's brilliance.

Elsewhere, the bond we had formed with the ABC was also very evident such as in Queensland and South Australia.



And now we cross to the tally room: In Brisbane we see **Bob Shaw, Mike Daniels, Sandra Davies** and the ABC's **Graham Irvine** preparing for an election telecast in the Sunshine State.



Lights, action, camera: **Terry Crook, Ed Reynolds, Garry Preston, Jan Chisholm, Ted Coucher** (from the ABC) and **Trevor Batten** doing the ICL election thing in Adelaide.

Aside from the ABC, another immediate top-of-agenda priority was creating our exhibition stand for the up-coming bi-annual ACS conference and exhibition, in this instance being staged in Brisbane.

Here, I have to say, my inexperience (totally so) did not deliver the sort of results and high corporate and product profiles I was delighted to produce in later years. This occurred as my exposure to such events very seriously matured.



Making an exhibition of themselves: On the Dataset component of our ACS-Brisbane stand are **Tom Geddes, Val Mickan, Bob Dibley** and **Lynlee Watson**.

On the mainframe side of the stand, the powers-that-be had decided that the behemoth of a device, the Universal Document Reader (UDR), would take centre stage. This product had then very recently taken on a substantial profile under the astute orchestration of **Derrick Davey**.



Judy, Judy, Judy (with apologies to Cary Grant): The stellar **Judy Sinclair** at the ACS exhibition helm of the UDR.



Trying the ICL demonstration program are Dave Oswald (Canberra), one of our two stand secretaries, Lynlee Watson – in real life Tim Baker's secretary – and from Brisbane, Dave Applegate, David Crouch, Barry "Murray" Boaden and Ken Grant.

It's possibly interesting to note that, as an incentive to spend some time on our hardware stand, we presented visitors with a multiple-choice questionnaire that, when the selected boxes had been marked, would be input to the UDR. The person with the most correct answers was slated to win a valuable prize. Trouble was that a neighbouring exhibitionist's brochure, when fed through, scored 100%.

In those ever-great early-Sydney days, there was also a massive number of press conferences and press releases to orchestrate. Far too many to mention, but all very well accepted by the media. Our selling was on a high, and so there was never any shortage of great stories to crow about and actively promote. That said, one press conference does warrant some specific attention. It was to formally announce our first contract from Woolworths, and **Cliff Oldham** was in the chair. During his effusive presentation, **Cliff** pondered on the soon-to-be-realised day when every checkout in Woolies supermarkets would be linked, on-line, to a central computer. Some attending journos, and your humble scribe, thought that this was rather over the credibility top. We all imagined that the lad was away with the fairies. The reality of Cliff's vision, yet again, demonstrates what an absolute naysayer and idiot I could be.

And then along came the 2903, or PF76 as it was coyly known prior to launch. In a morning call from **Cliff Oldham**, I was summoned to a PF76 meeting. I assumed, when **CO** opened the batting, that I was about to be asked how I might handle the PR launch of said system. Wrong! He offered me the task (I must stress, in addition to my current role) of what was clumsily described as '2903 Product Introduction Manager'. **Alan Cox** and **John Farrell** were to spend time in the UK receiving first-class product knowledge and to return home as product aficionados. But my product

introduction role was pretty simply: to ensure the field's many queries on the new marvel were successfully answered.

Some of these inbound questions to your humble scribe were more than sound. But like the query 'Can we link the 2903 to an X-ray spectrometer?', there were a few inputs that drove me to distraction. And for the record, the answer to X-ray thingamabob was a resolute NO!



Starting the 2903 magic: Cliff Oldham (with Lynlee), John Farrell and Alan Cox.

As history will record, I accepted the product introduction role (to be honest, one could hardly say no): this was very much a backroom marketing function. But my instincts drove me with a vengeance, and ensured my back-of-house soon also moved into front-of-house. It was with huge pleasure I watched as order after order after order for the new system rolled in.



Wetting the baby's bottom: Welcoming the first 2903 to Australia.

The race for winning the first Australian 2903 order was a heated battle. In the end, the ever-great **Angus Chalmers** from Western Australia got the accolade. His order from Swan TV was also about the first globally. Records will tell, but the conventional thinking was this was the very first 2903 sale worldwide.



Make it, I'll sell it: The incomparable **Angus Chalmers**.

Around the end of this demanding and rewarding time, I started to savour being called to Bridge House South in London as something of an antipodean marketing supplement to ICL's International Division team. On reflection, some visits saw me contributing sweet Fanny Adams to anything. But then arose the great 2900 launch debate. To sum this up: The IT-world was avidly expecting our new system: the hardware was ready: but the software was far from OK. The dilemma was launch now and meet worldwide industry expectations, then suffer the slings and arrows emanating from a system that could not be delivered in any sort of predictable time. Plan B was, of course, to again delay any sort of launch; avoid delivery embarrassments, but be held to ridicule - bearing in mind this was not the first New Range announcement delay.

For those who have never experienced British committees, let me paint a picture of doom. For the 2900-delay synod, there were representatives from all ICL divisions, and then some. For my sins, I was the sole International Division turkey, ready to be plucked, trussed and roasted. And so the debate went round and round and round. Plan A 'launch now' had its ardent advocates, but Plan B was equally supported. So did the discussion perambulate like a circular firing squad, hour after tedious hour.

And then some enterprising Australian upstart, who by this time was totally pissed off, elected to offer a suggestion. The lad recalled that the 2903 had simply been an ICL lab's concept that no one in any position of decision-making had taken seriously. That was, of course, until the brilliant **Arthur Humphreys** oh so vividly saw the potential, and said: "Bugger you naysayers; let's run with it" (or words to that effect). In such a context, the upstart of a colonialist dared to suggest that, with Plan A and Plan B well and truly broken, what was needed was a Plan C. The Down-Under boy then went on to opine (à la the 2903) that pure magic was undoubtedly residing in our development centres. And, so the Aussie upstart's argument continued, could we not tap into these potentially great innovations and create a new 1900 platform that could be portrayed as a 'Way Ahead' to the New Range?

The Spanish Inquisition (or so it seemed) appeared to be taken aback by such thinking. And in a state of apoplexy elected to retire to a neutral corner and consider matters. The very next day, the council of the wise re-assembled, and it was announced that a brand spanking-new 1900 would be introduced. Round 1 to Australian lateral thinking.

There was then a matter of a name and apposite publicity (the latter to really take the heat off the 2900 delay). Again, your Oz mate suggested 'T' as in transition and telecommunications ... as well as some sort of intelligent alphabetic progression from the 1900S series. Not unexpectedly, the theme was accepted by all and sundry.



Get a haircut son: While in London, there was a modicum of time for some socialising. Here, In Paris, the ridiculously-coiffured **Pearson** with ICL's South African MD, **John Starkey**, and International Division controller **Isabelle Woodhead**. I think I had just made a joke.



Doing what comes naturally: Scottie enjoying a wine or three with International Division heavy Tony Chandor.

Well! So much for now. When I next write, it will be about such things as my ICL time in New York and Toronto. Till then. Cheers, **Scottie**.

MORE MEMORIES - BY PHIL SUGDEN

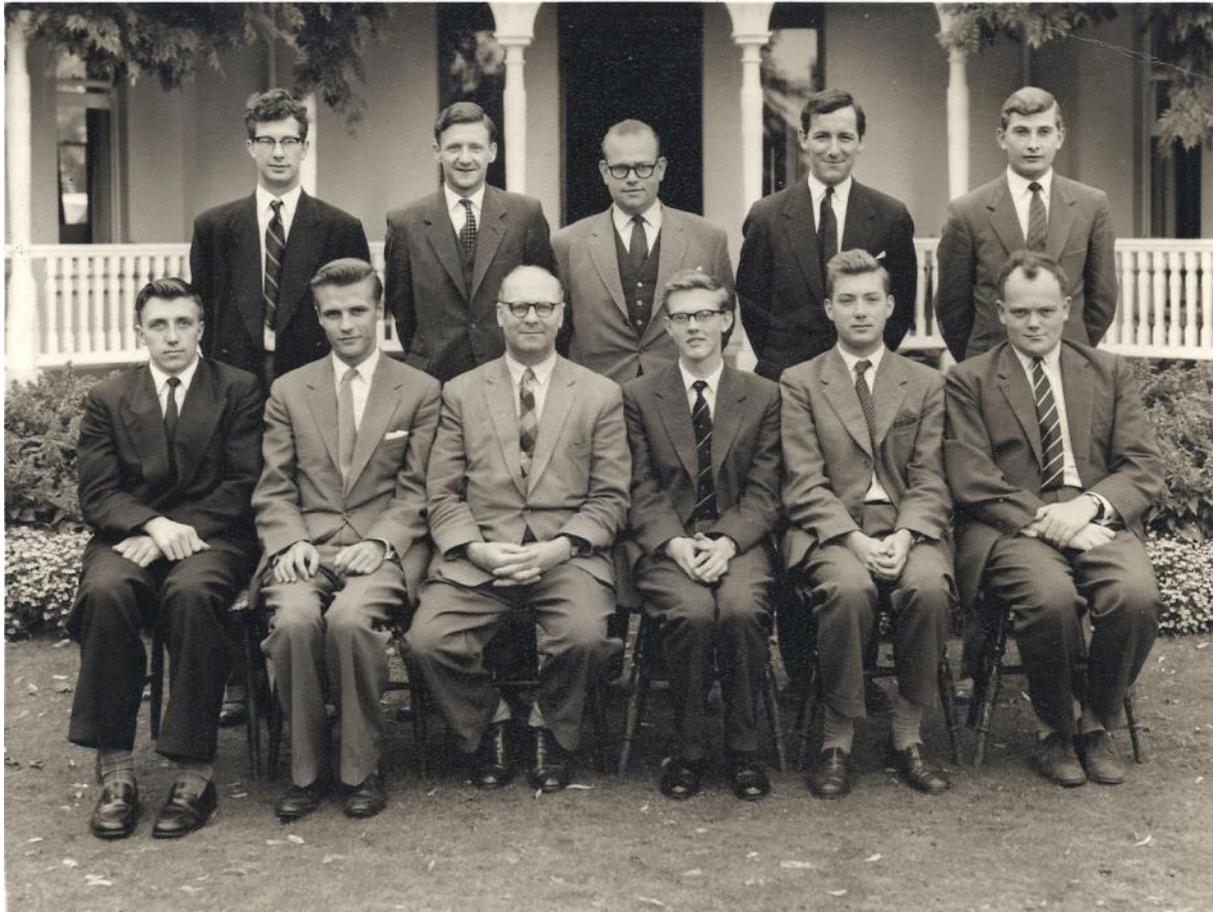
Cookham Training

1961-62

In the dim and far-off days of the early 1960s, new recruits to the ICT sales force joined as trainee Technical Advisors Grade 1, and spent nine months or so in training, before being unleashed on unsuspecting customers. Most of the time was spent at Moor Hall in Cookham learning the rudiments of accounting and all there was to know about every item in the Hollerith and Power-Samas ranges of punched-card machines.

There were two breaks from the Cookham routine, when the trainees were assigned to sales offices for periods of between four and eight weeks. The final term back at Cookham was centred around producing a fully documented sales proposal in response to an invitation to tender. The culmination of all of this was a sales presentation to the Principal of Moor Hall.

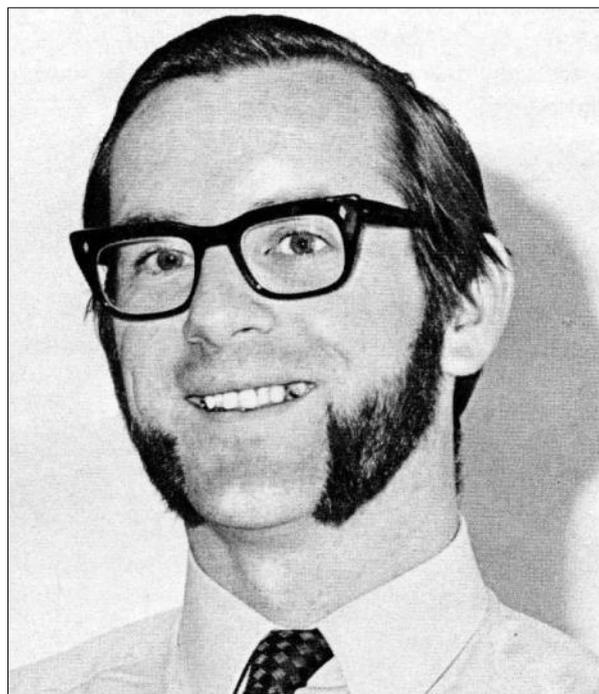
The students were divided into teams, and each had to make their own choice of hardware to propose, produce the sales report and make the sales presentation.



Moor or less: Fellow students at Cookham's Moor Hall – **David Stafford** rear far left and **Bill Leakey** seated second from left.

The team that I was assigned to included a man who could type and who had a portable typewriter: this was a rare and valuable asset in the era before word processors. For some reason, the typewriter had a Spanish keyboard, but this was only a minor disadvantage and it was thought that the occasional and random addition of ~ would add a certain interest to the text - anything to distract the reader from the style and content. The team also included someone who had been, and perhaps was still, an aspiring politician, and public speaking held no terrors for him. This was also thought to be a major advantage.

Come the day, our proposal was completed, our presentation was rehearsed and we, and the other teams, were ready to make our presentations to the Principal, a saintly and ever-patient Scotsman by the name of **George Thompson**. Come the time, our team was invited to make its presentation. It was at about this moment that things started to go wrong. Our lead salesman seemed to get stage fright. Instead of clamming up, which at least would have given the number two a chance to take over, he went into overdrive. He launched into a tirade about the history of punched cards and nearly everything that it was possible to do with punched cards. It was magnificent. It was irrelevant. It was non-stop. It was a disaster.



Far from a presentation triumph: Phil Sugden.

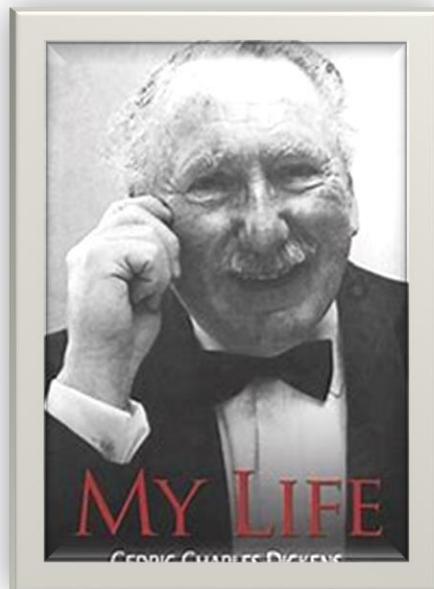
After about 15 to 20 minutes of this, everyone but the presenter could see that even the Principal's patience was wearing a bit thin. Said Principal did his best to break the flow by offering the budding salesman a cigarette. This was declined, without even a pause for breath or a break in the flow of his diatribe. A call to the telephone went ignored. Eventually the presentation was brought to an abrupt halt by the Principal, and it was all over. We never did get to present our solution to his business problem.

In the subsequent post-mortem of all the proposals and presentations, it was a little galling to be told that ours was probably the best proposal of the three. It was, however, good practice for the 'real world', when on more than one occasion I had to try and look grateful when a prospect said YES ICT/ICL had produced the best proposal but NO they were not going to get the business.

Cookham Graduation

1961-62

The very last day of the initial training for technical advisors was a visit to the Demonstration Centre, then in Piccadilly, to show off one's expertise, or otherwise, in operating and demonstrating (to a selection of ICT sales managers) the company's many and various punched-card machines. It was customary to hold an end-of-course dinner somewhere in the Cookham area on the last evening. Our course adhered to this tradition and also to the tradition of being rowdy and obnoxious after we had returned to Moor Hall. On this particular occasion, the Principal took exception to the performance and read the Riot Act. In addition, he instructed the lot of us to appear before **Cedric Dickens**, the UK sales manager, the following morning. This we did, and received a further dressing-down, but nothing worse.



In his own words: Cedric Dickens' final book.

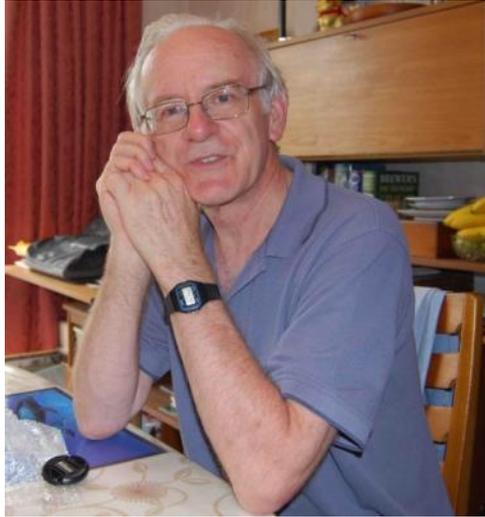
It used to be said that, to get to the top, it was important to get one's name known at the top. It did not necessarily matter how one got one's name known, just get it known. It does not seem to work in every case!

The customer is always right; well almost always.

c. 1965

My claim to the authorship of the least useful and least-used piece of software would be for the core store sort subroutine that I wrote for the 1004.

The customer detailed the requirement as part of a program specification, and subsequently insisted that it was absolutely essential. I wrote the code, plugged the board, and tested the program. The customer then decided that he could manage without it!



A sort of subroutine: A more recent **Phil Sugden**.

Unfavourite Location

1966-68

Over the decades ICL and its forbears have occupied a great variety of offices. To put it mildly, many of them have been a bit on the grotty side. My nomination for the grottiest would be 5-11 High Holborn, opposite the Prudential headquarters. Apart from its convenience for Chancery Lane tube station, it is difficult to think of any redeeming features for the building. The lift was antique, the offices were scruffy in the extreme, the furniture could easily have been retrieved from a skip, and it was, and is, a total mystery how the canteen failed to give the entire staff food poisoning.

I was overseas for five years between 1968 and 1973. When I returned, I found that London had been improved in two major respects: The Sound of Music had stopped running at long, long last, and 5-11 High Holborn was a hole in the ground. The best thing that could ever have happened to it!

Program Overlays from Magnetic Tape

c. 1966

The advent of the 1900 Range in the mid-1960s resulted in a dramatic increase in the amount of immediate access store/core store/main memory that was available to programmers. It went up from a few hundred words on the 1301 or a few thousand characters on the 1500 to as much as 32,768 24-bit words on the initial 1900 models. How could one possibly want or need so much store? We very quickly found out of course! Deducting the size of Executive, deducting the minimum size of each program that you were hoping to multiprogram together and then sharing out what was left very quickly blew in a cold draught of reality.



Waiting for Santa: Phil (right) at a fairly recent Christmas lunch with Philip Basil.

At some sites, reality was a little late arriving. One public utility ordered a 1904 with 32K and the usual range of peripherals to take over the customer billing application from a punched-card installation. The systems analysts and designers set to with a will, and defined a most elaborate system with a multitude of bells and whistles. It did not take too long before it became obvious that 32K was not going to be adequate for the main billing program, never mind multiprogramming it with other applications.

Rather than scale down the scope of the program, it was decided to overlay it. The only snag was that the site did not have any discs. In fact, it totally pre-dated the availability of discs on the 1900. The program therefore had to be overlaid from magnetic tape. By this time the program was so large that overlays were needed to process even the basic transactions. This gave rise to near-paralytic performance and excessive wear on the magnetic-tape media and tape decks that objected to the continuous winding and rewinding.

In the end, the customer admitted defeat and bought a 32K-word drum to hold the overlays, followed shortly afterwards by a second drum. It was at this point that ICT added its own contribution to the customer's problems. The program ran reasonably well after the addition of the first drum, but it was still so large that some overlays had to be made from tape, and this was sufficient to slow down run times too much to be acceptable.

Following the installation of the second drum, there was chaos. The program crashed every time it was tested but there was no obvious pattern to the crashes. It was realised, fairly quickly, that the crashes occurred whenever the program was obeying code that was held on the second drum. This was initially thought to be some sort of obscure hardware fault, and the designers were called in from West Gorton, but to no avail.

By chance, after much fruitless hardware and software diagnostic work, one of the programmers noticed that one of the crashes occurred when the system had been trying to execute data held on the first drum as program code. It was quickly

established that all the crashes resulted from program overlays being made from the first drum when they should have been made from the second drum. Must be a hardware fault, more diagnostic work but still to no avail. Finally, the drum software was put under the microscope. Initially that appeared to be correct, until it was noticed that the drum address was masked at some stage so that only the first drum could ever be addressed. Eureka! Problem solved. But why had the problem arisen in the first place? Due to limited hardware availability, the drum software had never been tested with more than one drum. But then no-one would ever write a program so big that it would need TWO 32 K WORD DRUMS - now would they?

Key to tape 'expert'

c. 1967

From about the mid-Sixties, ICT computer customers started to show an interest in the new 'key to tape' method of data capture as an alternative to the traditional card punch and verify process and the paper-tape equivalent. The new approach appeared to offer a quicker, less media-expensive, and generally more cost-effective system for getting data into all those big, new 1900 computers that we had been selling.



Real cards: Punched cards were also a notable business for ICL. In Australia we had a punched card factory in Melbourne's Box Hill. Here, some Dataset front-line ladies 'help' in the production. From left **Kate Castle, Roy John, Marlene Baker, Frank Gwyn** and **Ailsa Sheen**. *Editor's note: It's recalled that Kate's 'help' included driving a forklift through a Box Hill factory door.*

ICT, with its BTM and Power-Samas background, had a big interest in the traditional card, and to a lesser extent paper tape, punch and verifier systems, and had tended to ignore the new technology (in the hope that it might go away?). In addition, ICT made a substantial profit from its 'own-brand' punched cards which it mandated, or tried to mandate, to all of its' customers. To my public utility customers, the new technology appeared to offer a way of beating the input bottleneck, as well as an opportunity to reduce costs: an irresistible combination.

At the time I was working in the Public Utilities sales unit. Among my customers was one of the area Gas Boards. They had taken one of the first ICL mark-scanning document readers (UDR/UDT) to give them faster and cheaper data input, and were looking to make other savings in the labour-intensive area of data input. They approached ICT for a quotation but, at the time, we did not have anything to offer. I think that Mohawk or MDS were the market leaders at the time, and perhaps even had the market to themselves. All ICT could offer at the time was FUD! I sat down and wrote an evaluation paper with cost comparisons between key to tape, punched cards and punched paper tape. Surprise, surprise, key to tape did not come out as 'Best Buy'.

The customer was so impressed with the document that he circulated it to every computer department within the UK gas industry. Before long I was receiving queries from Gas Boards around the country on the subject. Slightly panic-stricken by this turn of events, I sent a copy to ICT's marketing department, asking them whether I had presented the merits of the different systems relatively fairly.

A week or so later, I received a phone call from someone in the marketing department. The gist of the conversation was that I appeared to be the most knowledgeable person on the subject in the company, and did I think that ICT should also move into the key to tape market. (My opinion was YES, because if the company did not, other people would move into our accounts and there would be nothing that we could do to stop them; sole supplier tended to be the rule, rather than the exception in those days. Eventually ICT marketed a product from Potter, but whether my paper had anything to do with the decision I never found out).

A Classic Sales Opportunity

late 1970s

Make the opposition fight on the ground of your own choosing has always been a good military maxim. Training courses that I have attended have suggested that it is equally applicable to sales situations. Indeed, lecturers have gone so far as to suggest that it should always be the case. In the real world, I have usually found that this utopian situation rarely exists, and that the sales pitch has, to a greater or lesser extent, been 'queered' by external forces before one's own arrival on the scene. I did however have one occasion where I had a classic sales opportunity, and was able to define the rules and set the terms for a prospective sale. I had been dealing with a major UK petrochemical company on a regular basis for a number of years. On one visit to the IT department, I noticed one of the analysts annotating a roll of telex printout. After I made some passing comment about old technology, the analyst explained what the data was and the associated business problem.

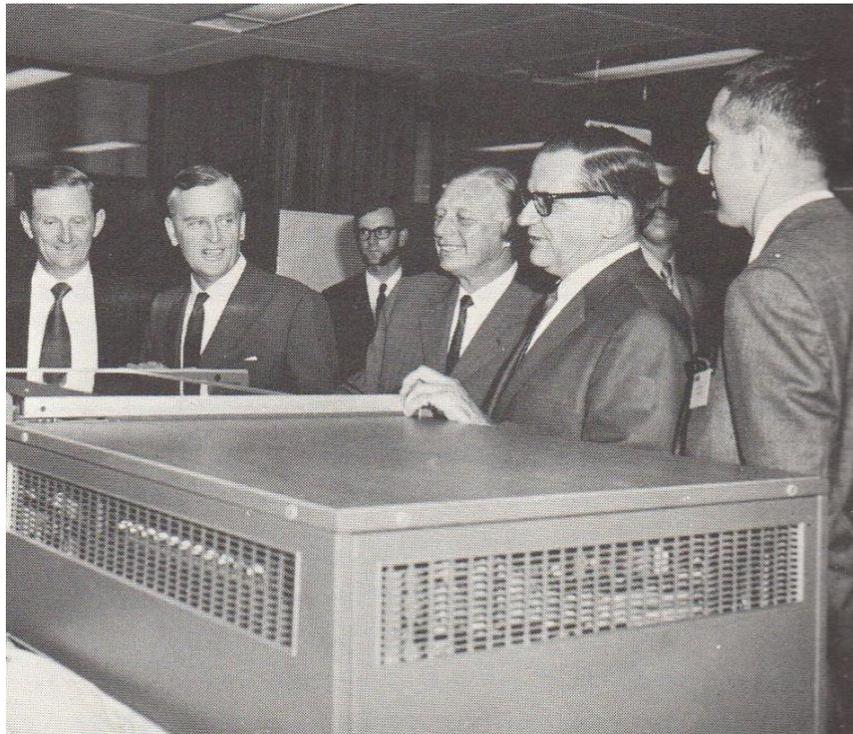
The data was from their aviation fuels subsidiary, and related to individual refuellings of aircraft around the world. Getting accurate and timely data back to the UK so that the airlines could be invoiced promptly was a major headache. The values involved, even for duty-free fuel, were high, and a few days' loss of interest from late billing was significant. The analyst was trying to see if a telex-based system for submitting flight refuelling data would be an improvement on their current paper-based system.

At the time ICL was marketing the 1500 System * that it had acquired as a result of buying the Singer Business Machines computer operation. The 1500 came with a large variety of software, including some packages specifically for data capture. One of these, Complex Data Entry (CDE), was chosen, and a demonstration program was written quickly. Some basic validation was performed on the input data and, as an additional check, the name of the airline was generated from the flight number by

means of a small look-up table. The demonstration was first shown to the IT department, who gave it their blessing, and then to the users. The users liked it, and thought that generating the airline's name from the flight number was magic. Users were much more easily impressed in those days, and far less cynical! Despite being a better-than-expected match for the business requirements, the rules said that it would have to be subject to competitive tender. Because the tender was drawn up very much with the 1500 in mind, it was a one-horse race and ICL got 'the nod'.

That was when the going got really hard. The users liked it so much that they wanted to extend the scope of the project to cover additional airfields and countries. Instead of installing the system in just two or three European countries, the customer now wanted to put systems into about ten of them, as well as sites in the Middle East, the Far East and Africa. This should have been good news. WRONG! ICL did not even operate in some of these countries, and in others it only had agents. Even an ICL presence did not necessarily mean that the 1500 was marketed locally, particularly where there had not been a previous Singer presence, as in the Arabian/Persian Gulf states. It very quickly became obvious that the "International" part of ICL's name was more of a wish, rather than a reality.

Each territory appeared to 'do its own thing' in its own way. In practice, it meant we had to obtain quotations from every relevant ICL subsidiary and agent and try to get them to agree the same level and style of support that the customer was used to in the UK and expected elsewhere. It very quickly became a multi-lingual and multi-cultural nightmare. Was I glad when I got moved on to another project! I did feel slightly guilty about leaving behind the consequences of my classic sales opportunity exploitation.



Keeping an eye on things: Our MC for the official 'switch-on' of the Queensland SGIC system, **Phil Sugden**, looks on while ICL's **John Marshall**, Queensland Premier Joh Bjelke-Petersen, Brisbane Lord Mayor Clem Jones, Deputy Premier G W W Chalk and the SGIC's IT head, Ashley Goldsworthy.



When more is more: The SGIO computer room.

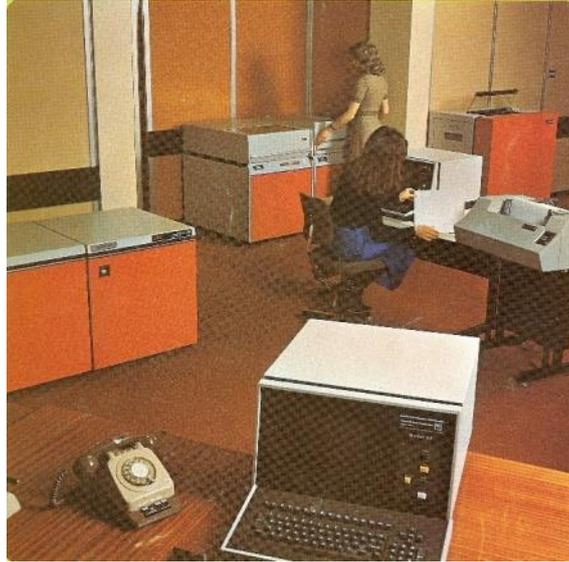
***Some notes on the 1500**

The ICL/Singer 1500 should not be confused with the rebadged RCA301 sold as the ICT 1500 computer system in the early 1960s.



Oscilloscope optional, but recommended: An ICT 1500.

The ICL/Singer 1500 was the predecessor of the DRS20 range. It originated (I think) with a company called Cougar, who invented or were pioneers of MOS computer store in the early 1970s as a replacement for the earlier ferrite core store.



Staggerable, not portable: A Singer/ICL 1500.

Singer either bought Cougar or, more likely, just the 1500, and marketed it as a range starting with the basic entry-level 1501. In many ways the 1500 was ahead of its time. Different processors could be linked together using a proprietary LAN (it predated Ethernet), and individual processors could act as print, file or communications servers for the network.

The smallest model, the 1501, was probably one of the earliest desktop computers, where the user could move the system around without having to involve an engineer. Although one person could move it, it would be difficult to describe it as portable; 'staggerable' would probably be more accurate. It also came with a computer game, Grand Prix, which we thought was rather good at the time. Such innocence!

REMINISCING BY YVONNE BULLUSS

Yvonne writes: "Hi **Kent**. Here is a story and photo contribution for the next AllStars issue. Regards."

Pictured are **Yvonne Bulluss**, **Lynda Tate** and **Suzanne Pattie**, who late last year undertook to expand their artistic talents by attending a "Paint & Sip" evening class. As you can see from the 'fabulous' photo, their painting talents are greatly exceeded by their sipping talents. Notwithstanding, the evening was full of fun. It was a great way to mark over 40 years of friendship.

We met at the ICL offices in Arthur St North Sydney back in 1980. It was a really busy and energetic time, as the company was expanding into new business areas and the promotion of consultancy services. Over the years that followed, we took on various roles in pre-sales, sales, training, consultancy, management and project management. Even though work took us across Australia and the world as our individual careers progressed, we still managed to keep in contact. In retirement we have enjoyed travelling to the far corners of the globe, always getting back together to exchange fantastic travel stories - and many laughs.



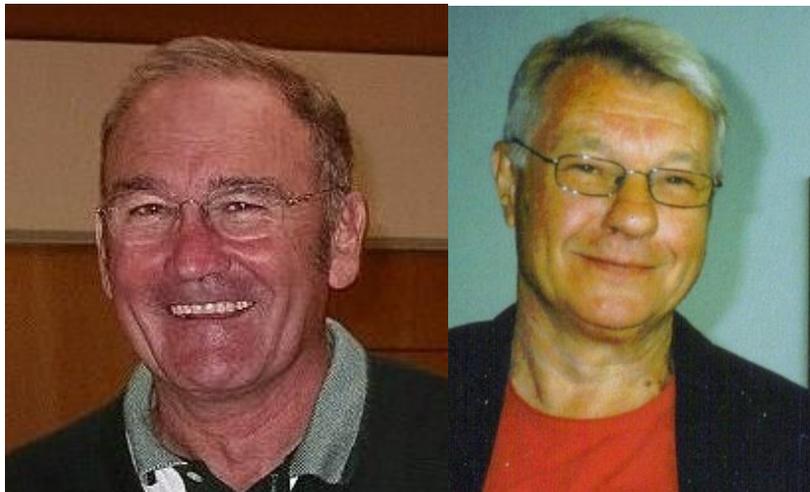
LETTERS TO THE EDITORS

Concerning our ICL AllStars Edition 70

Let's kick off with **Rod Rodwell** who says: "Well done, guys. Most enjoyable. I certainly don't remember slowing down while bowling to **Val**. We used to have an ICL indoor cricket team that won lots of trophies in Sydney in the mid-Eighties. I shall have to consult with **Neil L** to see if he has any photographs, or if any of the other members of that illustrious team do.

Hash tags are a bit new to most of us. I needed CAFs to help me find it, but I did eventually."

Cheers **Rod Rodwell**



Rod Rodwell and David Dearman.

Next up to **David Dearman** who says: Hi **Kent**,

Finally broke through the complexities of access and read the latest edition. Good work and thanks to all involved.

I must admit that the *Goups.io* system seems to have been designed by a PC user and really needs a manual. Ever since my Silicon Valley days in the late 1980s - early 1990s with Tandem in Cupertino, California, I have been locked into Apple – whose mantra was "If it's not intuitive (= obvious), then something's wrong."

Keep the good work going. Cheers, **David**

And so to **John Stockbridge** who opines: Hi **Kent**

Thanks for edition 70. Great reading. I only had coffee with **Aiden Montague** the other day.

Cheers . . . **John**.



John Stockbridge and Ian Pearson.

Also weighing in was **Ian Pearson**: “Hi **Kent**, Hi **Raf**

My most sincere congratulations on the *AllStars Magazine's* 70th edition.

I guess I appreciate the effort that goes into the editorial task a tad more than some. And so I understand how much time and effort you guys committed/commit. Thanks a heap. Best wishes for issue 71.

And folks, make sure the lads have plenty of inputs to keep the publication as alive and well as it currently is. With the hassles of COVID meaning we have a lack of face-to-face gatherings, the magazine is the real glue that helps keep the AllStars happening.

As ever. **Scottie.**”

Les Vincent writes: “Hi **Kent**,

Your comments on challenges in accessing the magazine described me perfectly. Thanks for the second mailing. Great job with the latest AllStars Edition.

Stay well, **Les Vincent.**”

Les' note followed an e-mail from **Kent** which noted: “Fellow AllStars . . . For those of you who have difficulty remembering passwords or are otherwise technically challenged, please click on this link to view edition 70.”

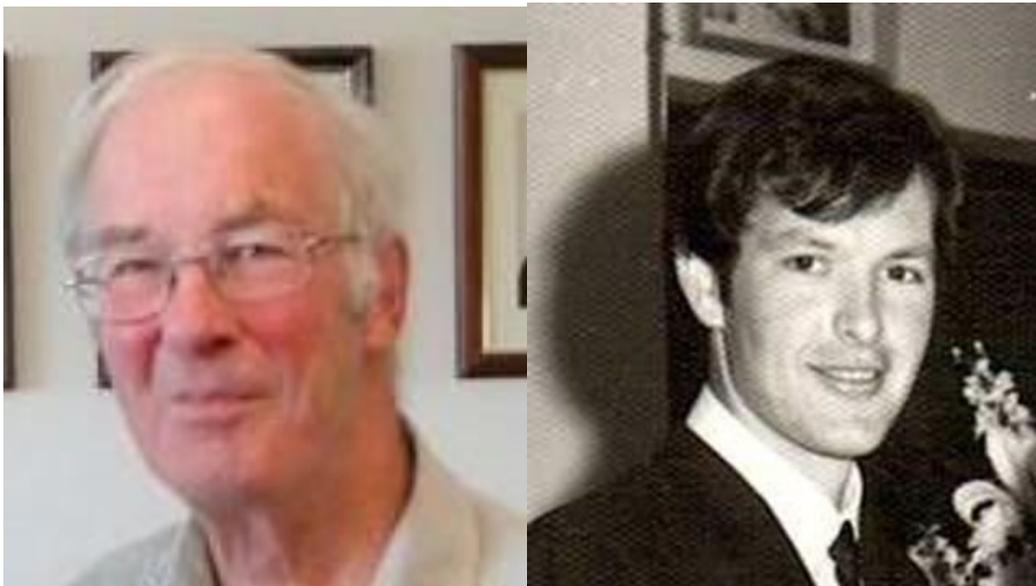
<https://groups.io/g/ICLAllstars/files/ICL%20AllStars%20Edition%2070.pdf>



Les Vincent (right) with **Jon Duggan**.

David Stafford says: Hi. Thanks greatly for the latest issue.

Give me your phone number and I might call and wish you "very well done with the current edition". Staff001



David Stafford and **Brian Caddell**.

Concerning Edition 70, **Brian Caddell** wrote: " Loved it. Thanks".

And so to **David Nowlan** who records:

Kent, Raf,

Thank you very much for ICL AllStars Edition 70.

It is very interesting; so many people from so long ago. I look forward to further issues.

All the best. **David**



David Nowlan

SOFTWARE

HOW TO CAP AN OUT-OF-CONTROL OIL WELL IN A FEW WEEKS FROM CLIVE DAVIES

Going back to 1977, I was a civil engineer working for ICLDS in 45 Ventnor Avenue, West Perth. I was part of the Technical Department under **Dave Varey**, working with **Richard Stuart** (a geophysicist), **Gary Hooley**, **Rick Gallagher** and **Alan Wells??**, a very clever Cambridge mathematics graduate. He obviously had some experience in computer programming, as he had written a very complex piece of software that read a magnetic tape (called a dip-meter tape) from Schlumberger that held all the down-hole well data from a newly-drilled oil well. An oil exploration consultant called Hugh Crocker used to bring in a new tape every fortnight, sent from somewhere in the world. The oil companies used to send us the tapes because we gave a better service than the oil driller, producing a detailed analysis and a complex drawing of the results plotted on our Xynetics flatbed plotter.



Keeping their house in orders: Merv Cooper, Peter Garnham, Warren Grace, John Baister, Dave Varey, Rick Gallagher and Gary Hooley.

One day consultant Hugh strode into our office, shouting there was something wrong with our computer program. Alarm bells rang everywhere, except in our technical office: there had to be something wrong. Huge – we called him Huge as he was only about 5ft tall – was mouthing off about our computer software and drawings, which

only recorded a well depth of 1,500 feet, whereas the oil company said they had drilled to 3,500 feet.

While everyone else started looking at the program code (Fortran 1V), **Richard Stuart** and I immediately assumed there was a reason for the discrepancy. We started to discuss what could cause an oil well to record some sort of discrepancy. We determined that maybe the drill had hit a basalt inclusion, had deflected off at an angle, and had not returned to a vertical well hole. After we calmed Huge down, he actually thought we might have a good theoretical answer to the problem. **Alan??**, who had been listening to our rather intelligent and theoretical conversation about geology, had already started writing a program to plot the X and Y co-ordinates of the well tape, in plan mode (Z co-ordinates were the vertical).

The original tapes were usually sent back to the client, but by a stroke of luck, we found a duplicate scratch tape of this well in the office. Within 20 minutes we had run the new program with a plot and, lo and behold, yes, the well had gone vertical for 1500ft and then shot off for 2000ft in a horizontal direction. Huge was impressed at how quickly we had come up with an answer to a problem that no one else even thought was possible. Quickly he asked us how much it would cost to do this for every other well we had previously analysed: I quickly said \$1,000 and he said he would ask all the oil companies if they wanted to check their old tapes. From memory, I think we processed 100 tapes that financial year (good revenue). All the oil companies sent their tapes back for a review (except for Shell), and probably 20% of them showed up to 500ft deviations – and two or three of them were about 2000ft. The majority of the wells were vertical.

Fast forward to 1982 and I was in Brunei working as an engineer on a gas-field installation. One evening I was told to be up at 6am the next morning for a helicopter ride to Shell's offices in Miri, Sarawak. I was escorted to a conference room with 30 other people and 3 Shell engineers. We were told we were all experts in our field, from around the world, brought to Miri by Shell to solve a problem of a broken offshore gas well that was blowing gas out of control in 100ft depth of water – all very confidential. After a few people had a few ideas, the discussion came to a halt in 20minutes, as no one had any idea about what to do.



That's the drill: Clive Davies left, with Owen McKenzie, Martin Baker, Irene Dawson, Keith Lorimer and Bruce Lakin.

Shell was not impressed. I was wondering what I was doing around the table with all these clever people, when I suddenly thought about Huge and his oil well that went sideways. I started asking questions, winging it all the way! I said: "Do you have access to a couple of drilling rigs that can do directional drilling?" Yes, said Shell. "Do you have access to some heavy bentonite (can you check if this is correct: it appears with initial capital on p. 52!)(drilling mud)?" Yes, said Shell. "Do you have access to some fairly large pumps to pump the Bentonite down a couple of new holes?" Yes, said Shell. Then I said: "If you drill down into the end of the well and pump in lots of Bentonite under pressure, the gas well will stabilise and you can repair the broken well at the surface or just cap it".

Suddenly everyone was looking at me. Shell then asked me: "How do you know where the end of the oil well is?" Trying to keep control, and with a smile on my face, I asked: "Do you have the original dip-meter tape?" Yes, said Shell. So, I told them that if they wrote a program to read the dip-meter tapes and plotted the X and Y co-

ordinates, they could drill a hole to the end of the oil well, pump lots of Bentonite down the hole drilled into the well, and that should stabilise the gas blowing out.

Shell and everyone else in the room were completely stunned, and Shell asked how I knew this. I then recounted the story at the beginning of this paper. But why do you need two drilling rigs? I was asked. I said, "You need two rigs, in case the 1st drill rig misses the gas well, and you have to check all the data to make sure the 2nd drill rig makes contact with the well". And that's the way you do it!

In 2009, there was a gas blow out on the West Atlas rig on the North West Shelf of Western Australia. A week later, a friend of mine was running an incident meeting with the rig owners, designers, Government representatives, safety and environmental engineers. He called me up and asked if I could meet him for lunch, as he was frustrated at the diverse nature of the meeting: no one had any idea how to stop the blow-out, and they were just arguing as to how deal with the incident. Over lunch, I told him the above story: the rig owner called his office and ordered two drilling rigs and a boat-load of Bentonite and closed the meeting. The blow-out was successfully stopped within three months. Then in 2010, there was the blow-out on the Deep-Water Horizon platform in the Gulf of Mexico, which was successfully stopped by the same method. Another gas well in the Arabian Gulf that had been blowing for 20 years was also stopped using the same method.



The plot thickens: With the then-new Xynetics plotter system are **Jim Paice**, **Carlos Penna**, **Noel Fogarty** and **Mario D’Alessandro**.

I would like to thank **Carlos Pena**, for having the foresight to purchase the Xynetics plotter for ICLDS Perth, **Richard Stuart** and **Alan Wells??**, the genius Cambridge mathematician and Fortran writer. The world is a slightly safer place.

Clive Davies B.Sc., MICE, C.Eng. FIEAust, Eur Ing.
ICLDS, Technical Department, 1975 to 1979

A LOOK BACK IN TIME - OBSERVATIONS ON COMPUTERS IN MANUFACTURING BY DR STEVE HUNT

I have to start this account with some apologies. The observations I will make about my experiences with manufacturing software are inevitably coloured by my own particular preferences and prejudices, and while looking back 30 or 40 years provides the benefit of hindsight, some of the finer details are now lost in the mists of time.

However, for me it is interesting to revisit the journey from the earliest days of punch-card processing to today's streamlined manufacturing with computers and robots controlling every stage. Commercial computers first appeared in the 1950s, and it is interesting to think that, about that time, somebody somewhere must have said: "You know, we could use this thing to manage our inventory and schedule our production". Nobody really could have guessed where that statement would lead.

The First Generation: punched cards and magnetic tape

ICT/ICL Prompt

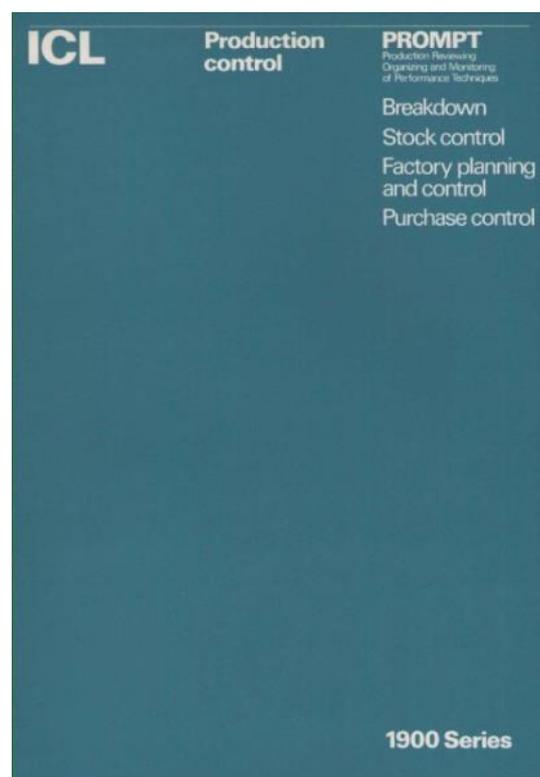
I first became involved with computers in manufacturing in 1970. I joined the manufacturing company British Industrial Plastics (BIP) in the UK Midlands, who had a newly-installed ICL 1902A with EDS and magnetic tape storage. This was a diverse organisation that manufactured everything to do with plastics, from raw moulding powders and injection-moulding machines to finished plastic products.

The division causing the biggest headache was undoubtedly the manufacture of moulding machines. The equipment was marketed under the name BIPEL and was highly respected in the industry; the machines were exported worldwide (including, in quite large numbers, to Australia). This hard-won reputation was under threat because of massive problems with inventory, late deliveries, and non-availability of spare parts. These were classic issues in the manufacture of complex products, which were supported only by manual inventory recording and ordering systems. I was to encounter a similar set of problems when I joined the Australian company Warman in 1978.

BIPEL first started using the ICL PROMPT system in 1969 at a bureau, and were sufficiently encouraged by the initial results to persuade the BIP management to acquire an in-house ICL machine so that they would have much faster turn-round and greater control. PROMPT was developed originally by ICT in the mid-1960s, when packaged application software was just emerging as a tool to assist in the selling of the main event, which was the highly-expensive hardware. These were the days of "bundling", when software (including PROMPT) was provided *free of charge* to purchasers of main-frame computer hardware. This seems incredible now, when hardware is cheap and software can be (comparatively) expensive.

In hindsight now, PROMPT was a remarkable piece of software, and a tribute to the designers and programmers that developed it. Using flat files, stored on magnetic tape, it enabled the creation of multi-level bills of material and detailed operations stages for each manufactured part. Inventory could be transacted and work orders monitored. This base information could then be used to process material requirements planning (MRP) and factory forward loading. MRP was rather quaintly termed Breakdown, Netting and Batching (BNB). PROMPT pre-dated the widespread adoption of the now widely- recognised inventory terminology. However, PROMPT was still a powerful system. The system was able to state what you needed to manufacture, when it was required, and whether you had sufficient workshop capacity to undertake it. These were exactly the areas that were so difficult to control and manage using manual systems. To inventory managers and factory managers struggling to satisfy internal needs, and ultimately customers, PROMPT seemed like a godsend.

Here is a snapshot of one of the PROMPT manuals from the late 1960s.



PROMPT was extensively documented, with comprehensive manuals on each of the modules. The entire system functioned under a single program name: #X5PC (ICL 1900 program names consisted of 4 characters, those with the first letter X indicating ICL software products). To execute PROMPT, you simply loaded the program from magnetic tape and started it running. It started reading from the card reader, and the first card informed the system what you wanted it to do: stock update, breakdown, forward load etc. Every single piece of information held within the PROMPT system needed to be punched onto cards and read in through the card reader. The program would then ask the operator to load the magnetic tape files that it needed to process the job. During the course of a PROMPT run, the operators were required to change

tapes constantly. It was quite a labour-intensive task, and kept the operators on their toes.

Good things about PROMPT

It was fundamentally a reliable piece of software. I can rarely remember PROMPT “crashing” or producing the dreaded message ILLEGAL.

It was very well documented. The manuals were well written and informative. They included punched-card formats that you could photocopy and provide to the users for them to manually write the transaction information.

It was a rigid and non-customisable product. Some might see this as a disadvantage, but it imposed a discipline on the user that (in some cases) was useful in gaining control of their inventory and production. The late **Bryan Merchant** (manufacturing guru with ICL and later IBM) was very knowledgeable about manufacturing software, and considered PROMPT to be a robust piece of software that could be used to bring much-needed order to untidy areas of a business.

It acquired a considerable number of users, probably in the hundreds. There were active user groups all over the UK. I attended the Midlands user group meetings on a number of occasions, and it was very valuable to be able to discuss problems and work-rounds with other users. The user groups also provided a channel to the ICL development team, and were able (sometimes) to influence the development of the product.

Limitations of PROMPT

It was magnetic-tape based. Even after direct-access disc systems were introduced and became commonplace, PROMPT remained a mag-tape system. Despite all the efforts and lobbying of the user groups, ICL steadfastly refused to port the system to disc. The best they would do was to put the #X5PC program on disc, and also to allow the sort functions to use work-space on disc. The reason was, of course, that ICL did not want to damage the prospects of the replacement system NIMMS. I shall have more to say about NIMMS later.

Run-times could be huge if inventory levels were large. BIPEL had an inventory approaching 40,000 discrete stock-keeping units. The stock file occupied 3 reels of magnetic tape, and a stock update would run literally all night. These were the days when computers would run for 24 hours every working day, with three shifts of operators. The big risk with magnetic tape was the dreaded tape crinkle or breakage. This would ruin your entire run, and the operators would have to start all over again. Countless times I would arrive in the morning to find that the run had failed, or that the run was still in progress, having failed sometime in the middle of the night. You had to be very patient to be in charge of a PROMPT project.

PROMPT was, of course, incredibly manual and labour-intensive. Every single piece of information needed to be written on a docket and submitted to the punch room.

The punched-card operators would do their best to decipher the scrawl of the storeman, and the cards would go into a batch update run. This would generate large numbers of errors that had to be returned to the users for correction. Sometimes the error print-outs were mislaid, run over by a fork-lift, or whatever. Trying to maintain accurate inventory figures was exceedingly difficult. Eventually I designed and we developed a recycling error file, so that no transactions went missing. The success of breakdown depended on accuracy in your bills of material and up-to-date stock figures.

PROMPT would not reschedule the due date for a work order. When a breakdown run was executed, the system would calculate all the shortfalls of components to satisfy a forward sales plan, and generate planned orders to meet the requirements. *However, it would not reschedule firm orders that were already in the system.* For some reason, a work order was considered untouchable and left strictly alone, and the system would generate new orders alongside the existing ones. This was a source of major annoyance to BIPEL and, despite our representations to ICL, it was never changed. The PROMPT support people had some philosophical rationale for resisting the change, but the reason was never clear to me.

How successful was PROMPT?

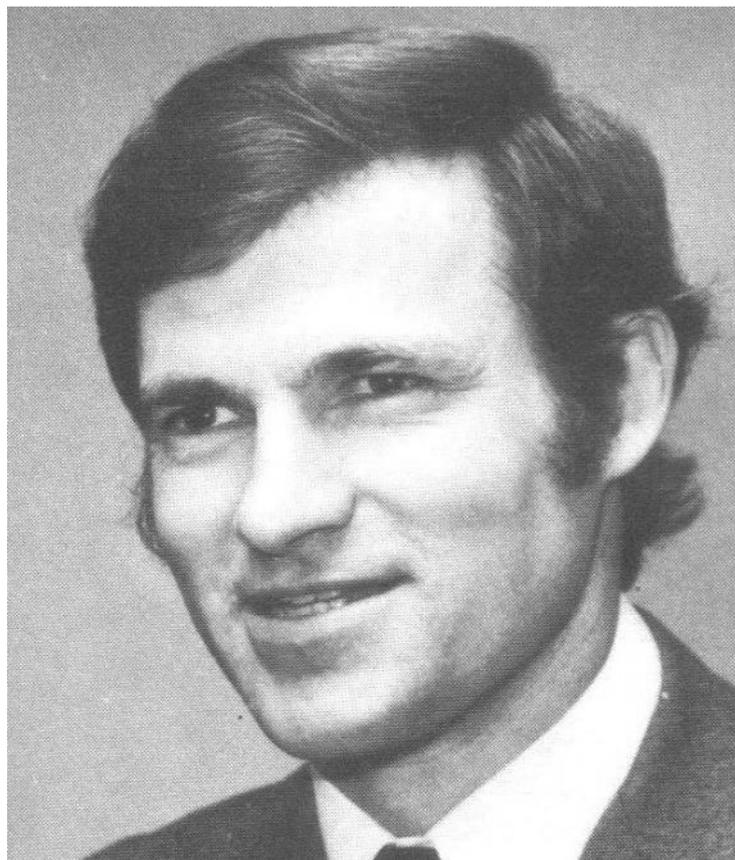
It is fair to say that BIPEL got considerable value from using PROMPT. A most important and complex part of a moulding press is the valve gear that operates it. The valve stores were full of componentry before the system was operational, and after a year of running Breakdown, the shelves looked distinctly empty. The storemen were full of disbelief, and felt most uncomfortable operating with minimum stock levels, but the system held up remarkably well. There was a substantial dollar saving in stock holdings, but I cannot claim to remember the numbers now. I remember getting a phone call from a storeman to say (in rather colourful language) that his shelves were empty, and he had fitters asking for a vital part that he simply didn't have. Storemen in the UK Midlands are not noted for their *politesse*. I checked the Bill of Material, and sure enough, there was a mistake there. The system was right, and the human factor was letting it down. Isn't that pretty much the story of computing?

Before PROMPT came on the scene, there were stories about the difficulty in getting moulding presses to customers on the promised date. On one famous occasion, an important customer told the company that, if they couldn't deliver a press by a particular date, the order was cancelled. The required press was loaded part-finished on to a flat-bed truck, accompanied by two fitters with tools. The truck was driven out of the gate with the two fitters working on the final assembly. And the truck proceeded up the M6 with the two fitters hard at work on the back. Not sure if that would meet workplace health and safety regulations today. But after PROMPT came on the scene, there was a definite improvement in the availability of parts, and delivery of finished presses to customers became more timely and less stressed.

What happened next?

ICL in Australia advertised for a PROMPT specialist to work in Sydney. I read the ad in *Computer Weekly* (the job-hunter's bible), and wrote an application extolling my detailed experience with PROMPT, and explaining how I was exactly the man they wanted. After four years at BIP, I was absolutely ready for a change of scene. I was interviewed at Putney Bridge House by **Brian Lovelock** (then a senior figure at ICL North Sydney); he asked all the right questions, and I had all the right answers. A couple of weeks later I had a call at BIP to say the job was mine. I am pretty sure I went to the pub that lunchtime.

Fast forward to March 1974, and my wife and I landed in Sydney to be met by **Paul Beckhaus**. And that was the start of the Australian adventure.



Metters Appliances, Bankstown, NSW.

Metters was a famous old name from Australia's colonial past. You can still find ancient Metters cast-iron wood-burning stoves in old homes in country towns. In later years, Metters transformed itself into a manufacturer of modern electric appliances, mainly cooking ranges and refrigerators. However, it never achieved the critical mass or the reputation to be a strong player in the market. After years of losses, it finally succumbed to a takeover from its major competitor Email, who manufactured appliances under the Westinghouse brand.

Metters in Bankstown operated a 1901A with the rather idiosyncratic low-capacity TEDS disc storage. They had a number of rudimentary in-house developed

applications, but no decent inventory management system. I was taken for an introductory tour of the factory premises. The sounds and smells of steel fabricating were reassuringly familiar. In one corner of the factory, there was a number of competitor appliances: Hotpoint, Simpson, Kelvinator, in various stages of being dismantled. "What are they doing here?" I enquired. "That's the R & D department" was the reply. Innovation was not exactly Metters' long suit. The IT department consisted of an IT manager who spent most of his time punching cards on a hand punch, and two maintenance programmers named Bazza and Wozza (no kidding).

Metters' requirement was not for a "requirements planning", system, but for a re-ordering system for purchased stores. NIMMS was not an option (insufficient CPU power and low-capacity discs), so ICL proposed 4 tape decks to run PROMPT, plus a specialist to guide the implementation. Problem solved, or so they thought.

In practice there were two major drawbacks to this solution. The first was that PROMPT was a complex and heavy-duty system, with its strength being in MRP rather than stores control. Metters had purchased a sledgehammer to crack a nut (to quote **Bryan Merchant** again). To implement even a basic PROMPT solution with one specialist plus a part-time programmer was a very big ask. The second problem was more political and more serious.

The takeover by Westinghouse took place at almost exactly the same time as the tape decks were delivered and the PROMPT project commenced. The whole demeanour of the organisation changed overnight. The management were fearful for their jobs. Some key members of staff immediately upped and left. There were rumours of mass redundancies, and even of factory closure. When we had steering meetings for the project, it was difficult to get clear guidance or commitment. This was the biggest difference between the BIPEL approach and that of Metters. The BIPEL management wanted the system to work, and pushed everybody hard to get the outcome they wanted. The Metters team were hesitant and fearful. You can more or less guess the eventual outcome.

However, I forged ahead. I really had no option, having been hired to do a specific task. We got the inventory file established, we loaded initial stock holdings, and we organised the flow of inventory movements to maintain the stock levels. We started capturing re-order points and re-order quantities, and we implemented inventory cycle counting. However, after six months, the inevitable took place: The Email management moved in, and started an audit of all the IT systems.

The first thing that you do (of course) is to suspend all development. They had a look at the PROMPT system and were impressed with its functionality. However, their interest evaporated when they realised that it was a mag-tape based system, and expressed surprise that it was being implemented when mag tapes were increasingly being seen as ancient technology. Hard to argue with that, really. The PROMPT system was canned forthwith, and I had to say farewell to my friends at Metters, who had supported me throughout. I would hazard a guess that was the very last new

implementation of PROMPT anywhere in the world. I was reassigned to ICL North Sydney, there to start the transition to the (to me) new world of NIMMS.

The 2903 was also newly released and selling strongly. There was plenty of work to keep me busy. Metters products continued to be sold for a few years, until finally the Bankstown factory was closed and the brand name disappeared. It was a sad and ignominious end to a proud old Australian company. Coincidentally, I was to have a lot more involvement with Email, but that was many years later when I was at NCR. I still think it's a pity that PROMPT was never ported to disc.

To be continued.

Dr Steve Hunt PhD, M. Bus, ACIS
Academic Mentor (University of Technology Sydney)
ICL Sydney 1974-1978

HARDWARE

THE 1004

Sure, I loved the 1004 and why not! In '63 after 5 years of maintaining data processing machines as resident tech in large contracts, the 1004 was a breath of fresh air. It began in 1958 when I started working for Hollerith Australia. In the factory at first with **Ivor Chalkley**, **Eugene O'Bara** and **Keith Daniels** plus **Peter Cooper** as instructors, every day was training.

I was resident tech at large installations, Albert Barracks with **Keith Dickinson** and **Lloyd Lancaster**, (I also met my future wife **Thelma**, who was a Data Prep 31 punch operator. The 31 was a Key Store with the operator typing key-strokes to store, which meant the operator could get several cards ahead, then stop work with the punch rattling on for 5-6 cards). Then came Ford Motor Co in Geelong and Shell Petroleum, with **Lou Lane** and **John Hodges**. **John** looked after the 555. Then Kodak by myself, and Olympic Tyres, Ampol and Melbourne University with **Neil Peacock**.

Ford and Olympic Tyres had 555 computers too, along with large data-prep rooms plus sorters, collators and tabulators, the latest of which was the 915. What a machine! It had 2 punched-card read stations, a 120-column-wide printer with 150 LPM, 120 counter plates which, arranged in groups, handled arithmetic, plus a core store and summary punch. It was pushed to just over the limit; I tell you Heath Robinson would have proudly hung a badge on it. It was also very loud and required a lot of maintaining, and after 5 years I was jaded.

Then one day I saw my first 1004 in the Bureau.



Russel Gravatt was a senior tech who was installing and running tests on a brand spanker in the Melbourne Service Bureau. I saw it churning out paper at 600 LPM, too much! It was compact with integrated card reader, printer, and processor but a tiny core store and a program plug board, but I was eager to start training on it, so bring it on.

Gone were costly-to-tabulators and We used to valve grind by slipping 12AU7 valves the card input was fragile too, MoCo dropped into drum, causing a colossal jam-up and a piano-wire giant bird's nest, it took days to wind new wire on the damn thing, nasty.



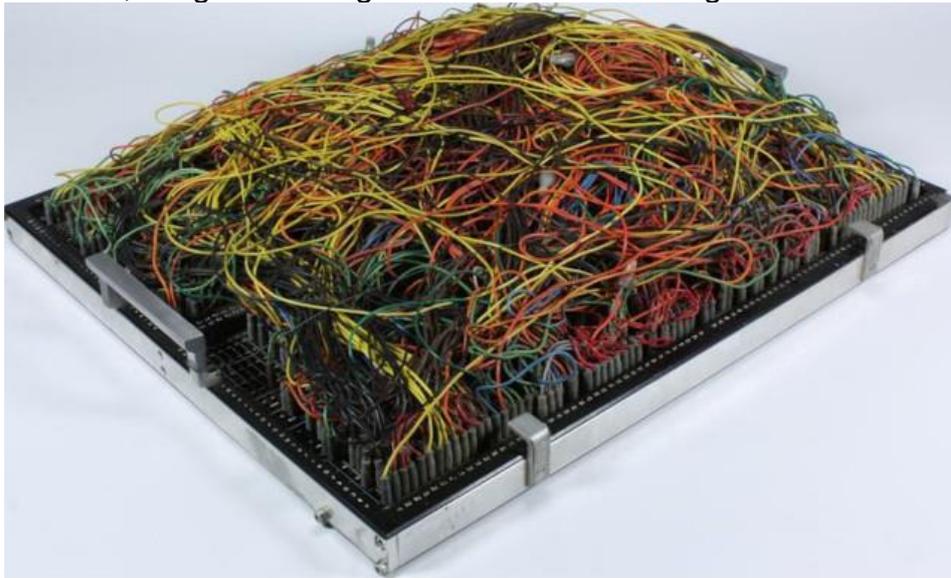
noisy, slow, maintain 555 computers. give the 555 a every so often hundreds of in their gates, reader punch and at Ford something the uncovered



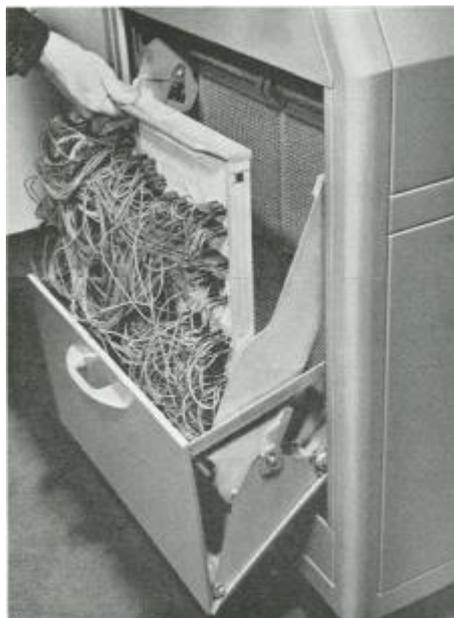
Line up the usual suspects: From Melbourne and reflecting on some of the names in this story.

By now I was convinced that the company had a full-time handicapper who could veto any good design, causing a rethink to the third next-best design. It was evident everywhere, but I didn't know Univac had one too: when fully plugged the board weighed about 10kg which had to be lifted high and two cap-head screws had to engage with a little slot, a big ask for a slight girl. Often, they missed, raking a corner across the frame contact pins wrecking them, gee I replaced dozens of them.

This is how it could/should have been: shown is the 915 plug-board, easy to insert and remove. The 1004 plug board is shown below on which you can just see the cap-head screw; imagine locating that 1.5 metres off the ground!



Apart from that blunder, the 1004 was in my opinion faultless, it was beautifully made and reliable, and a pointer to what was to come in the 1901A. They were fun too.



Flexible and highly versatile machine operation is secured by a detachable control panel.

FUNNIES

So apparently
RSVP'ing back to a
wedding invite
'maybe next time'
isn't the correct
response

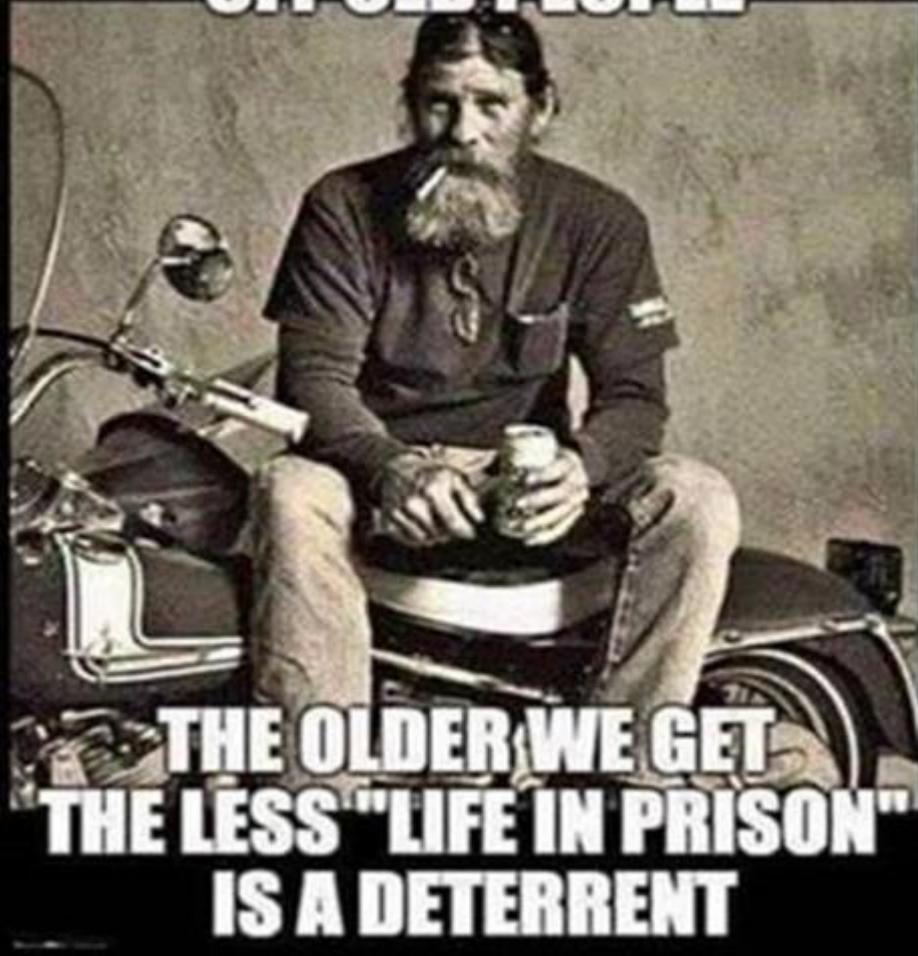
IF MY KIDS KNEW
THERE WAS A
LIGHT IN THE
OVEN, THEY'D
LEAVE THAT ONE
ON TOO.

I miss the 90s
when bread was
still good for you,
and no one knew
what kale was.

**I asked my wife if
I was the only one
she'd been with.**

**She said yes, all
the others had been
nines and tens...**

**DON'T PISS
OFF OLD PEOPLE**



**THE OLDER WE GET
THE LESS "LIFE IN PRISON"
IS A DETERRENT**

**MY MIND IS
LIKE MY
INTERNET BROWSER**

**19 TABS OPEN
3 OF THEM ARE FROZEN &
I HAVE NO IDEA WHERE
THE MUSIC IS COMING FROM**

Picked up a hitch-hiker. Seemed like a nice guy.

After a few miles, he asked me if I wasn't afraid that he might be a serial killer?

I told him that the odds of two serial killers being in the same car were extremely unlikely

Told my wife I wanted to be cremated. She made me an appointment for Tuesday.