

Bits & Bytes

No 32

Editorial

On 24 October 2010 I watched two famous computer pioneers, Ralf and Frank Land, who were celebrating their 82nd birthday, jump out of a plane at 12,000ft., returning to earth under a parachute, landing at Lewknor in Oxfordshire. They performed this remarkable feat in memory of Ralph's wife who died a year ago from cancer.

The past weeks have made me realise how lucky I have been to witness first-hand the computer revolution and the advances made since I joined the British Tab in 1958. Two events have brought this into sharp focus. Colin Martin, who worked in Datakils' Data Centre in Cardiff Road Reading in the late 70s and early 80s, posted a photo of the 2970 system he operated, on Facebook. This caused me to look through my photos taken in 1982 and I found a picture of the Network Control Panel which enabled 7502 terminals located in the various Dataskil offices in Reading to be switched **manually** between the 2900 and the 1900 systems. In December I was in Holland with my daughter's family, where my two granddaughters were able to play a Kinect game on their Xbox 360 with their cousin in Reading.

Adrian Turner

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Fujitsu News

Fujitsu seven year global deal for Shell.

Shell has entered into a contract for future IT deployment and support services for service stations across 19 countries under one supplier, Fujitsu. The work, which includes IT support for forecourt controllers, Point of Sale, payment card machines and back office systems, is currently being handled by multiple suppliers. As part of the agreement Fujitsu will not only support existing and new IT, it will also be responsible for the rollout and deployment of new site systems. Support of the 19 countries will be served by three global Fujitsu service centres based in North America, Europe and Asia Pacific.

Confidence in cloud grows

Research commissioned by Fujitsu has shown strong success rates for IT cloud projects. On average CIOs and IT managers have experienced 24% cost savings in their cloud computing projects with some achieving

as much as 40%. 71% of those that achieved savings said it met or exceeded their expectations. Just 3% stated that they found no cost saving when moving to the cloud.

The research indicates that contrary to many industry warnings, early adopters of cloud have had a mostly positive experience - more than two-thirds said they would recommend cloud services to a peer.

The research shows that organisations have invested in Private Cloud ownership (73%), but to get the twin advantages of pay-as-you-go flexibility, without operational risks, organisations are using Shared Community Clouds (30%).

Agreement with UK Government

Fujitsu announced in November that it had signed a Memorandum of Understanding (MOU) with the UK Government. The agreement, which will help tackle the UK deficit, has been reached following discussion with Francis Maude (Minister for the Cabinet Office), the Efficiency and Reform Group, and Government departments.

Fujitsu has a relationship stretching back more than 40 years, supporting many of this country's largest and most complex Government departments. The company will continue to bring its experience and expertise to enable the public sector to be more effective and save money and will continue to deliver all its existing contracts.

Romford Report

ARE YOU BEING SERVED?

Reading of a champion race horse retiring to stud, I was intrigued by the euphemism used to describe its forthcoming duties as "servicing" mares and sure enough, one of the 30+ definitions of "service" I found was the "copulation of horses" I wondered if my job of servicing computers was closer to this definition!

The word comes from *servitium* from the Latin *servus*- a slave, which is more like I saw the job. My grandmother and later my mother had been "in service", which was akin to slavery before the First World War. Perhaps I was destined to serve, after the experience of my maternal ancestors.

I never quite understood the phrase "They also serve who only stand and wait". How can anybody be said to serving when they're standing about waiting?

Supplying a service is perhaps the accepted usage of the word, but where does a tennis service, a dinner service or the Civil Service fit in?

The first memory I have of the word was in connection with church services twice a day on Sundays and then the Church Lads' Brigade, with, I think, the motto "Service not Self".

Military Service loomed with the War and I was involved in Civil Defence service and eventually the armed services. Only the Royal Army Service Corps was proud enough to have "service" in its name, but they ended up as the Royal Logistics Corps, which I suppose sounds less slave-like.

The self-styled "service industries" assure us they are here to serve, but with the new name came a new interpretation of service, if one looks at the postal service, banking service or transport service. The dustman, who collected our rubbish in the past, provided a better service than the refuse service today, which is "rubbish".

On retirement I thought I'd be the recipient of some "service" but it was explained by Social Services I was lucky enough to have a generous pension and wasn't in need of any "service". The one service I could look forward to was the National Health Service and I've been fortunate not having to need to take advantage of that service too often.

Apart from civic duties, when one freely gives a service, one expects to be rewarded by being paid, similarly, when one pays for a service one should expect to receive some service. Today, I think, there is a divergence; as service charges rise, quality of service falls. When a national bank announced "To improve the service to its customers it would close the local branch and we could use the main bank in town four miles away," I began to realise the meaning of the word "service" had changed out of all recognition.

I accept meanings of words change by usage. "Wireless" has been superseded by "radio" and is now more accurately used as a description of an inter-connection without wires. But the distortion of the word "service" is inexcusable and "self-service" is an oxymoron, helping oneself is no service!

Outside Buckingham Palace during the Changing of the Guard I noticed an impressive guardsman in scarlet being mobbed by young girls and school kids. He was accompanied by a fellow squaddie in combat fatigues shaking a bucket. Foreign tourists were dutifully tossing coins in the bucket. I found it slightly embarrassing. I assume they were collecting for widows and orphans, comforts for the troops or maybe decent helicopters, but it seemed undignified and reminiscent of "Penny for the Guy" rather than the duty of a member of the armed services.

Echoing my subject of service, it reminded me of "service charge" the iniquitous practice of subsidising a poor wage. Inconsistently, we give it to waiters but not to dentists, to coach drivers but not pilots. I think I've shown the word "service" is an anachronism, but I still expect the Editor to buy me a drink at the reunion to ensure future articles are published, as I do provide a proper service.

Dennis Goodwin

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Letters & e-mails

Our Skydive 24th October 2010

The morning of October 24th turned out to be crisp autumn day, blue skies, a few puffs of cloud and very little wind. Clearly the weather was not going to

prevent us skydiving. We arrived at the skydive centre, a large flat field near Lewknor in Oxfordshire, at the appointed time of 10.30. We were signed in by the organisers, the London Parachute School, and briefed on what was going to happen. We were assigned to the 7th flight of the day (out of 14 that Sunday) which was expected to take place about 2 hours later. In the meantime we had the opportunity to watch other skydivers perform and to talk to them. Many were experienced, but there were also first timers like us. All those we talked to had enjoyed the experience and some were enthusiastic enough to want to have another go immediately - immensely confidence building. In addition there were no ambulances or posses of compensation lawyers visible.

We were to be given instructions and training just before our own flight by our dive partners. My own partner, Max, a professional skydiver, had performed nearly 2000 skydives, many of them tandem dives. The instructions were well thought out and thorough, so that we knew the equipment, its safety features, how it was deployed and the positions we had to take up prior to the jump in the plane and then as we descended. We would be tightly strapped to our partners, facing front and with our backs almost in their lap. At the jump from a sitting position, we had to take up what they called a banana configuration that we had to arch our backs, heads up and feet tucked behind. Once again the build up inspired absolute confidence.

We would jump from 12000 feet, free fall for 5000 to 6000 feet at about 120 miles per hour, then our partner would open the parachute and we would float down controlling direction and speed of descent by pulling the parachute control cords. Although our partners had ultimate control we would be able to manoeuvre the parachute ourselves. We had also requested a DVD of our descent. A photographer with camera would jump with us, just ahead of us and film our free fall.

Then suddenly it was our turn. The small plane took up a complement of eight people - the pair of us with our tandem partners, one photographer for each of us, and an instructor and his student doing her final solo jump before graduating as a certified skydiver. We sat on the floor at the back of the cabin tight against our partners. At 6000 feet the plane door was opened and the student jumped into the void.

The plane climbed up to 12000 feet and it our turn. But before we jumped, all sang Happy Birthday for us. The drill was for the jumper to shuffle up to the open door, then sit on the edge with legs dangling out of the plane, and then to fall out. It was Ralph who went first. One moment he and his partner sat on the edge the next he was pushed out and disappeared. He was preceded by his photographer who had hung on the edge of the plane. Then it was my turn. I had been slightly apprehensive, but not really nervous or frightened. There was a moment sitting with the ground 12000 feet below when I wondered what I was doing up there. But in no time a push sent me and my partner into free fall. The first sensation is one of complete disorientation, but in a moment as I took up the classic dive position with arms outstretched that sensation passed. And the photographer is just below you gesturing and talking to you. 120 mph sounds frightening, but there is no sensation of speed or indeed of falling. The air rushes past you, but it is the air that is moving, not you. Free fall takes about 40

seconds, but before you know it the parachute opens and the rush of air stops. You float down gently, twisting and turning to manoeuvre to the landing site. Landing in tandem is often done sitting down on the ground. Our instructions were to lift our feet as we land, and this worked perfectly for me. But unfortunately, Ralph who had landed just ahead of me failed to lift his feet properly, and twisted an ankle. This turned out to be a break of his ankle when he went to his local A&E the following day. So he will be in plaster for the next 6 weeks.

Summing up:

The experience was exciting, amazing and I would not hesitate doing it again, though it passed so quickly, that there was no time to feel the exhilaration that some find in the experience. I would not seek it out as something to be done again.

What of the age factor?

Three observations:

1. It is difficult, if not impossible to get special insurance for the jump past the age of 80.

2. At 82, and especially as 82 year old twins, you attract a great deal of attention from the media and others.

3. There is nothing which makes a reasonably fit 82 year old unsuitable for the sport, except perhaps in a stiffening of joints which makes taking up the banana position and landing position slightly more difficult.

I would also like to pay tribute to the London Parachute School for the professional, caring and kindly way they dealt with a pair of 82 year old novices.

For us, despite the broken ankle it was a success, especially as we have now raised over £11,000 for Cancer Research UK.

Frank Land ex LEO f.land@lse.ac.uk

SIX DEGREES OF SEPARATION

I received the No 31 copy of Bits & Bytes this morning and was amused by your opening Editorial.

The concept that we are all part of the Six Degrees of Separation theory tends to ring true. After leaving ICL (WIN01 - Winnersh) in the late 80's, a friend and I had set up a business in the UK and as he had dual nationality with Australia, the natural progression was for him to go to Perth to run an Aussie end of the business.

A business contact asked me to travel to Melbourne to meet with a potential distributor of his products. To cut a long story short, on meeting it was obvious he originated from the UK, and (as one does) I asked him 'where from?' It transpired that he came from by birth town of Croydon, Surrey. Not only that, he was a member of a local Scout Troop next to the one I had joined. His wife actually went to the same school as my sister! We did no business that afternoon, but instead he invited me to Dinner with his wife so that we could all do a "catch up" - a great evening, but sadly no business transpired!

On another visit to Perth about a year later, my business friend and I decided on a 'break' for a few days, and travelled up the western side of Australia stopping at various points overnight on the way there and back. We reached a small (and difficult to reach) beach where there was one small hut and a small cafe. There was a small pier to which boats could be moored. The beach was famous for the morning feeding of the dolphins by the local Park Rangers -

spectacular! We found out that every evening, a small catamaran left the end of the pier towards dusk and travelled out into the Ocean where it anchored, and all on board toasted the sunset with whatever drinks you happened to have brought along. Wonderful. But what about the tickets? This is where the small hut comes into the story.!

The "office" was staffed by a young lady in her early twenties, and again we found that she was English. So again "where from?". "Just outside Reading, in Berkshire," came the reply. "Where outside Reading?" I asked now getting interested. "Oh, you will not know it - it's small - Burghfield Village". I then let on that I had lived in Burghfield Bridge (a couple of miles away) for some 25 years! So I again asked where in the Village? The lady named a large house set on the side of a hill. I shocked her when I told her that I not only knew the house, but had been in it for church meetings in the past and knew her Grandmother!

A final one for you! I remarried in 2001. Towards the end of last year my wife received an e-mail through one of these internet "Find your school friends" sites. She was cautious at first, only to realise that she was being 'traced' by someone that she was at school with, and with whom she had kept in contact for a few years after they had both married. The friend was living abroad, but she and her husband were intending to visit the UK mid-year 2010. We arranged to meet for lunch. Apart from the "girls" catching up-to-date, it started to transpire that both of them had been Leaders in the Scout Association (as I had been) and we had a lot of contacts in common, people we both knew and had 'worked' with. We must have crossed paths very often without making contact! Strange.

As for myself, although I am some 12 years past retirement age, I am still working full time. The article "What to do in Retirement" had me thinking. "Work, Rest and Play"! My problem is that I enjoy my work so much that it is difficult to accept it as "work". Some of my evenings are spent on Parish Councillor problems and helping to look after the management of the local Village Hall - work or play? "Resting" for me is spent on taking holidays, going to theatres or just eating out. As for the Mars - forget it - far too fattening!

Thanks for the good work on Bits & Bytes.

Brian Groom

HEC1 - 1201

I went in the very cold winter of 1950/51 (60 years ago!) with Dicky Cox and Bill Davis to Fenny Compton about 10 miles north of Banbury to Doc Booth's home to copy APEX(C) for BTM.. It consisted of about 5 post office panels and is now in the Birmingham Museum store.

I then designed and built, with my lads help, added panels to contain the drum with its track select (millisecond multiply relays), the switches and neon displays the read in circuits from the E6/6 tab and the output circuits to the printer. and the power supplies to make up a usable HEC 1 which is almost the same as the HEC 2 which went to the Business Efficiency Exhibition at Olympia . . The HEC2 M was the same machine with plug in circuits as used on the 550/551 Woodhill machines. The machine went up to 17 Park Lane for Ronny Michaelson to programme. The first programmer was a vacation student at Letchworth called Harold Ashforth, who managed to get a Coal

Board Gang payroll onto a 256 word drum! The HEC2 that went to Olympia was programmed by me to play Noughts and Crosses and by Ronny Michaelson to bid a hand of Bridge in the ACOL system. I still have the pack of playing cards on punched cards used for the customer to choose the hand he wanted to bid!

Best Wishes to all the pioneers who will be at your October meeting at Stevenage

Dr Raymond (Dicky) Bird
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One HEC of a computer!

I first met HEC1 (Hollerith Electronic Computer No1) on the 1st March 1954.

HEC 1 was the first computer to be built by the British Tabulating Machine Company Ltd. It was developed in Letchworth by Dr Raymond – “Dickie” Bird and Steve Hare (and no doubt others) both of whom were far too nice to be genuine boffins!

It was the only was the only one of its type ever constructed and consisted of an 8 ft wide and 6ft high frame. On the back of this frame were stuck a load of large valves; whilst on the front each valve had its own bulb arranged in panels representing the input and output registers, arithmetic unit, storage area etc. It had no covers. (*No H&SE! Ed*)

Input was achieved by flicking down switches below the bulbs on the input panel and then pressing the button marked “Input”! Since everything was performed in binary, to enter a number, say 9, it was necessary to flick down switches 1 and 4 (to give 1001) before pushing the input button. HEC1 didn’t do the alphabet! For output you simply looked at the “output” register to see which bulbs (in binary) had been lit up! Although officially a computer HEC1 was not overly user friendly!

After National Service I joined BTM as a trainee punched card Technical Serviceman on 2 February 1953 on the princely salary of £377 per annum. This translated into 13 pay cheques of £29 every four weeks. Since the rest of the world operated in months you can imagine our delight when we received two pay cheques in the same calendar month. My reason for joining the BTM was simply because they offered a 13 month training course and this seemed a convenient way to put off the evil day when I would have to start some real work!

On completion of my course I reported to John Perceval (retired wartime Lt. Col.) who was the Personnel Manager and mentor to all TS trainees, for my posting. He told me I had been selected to go on a two week “compooter propping course”. “What’s that?” I enquired. “Don’t know” he replied, “but please come back and tell me what it is when you have finished”

My two week course was presented by Ronnie Michaelson, (an actuary), Brian Dagnall, (a statistician), and John Insall, (a mathematician). On returning to John Perceval he duly asked what was “compooter propping” and I had to admit that no idea as I had not understood a word throughout the two week course! In spite of this I was immediately posted to join the company’s Computer Commercial Research team based on the ground floor of 143 Park Lane. I joined Rosemary Bonham-Carter, who brought a touch of glamour and class to the team, as the company’s second computer programmer.

As I know many of the readers of Bits & Bytes are/were engineers, I thought perhaps you should

know how we carried out our fault diagnosis. Now and again a valve would blow and in the absence of an engineer Rosemary and I contrived to light up all the bulbs in the panels on the front of HEC1. The bulb representing the broken valve did not of course light up, but which valve was it? We had no idea! So while I squeezed behind the machine and pulled out each valve in turn, Rosemary watched the lights on the front. On being removed each valve resulted in its corresponding bulb going out; when no new light went out we had found the dud valve. Although rather tedious, this technique worked on a few occasions; unfortunately it also created more faults as well! During my 45 years with BTM/ICT/ICL this was the closest I ever got to doing any engineering work!

One summer day I was toiling away on HEC1 when a charming little gentleman with silvery hair peered in through the open window and enquired “How’s it going?” Fortunately I had the presence of mind NOT to tell him, as I was subsequently discovered that he was Sir Cecil Weir our chairman.

At this time 1954/55 the computer industry was rather like a large club – whenever you went to a conference or exhibition you would see or hear the same people contributing each time. The industry was made up of a number of little groups of expertise: Cambridge University (EDSAC), Ferranti Manchester (Mark 1 star), Lyons (LEO), Hollerith (HEC), Elliot Bros, General Electric, English Electric etc. The Computer Commercial Research team at Hollerith became quite well known for presenting a simulated computer under the banner “What is a computer?” Under Ronnie Michaelson’s leadership five of us simulated the operation of a computer: Input, Output, Arithmetic Unit, Immediate Access Storage and Control Unit. Input and Output consisted of paper tape punched cards or a telex printer. I was only ever trusted to represent either Input or Output as they were the easiest to demonstrate!

I never had the pleasure of meeting HEC2, but the company developed and built and sold eight HEC2Ms (M for marketable Ed). With very limited input and output they were only bought for complex calculations/analysis. I found myself despatched to Esso’s refinery at Fawley near Southampton to write a programme for their Refinery Running Plan; BP Research were also interested. HEC2Ms were sold for wind tunnel analysis at both the Royal Aircraft Establishment at Farnborough and to the Aircraft Research Association at Bedford.

In 1956 the company flirted with a monster of a computer called Diana (goddess of hunting) imported from LFE (Laboratory for Electronics) in Boston USA. Subsequently the HEC4/1201/1202 (complete with punched card input and output and line printer) became available and were sold widely and successfully for many years.

(Martin Campbell-Kelly’s ICL History says that the 1200 “was the most successful of the first generation British computers” and that more than one hundred were sold. Editor)

Pat Morrish 01372 459050

AN INTERESTING DAY

I spent an interesting few hours in Oxford on September 25 2010. I spend (or some might say waste) many hours doing crosswords and 60 years ago I started doing the Observer competition called

Ximenes (who was a Grand Inquisitor of the Spanish Inquisition). It was very difficult and it was some years before I completed one. When the setter died in 1971 the baton passed to a lexicographer at the O.U.P. who renamed the puzzle AZED. The puzzle is difficult in the sense that if you do the Telegraph in around 15 minutes or the Times in around an hour, you'll be hard put to finish AZED in a day. The clues are very cryptic eg *Eastern capital characterised by backward people (4)* and therein lies the challenge. An even harder variation known as Carte Blanche pops up about every 2 years. You are presented with an empty grid with no bars or blocks, the clues aren't numbered, you aren't told the length of the answer and all you know is that the Across clues precede the Down clues; and the clues are just as difficult. I did finish one once but it took me a week to do so. The event at Oxford was to celebrate AZED 2000 which appeared on the 26th. That's one every Sunday without fail for 38 years. Because AZED is so hard its solvers are numbered (worldwide) in hundreds rather than thousands or tens of thousands. We form a rather unusual little club and over 120 turned up to an excellent lunch at Wadham college. Most notable among us is the crime writer Colin Dexter who named many of his characters after AZED solvers whose names are all on file somewhere. Thus I rubbed shoulders with Sir Jeremy Morse, sometime chairman of Lloyds bank, but failed to meet Dorothy Lewis who had died in 2009; she compiled the other Observer crossword called Everyman for many years. Most of the speeches were as expected but Richard Stilgoe was to me by far the most interesting in his toast to the Observer. He spoke about the English language and anagrams in particular, invariably a source of amusement eg of his own name "I dig Claire Short" which apparently David Milleband had worked out on some TV show they shared with the aforesaid Claire Short. The comment "only in the English language could *eleven-plus-two* be an anagram of *twelve-plus-one*" provoked some laughter. (Who thinks up these things I ask myself). I certainly didn't know that Laptop Machines is an anagram of Apple Macintosh. A founder of the modern computer and indeed everything digital was a famous mathematician called Alan Turing who in the 1930s knew how to make a computer but simply didn't have the right bits to make one. He was, as many know, instrumental in making Bletchley Park so successful in the war at breaking the German codes. He was gay but the Government decided that he was more use at B.P. rather than languishing in prison but he was hounded mercilessly and eventually took his own life. He didn't fancy the taste of cyanide so he injected some into an apple, took one bite and died. And that, said Richard, is why the Apple logo is an apple with a bite out to remind us all as we browse the internet or text on our mobile or watch our TV, how much we owe to Turing. (Subsequently John Harper told me that this anecdote is not substantiated by Apple). During pre-lunch drinks there was a short musical interlude of 4 songs composed by solvers to familiar tunes of which the chef d'oeuvre was unquestionably a parody of the G&S song entitled "I am the very model of a modern cruciverbalist"; quite brilliant. So, if you do crosswords and fancy having a try at something challenging, try AZED but (a) you must have the Chambers dictionary, either book or electronic, otherwise you'll get nowhere and (b) be patient. I did several Ximenes before I

managed to solve one clue. The answer, by the way, is *folk*.

Keith Crook k.j.crook@btinternet.com

Broadband in the mid Sixties

In 1964 Imperial College expressed a need to use the London University Atlas for real-time experiments in adaptive control and approached Ferranti Digital Systems Department in Bracknell to design and supply a high-speed data link between their premises in Exhibition Road and the LU Atlas in Gordon Square.

In the mid 60's the state-of-the-art for A/D conversion with 12-bit precision was about 5,000 conversions/second. The IC requirement was for a link that could support this data rate (60Kbits/sec) in both directions simultaneously. To achieve this they planned to lease a 1/2inch TV coaxial cable from the Post Office.

The logical design of the system fell into my lap.

The actual transmission rate on the line was 500 Kbits/sec. Frames from IC comprising 12 data bits plus error checking, synchronisation and control signals triggered a return frame from Atlas, at a rate of 5,000 frame pairs/second.

The interrupt rate on the Atlas interface was eased to once per millisecond by a double buffer store that held 5 X 12bits in each half, a total of 120 bits. Laughably trivial nowadays, only 15 bytes! But in the mid 60's integrated circuits were not really available. Using tried and trusted discrete components we could just squeeze six double-entry shift register stages onto a single printed circuit board. So the Buffer store alone needed 20 PCB's!

These cards were used extensively in the system, for serial < > parallel conversion and FIFO buffering. The link side loaded and unloaded words singly, while the Atlas side handled five at a time. At the end of every millisecond when both IC and Atlas buffers had been emptied and refilled, a master pulse interchanged the buffer contents.

In the adaptive control mode the link was interfaced to Atlas as a card reader/punch, the 12-bit samples corresponding to card "Columns".

The Atlas engineers had experienced system crashes when actual card reader/punches were being commissioned. They were understandably nervous that the IC link might also be a threat. Their knee-jerk reaction to get the system back up after a crash was always to pull the plugs from the IC link. But during commissioning of the link in paper-tape mode we identified a bug in the Atlas Engage/Disengage protocol firmware that was causing the crashes. From then on relations with the Atlas engineers went from frosty to cordial!

For the Paper tape mode the IC terminal was equipped with a Ferranti 300 cps tape reader, a Creed 3000 300cps tape punch and a Creed 1000 100 cps dot matrix printer. This printer was later replaced by an Data Products 600lpm line printer. A control panel with Honeywell push-button indicators (identical to those used on Atlas) allowed the peripherals to be engaged/disengaged.

Before the link was installed a daily van took paper tapes and punched card stacks to the Atlas and picked up the previous day's output. Thus the turn-round time was a couple of days. When the link was up and running IC achieved two turnarounds per day and the

link was recorded as using 27% of the available Atlas time.

But it failed miserably on the notoriously tough test, "Demonstrate it to the customer". This should have been a doddle. Half-an-hour before the grand opening ceremony I powered up the IC terminal and phoned my colleague at the Atlas end to switch on. "It is on" he said, "Switch your end on". My heart sank. We had to cancel the ceremony.

It transpired that a workman in the bowels of the IC basement had flattened the TV cable with a heavy ladder!

Malcolm Baxter malcolm.baxter@ntlworld.com

Reunions

Watford-Harrow- Feltham

Mike Ray 01895 230194

Ferranti Pegasus 50th anniversary

Contact alan.thomson@bcs.org , or phone him at 01344 422993.

ICL Central London

The next reunion will be on **Wednesday 20 April 2011 at The Shakespear's Head, 64 Kingsway** from 12 noon. The pub is on the eastern side of Kingsway just south of Holborn tube station.

Bill Williams 020 7607 9408

aberglaubig@yahoo.co.uk

Stevenage & Letchworth Old Boys (renamed Punch Card Reunion)

The annual reunion will take place on **Tuesday 4 October 2011** at Stevenage Labs STE04 when the speaker will be Dave Clarke. Please send £10 to **Adrian Turner, 5 Nun's Acre, Goring-on-Thames, RG8 9BE**. Cheques should be made payable to **Punch Card Reunion** and accompanied by a **SAE**.

Adrian Turner 01491 872012

Oxford Engineers

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Copthall House Newcastle Staffs

Bob Green 01782 615290

East Grinstead 81 Club

Gordon Franklin 01342 328479

East Midlands UB40s

Brian Skeldon 0115 9725119

ICL Double Majority Association

The 21st Biennial dinner will take place at the **Letchworth Hall Hotel 21 May 2011**

Joseph Gardner 01438 362806

ICL Midlands

Brian Trow 01785 257317

LEO Computers Society

John Hall leosoc@freenetname.co.uk

Liverpool Engineers

George Lynn 01744 29984

Surrey Engineers

Trevor Harding 01483 565144

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Tin Hut Reunion

Olaf Chedzoy 01278 741 269

West Gorton Reunion

Eric W Watts 01457 875080

West Branch Engineers

Eric Reynolds 01452 712047

West Kent Reunion

Ron Harding 01732 761076

ICL Old Buggas

Les Mowbray www.cuin.co.uk/oldbuggas/

ExICL Kidsgrove

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OBITUARIES

John Aris—a personal memoir

In the 1950s, Joe Lyons and Company – more famous for its Corner House and Teashops – recruited a team to design and build what turned out to be the world's first business computer. That was LEO, the Lyons Electronic Office. In 1958 after leaving Oxford, John joined the project and he quickly proved to be ideally suited to the new skills of systems analysis and programming.

Later, John moved into Government Sales for LEO. He managed the marketing and implementation of several very large systems, on many of which I was lucky enough to be his bag-carrier. I suppose we formed a relationship rather like Stephen Fry and Alan Davies on QI. .

During the 1960s a series of mergers concentrated UK computer manufacturing into a single company, ICL. As the mergers gathered pace, John rapidly advanced through the management levels and had a number of significant roles in the growing company. In particular these included advising Governments on IT issues at the most senior level, both here in the UK and across Europe. Soon after that final merger, John moved to the Paris office where he was Technical Director of ICL Western Europe with a wide range of responsibilities.

But, being John and despite the challenges of multilingual negotiations, he set himself a personal goal. He aimed to eat in every three-starred Michelin restaurant in the city. In pursuit of this he used to entertain visiting customers and even hold management meetings in suitable establishments. But, whether he managed to fully achieve that gastronomic ambition, isn't recorded.

After four years in Paris, John returned to the UK and was tasked with advising the ICL Board on all aspects of user-driven computing. However, when he eventually left the company in 1975 and joined Imperial Group in Bristol, he discovered that users' actual needs differed quite substantially from what the IT industry imagined. Users at all levels had skills and expertise but didn't use computer terminology to define their IT requirements. And why should they? So John set about clarifying those needs systematically. And this led to him being invited to join the board of the National Computing Centre – the NCC - as a non-executive director.

In 1985, when Imperial was taken over by the Hanson Group, he left and took on the full-time role of Director of the NCC. Under his leadership the Government gradually relinquished its financial involvement, enabling the NCC to become fully self supporting.

John had many other professional activities. He was a trustee of the LEO Charitable Foundation. While at the NCC he initiated, then helped to run, IMPACT, a Top Users club, specifically for company CEOs and IT Directors. He was also an active member of the Worshipful Company of Computer Technologists. All of these activities he cheerfully put at risk by parachuting. He jumped out of planes 34 times. Luckily he did no irreparable damage to himself, although it's possible the drop zones may have taken a battering.

John had a life-long love of anything cultural: art, music, theatre, literature – and cricket. As with his work, in every one of these spheres John's knowledge was extensive. But he never talked down to people. Another colleague has reminded me of John's frequent opening phrase "as you probably know..." This was typical of him and he was always generously surprised if you didn't have a clue.

John had two enduring hobbies, or perhaps one should say passions: music and countries. He had wide musical interests, including playing and composing. Interestingly, John denied having perfect pitch but there was an intriguing occasion in the very early days. We were in a café in Westbourne Grove. Someone, probably me, dropped some pennies on the tiled floor. Amid the clatter, John immediately said, "There's a dud one in there" – and, of course, he was right. Perfect pitch or not, he certainly had an expert ear. His other hobby was "collecting" countries. He famously arranged his early travels to avoid the Antipodes so that, sometime in the 70s, he was able to send around a note which just said "I got 100 in Australia!" In September of last year he said he had 196 and felt that getting the double century might prove difficult. However, by April he had placed both feet on the ground in seven more. His achievement of having visited 203 separate sovereign states must surely be worthy of the Guinness Book of Records.

Ray Hennessy

Lawrence (Larry) Large 1919 - 2011

When I joined BTM in 1957, interviews took place at two rather different locations; 17 Park Lane, and Oxen Road, Luton.

One rather ostentatious, one very down to earth.

At Oxen Road I did a 'trade test', which included filing a hexagon in mild steel, and was assessed by Larry Large.

I mention this to illustrate the fact that Larry was in no way ostentatious, in fact rather self-deprecating; in my view and was frequently under-estimated.

When I became an instructor at Letchworth Engineering Training Centre, Larry was there. Sometimes in charge, sometimes with administrative responsibilities, under a 'Principal'.

Never aggressively ambitious, he was there to keep the ship going while the potential captains and admirals were manoeuvring for position.

After service in the RAF he worked for Bletchley Park at the Stanmore 'out-station' where some 40-odd RAF personnel maintained Bombes operated by over 500 Wrens.

(Larry once showed me a typewritten pass that he had during WW2 that allowed him to go anywhere in the country without hindrance. Editor)

Very frail in his later years, he lived to the age of 92, in Letchworth. His widow, Eileen tells me "He had a

good life" I am glad to have known him, and to observe that contentment brings its own reward.

Dave Clarke Stevenage

Derek Pring 1931-2011

One of the real characters of the Field Engineering world died of a heart attack on 15 Feb 2011. I knew his name long before I met him face to face at the Punch Card Reunion in Stevenage where we became close friends. Despite living in Lostwithial in Cornwall he made the annual pilgrimage to the reunion and we travelled together from my home, when he recalled stories of his time as a union rep with the battles he fought on behalf of the field engineers with Tom Griffin.

One memorable story he told me was that when he was stationed at RAF Hendon he came up against a very pompous officer who used his rank to make Derek's life difficult. One night he went onto the hard standing where this officer's plane was parked and welded the tail wheel to a metal ring in the concrete.

Needless to say the officer's plane didn't take off as planned the next day!

Derek joined the British Tab in 1956 and was site engineer at the British Rail Swindon Railway Works - a wonderful place for him to work.

He was an avid steam locomotive man and unlike most train spotters/anoraks took his passion to extreme lengths building working scale model locomotives in his basement workshop at home.

Derek always had a smile on his face and many people who knew him will have fond memories of a unique individual who was not afraid to challenge authority. He will be missed.

Adrian Turner

ICL/Nortel Fund

BRA01	V L	Bates	07/02/11	80
	Derek S P	Meek	24/09/10	81
BRS05	Derek	Pring	15/02/11	80
EDI05	John R	Beveridge	15/12/10	85
ELS01	P F	Cuthbert	25/01/11	76
	Dennis W	Evans	02/01/11	82
GAT01	Jacob A	Barker	13/02/11	82
KID01	W	Archer	02/11/10	86
	Anne	Brammell	26/12/10	75
	Frank	Dale	29/10/10	71
	John W	Gibson	13/01/11	86
	John	Gilbert	30/12/10	73
	Dennis	Lovatt	30/11/10	78
LET01	Michael J	Hall	25/12/10	74
	Wesley E	Reid	18/01/11	87
LET03	Walter C	Grantham	12/01/11	84
	Ernie C	Noble	27/10/10	96
LET04	R D	Bacheldor	05/10/10	88
	D H	Etherington	12/01/11	86
	W T	Riley	20/09/10	86
	Joan	Tyson	01/12/10	75
LET05	William	Craig	22/09/10	80
	L	Gilpin	11/09/10	86
	Mary E	Hedley	31/01/11	82
	Eustace N	Rodgers	20/12/10	81
LET ETS	Larry	Large	07/01/11	92
LON11	Jennifer E	Kirby	20/09/10	73
	Edward K	Rogers	09/12/10	87
LON30	L J	Cook	13/10/10	80
LON49	A	Batts	03/02/11	80

MAN05	John	Millin	20/01/11	85
NEL02	P	Richards	01/10/10	75
NEW03	John A	Tierney	10/01/11	60
Unknown	M	Abbott	03/01/11	91
Location	Helena	Ashton	22/10/10	76
	Elsie	Berry	23/11/10	98
	D C	Bishop	12/10/10	83
	Alfred	Bradshaw	13/09/10	88
	Kathleen	Brown	15/12/10	92
	Barrie	Carne	17/01/11	75
	Luard J	Coleman	14/01/11	84
	Geoffrey J	Cook	16/11/10	82
	Susan E	Cormack	17/09/10	62
	Hugh R	Croxford	30/09/10	66
	C M	Frendo	31/10/10	78
	Stephen	Gallagher	07/11/10	85
	E	Grant	29/12/11	86
	Gary J	Grant	08/11/10	57
	William J	Gregory	18/10/10	94
	Percy H	Grimes	27/09/10	95
	Charles A	Hibbert	28/09/10	70
	John G	Hollinshead	21/09/10	76
	S V	Hooper	31/10/10	84
	T F	Humphreys	04/02/11	83
	J	Jessop	13/02/11	88
	E	Jones	03/10/10	83
	P C	Lane	13/02/11	84
	Robert E	Leigh	08/12/10	77
	M D	Maker	06/02/11	92
	Stanley D	Mann	15/09/10	75
	Derrick W	Marsh	25/09/10	77
	Alexander	McNab	31/01/11	97
	Douglas A	Nobbs	08/10/10	83
	Gordon	Parry	03/01/11	91
	George D	Peckett	11/09/10/	94
	Donald	Renwick	12/09/10	77
	William S	Sharrock	24/11/10	88
	William A	Sims	21/10/10	90
	S	Slater	10/09/10	90
	Dennis E	Smith	24/11/10	90
	David A	Sparkes	09/10/10	93
	Arthur E	Stansfield	02/12/10	90
	Leslie G	Taylor	01/10/10	89
	Richard	Taylor	20/01/11	75
	Hilary M	Walker	17/12/10	60
	Stanley R	Walker	03/11/10	84
	W	Watson	05/12/10	92
	Malcolm V	Whitehead	20/01/11	79
	Bryan	Wiblin	19/11/10	80
		Wood		

ICL Fund

Includes people who died in service

BRA01	Anthony P	Brown	04/12/10	71
	Stuart W	Phillips	02/01/11	65
	Simon M	Riddle	12/08/10	66
	Barry J	White	29/09/10	67
BSN01	Arthur D	Kilborn	07/02/11	82
FCY01	James M	Bell	06/08/10	75
	Charles A	Bogg	12/01/11	53
FCY02	Ken E	Rowcliffe	14/12/10	77
HOM99	Geoffrey D	Argent	27/12/10	62
	Donald J	Betts	22/10/10	77
	John A	Franklin	01/02/11	57
	Arthur	Livesley	30/10/10	78
	Terrence	Naylor	01/01/11	76
IRE02	Brian	McDermott	17/09/10	49
	John Mc	McGarel	10/09/10	73
KID01	David	Beech	24/10/10	77

	Peter	Chetwin	17/01/11	71
	Douglas	Harry	15/12/10	75
LET01	Margaret	Darge	04/10/10	77
	Roger C	Todd	26/09/10	65
LET16	Mary P	Gregory	15/12/10	70
MAN05	M	Boocock	01/01/11	79
	Nigel R	Johnson	09/02/11	57
	David E	Powell	01/10/10	70
	John H	Whittam	09/02/11	73
MAN13	Brian H	King	22/12/10	68
REA08	Rex	Bowman	05/01/11	79
REA21	Joan M	Chester	02/01/11	72
REA24	Christopher M	Willis	11/01/11	70
SLH06	Andrew R	Jarman	06/11/10	52
STE04	Thomas N	Arthur	30/12/10	76
	Philip G	Rogers	19/12/10	66
STN02	Caroline H	Swain	08/12/10	45
WAK01	Donald H	Louth	07/10/10	77
WAK02	Terence	Crowe	31/12/10	73
WIN01	Joan A	Bartlett	19/01/11	74

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Computer Conservation and History.

The Pegasus computer at the Science Museum is being repaired and further conserved. Go to <http://ccs.bcs.org/> which takes you to the front page for the CCS on the BCS website, then navigate to Bulletin, then issue, then 53 for the latest which has an article on Pegasus by Chris Burton.

The Resurrection bulletin is now edited by Dik Leatherdale. The CCS website has latest details of forthcoming CCS events, and also information about how to join the CCS.

A new CCS project has been started to build a replica of the EDSAC computer - one of the earliest UK computers. That will be done at Bletchley, and you are welcome to contact the project if you are interested in getting involved.

Alan Thomson.

NEXT ISSUE

Copy for the Autumn 2011 issue must be submitted by 1 September 2011, but would be appreciated earlier.

The content of Bits & Bytes has been prepared by the Editor to provide a newsletter for ex ICL/Fujitsu staff. By facilitating this newsletter Fujitsu Services does not endorse, edit, or attempt to balance the opinions offered here or accept responsibility for any errors or omissions in the information, nor for any loss or damage occasioned to any person acting or refraining from acting as a result of the information or data contained within.

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