



THE UNIVERSITY OF  
**SYDNEY**



**Pearcey**  
FOUNDATION

# **The Past and Future of Australian Innovations in Information and Communication Technology (ICT)**

## **Oral History Interview**

**22**

**Jim Ellis**

*Interviewed by:*

*Graeme Philipson, Sebastian Boell*

*Interviewed on:*

*Friday 27 November 2020*

## **Project Summary**

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This interview is part of a series of oral history interviews undertaken by the Pearcey Foundation and the University of Sydney as part of the project ‘The Past and Future of Australian Innovations in Information and Communication Technology (ICT)’. The series interviewed recipients admitted into the Pearcey Hall of Fame from 2003 to 2020. The hall of fame recognizes outstanding life-time contribution to ICT in Australia in business, research and government. Each oral history captures a short biography of individuals who made an outstanding contribution to ICT in Australia. They also collect insights on aspects that had a lasting effect on ICT innovations in Australia, positive as well as negative from approximately the 1960s to the 2010s. Interviews lasted about 60-90 minutes and were conducted by Sebastian Boell, Graeme Philipson, Peter Thorne, Kai Riemer, Sandra Peter and Belinda Wang. The complete set of interviews in this series is archived by the Pearcey Foundation.

## **Key Points Covered in this Oral History**

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1. Setting up an industrial society WAITTA and awards, which helps the WA to form an industrial network, and also helps to bringing venture capital investments in wining start-ups.
2. Australian culture of openness and being adaptive to change could promote innovations.

# Biography

## Jim Ellis OAM

Founder and Former Chair of WAITTA  
Inaugural Chair of AASQA  
Pearcey Hall of Fame in 2016



*Entrepreneur, Adjunct professor*

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An experienced IT professional who wrote his first program on a Stantec Zebra valve computer in 1962 and has done just about everything in IT since. Following work in the design stages of the Concorde supersonic airliner at the then British Aircraft Corporation at Filton, Bristol, Jim joined the East European Division of early computer pioneer Elliot Automation (later a component of International Computers Ltd - ICL) in 1967.

Jim worked with ICL in Serbia, Croatia and Russia, before joining Sperry Univac and opening their office in Slovenia in 1972. In 1977 Jim moved to Singapore with Sperry Univac, running their operations in Singapore, Malaysia, Indonesia, and Thailand, before relocating to Hong Kong in 1979 to run the entire Asian distributor network for Sperry, covering 6 countries from Taiwan to India.

In 1982 Jim moved to Australia to run Sperry's Western Australian State office. After Sperry, Jim joined a number of software houses, consultancies and multinationals, including Sun Microsystems and Tandem Computers.

In 1997, Jim set up Gartner in Western Australia through his own company Westinfo Services, running Gartner's activities in both WA and Northern Territory until selling to Gartner in 2006.

Jim Ellis has played a leading role in industry associations both in WA and nationally. He has been ACS Chairman in WA, national Vice-President of ACS, a Director of the ACS Foundation and Chief Judge of the AIIA National iAwards program. He was the driving force in the establishment of WAITTA. He has also been a member of the Executive Committee, and a Lead Judge, for the Asia Pacific IT Awards.

Since retiring from direct line management in 2008, Jim has largely devoted his activities to the not-for-profit sector. Amongst other areas, Jim has worked with the Australian Computer Society (ACS), the ACS Foundation, Independent Living Centre WA, the Autism Academy for Software Quality Assurance at Curtin University.

Jim Ellis has been a member of numerous advisory boards and panels at tertiary institutions – including Curtin University, Edith Cowan University and Murdoch University, where he is an adjunct Professor and where he was awarded an Honorary Doctor of Science in 2016.

## Interview Transcript

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*Date of interview: Friday 27 November 2020*

*Can we start out with an overview of your career, how did you get into IT, were you doing anything before you did, what was your education, what are some of the highlights of your career?*

Well, I started, well my degree, which was at St Andrew's University in Scotland, and I lived in the south of England (which is one of the reasons I went there because I thought it would be interesting to be well away from home and in a different part of the world) was in maths. It was going to be in Physics originally but then I discovered that you had to lab work every day and in maths you just had to understand the theory, that's all, and reproduce it when you needed to. So I thought well: that's a lot better. I can play snooker every afternoon, I. I don't know if you want to have this for your students Sebastian. So, there was an element of laziness involved. But I always found maths pretty easy, so I did a maths and statistics degree and as part of that we had a laughingly called a computer. It was a thing called a Stantec Zebra which was, actually, I discovered, when I looked at Google about it, it was actually a Dutch machine. But I didn't realise that, I thought it was kind of British or something. But it was a huge thing, it took a massive room and it had valves in it and it must have had less than 1 K of memory. It had no languages, you had to program it in machine code, which was a challenge in itself. I used it for one of my projects really. Which I'd done the manual way using a manual calculator. (There were no electronic calculators in those days) Going back further than you Graeme, those little things that used to have a little handle on the side and you put in the number (that was the nearest thing to digital, you could either use a slide rule, that was analogue, or you used digital.) You put in the number, if you wanted to multiply it by 17, let's say 27, you'd zip it around twice at the 20 and move it along one and zip it around seven times and up would come the number, so it was very mechanical. I was doing a particular project, something to do with the successive approximations, kind of Newton theory. And anyway, to do this I had to work out this thing to about four or five decimal places. This calculation, it took me three weeks to do, I remember this quite distinctly, on this machine. And they said: "Well, why don't you try and do it on this wonderful computer we've got and we'll see if that works and comes up with the same result?" So I programmed the computer, having learnt this machine code and how to program it. And it only had one input/output device which was a teleprinter. That was it, that was the total sum, there was no printer as such. I put in the program, there's a little part of the teleprinter, a little paper tape thing on the side. I put it in and it sat and waited and I just kind of sat there and clicked away for about ten seconds. And then it started spitting out a number on the teleprinter. I was quite relieved, because that was what it was meant to do. And lo and behold this calculation I'd taken three weeks to do, came back to me in ten seconds. Pretty much the same result to about four decimal places. I was pretty impressed with that and that was my first run in, if you like, with computers as such. But then I carried on, did the rest of my degree, and didn't have to involve that machine at all. When I graduated, with a maths degree you've got a limited number of areas that you can really work in. One obviously was to do a research project, but I thought I had enough of being at university at that time and I thought I'd go and get a real commercial job, and didn't really fancy...

*Which years did you go to university Jim?*

That was '61 to '64.

*Thank you.*

Yeah, and I actually was quite young for my year. If you've got a birthday in July you're either a year young or a year late in the UK, and so I was a year young. So I ended up finishing my degree before I was 21 which was a bit unusual at the time. Anyway, I had a number of places I was talking to. And the one that kind of interested me, which was also closer to where my home was in the south of England, was the British Aircraft Corporation, as it was called then, now British Aerospace, building Concorde. They were actually designing and they were building prototypes of Concorde. And they thought that it would be useful for me, because I'd done quite a lot of reliability studies, actually building up a mathematical model of particular things and using those to actually predict what was going to happen and so on. And so they dragged me in to be part of their team. My role was pretty junior, to put it mildly, and at that time I wasn't using computers at all. We had what we called an analogue computer for some of the things. Honestly can't remember how that worked, but I think it was like a mechanised slide rule if you like. Anyway, that was what we used for most things but we did have a couple of digital computers within the thing. Anyway, I started to get involved with that and then discovered that there was a great job going in the fledgling commercial IT area. I kind of left the group that was doing this mathematical research and got involved in the commercial thing. That would have been 1964, yeah, towards the end of 1964.

*That was Elliott you joined?*

I'm sorry?

*You joined Elliott?*

No, I joined Elliott in '67. So I worked, I was on an IBM 1401, because we worked mainly with IBMs. It wasn't a valve machine, it was a transistor-based machine, had 16 K of memory, I remember that. It was mostly tape-based the way we used it but it did have, I think it was a disk, it wasn't a drive, it was a disk. The Stantec Zebra actually had a drum as part of itself, most of its memory was held on the drum, the one I'd used at university. So, I did some commercial programming and we programmed in what you called Autocoder which was similar, it was a machine language, you probably remember those kind of things. It was the main language, but COBOL came out around that time. We thought this was pretty weird having a language like that. Why would you bother? What's wrong with Autocoder, we managed quite well with that? Anyway, we learnt COBOL and we thought this is terribly, bureaucracy, all this writing you've got to do. Because we used to write things out on sheets and then type them in, there was no online stuff. You used to write your program on a sheet and then you'd pass it to someone who'd then enter it, a bit like a typist. But you kept these sheets, that was your program and it was all punch cards in those days. You might remember some of this Graeme, but you could put the cards at the back, which were called patch cards, and you could change the program by adding these patch cards. And you knew that a program had really been around long enough if there were more patch cards than there were the program cards at the beginning. Anyway, I had a hankering for living overseas and I looked. Boeing actually offered me a job but the Vietnam War was on and when they sent me some of the documentation they said you ought to sign up to be drafted for the Vietnam War. I didn't really fancy that too much. Especially as one of my mates, who I actually shared a

house with also did a maths degree at St Andrew's, had taken the job at Boeing and arrived there and thought it was wonderful until they said right, come along for your draft thing. And he shot off to Canada at that stage and came back to England, so I thought well that's not a good idea. I don't really want to end up in a war which I don't regard as I'm anything to do with. So I looked at various other jobs and one of the jobs that came up was this smallish computer manufacturer called Elliott, Elliott Automation, who had a fairly famous computer called the Elliott 803 which was very much a standard for universities at the time. It was one of the two main things sold to universities, sold hundreds to universities, and it had a language called ALGOL, which Elliott had developed. In fact some genius guy developed ALGOL literally in a weekend, he wrote the language in a weekend, and it became quite a standard. It was either ALGOL or Fortran. If you're European or UK based you used ALGOL, if you were American you used Fortran, those were the two main scientific languages. So, I joined the East European Division, based in London and we basically were support. So I learnt how to use ALGOL, and there were various other, there were some commercial languages which I can't remember. Language H was one I remember, which never survived, that was a commercial thing and I had to learn Language H so I could help people who had problems. Anyway, the general mode of working was that I'd go into work and the guy would say right, there's a problem in Budapest, jump on a plane and go to Budapest or Warsaw or wherever it was. And it was quite interesting, as a young guy, I was only 21. I thought it was great, you're jumping in, shooting off to these places, kind of sitting down with them trying to find out what the problem was and then quite often I couldn't work out what the problem was and they used to send a second wave of real technicians in who used to kind of analyse the thing. But most of the time it was pretty basic stuff. And that went on for about a year or a year and a half and Elliott was taken over by English Electric Computers, and English Electric Computers had a different policy for their East European Division. Their East European Division they based people in the place concerned and they said to me: "Where do you want to go? You can go to any of these list of countries, Czechoslovakia, Poland, Bulgaria." a whole swag of them. One of them was Yugoslavia, and Yugoslavia had, it wasn't really part of the Iron Curtain as such, you could come in and out easily. It had a beautiful coastline which was also an attraction. It didn't take me long to say: "Okay, I'll go to Yugoslavia." So I went to Serbia in fact, it was now Serbia, initially, based in Belgrade. I was part of a support team but as much as anything doing pre-sales. I was a technician assigned to the sales guy and we'd go there and try and persuade someone to buy an English Electric Computer, which was an IBM-compatible machine developed by RCA, do you remember those?

*Yeah, I follow this, I looked all this up for the first chapter of the book, I got the history of the architectures.*

The sales line was this was 100 times better for all kinds of reasons than the IBM. But it was basically used very similar architecture to the IBM, it was identical in fact. So just shows you compatible machines didn't just happen when PCs came along, they were, for a very long time they were making these. So anyway, I was based in Belgrade, but we were going all over the country, often driving, driving huge distances in Yugoslavia which is a bit of fun in its own way, but we ended up selling a computer, an RCA. English Electric, because they had their own name for it but it was an RCA computer, it did actually make them in Manchester. I went to the factory, they made the same, the computer but kind of under licence as it were. Quite an impressive factory, and so was, Elliott was a pretty impressive factory as well. These places were a bit like large, the old large milling machines, you went in, and they were all soldering boards and things which had the transistors which these things ran on. Anyway,

we sold a computer to, a large computer by those standards, to the largest petrol or oil company in Yugoslavia, which was based in Zagreb, in Croatia. And so I became the project manager for putting in all the things that we promised we'd do with this computer in Zagreb and I transferred to Zagreb, and stayed there for probably three years. This was '68 that I went to Yugoslavia, so it was about '71 I guess...

*That's about the time that ICL was formed.*

It was, well that's exactly right, and in fact you're completely on the ball Graeme. Because one day we kind of, we were way away down in Yugoslavia. We didn't know what the heck was going on, apart from odd Telexes we used to receive and phone calls and things, and we discovered that ICL was being formed. It was really a push by the British government to have one large computer company rather than several small ones. And so all of a sudden our logo changed and the name of the company changed, but nothing else changed. We carried on as normal. Except we had another range of computers that we could sell which was the old ICT 1900 range, and so we had two separate ranges. And it was quite funny at the time because whenever you met someone the first thing you said was: "Are you an ICT person or English Electric person? Are you one of us or one of the enemies?" But over a couple of years we all became mates and so on. So I was living in Yugoslavia and I decided that skiing was a good idea and I used to go up to Slovenia skiing. This is about 100 miles up the road and they've got mountains and it's really a bit like Austria: it was on the other side of the same mountain range really. Anyway, to cut a long story short on that one I ended up getting married in '71 to a Slovenian lady who I'm still married to, in fact we've got our 50<sup>th</sup> anniversary next year which is amazing really if I think about it. But I was offered a job to go to Russia to be part of the ICL group in Russia, in Moscow. That was in the Brezhnev days and so I went and it sounded fun, and it was quite an interesting project. It was a project which had actually hit the headlines, because it was to do with nuclear research and Americans were absolutely dead scared that they would use this for developing nuclear weapons. And the job we had was to try and work out from the machine code whether or not it was a nuclear weapons program or it was a nuclear electricity station or other uses for nuclear thing. Or what they used to call bubble chambers which was research on nuclear things. And that was just outside Moscow. So I was involved in that but somehow I got moved from that into a pure selling role, that's when I took up sales in Moscow.

*Sorry, what year was it, was it '71 or...?*

It was, that would have been, well I got married in '71, so it would have been '72 or '73, something like that. Yeah, that was...

*And you joined UNIVAC.*

Exactly, I joined Sperry UNIVAC at that point, and the reason was I had to leave Russia in a bit of a hurry. I had a car accident and the British Embassy had said: "If anything happens to you tell us immediately": because they were throwing out Russian diplomats in London and they were absolutely expecting that there would be retaliation. The fear was that we'd be kind of... I'd be sent to Siberia or something for this car accident which happened on an icy road. I went into the back of this taxi which didn't do much good for my car, but it was still driveable, but it was a bit of a mess. So anyway, ICL said: "Come back to London, we'll send you somewhere else." So I left Russia in a hurry, which is quite an exciting story but it all worked out, and I bumped into someone I'd known from Sperry UNIVAC at Heathrow Airport actually, bumped in. And he said: "What are you doing now?" I said: "Well, I've just

come back from Russia and I'm probably going to go somewhere else, and they're talking about sending me to Romania." He said: "Romania, you don't want to go to Romania, you know Yugoslavia like the palm of your hand." By that time, I could speak the language reasonably, I'd been there three years, two or three years, and he said: "Well we're setting up things in Slovenia." In fact, that's how I knew him, he was a kind of sales manager based in Zurich, where Sperry ran all their East European Division from. He said: 'Come over to Zurich for the weekend and we'll talk about it.' And that seemed a good idea to me, a nice weekend in Zurich, and anyway, the end result was I ended up joining Sperry UNIVAC, and my wife was from Slovenia. Slovenia was the most developed of the republics in the old Yugoslavia, now a separate country of course. It was much richer, it was much better developed and everything, and it was IBM's headquarters. IBM had 99 percent of the market and they based their whole Yugoslav headquarters in Ljubljana in Slovenia. The end result was that I tried in my own way to have a go at IBM. I thought there must be a chance here because they're fat and lazy, they sell very aggressively everywhere else, but that's their home market, that's the way they looked at it, and they had 99 percent. I had had a go at trying to sell into Slovenia with ICL, I tried to sell the University Project, which ended up being, they took it to CDC in the end. But anyway, it kind of appealed to me to try it, and I worked from my mother-in-law's kitchen. That was our office initially, and then we moved up. I sold quite a large computer to a local manufacturing company that made refrigerators, which was well known. It was one of IBM's prize things, they always mentioned, when I went and asked, I went round to a lot of the IBM companies, or people that had IBM computers, and said: "Why did you buy IBM?" And they said: "We bought it because LTH, such a wonderful company." I thought well I'll go around and see LTH, this refrigerator company, and they said: "Well actually, we're not that happy with IBM, we don't think they're treating us in the best possible way, what have you got to offer?" And so anyway, I ended up selling to their prize company and the guy suddenly realised that I was on the cusp, I had a letter of intent from this guy. I was on the cusp of selling and he then launched into everything to try and stop me selling this, but we managed to prevail, to get the letter of intent was like three months and the actual sale took another year. But eventually we prevailed, and we installed that and that was a great start. That really got people's attention that we'd taken over this prized IBM one. And after that the next one was easier, the one after that was easier still, and then we started getting a reputation. We ended up having quite a comfortable office, quite a large office we moved into. Initially into a hotel room in Ljubljana and then we had our own offices and so on, and we had, I don't know, probably 10 people, 10 or 15 people in Ljubljana and...

*And you were head of the office, the...?*

I was Head of the office and we worked through distributors, so it was one of these situations where you..., I ran the place and during that time they asked me to actually look after Serbia as well, so I was looking after Slovenia and Serbia but not Croatia, so it was sort of both ways.

*How long were you there?*

*Yeah, and then you were sent to Singapore and Hong Kong?*

I tell you what happened there, basically what happened was Tito died, and when Tito died the place went to wrack and ruin in that there was no-one could decide who was going to be President. And they ended up with a cyclical thing, every year there'd be a new President from another republic and that was never going to work, quite frankly. And they suddenly

started running out of foreign currency. Previously we could, you know, as long as we could get the decision from the people, they would get foreign currency and we would sell it. There was local and foreign currency and that applied to the whole of Eastern Europe. There were two currencies. A friend of mine, a guy I worked with in Zagreb in fact had taken up, he'd changed out of computers into selling bank notes actually, of all things. Sort of a strange thing to do. He was based in Singapore, he'd gone there to Singapore. They offered him a job, and he said: "Why don't you come down for a holiday down there?" and I'd never been to South East Asia before and I thought that sounds interesting, so I went down to Singapore with my wife that we'd just been married about maybe less than six months.

*What year are we in Jim?*

We're in '76 I would say, yeah, '76, '77, might be, yeah, must be '76, something like that. I'd sold several computers to universities in Slovenia at that time, and the Sperry UNIVAC guys heard that I was coming down. I was quite infamous I suppose, within UNIVAC ranks, because we'd beaten IBM out and we became one of the dominant suppliers to them, The other alternative if you like. They heard I was coming, and they said: "Why don't you come into the office and we've got, we're trying to sell to a university in Malaysia, (MU, Malaysian University, the biggest university there at the time in Kuala Lumpur) and we'll see if we can get you to do a presentation to them as to the things you can do at universities with computers." So I thought, well that's great, they're going to pay for me to go to a country I haven't even, didn't think I was even going to go to. And that was what I did. I went up there and gave the presentation, I gave them the usual spiel about what we did and how it all worked and so on and went back and continued with my two-week holiday and went back to carry on in Yugoslavia. And I told the guys in London that if something did come up in South East Asia I'd be interested in moving there. That was the HR kind of people, and they said: "Oh, that might be interesting, we'll think about that." Because things were getting a bit rough in Yugoslavia in terms of just not being able to get money. We used to get the sale, but we didn't, couldn't get the money. Or the company couldn't get the money and it became pretty pointless to sell things if you can't get paid for it. So, all of a sudden, I was working in Belgrade that particular day and into my office comes a guy who said: "My name's Ron Robbins and I'm in charge of South East Asia, for Sperry UNIVAC and I want to offer you a job". I said: "really?" And so, it came out of the blue really. He'd flown into Belgrade, which I thought was pretty impressive, to kind of do a face-to-face interview, and I said: "Well I'm certainly interested in that". Anyway, we kind of settled it on the day that I'd move down, straight down to Singapore a few weeks later, that was in '77 I'd say.

*And how long did you stay in Singapore?*

So, I was in Singapore for a couple of years, and I was looking after Singapore, Malaysia, Indonesia, and Thailand. Those were the countries, if you like, that we handled from Singapore. And then one of the guys who I worked with in Yugoslavia, in fact my boss in Yugoslavia, suddenly rocked up in Hong Kong. Hong Kong was the headquarters for the whole of Asia. So we reported to Hong Kong, and he said: "We're going to reorganise things, we want you to actually come to Hong Kong and look after all the distributors, all of the companies (that was apart from Hong Kong and Singapore which were direct operations, everywhere else was via distributors) We want you to look after it all from Taiwan right across to India." India was an interesting one because IBM had just pulled out of India or had been forced out of India. Because they refused to disclose some, what they regarded as trade secrets I suppose. And they were selling second-hand 1401s, of all things, to India. They were taking terrible advantage of the marketplace, sending their old second-hand machines

there. And so India was actually ripe for the picking, and Malaysia was going gangbusters, in fact, we sold a computer to that university and another university, and oil companies. I made the sales numbers in so far as in Singapore not based on Singapore but based on Malaysia, Malaysia became huge, it became one of our biggest markets.

*So, what then brought you to Australia?*

I'm probably rattling on for too long, so I went...

*What then brought you to Australia Jim?*

Well, I was there in, I went to Hong Kong in '79 and my eldest daughter was probably, in '74 she was born, so she was....., I was offered another three-year, they used to do three-year assignments as it were, and I was offered another three-year assignment and I realised that was going to, might compromise her secondary education. Primary education was fine, the local one, but I was a bit concerned about how good it was at the secondary level. I started thinking about what do I want to do now? The obvious thing was to go back to the UK and that was always an option. I had a strange thing in the contract which I'd agreed that weekend in Zurich, many years before, that I could choose where I wanted to go in my contract when I left. Anyway, they wanted me to go down to South Africa at one time, which was the middle of Apartheid which didn't really appeal. America was another one, they wanted me to go to the headquarters in Philadelphia and that didn't appeal either really, too much. Because I'd been to America a lot of times with Sperry UNIVAC, I knew what it was like. And although it has a lot of appeal, it wasn't really a lifestyle that I really fancied. And there was Australia just down the road as it were. I had visited Australia when I was living in Hong Kong, because I moved to Hong Kong in '79 I suppose. I had an uncle in Adelaide, and I went down to Adelaide to see him because he had a heart attack. He was as old as we are Graeme. And I went around Australia by, you had a flight which went around to all the capital cities. I don't know if you remember those days, a special price for visitors and so on? It took a week and went around and went to all the capital cities. In fact, I flew into Perth from Hong Kong, and so I stayed a few days in Perth and knew it was nice. They said: "Right, we'd like you to come down to Australia." But I was going to be based either in Sydney or Canberra. Those were the two options and that was fine, I was happy with that. and on the day I actually came down from Hong Kong to actually start working they said: "Oh, change of plan, the guy in Western Australia, we had to get rid of him, he's caused some problems and we're looking for a new manager for Western Australia, we want you to go." I said "Yeah, that's fine." In that split second of doing things that totally changed my life forever, because that's how I came to WA and I've been here ever since, that was in '81, so...

*Yeah, how long then did you stay with UNIVAC after you came to Australia?*

It was about three years, I think '81 to about '84, and then I joined a local software company. We did okay with UNIVAC, but it was a pretty hard market in those days. We were selling large mainframes and there was really only a limited number. The minicomputers were coming in.

*Well, UNIVAC's star was starting to fade then, wasn't it?*

Data General and all the rest of them were coming and they were the big names. So, I joined a software company, was there for three years, we had a great time, but somehow, I ended up...

*What company was that and what was your role?*

Yeah, sorry?

*Sorry Jim, what company was that and what was your role there?*

Oh, okay, I was marketing director I suppose, they used to call me, and I was on the Board, so I suppose it was the directorship at the time, it wasn't a formal directorship, it was called Super Software, wonderful name. We built it up quite substantially, it became really quite a large company, we...

*What sort of software did you sell?*

Well, one of the ones we sold was local government software, and there were 70 or 80 local governments, I think there was more than that, may have been 100 local government shires and we got a lot of them. I'd say we got the larger ones. Some of them were very small but didn't have a computer or were very small. But the ones that wanted things for rates and rubbish collection and all the rest of it, we added applications for those which we'd written. And they thought it was wonderful, because we could take all this headache off them. It wasn't a bureau service. We sold them an NCR computer which they ran it on, and that was good, and we had various other companies as well. Had about, quite a lot, probably the best part of 100 clients, I'd say, more than 100 clients. But Sun had just emerged. Do you remember Sun when it came? And that was quite a revolutionary company at the time, and I knew the guy who ran the Sun office. And he said if you want I can offer you a job as.... You're a salesman with Sun, and at that time you only had to say the word and everyone came running type thing. It was very hot just at that particular moment, that would have been about '87, around '87. I was a freelance salesperson on a commission with Sun, and made a heap of money with them, because I had all the benefits of having the Sun name and everything behind me. I operated from their office but it was a kind of slightly unusual way of doing it, but I was basically on a commission basis. I can't remember how much it was, it might have been 25 or 30 percent, but it was almost a licence to print money in those days. We sold to Telstra, just lots of companies. They all wanted the Sun workstation which, was a Unix computer in fact at the time. One of the things I'd done at Super Software, we'd made the leap into Unix when Unix really wasn't considered the dominant operating system. Pick was the dominant operating system, certainly in Western Australia. So we became the kind of Unix commercial use of Unix specialists, all our stuff was written around that. Anyway, so that's how I guess I had an interest in selling Unix-based stuff, and I worked for them for a year or so. Then I was approached by a company I'd heard of, but didn't really know much about, to take over their WA operations. That was Tandem, and Tandem Computers were the supplier for ATM operations, in fact anything which was what they used to call non-stop. So stock exchanges and anything, reservations, anything which absolutely couldn't stop working, if it was going to be a disaster if the thing would stop working, Tandem...

*And what year was that?*

That would be about...

*About '90 now.*

Yeah, we're getting up towards '90, it would have been '87, '88, something, yeah, coming up '87 to '90. I worked for Tandem for about three years, and then joined another software company, and I was kind of more into consulting, interested in doing more consultancy than just sales at that time. I had a great time with Tandem by the way, it was a fabulous machine,

never stopped running. One of the demonstrations we used to do was to actually have a running machine in the office and it would all be going and you'd pull out things out of the machine while it was running, which was the thing you just couldn't do, and the thing would carry on. It would carry on, it wouldn't halt, you had this pile of, it had like four minimum, usually it was four processors, could be up to 16, all running together. And you'd pull these out and the thing wouldn't miss a beat. The real thing about it was it had this operating system which detected that there was a problem and switched to another CPU within the computer, and everything else was duplicated, all the disks and everything else, everything was duplicated several times.

*I remember they used to give away a two-handed coffee mug so that if you broke a handle off your coffee mug it would still work.*

That's right, yeah. It doesn't matter which handle you use, so yeah, that was clever. It was a good company. I mean I spent quite a lot of time over in the US with them, actually, because they, just on sales business and so on. But anyway, I ended up running a consultancy division for a software company which was called ATR, Australian Technology Resources. Quite a well-known company in Perth, probably had the best part of 100 people. And one of the things they mentioned when I took it on, they said: "Oh, by the way, we've got this new distributorship for this company called Gartner." And I said: "Oh, okay", I'd heard of Gartner. In fact, I was quite impressed because I had read some of their stuff, and IBM had told me about it and said, this is the bee's knees and all this kind of thing in terms of advice and what's going on. So they had this for about a year, they had this distributorship, hadn't sold any, and I took it on myself to actually go around and try and sell Gartner services. I found it remarkably easy actually, because people were absolutely crying out for the kind of independent advice on things. I sold to the banks and any large WA-based organisation. I only had to phone up and say I want to come and talk to you about Gartner and they'd say "When are you coming, can you come today?"

*Now what year are we now Jim, it's early-90s?*

Yeah, we're in the 90s, yeah, we're about '94 I'd say.

*Yes, so it's '95 when I joined Gartner, when you and I had a bit to do with each other.*

Yeah, it was in that time. Anyway, my lucky break was that the guy who owned ATR, the company, was made an offer to sell the whole company to a South African, I think they were, American-based but they had a link with South Africa somehow. I think they operated southern hemisphere or something from South Africa. Anyway, he did very well out of it and sold his company for several tens of millions, it might even have been \$100 million. It was a substantial sum of money, and Gartner said: "We can't have someone representing us because this company (I can't remember the name of them now, but they had a whole lot of, they were selling software and so on, whereas previously it was really a consultancy which is why Gartner didn't mind having them as a distributorship) and they said: "We can't have somebody selling software, sell our products as well. We can't be linked in with that." So they said: "Either we're going to open a direct office in Perth or our actually preferred alternative is that if you would take up the distributorship. Because then we don't have to invest in setting up an office, which we were intending to do". I said: "Well that sounds terrific." Because I'd run my own business, anyway, when I was with Sun. So I wasn't really afraid of having to actually do that. I thought, well knowing the appeal that Gartner has and the way the market was able to be, attacked very easily, or attacked is the wrong word, but it

was really a fairly straightforward product to sell. Because the analysts, and Graeme was one of them, were absolutely terrific. I mean they were the people writing the research and doing the research, and they were just magic. You could wheel them in anywhere and they would impress everyone. They would be willing to stick their necks out and say: "No, that company is crap and this one's great." And no-one else would say that, and they were very good. They were willing to take a stand and they had a very good track record of getting the thing right. Not 100 percent, but it was pretty damn good. Anyway, I started off, again, I was working by myself initially and then the hardest thing was getting the first person I took on, which doubled the size of the thing. I'd inherited the five or six clients that I'd already got, so that was a good start. And anyway we grew quite rapidly within Western Australia and Gartner became a real standard. We ended up with 70 or 80 clients, with the government departments and so on, and I had, at the end I had that for the best part of ten years. We're up now to, yeah, it would probably be '97 I started and it went through to about 2007, when I was 63 or 64 at that stage. I thought this is probably a good time to ...Gartner actually wanted to reduce the percentage we got, because remember I was still running it based on a percentage basis, and I wasn't too keen on that having a thing, a rate cut. Gartner had always said if you sell this you've got to sell it to us or you've got to give us the option to buy it. So I knew I only had one..., and they made it clear, they weren't going to set up another distributorship, they would either, they would buy it directly, either I was going to be on running it or they would take it over. Remember Bob Hayward, I'm sure you remember him?

*Oh, still a friend of mine.*

Yeah, well he's a fine fellow, he was assigned the thing of starting the negotiation, and I remember he called it Project Quokka. Ask him about that if you ever talk. He said we'll call it Project Quokka, I don't know if you know what a quokka is, it's...

*The little animals out on Rottnest Island.*

Those little animals on Rottnest Island, it's a kind of little marsupial, it's quite an icon of Western Australia. So anyway, Bob and myself we haggled over things for a long time. We didn't really get anywhere, and I think he was very limited in what he could offer, and anyway... Then someone else took it over and it eventually ended up being handled from the US. What I suddenly realised was that the amount that they'd offered they were thinking in US dollar terms and I thought they meant Australian dollars. So when that realisation came I realised it was actually twice as much as I thought they were offering and then it became a really attractive offer and I said yeah, that's great. They thought it was fantastic. They took it over and immediately I accepted, more or less. So, it was all, I think Bob was under the impression it was in Australian dollars as well. That was classic of Gartner, they had a lot of good things about them but administratively they were fairly disorganised, weren't they?

*Yeah.*

But I really enjoyed working for Gartner, that was ten years really. I worked with Gartner as a distributorship and we not only had WA at that time, we also had Northern Territory. Because no-one was up in Northern Territory. And again a bit like when I was in Slovenia with IBM, I thought there's a market there ripe for the picking because no-one's there (and the same in India when we sold in India and we went gangbusters in India as well. I must have had, been back with about 15 or 20 different contracts and they were all huge in India. India just went mad, so I like markets like that that were open) And went up and it was always a very small part of that total operation. But it was a significant part, probably the

best part of a million dollars a year just from the Northern Territory and really it was one client, which was the Northern Territory government. There were a couple of others but they were very small by comparison. So that was when I kind of stepped down. One of the nice things about that Gartner relation, Graeme will probably relate to this, was they said: "We'd like you to actually still be part of it on a kind of up to two day a week basis. Just because you know all of the clients and what the story is behind them and so on." And I said "Great, that sounds good." and it was meant to be a six-month arrangement, ended up lasting two years because they kept on renewing it every six months. So that was a great lead into retirement as it were, but I was on quite a few Boards and things at that stage.

*Yeah, I see from your bio you were very active in the Australian Computer Society?*

I was, I was, yeah.

*The AIIA.*

Well, I joined the Computer Society, really just to get to know people, it was a networking thing as far as I was concerned where I was...

*Well, you're always the consummate networker, weren't you?*

This is part and parcel of the sales thing, isn't it, but it was a great way to get to know people, and anyway, I ended up being Chair eventually. Then I went on to various national positions of the ACS, went up to Vice President, never got to President I'm glad to say, and that was a long time ago. But the players that were in, what you'd call the clique players now, there was Nick Tate, I know very well, and Anthony Wong of course, and various others, and in fact at that time Johann. (We're getting into a different area Sebastian, sorry.) But that time, Johann was perhaps a mentor, he was a mentee of mine to an extent, or he regarded himself as that, but anyway, I won't get into the ACS politics because it's...

*I've had enough of it myself.*

*Maybe I can follow up...*

Yeah, I'm sure you have. So, but yeah, one of the things I did when I became Chair, I said there's no awards ceremony for the IT thing in WA.

*The chair of WA ACS.*

Many years ago, I set up WAITTA. It was WA IT and Tech, initially the WAITA awards WAITA, and we added another T for telecommunications, for telecommunications and ICT as it were. And we were able to add another T without changing the name. It's still WAITTA as far as anybody was concerned. I set that up and that grew from just being a little adjunct to the conference, like a dinner to the conference, to being a total event in its own right with 400 or 500 people coming. In fact it's in its 30<sup>th</sup> year next year, and I've been dragged back on for the Board of WAITTA. I had stepped down, I was Chair of that for 12 years and that was really the reason I ended up with the Order of Australia for that. Because it was quite well known within WA and so on.

*And so, what was the main, the Order of Australia, what was that ostensibly given to you for?*

Well, ostensibly, basically for setting up the IT awards, but various other things that I've been involved in, including AIIA. Because AIIA started up and I was involved in the start of that, so I had a foot in both camps, ACS, and AIIA, which was a bit strange at the time.

*Okay, so you landed in Western Australia in '81 and...*

That's right.

*...and made yourself Mr IT WA, didn't you?*

A bit of an exaggeration but I certainly...

*Everybody knows Jim Ellis...*

I was certainly well known, I was well known and I knew everyone and Perth's really just a village when it comes down to it, especially in IT. Everyone knows everyone and you've got to be careful, if you go and, I saw various people were doing this, they went and blotted their copybook on stupid things, and they were persona non-grata and that was the end of their career. So I was always careful to try and do the right thing by people.

*Yeah, you also did very well. So you're a bit different to a lot of the people we're talking to for this exercise, we're talking to a lot of academics, a few CIO type people. You're one of the few we're talking to who is essentially on the sales and marketing side and management side as much as anything else. So this idea of innovation, if we could move to that part of the conversation now, what do you think, did you ever do anything innovative?*

Oh, a bit of Gartner here, but one of the things of course that has totally changed things, and I thought it would change things. I mean the mobile phone would change things in the long term, but the way the Apple iPhone has changed things so dramatically, and initially it was a Blackberry, do you remember the Blackberry Graeme I'm sure? But the Apple, with all the apps and things that came into it, that has totally changed computing full stop. I mean the thing we've got in our pockets, mobile phone, is so powerful, does so much, and so that has been the revolution I would say in the last ten years.

*And what's something innovative that you yourself have done in your career? Have you just been an operative or is there anything that you've been involved in that you would say to yourself, well that was really innovative, I'm proud of that?*

Well, I guess I am proud that I set up that IT awards and that became part of the iAwards, which is the national one. And then the iAwards was part of APICTA which was the Asia Pacific one. I was chief judge for quite a long time of iAwards, and I was on the Board of APICTA as well, so I had got heavily involved in the awards business I guess. One of the reasons WAITTA went so well was that we had a very strict judging procedure, a very demonstrably fair judging procedure. One of the other things I saw other awards companies do, they just kind of said: "Oh, who should we give it to?" and scratch their heads and that was it, and there was no kind of procedure and way of going through it. So WAITTA was a success and it's still going strong I have to say, surprisingly. It has morphed a little bit into other things, it has a junior thing with schools now called "Game Changers" and various other things, but...

*Yeah, so obviously went with that award...*

Well, that was probably the thing that I'll be remembered for, if anything, was setting up those whole awards things. I don't know, I was personally proud of setting up businesses from scratch, I suppose. Which was the case with certainly that Sperry UNIVAC in Slovenia and then getting involved in various parts of Asia. Asia was really fun, because every market

had its own particular characteristic, every country operated in a different way. Some of them in rather dodgy ways, the Americans at that time were very, very strict on. I had to sign a thing every six months saying I was not involved in any kickbacks or anything like that, and it had to be witnessed by a well-known lawyer and all that sort of thing. But some of the countries, times when I just said: "I can't even, I don't even want to hear this conversation." and that was Indonesia and the Philippines, they were the dodgy ones. But other places like Singapore were actually squeaky clean, more clean than anywhere else I ever worked. But India was very squeaky clean as well, which was good. So I was yeah, developing markets in some of those places. Malaysia was a different one as well, I was just in the right place at the right time really. But yeah, so Slovenia, India, and Malaysia were certainly highlights of my career in terms of building up things from nothing, and I did the same with Gartner I suppose to an extent. So I suppose if I had any talent at all it would be being able to set things up and be a bit entrepreneurial about the whole thing, but anyway. Have you ever heard of Gartner Sebastian? You probably haven't...

*Yes, of course.*

You have.

*Gartner's Hype Cycle is something that I show my students every semester.*

Oh okay, because that was a good sales line, I have to say. It had some truth to it as well.

*Yes, it's just the things that appear in one year disappear the next year, and they may reappear a few years down the track or not at all, so there is no, but it's a very good tool to get students to think what technology is doing to organisations.*

*I found it very useful at Gartner, I remember before it was developed, listening to one of the Gartner, before it was formally developed, listening to one of the senior Gartner people. She was a woman, I can't remember who she was, but describing the general concept of the Hype Cycle before I had been formalised in the early 90s.*

Yeah.

*So, these awards...*

How long were you with, I shouldn't be interviewing you Graeme, but how long were you with...?

*I wasn't there for long Jim, I was only two years at Gartner, they acquired my company which is how I got into it.*

Yeah, well there's a little bit of similarity in a way between...

*Yeah, but I didn't like that corporateness of it, so I got out after a couple of years.*

*Because I was still shareholder in Strategic Publishing, and we sold that...*

That was running the ACS, wasn't that running the ACS ...?

*Well, we did, we had the ACS publication for a while, we got rid of it, we sold that to Fairfax in the end of '99...*

You always were a very innovative, an innovative analyst, I always enjoyed...

*Well, that's one word for it...*

You were always, talk about people that are willing to stick their neck out and say something controversial...

*Yeah, well I said to Craig Batey once, I said where would I be if I were still at Gartner, and he said if you were still at Gartner Graeme, you would have been fired years ago.*

*Okay Jim, can we ask you about these awards and your involvement with the societies, both ACS and AIIA and others, what role do they play in fostering innovation?*

Well, that's a very good question. These days, probably not a very central one, but there was a time when the ACS was the main professional operation. Anyone who wasn't in ACS really wasn't in IT almost. It was very critical that you were really part of that, if you wanted to keep up with what was going on. AIIA was obviously set up for the industry and that I think was fairly crucial. The industry was very disjointed before, and that did serve or does serve I think quite a useful purpose. I haven't been involved in it for years now, so it seems to come and go a little bit. But overall, I think it's done some useful things as well. I'm not sure how relevant they are, I think ACS has kind of shot itself in the foot, hasn't it Graeme? It's certainly got itself in some hot water in one way or another. And really, I think a lot of that could have been avoided, but that's just my personal view, I guess. But nowadays, I guess the whole influence of social media and groups springing up and getting a well-known name for themselves very quickly, this makes the world quite different to what it used to be. I think organisations can become quite big very quickly but also disappear, the Hype Cycle again. Yeah, I mean it's the old story, isn't it, everything changes but everything stays the same in some ways.

*Plus ça change.*

Yeah.

*So, you said that setting up these awards for WA really were helpful, why do you think it was so important to have an award that was really based on a clear procedure?*

Well, having it based on a clear judging procedure and well-defined judging role meant that it did have some credibility, it wasn't just awards for the old boys, type thing. In fact I know that the iAwards took our..., we developed quite a really comprehensive judging manual. And the iAwards took that and decided that was great. I mean the use of the awards was that we were able to recognise companies that were just start-ups, and give them publicity and propel themselves into greatness as it were. Probably again, it doesn't apply so much now, because the publicity can be done so differently. But there were quite a few companies that were, well man and a dog and they became quite big and they were kind enough to say a lot of that was due to WAITTA and the publicity they got from it. So there was a usefulness for the awards, no question.

*Can you give an example of one or two of those companies?*

Okay, now, good question Sebastian. There were some, I can't remember them off the top of my head. One of them went to Silicon Valley and became quite large in Silicon Valley and, one company I worked for, for a short period of time, which was how I met this guy was QPSX, have you ever heard, you ever hear of QPSX?

*Yeah, that acronym is familiar to me.*

Yeah. QPSX was a research project out of the University of Western Australia that was basically developing a broadband, a high-speed thing. In the days when 64 K was your main thing, and there was a guy called Rob<sup>1</sup>, Roger, Robert, Roger... I'll send you the details. Anyway, he was the inventor if you like, he was a student, a genius behind this QPSX thing. It look like it was going to take over the world for a time, but it was bought by Telstra, well Telstra funded it so it was kind of a joint venture between the University of WA and Telstra. And somehow they kind of stuffed it up really, because I think other things were coming in and took over from it. After I left Super Software, I actually became marketing manager for QPSX for a time, but...

*Yeah, I remember from my distant past, I hadn't heard it for ages, but...*

No, no, so and that guy whose name I can't recall but I'll send to you, he set up a kind of spring off if you like, something related to that whole broadband concept, and he set up a company in Silicon Valley and it became large, became a large...

*Roger Jeffrey was it?*

No, it wasn't Roger Jeffrey, it was...

*So...*

*Jim, you've worked all around the world in I know the last 40 years of so has been in Australia, but you have experience in England, Eastern Europe obviously, and Asia. What have you found, obviously you've adopted Australia as your home, what peculiarity if that's the right word of the Australian psyche, the Australian personality do you think are helpful or not when it comes to innovation?*

I think a willingness to adopt change is a great thing. Much more so than the UK anyway, which is very formal: You haven't done things like that, stick to the old school type thing, it was in those days anyway, to an extent...

*So, you think Australians are more open to change than many other...?*

Absolutely, I think it is, and I think that's been one of the great reasons why we've had some great innovations coming out of Australia. People have been willing to adopt it, and I think various international companies have recognised that and they often use Australia as their test market, because they know that Australians will give it a fair go and try and see what it's like. I think that's one of the many characteristics. I like that, and that openness of people, you don't have to call everyone Mr Philips or something. I remember my uncle saying that, he said: "It's fantastic, you meet someone for the first time and they're MD of some large company and he immediately calls you by your first name and expects you to call him by his, that was pretty...."

*I was talking to a German once and he'd just come to Australia and he said to me that, it was on a flight, and then he couldn't believe when the plane landed how everybody on the plane seemed to be friends with each other, because they were talking to each other, he said that never happens in Germany, you don't talk to strangers.*

That's right, that is so true.

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<sup>1</sup> Rob Newman (Ed)

*Sebastian is of course German.*

Australia is a great country, I mean, it's been great to me as well because I really enjoyed all the time I've been here, all the different areas that I worked in, they've all been enjoyable.

*Yeah, so you've hired and fired, I assume you've fired a few, hired a lot of people, what sort of attributes do you look for when you hire people?*

Okay, because I was involved in a lot of salespeople, I mean sales was often the make or break of companies that I worked for, particularly the computer companies, I became quite good at recognising who was going to be, who's a good salesman and who isn't. I really couldn't give you a checklist, a formal checklist, but somehow you get the impression just from talking to them that these guys have the, or this person-in fact, I had quite a few females. In fact, two of the people I had employed as salespeople, that's in my days with Gartner in Westinfo as it was called, became the top salespeople in Gartner for Asia Pacific, which was surprising. But somehow, it's, I guess, recognising an openness, ability to ask questions if you like, not take no for an answer and various other characteristics that you could somehow see. I guess if there was one thing that helped me more than anything else, it was that ability to be able to take on good salespeople. Because you can't do all the selling yourself, you've got to have good people around you. And I learnt that a lot when I was running my own business that the people you have under you are the most important thing.

*Sebastian, do you have any other questions?*

*I would like to follow-up a little bit on this awards topic, how did you find these people, because I think what we are hearing a lot is the ability to attract venture capital for enterprising start-ups is really important, and it seems that the award was one of the vehicles you achieved this. So how did somebody get to this point, do they have to apply, did you find them, or was there a 20-page submission that they have to make, how did this work?*

What, you mean the venture capitalists?

*No, no, for the application for the awards, or maybe I have two questions.*

The awards, okay. Well there was a process of inviting people who have awards. There was a format: these are the kind of questions or the areas you should address, and those are the areas we rank them on as well. And depending on the particular award, it varied, the things obviously. So I guess we made it up as we went along largely. But the people I initially took on were some of the people from the ACS, involved with the ACS, but as we progressed some of the people I recognised were award winners, would make good people to have on the committee. So they came on and they became really useful people to have on it. So again, being able to put a good team around you was really the key I think, and that judging process which is fairly clear...

*And how did you find the companies to be potential winners?*

Well, it really is a question of sometimes you would approach a company and say: "Have you thought about putting in a submission for the WAITTA? Because we think you may have, we can't give you any guarantee whatsoever, there may be, you would certainly be an interesting one." And they would understand that and come into it. I can't say there's any magic formula really, but over the years we developed a fairly clear process. And by this date they have to register their interest and then complete their submission by such and such a date. And then we'd have the judging process, and then we'd set up the whole gala dinner which was the big event sort of thing. I think most of the other branches, not only of ACS but all the other

awards that were around the country, they recognised the one thing we did well was not only the judging, but also the awards dinner, that was done really well. We had a really good MC who really held it together, I did the MC myself for a time and that wasn't necessarily the best thing that, that was great, it was very small, we only had three categories initially. As time went by we ended up with about 11 but that was the maximum, because we realised that the whole night was going to take too long if we had any more. So, every time we put a new one in, we knocked one out. so, but it was over that many years, I mean I was chair for 12 years and the next chair was probably the best part of 10 years, so we had a continuity which was useful.

*And the second part of my question was about venture capital.*

Oh, venture capital, yeah.

*How did this buy in to venture capital?*

Yeah, well venture capital really came into it and I guess I became interested in that only because it was such a part of these start-ups if you like, in the awards. So it was the awards that really alerted me to the whole thing, and QPSX as well, which was a kind of venture capital type thing, In fact that guy (whose name still escapes me but I'll come back to you on that), he moved into being a venture capitalist. He went from running his own company and developing it and selling it, and he sold it for some huge amount of money to be a venture capitalist. And some of the venture capital companies did well, others didn't, it's like everything, there's some people can make it happen, some can't. But venture capital is key, and they're still a very important part of the whole thing. There's a thing called angel investors which get people, who are interested in investing in start-ups, to consider them, it's a bit like Shark Tank kind of thing. You get them to do a presentation, you decide if you want to make an investment in them. Venture capitalism is a whole story in its own right, and I was never really involved in it. I never really got heavily involved but I was very aware of it and knew a lot of the people in it, and yeah.

*In hindsight what do you think was the best benefit from being involved in these societies?*

Well as I say, because I was the new boy on the block, actually the ACS was a vehicle to get to know people very quickly in Perth and even more so than any of the other cities as such. Everyone knows everyone type of thing. And it didn't take long for me to know who mattered, and I put that down largely to the ACS as such. I think they're an important part of..., I'll be very sorry to see the ACS disappear if it does, I think it has got a role to play in terms of...

*Yeah.*

There's no doubt it will be replaced by some other, another organisation...

*I think they seem to be getting their act together.*

Yeah, I think Oppermann is quite good from what I see...

*Yeah, he's a very good man. Hey, we'll end Jim.*

*We'll end on a high note, what are your biggest disappointments, either in your professional career or for the Australian IT industry?*

That's a good one. IT industry, well I'm disappointed to see the way that the ACS has gone into this kind of death spiral at the moment, but I think it'll come out of it, as you say. I'm never really too disappointed with things, but ...

*Yeah, you don't strike me as a disappointed kind...*

Well, it's a change of situation, and as I say, everything is going to change and accept that change and be ready to jump into it, and see what the benefits are. Because with any change there are pros and cons, there's always an upside and something you can take benefit from. On the personal side, not too much. I've had a wonderful life, very lucky to have various things fall in my lap, like the Gartner thing, that was one. I guess having married a Slovenian lady and set up the operations in Slovenia really made my name. I became quite famous within UNIVAC at the time, because they couldn't believe that one man would kind of start up a whole operation against IBM singlehandedly and succeed really. So there were a few things that happened that I was in the right place at the right time.

*End*