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Quarterly Bulletin For the Institution of Analysts & Programmers

Issue 12 December 1994

Council Elections -Nominations for election in 1995

The constitution of the IAP provides for a governing Council of fifteen elected members. Each member serves for 3 years, five members retiring and five new members being elected every year.

We are now calling for nominations for the five Council places which become available on 1st June 1995. Only Companions, Fellows or Members of the Institution can stand for the Council, but all members including Associate Members are entitled to make nominations and to vote in the elections.

Each member can nominate up to five people, because there are five vacancies to be filled. Nominations should be addressed to the Director General of the Institution, saying who you are and who you wish to nominate. Nominations received after 31st January 1995 will be ignored.

Those thinking of standing for the Council should know that Section 4 of the Institution's Memorandum of Association states "...no member of its Council of Management or Governing Body shall be appointed to any office of the Institution paid by salary or fees or receive any remuneration or other benefit or money's worth from the Institution".

Members are expected to attend full meetings of the Council three times a year. The Institution does not normally pay expenses, but considerable effort is made to minimise the cost to Members.

Meetings are held in varying

wherever possible the Council's business is conducted by letter, telephone or fax.

locations to suit the convenience of

those Members attending, and

Subscriptions for 1995

From 1st January 1995 the following rates will apply:-

Companions £64.00 Fellows £60.00 Members £52.00 Associate Members £44.00 Retired members £36.00 Students £36.00

All these rates are reduced by £5.00 for members who pay by direct debit. Over half our members are already taking advantage of this concession, and for those with current accounts in the UK it is probably the cheapest and most convenient method of payment.

Members who pay by cheque or by credit card will receive letters of reminder when their 1995 subscriptions are due. Subscriptions are payable on the anniversary of the day a member was first admitted to the Institution. This date is unaffected by subsequent upgrading.

Overseas members in particular may find it convenient to pay over the telephone by credit card (Access or Visa). This avoids the cost and inconvenience of purchasing sterling drafts.

Reduced Rates for Retired Members

The Council has decided to introduce a reduced subscription rate for retired members, with effect from January 1995. When the Institution started all its members were working. But we have already reached a point where a significant number of those earliest members have retired, and as the years go by this number will increase.

While many of them are financially secure and continue to make a good income from occasional consulting work, we know that some retired members are having to tighten their belts.

In order to qualify for the reduced subscription a member must:-

• Be over 60 years of age

- · Have been a member of the IAP for at least 10 years
- No longer be working or available for work except on an occasional

Retired members who choose to take advantage of this concession will suffer no reduction in the services they receive from the Institution, and their status as Members, Fellows etc. will be unchanged. There will be nothing published in the Institution's membership list or other documentation to indicate that they are no longer paying a full subscription. Anyone interested should apply in writing to the Director General, confirming that they meet the criteria outlined above.

Everybody else is queuing up to wish you a happy new year, or variants on that theme... shall I put on my Scrooge head and mutter "Bah! Humbug!"... no, it's a good chance to sit back, put feet up, forget diets (if you are daft enough to be on one) and enjoy yourself. So have a good 'um!

Dragged screaming and kicking into the steam age, I've now got a modem! Those with email access can crank up my 'phone bill via mcrobertson@cix.compulink.co.uk.

The design for the Coat of Arms

has been finalised, now all it needs is the approval of Garter King of Arms. (He's one of those "playing card" blokes you see at the Opening of Parliament and other such ceremonials.) So in the new year we will be able to display them for all the world to see. Next issue – full drawing and description. So where do you want to display it? Shall we have an Institution T-shirt, a new tie, lapel pins? Ideas to the office please.

As nobody has yet sent me an entry for Ted Pugh's cryptanalysis competition, I'm not going to

publish the answer until the next issue. So you have your Christmas break in which to get your thinking caps on... if I can do it (before reading the solution, I hasten to add) so can you! And just because those who came to the Conference received a copy of his RSA program does not mean that they are excused from making an attempt. Remember – it's LOGIC not mathematics that's important!

See you all next year,

Megan C. Robertson

Have you considered upgrading?

Many members do not realise that since joining the Institution they have qualified for upgrading. Others are aware of the position but are far too busy to worry about filling in a lot of forms and applications.

The good news is that: a) the procedure is very simple; b) it doesn't cost any money and c) the old "two year rule" has been abandoned. Institution policy is to encourage members to progress to higher grades: the added prestige benefits both sides.

To become a full Member of the Institution an applicant must show that he has either six years of experience gained working as a programmer or systems analyst, or four years plus a degree (or equivalent) in a computer-related subject. Provided they continue to work as programmers or analysts all those people who originally join the IAP as Associate Members will meet these criteria within four years.

The procedure for upgrading requires the completion of one simple form. Applications are placed before the Council's committee at their regular meeting on the first Wednesday of the month. Very shortly after that the members concerned receive new certificates confirming their upgraded status.

There is no charge for administration, and members are not required to pay subscriptions at the increased rate until their normal renewal date.

Upgrading to Fellow is more difficult to achieve. An applicant must be 30 years of age, and able to show not only that he has ten years' experience of systems analysis or programming, but that for at least five of those he has occupied a senior position of substantial esponsibility.

For this purpose the applicant is recommended to prepare a personal statement of approximately 500 words, enlarging on the information given in the upgrading application form.

The statement should cover the period required to qualify for election as a Fellow, with particular emphasis on those years spent in senior positions of substantial

responsibility. It should describe the work done by the applicant personally, and his responsibilities for budgets and personnel in terms of staff numbers and cost.

We hope that this article will encourage members who are qualified for upgrading to take the plunge. One phone call to the office is all that is needed. Treat yourself to an upgraded New Year.

The Institution of Analysts and Programmers

Income and Expenditure Account for the year ended 31st May 1994

Income		1993
Subscriptions	£116,607	£98,266
Other income	2,284	1,334
Total Income	£118, 891	£99,600
Expenses		
Services to member	ers	
and Promotional		
Activities	£50,250	£42,553
Salaries and Staff		
Costs	34,921	36,301
Office Overhead		
Expenses	28,697	14,825
Total Expenses	£113,868	£93,679
Surplus of Income over		
Expenditure	£5,023	£5,921

Accountants Report to the Members of the Institution of Analysts and Programmers.

We have prepared accounts for the Institution of Analysts and Programmers for the year ended 31st May 1994 from the books and records maintained by the Institution.

The summary Income and Expenditure account shown above having been compiled from the full accounts of the Institution of Analysts and Programmers for the six month period to 30th November 1993 and those of the Institution of Analysts and Programmers (Limited by Guarantee) for the six month period to 31st May 1994*.

Charles Stuart Chartered Accountants 21st October 1994

^{*} Full accounts are available on request.

The Director General writes

Just over a month ago we had our third annual Conference at the City University, followed by the AGM, followed the next day by a meeting of the Council.

I felt I needed a change after that so I was particularly glad when one of our members asked me to open a new computer facility at the school where he works.

On the face of it this seemed a simple task. But it is not so easy for someone who spends most of his time bandying technicalities with members of Mensa to suddenly switch over to talking common sense that can be understood and possibly even enjoyed by thirteen-year old boys. However, I must have done OK – either that or they had a very poor aim with the tomatoes.

Of course small boys take to computing without much difficulty. It is often harder for their teachers. So I was particularly pleased to hear how the computer now plays some part in the teaching of almost every subject. Teachers have realised that while it will never be a complete

substitute for traditional methods, the computer can do some things particularly well.

While I was there the boys were working with an interactive history program. In effect they were transported to an historical setting where they could travel about, ask questions, explore and learn about the period in the process. Very different from the history lessons I used to sleep through.

Looking in the mirror the other day I suddenly realised it was about time the Institution did a little more to help its older members. So I was very pleased when the Council decided to cut the subscription rate for some older members who have been paying for a long time and have earned a bit of a break.

Examining the small print later I realised that neither I nor Father Christmas (if he was a member) are ever likely to qualify for the reduction. Nevertheless it is a seasonal gesture of goodwill that will be of increasing benefit as more of our members reach retirement age.

Last Christmas I told you that while there was more optimism about, it had failed to produce many more jobs. This year, while I know we still have a few members looking for jobs, there is more work about.

We are definitely turning the corner – though we do seem to keep on turning it without actually getting round it. If we turn the corner for very much longer I fear we may do ourselves a painful and embarrassing injury.

The Institution itself is in good shape. The Council is slipping into overdrive – a number of crucial developments are planned for 1995. The staff are in good heart and looking forward to a restful break before rejoining the battle in the New Year.

I wish all of you, members and in many cases friends, a peaceful Christmas, followed by the prosperity you all deserve in 1995.

> Michael C. Ryan Director General

Presidential Address

The end of the year is a traditional time to look back and take stock of time past. For the Institution of Analysts and Programmers this has been a momentous year.

A new Constitution, a new and legal Grant of Arms, the end (so we are told) of the economic recession and a lively new governing council. Once the dust of re-organisation had settled, your Council posed two basic questions:—

- 1) What can the Institution do for the members?
- 2) What can the members do for the Institution?

The answer to both of these questions can be found in a single word – standards. By maintaining high professional standards, members reflect credit on the Institution. Thus both will benefit and membership of the Institution will be seen as a measure of excellence wherever computing professionals gather.

Now this is all right for existing members but a major concern expressed by many was that few people outside the Institution knew of its existence. It is plain therefore that greater publicity is needed and in the coming year your Council

"when I encounter other members of the IAP I can be sure of high professional standards"

will try to ensure that the Institution is seen as a reliable point of reference on all things relating to our particular field.

You too can help us in this endeavour – if you see or hear of anything that might concern us as a professional body please call Mike Ryan, or any member of the Council and tell us about it.

You should also remember that you belong to a vigorous and dedicated organisation of experienced professionals, tell others about us, persuade suitable people to apply for membership, shout our name and tell the world who we are and what we stand for. The more people who know about us, the more your membership will be worth! I make no apologies for the flag waving, I am proud to be a member of this

Institution. In this industry anyone can call themselves a consultant or a programmer but when I encounter other members of the IAP I can be sure of high professional standards.

The coming year will be an exciting one for the Institution as our influence expands and our voice is heard more and more. I hope all of you share my optimism and I wish all of you a happy, prosperous and productive twelve months ahead.

Jim Bates President of the Institution

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Correspondence about *IAPetus*, contributions etc. should be sent to the Editor at 12 Bude Close, Crewe, Cheshire CW1 3XG (Tel: 01270 500565).

Correspondence about the Institution should be sent to Charles House, 36 Culmington Road, London W13 9NH (Tel: 0181 567 2118, Fax: 081 567 4379).

Conference

Alex and I were almost the first to arrive. The City University porter was trying to issue us with "Visitor" passes – then quailed and abandoned the attempt when we told him that there would be a good sixty of us! And so upstairs. After three years in the same place, some people still got lost. For a while, it looked like the lost included the lady with the coffee urn, but she eventually arrived and we could get underway.

As always, the proceedings opened with a few words from Mike Ryan. This year's prizes for "longest journey to attend" went to people from Belgium, Libya (via Sheffield University) and Kenya – this last being a lady who gallantly said that she'd arranged her whole trip around the Conference dates! And so, with Alex wearing his Council member's hat in the chair, to the first speaker.

Holistic Approach

This was Steve Clarke from Luton University's Business Systems department, who told us that while there are many applications for which a "hard" or structured approach to design is correct, there are many occasions when the problem solving approach just isn't appropriate.

He quoted Broadbent, who in 1977 said "One process alters the nature of another process rather than just supplying it with information", and proceeded to point out that the early uses of computers treated them as part of a mechanical system, for example, replacing a roomful of book-keepers with an accounting program. But nowadays the computer is part of the social structure of the organisation, and a holistic approach is necessary to understand what's going on, and to be able to manipulate the system.

Drawing a comparison with medicine, he suggested that it is necessary to treat the whole person, not just a single ailment. A business system is a complex and adaptive system, not a simple unitary system whose working is clearly understood. In the real world, there are two many variables and unknowns. Hence the need for the "soft systems" approach, where technology is a relatively trivial part of the whole system.

But there are no easy answers, even this approach will not give you the whole answer, but should be

used in conjunction with other methods, hard and soft, to obtain an eventual solution.

Thoughts of butterflies intruded. No, my mind wasn't wandering, I was thinking about the mathematics of chaos theory. Then the next speaker was on his feet, and it was time to pay attention again.

Prison Education in IT

Before us stood Tony
Benfield, who reminded
us that every aspect of
society is influenced by
computers... including
the prison system. Part of
the aim of sending anyone to
jail is that a criminal should emerge
at the end of his sentence less likely
to offend and equipped to earn his
living honestly. The prison education system plays a major part in this
endeavour, including instruction in
computing.

IT training can, of course, be put to dubious ends, but it can also give the individual knowledge that could lead to employment. Those who'd question the role of prison education should remember that its purpose is to train people for future work – and that there is no point in training an intelligent man to clean floors, as pushing him into such work could easily lead to a build-up of resentment against society that might cause him to re-offend.

The doubters must remember that a prisoner will only change if he himself wants to, not because of what others say or do. The support of professions and individuals is necessary to assist in providing an environment, an ethos, that will encourage criminals to want to change, to see that there are other ways.

Afterwards, Tony told me that this was his first attempt at public speaking. You'd never have believed it from the clear and well-organised presentation. For those of you not there to hear him, Tony is himself a shining example of how access to educational opportunities can benefit the man who wants to change for the better - he's serving time, and has been accepted as a student on day-release at a local college. I'm sure that the whole Institution will join me in hoping that all goes well for Tony as he prepares to rejoin society.

Copyright Law

We paused for coffee (which found

its way there this time!), then settled down to learn all about copyright from Mark Snelgrove, of Browne Jacobson, Solicitors. The law is murky on the application of copyright to computer software. To begin with,

copyright does not need registering, it comes into existence automatically when the work is created.

But it is sometimes difficult to apply copyright law to computer software. Source code, no problems. However, the object code derived from it is not original, so can't be copyrighted. As for compilations – the whole is original even if some of the components are not.

Right, OK so far. Who owns the copyright? Usually it belongs to the author, unless he's in employment, or to the person who set it all up, if it is a computer-generated work. (The computer, poor dear, can't own copyright as it is not a legal entity in its own right!) The copyright won't belong to the person commissioning the work unless a written assignment of the copyright is made in his favour. Usually he will be granted a license to use what has been written for him, this may be an exclusive license. Only the owner of the copyright is allowed to sue for breach thereof, so it's important to be clear about who has it.

When trying to find out if copyright has been infringed, you have to be able to identify the work in which copyright is claimed, verify that it is an original piece of work, show that it actually has been copied and finally prove that a substantial part of the work has been copied.

And then there's the whole grey area surrounding the boundary between protectable expression and unprotectable idea. Judge Learned Hand, an American, said in 1930 "Nobody has ever been able to fix that boundary and nobody ever can".

As there is little British case law

on the matter, American examples have been quoted in the British courts. Originally there was the "look and feel" concept, but people have begun to retreat from that one, which resulted in what has been

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termed the "abstraction and filtration" test, where you try and sift out all those elements of the program that are either from the public domain or done in the only practicable way, then look at the rest to see if it has been copied. Unfortunately the first time this approach was used in the British courts, they didn't get it right!

The upshot of all this is that it's still a murky area. Unless you can prove actual copying – such as one chap who had not only transferred code verbatim from a program written by him for a previous employer but also copied his incode comments complete with spelling mistakes! – it's going to be very hard to make a case that will stand up in court.

Data Protection Registry

Legal terms buzzing around our heads, we then heard about the wonders of the Data Protection Act and the work of the Registrar from John Woulds. The underlying idea is to provide legal protection for the individual with regard to the automatic processing of personal information about them, from which stems all the rules laid down about security, access to the data and so on.

The idea of registration is to bring home to those collecting and using personal data the responsibilities and obligations that they have. Hopefully, this all engenders good information handling practices. But, when failures occur, mechanisms are in place to ensure that matters can be put right. Unfortunately, a lot of people, both data users and data subjects alike, don't really know what the Data Protection Registry is

all about

By now everybody was ready for lunch – as usual the amount of discussion generated by each talk was causing us to run late – and most people found their way to the dining room without too much difficulty. Even with the wine, most found their way back, too, and we were soon embroiled in a new innovation, entitled "Members' Forum" A

chance for the members to express their thoughts as to the future of the Institution... or a chance for IAP President Jim Bates to threaten everybody with a big stick!

Conversation centred on the possibility of local branches, a directory of members' skills ("I know a man who does") and ways of gaining publicity for the Institution... there's still too many out there who don't know who we are and what we do.

EDI

Then Harold Ead, also a Council member, took the chair for the afternoon's talks, the first of which was presented by Stewart Shuttle on the subject of EDI. EDWhat? the listeners said, so Stewart explained.

Electronic Data Interchange is when one computer application communicates with another, none of this confusion that human intervention adds in. It is, surprisingly enough, a business innovation rather than a technical one – it's a new way of doing business, particularly that between customer and supplier.

One of the driving forces behind it is the automotive industry, who use it to facilitate Just In Time manufacturing systems... don't order the parts, raw materials etc. until you are just about ready to use them.

The advantages of EDI include accuracy, speed, certainty of data transfer, reduction of administrative overhead and an automatic audit trace. Because one application talks directly to another, there's no need for re-keying data, and everything has to be correctly structured, thus reducing if not eliminating confusion. However, some people find that they are being forced into using EDI - "All our suppliers need to use EDI, if you want to continue as a supplier, get it!". The trick is, to build up gently and carefully everybody needs to get used to new methods, so start with one of your business partners, and learn what you are doing, before moving on to others.

Contracting to supply software

So, tea, biscuits and Selva Naidu, another solicitor, who addressed us on that all-important beastie, the contract for the development and supply of software. Even those of us who don't run software houses need to understand, we may want to buy software, or be writing it on behalf of the people who are looking after the legal details.

Firstly he posed the question, What is software? If you look at it as information, its provision and supply can be classed as a service. If you consider the physical medium, or in conjunction with hardware, it could be regarded as goods. And there's a difference, in the eyes of the law, between the two.

If you make a contract to supply a service (which may include work and materials), your only legal requirement is that what you do is done with reasonable skill and care. But if you contract to supply goods, they have to be merchantable and fit for their purpose.

When you draft your contract, prepare for the worst, not just the possibility of having trouble with your customer but the chance of having to argue your case in front of a "non-computerate" judge. The idea is to think strategically when drafting the contract, envisaging the worst, anticipating problems and laying the groundwork for dealing with them.

Winding up

Once Mike Ryan had wound the meeting up, and Nick Swain – whose noble efforts as this year's organiser were well applauded – had gathered up his questionnaires, some fled and others stayed for the pleasures of the Institution's first Annual General Meeting. This dealt with the formal requirements that we now, as a company limited by guarantee, have to observe; and included a debate on should we have our accounts audited or not.

But now it's all over, and we have retreated to our lairs. Next year – where? Maybe Bristol, maybe somewhere "oop North"... somehow I don't think the suggestion of the Caribbean went down too well! But wherever we go – will we see YOU next time?

Megan C. Robertson

Quo vadis IAPetus?

Dear Sir,

First of all, I would like to thank all those involved in organising the conference for a very enjoyable and informative day. The standard of papers presented was excellent, as was the lunch.

I thought the members' forum was very worthwhile, and I hope this will be repeated at future conferences. It was also nice to meet other members of the Institution, and see what the "personalities" actually looked like.

Two issues seemed to crop up several times during the day, both during the conference preedings and in conversation during the lunch and tea breaks; the need to attract more members, and the need to raise the profile of the Institution. I believe *IAPetus* holds the key to both issues.

One of the questions put forward at the members' forum was "Why don't we all recommend one colleague to join the IAP tomorrow?". To be honest, it would be difficult for me to recommend membership of the Institution to any of my colleagues. If people are going to fork out £48 of their hard-earned dosh every year in addition to all their other, probably more essential, outgoings, then they will want to receive something tangible in return.

Working as I do in an educational establishment where we all have permanent jobs, the assistance provided by the Institution with regard to employment and contracting is not really relevant.

IAPetus

It's all very well to mutter vaguely about prestige and maintaining professional standards and so on, but for members like me the only material benefit we receive as IAP members is a certificate, a diary each year and a quarterly bulletin.

However, at eight pages every quarter, for an annual fee of £48, the bulletin doesn't sound very good

"when people see 'MIAP' after our names, they will know what it stands for" value for money. Prospective members are not going to be impressed. There is, of course a very good reason why *IAPetus* is so slim; Megan writes most of it herself. (Before you say it, I know I'm as guilty as anyone else when it comes to not writing anything. I'm trying to make up for it by ranting on at you now.)

Compare this with the Association of C and C++ Users. For an annual membership fee of £14, you get a journal, C Vu, which comes out six times a year, and is typically 65 pages in length. The IAP, with a much larger membership, can do the same. All that is required is for each member to write one page every six years. (If each member wrote one page every two years, we could produce a journal the same size as EXE Magazine, about 100 pages monthly).

The benefits

This would have two beneficial effects for the Institution. Firstly, we would have something impressive that we could show to potential members to encourage them to join. Secondly, copies of the journal could be distributed to libraries, schools, colleges and so on, to advertise the existence and work of the Institution to the outside world. This will ultimately benefit us as individuals, because then, when people see "MIAP" after our names, they will know what it stands for.

The problem is, of course, what do you write about? This is a real problem, not only to do with people's reluctance to put their thoughts on paper or disk. It is difficult to think of a subject without having some sort of frame of reference.

Paradoxically, the lack of material presently published is probably one of the reasons why so little is contributed. It is much easier to comment on, or add to, what has already been written, than to produce something original. So what can be done?

If you look at any of the "proper" computing magazines, or any other sort of magazine for that matter, you will find that they all have regular columns or sections on particular topics. This gives contributors something to aim for, and provides scope for ongoing discussions.

Suggestions

In conversation at the conference, John Ridout suggested having a "Problem page" where novices (and others) could air their systems analysis or programming problems, and members with the relevant expertise could give advice. This is an excellent idea. Such a request for help in a recent issue of *C Vu* resulted in two articles in the following issue (one by myself).

Other "theme" pages, for example on systems analysis methodologies, or programming tips and techniques, could similarly provide subjects for members to write about. We could also have a page of book and product reviews (anyone read any books lately?)

Alternatively, members can write articles on aspects of systems analysis or programming which interest them; Ted Pugh's recent articles on data encryption, and Megan's on historical image storing, are good examples of this.

Don't Rules

In general, I think there are two "Don't" rules which members could follow when considering what to write about:

- Don't assume that everybody already knows everything. None of us knows how much we don't know! If you know a bit about something, tell the rest of us.
- 2. Don't be afraid of commenting on, or even criticising, articles written by other members (but do it in a polite and professional manner). That way, each issue of the journal generates more material for the next one.

In conclusion, remember that the Institution belongs to its members. *IAPetus* should be the Institution's public face. By contributing to the journal, we can all help to enhance the world's perception of us. In this way we can attract new members and gain more influence. This can only be of benefit to all of us.

If any members agree with what I've written here, I hope they'll set to work and write something for the next issue. Whether they agree or disagree, I hope they'll WRITE IN AND SAY SO!

Yours faithfully,

Raymond Butler Grad.Dip. MIAP

IT in Prison

Prison: whenever people see that term they always picture a dungeon lit building or an episode of porridge. My paper to the Institute of Analysts and Programmers annual conference did cause a bit of a stir, partly from the point of view that they had an ex-gunman in their midst and also because of the actual level of IT that is taught in prison establishments.

By May 1995 I will have served 5 years of the 10 year sentence that I received in 1990. Out of this I expect to serve a total of 6 years 8 months with a third of the term off for good behaviour coming into effect.

I have been here at HMP North Sea Camp since April of this year, and have just started a BSc with Leicester University in Computer Sciences. I actually attend Boston College each day to do this course returning to the jail each evening. For the past couple of years I have also been doing a BSc with the Open University so my spare time is pretty scarce.

Controversial

As I explained to the conference, IT in prisons is still something of a controversial subject. It has its good and bad points like any subject in today's society. The response that I received at the conference was better and more encouraging than I could have hoped for.

I can remember that as Brian Lehaney was finishing his talk and it was getting closer to 10:30 am the palms of my hands were sweating and my heart rate must have all but doubled. Once the initial 5 minutes were out of the way things improved and I got some of my confidence back.

It is always said on the prison grapevine that it is the first and last years of a sentence that are the hardest. After the first year the inmate is over the initial disruption of imprisonment and is getting settled into the jail's routine. The last year to serve is probably the hardest of all as then thoughts are starting as to what is going to happen when the actual release comes round, are family ties going to be as strong, how different are things going to be. Most of all, what about employment.

With a prisoner learning IT in

prison, there is at the least something happening that is constructive.

As I stated to the delegates at the conference, what is better in modern day Britain? A spreadsheet user or a mailbag sewer? There are obviously some fields in the computing industry in which those with a conviction will never find work and that has to be accepted by those prisoners studying IT. My prison record will be there with me for life and that knowledge is something that I have learned to live with.

Prison is punishment for those who have broken the law, but to encourage a positive end result, whilst at the same time making sure that a form of punishment is still present, must be a good thing. Teaching prisoners a technology that is forever expanding is a good thing for them. It is for companies to weigh up whether to employ that person or not, and the trust that has to be built up between employer and employee is not going to be easily established for those starting out straight from jail.

Integrating back

Integrating a person back into society is not an easy task. When I started College in September I was way out of my depth on the social side of things. The simple things like trying to eat with a metal knife and fork after years with plastic ones are major tasks in themselves. Getting used to things like road traffic and the general environment is quite a job but a very pleasant one.

I am currently permitted a weekend leave every two months. I originate from the South East (Essex) and it is not true what they say about Essex blokes! Now I go and stay in Manchester. These Home Leaves really are helping me a lot to get used to the outside again. In a way I am one of the more fortunate ones, but the opportunities are there for those that want to take them.

Thanks

I could never thank enough everyone at the conference for their support. Those delegates of companies that had redundant equipment, printer ribbons and disks that offered to donate them to the prison education department will never know how valuable their help has been. Every item helps and it is more than just appreciated, it enables work to be done by people who are hungry for the opportunity.

There are four people that I really do owe a lot of gratitude to, they are Jennifer Hill, who is in charge of the Prison Education Department and Dr. Brian Cook, Arthur Mead and Rachael Geddes for their suggestions, comments and support.

Anyone that did not attend the conference who would like a copy of the paper The teaching of IT to those in Prison can obtain one by writing to me at the address below:

Tony Benfield (LE0395) HMP North Sea Camp, Freiston, Boston, Lincolnshire PE22 0QX

IAP Council Meeting

The next Council Meeting will be held at the Cresta Court Hotel in Altrincham (near Manchester) on Friday 17th February 1995 from 13:00 to 18:00.

Members in the Manchester area (and beyond) are invited to join the Director General and the Council after the meeting for a drink and a char in the bar. The DG and the Council are likely to be there until about 8 pm.

The hotel is approximately 200 yards from Altrincham Railway Station and the terminus of Manchester's Metrolink tram system. There is also ample parking at the hotel, which is on the junction of Washway Road (A56) and Church Street.

It would assist in planning if the office (0181 567 2118) were to be notified if you are planning on taking up this invitation. Even if you can't let us know in advance – we would still like to meet you! If you can't join us this time, don't worry. It is proposed to hold the next few Council meetings around the country in order that many of our UK members should have the opportunity to join us at some time.

Do We Need an Audit?

As I am sure you are all aware, the Institution is now a company, limited by guarantee. This means that it is owned by you, the subscription paying members. Furthermore, should it be mismanaged at some stage and lose money, you would be liable to contribute to its debts up to a maximum of the guarantee stated in the Memorandum of Association.

The committee members which you elect are responsible to you to run the company on your behalf. This includes safeguarding the company's assets (i.e. ensuring that it doesn't go bust!) and preparing financial statements each year to report primarily to you how they are managing the affairs of your company. These financial statements are made available to the general public at Companies House as a safeguard to the company's suppliers, since were the company to become insolvent they might not get all the money that they were owed because it has limited liability as mentioned above.

To ensure that these financial statements are not misleading in any way there has been a legal requirement since companies were first invented to have them "audited". This simply means "checked over" by an accountant who produces a statement that in his opinion the financial statements "show a true and fair view".

In recent years there have been some significant changes to these arrangements. The government has forced more stringent regulation on auditors. All auditors now have to be registered and produce copious documentation to prove that they have done sufficient work to justify their final opinion. This has put the cost of audits up for a small company from around £200 to over £1000. To compensate for this, the government has also allowed very small companies not to be audited at all, and medium sized companies to have instead an "Accountant's Report".

It is common for small company management to "subcontract" the preparation of the financial statements to the company's auditors. The auditors then perform two distinct functions: first they prepare the financial statements from the accounting records on behalf of the management, then they check them over on behalf of the owners to

report whether what they have prepared shows a "true and fair view".

Sounds rather ridiculous to you, the auditors checking their own work? To some extent there is more to it than that. One can prepare a set of financial statements from accounting records without ever checking that the accounting records were correct in the first place. It is largely a mechanical procedure. Having said that, one would hope that any self-respectingaccountant would take a pride in his work and would want to make sure that the financial statements were good!

Before the government imposed more stringent standards on auditors this is exactly what happened for small companies. The accountant prepared the financial statements using due care and was then able to sign the audit report without performing strenuous extra tests because he knew the financial state-

ments were good from first hand experience! Now the auditor must run up significant extra costs producing documentation to prove that the figures have been properly checked. This documentation incidentally belongs to the auditor, is not available to be seen by the company's owners and will only be shown in public if the auditor is sued and appears in court.

So does the Institution of Analysts and Programmers need an audit? Or will the Accountant's Report suffice? Is it worth paying several hundred pounds extra for the "real thing"? The decision ought to be yours. You own the company. It's your money. Why not write in and express your opinion?

lan Hargrave Member and Chartered Accountant

New Fellows

We are particularly pleased to welcome the following new members who were admitted to the Institution as Fellows in October and November 1994.

Mohammed E.A. Abdulwahab BSc Specialist in medical records systems, initially on the staff of hospitals in Cairo. Freelance since 1982. EDP Supervisor at the King Fahad National Guard Hospital; in Riyadh since 1987.

Mohammed Abubkar Head of Operations and Maintenance, Nigerian Telecommunications Plc. Specialist in payroll and billing systems.

Robert L. Bee In the shipbuilding industry since 1969. Project Scheduling Engineer at Swan Hunter since 1990. Recently joined James Knowles.

Paul R. Campbell Worked for Hawkers on the Harrier then in 1975 joined NCR (Brussels) travelling world wide on programming assignments. Returned to UK in 1988 as Senior Consultant at Oracle. Freelance since 1990, international clientele.

Patricia A. Dawson BSc (Hons) PhD Chief Engineer, Hydraulic Analysis Ltd, Leeds, where she has worked for 13 years. A leading authority on the mathematical modelling of fluids.

Sarath C.A. Kurundukumbura BSc Systems Analyst with the Central Engineering Consultancy Bureau, Colombo, now responsible for all the Bureau's data processing activities/

Neil K.F. Loveday Accounting background, then trained as a programmer and joined present employer Nestle UK in 1969. Responsible for the creation of systems now used throughout Nestle Rowntree.

Wendy A. Nash Senior Systems Analyst, with Nestle UK since 1962. Specialist in payroll, personnel and labour costing systems, Mainframe to PC.

Robert A. Pickford BA (Hons) MA
Project Manager with HPA
Micro Applications since 1983,
specialising in autopilots,
weapon systems and communications. Previously with Plessey
Telecomms and BNFL
Capenhurst.

David J. Sweeney BSc Exceptionally versatile freelance programmer. Real-time avionics with Easams, 1979; database for BZW in 1986. Then BBC, Natwest, Bull, A&AEE Boscombe Down, BA and many others.