

Vision

The house magazine of Rank Xerox Mitcheldean



Bill Lowe and his senior staff were escorted from their helicopter by Carol Copeland, Barbara Bevan and Kay Lewis to the main reception area, where they were welcomed by site director David Stokes.

Bill Lowe reviews our progress

FIRST IMPRESSIONS are very important.

So everyone made a special effort to ensure that when Bill Lowe made his first visit to Mitcheldean, following his appointment last year as executive vice president, Development & Manufacturing, it was a rewarding one.

The day fixed was 15 January and fortunately no wintry weather conditions prevented his arrival on time by helicopter from Heathrow.

Accompanying him were his senior staff, Eric Steenburgh, Steve Tierney, Dick Daubenmire, Debbie Smith, Mike Smith and Ken Kaisen.

Most of the morning was devoted to an operations review, which went extremely well.

The presentation material was accurately focussed, reflecting our performance over the past few years and our plans for the future, a great deal of emphasis being placed on the strategies related to all aspects of the Mitcheldean 2000 project.

Our strengths as a manufacturing unit were fully documented, as were major issues currently concerning the plant.

Feedback from the review was extremely positive, as indeed was that from the site tour (featured overleaf).

After lunch, various discussions took place and in mid-afternoon a communications meeting was held, attended by members of the management team.

Summarising the past year's activities, Bill Lowe said that Xerox had performed better than other systems marketing companies.

A solid basis had been established with a number of national quality awards and Mitcheldean's Best British Factories award.

However, the year could have been better regarding customer satisfaction.

There were some challenges, particularly as regards inventory which remained our major problem, and machine cost variances.

Referring to difficulties in demand planning, he said he saw Manufacturing having a greater involvement in equipment management and demand scheduling.

Turning to the D&M vision for the 1990s — an important decade for Xerox and Rank Xerox — he spoke of the concept of Triad manufacturing strategy with manufacturing bases in Europe, the USA and the Far East — the three principal markets.

He laid emphasis on the importance of our relationship with Fuji Xerox and indicated a much stronger link with them.

(Mitcheldean has considerable



Pictured with the 1,000,001st copier produced at Mitcheldean are (from left) Stephen Tierney, vice president and director, EMO; Bill Lowe, executive vice president, Development and Manufacturing; David Stokes; Eric Steenburgh, senior vice president and general manager, D & M/MO; and Debbie Smith, vice president personnel and support services.

Mitcheldean Plant — national award winners

From the left —

- Best Factories Award
- Environmental Commendation
- British Quality Award





In the Mitcheldean 2000 project room, Kevin Horrobin (then project manager) outlines the total plan and the numerous activities being embarked upon.

Pictures are improving the assembly process

THE SITE tour, lasting around one hour, began immediately after the operations review, and went at a cracking pace.

Taking in key developments in M2000 strategy, it commenced, very logically, in the M2000 project office.

Here the party were shown the project plan setting out the activities which are being embarked upon to improve quality, flow and employee involvement.

Then came a demonstration of a Mitcheldean 'first' — an illustrated assembly process (IAP) which is being adopted in the 5012/14 showcase facility in building 1.

Fuji Xerox programmes have traditionally had text assembly processes, with occasional sketches hand-drawn by engineers.

The IAP approach reduces the amount of text needed, using pictures of the actual components, sub-assemblies and other hardware to enable easy identification.

The overall benefit lies in the reduction of time spent in training operators, and fewer errors during the training period, thus shortening the total learning curve.

Our visitors saw a static image, taken by video camera, appear on a TV monitor which is

used to compose and focus the picture content.

They learned how the picture was captured by a 'frame grabber' PWBA and installed in a PC. Then the image was transferred via a floppy disk to a second 'magic box' — a Xerox 386 Companion plus 6085

New technologies manager Keith Jones explains the illustrated assembly process. Seated at a 6085 workstation, Dave Robinson adds build sequence indications to a captured picture of a component.



workstation — where it was viewed on a high resolution monitor to check clarity and be seen in relation to other images stored there.

Finally, using the 6085 workstation, engineer Dave Robinson was seen creating a template on to which he loaded the captured picture.

He then added build sequence indications — in the shape of balloons and arrows — which corresponded with brief instructions on an adjoining page of text.

(Images scanned in from a Xerox 7650 scanner could also be added at this stage.)

The completed template — now a fully fledged IAP — could then be printed out as hard copy on a 4045 printer for assembly use.

Although the technique has been used in the newspaper business, where, as they say, a picture is worth a thousand words, benchmarking has shown this to be the first instance of its application for an assembly process using electronic photographs combined with instructions.

A 'world first' for Mitcheldean, in fact.

Bill Lowe was particularly impressed. He asked about its further development — introducing colour in the hard copy, for example — and was assured that further ideas are being developed by the application team of technical staff and assembly operators.

All-Xerox process

SINCE Bill Lowe's visit, a new frame grabber has been acquired which enables the video image to be signalled direct to the 386 Companion, thus cutting out the intermediate PC stage.

This means that the process is not only speeded up — it is carried out entirely by means of Xerox equipment.

Continued from page 1

experience in this area, perhaps more than any other unit, and we are now using CAD as a means of bringing drawings from Japan, as shown on Page 4.)

Bill Lowe cited as our goals:

- Improvement in reliability.
- Reduction of product delivery time to market by 12 months.
- Improvement of unit machine cost by 50 per cent.
- Exceeding product quality benchmarks.

He focussed heavily on customer satisfaction objectives and the need to work with customers in order to understand their perceptions of quality and reliability.

"I envisage a very exciting

future for the company," he said. There was a new set of product architecture coming along and he saw a good opportunity to get back on the growth curve.

"Mitcheldean will play a key part in the future business of Xerox manufacturing operations," he said in conclusion.

Coming on site

FOLLOWING THE visit of Bill Lowe and his senior staff, we learned of the consolidation of the electronics and developer housing operations from Welwyn into Mitcheldean.



Keith Grant, manager, refurbishing, harness and manufacturing, highlights the M2000 initiatives for the harness centre.

How we'll get things moving

ON THEIR visit to 5012/14 assembly, Bill Lowe and his staff were able to compare the current style of operation, using a material 'push system', with the very different type of operator material 'pull system' developed to support Just in Time manufacturing.

They were able to appreciate how this would result in a more open, less cluttered environment when they saw a demonstration in a mock station layout of how operators will work.

The layout comprised four items of equipment which will make up each assembly station on the line in the showcase facility in building 1.

Focus of attention was an innovative 'product mover', developed at Mitcheldean, on which products being built will progress through the assembly area.

These battery-powered trolleys, which will replace the conventional roller tracking, will be steered manually by operators. (It is intended to develop an automatic guidance system eventually.)

Adjacent to the product mover was a service trolley accommodating the operator terminal that will be used for issuing requests for material, the terminal being connected by a pole to the overhead services grid.

This trolley will also house service tools and provide a personal locker for the operator.

The other two items of equipment displayed within the



John Flynn, manager, assembly operations (new build), points out the way in which the showcase facility in building 1 will improve on the existing assembly layout.



Kevin Horrobin explains how medium to high value parts will be placed in preformed trays and transferred on request to the assembly station via a kitting trolley.

mock station were for material stocks.

There was a kitting trolley, designed to hold parts of medium to high value placed in preformed trays, which will be pulled in by operators as and when required,



In the mock station layout, the product mover (left), and the service trolley holding the terminal used for issuing requests for material, are shown to our visitors by Keith Jones.

and a LinBin trolley to hold low value parts.

Our visitors were specially interested in the development of the product mover and its low cost (there were follow-up telephone calls from Webster about it later).

Generally they felt it was absolutely right for the purpose, while Dick Daubenmire, manufacturing consultant to Bill Lowe, said "On a rating of 1 to 10, this scores 8." On his own admission, he never gives the mark of 10! *Continued overleaf*

Interconnect Showcase

ARRIVING IN the harness assembly centre in building 6/1, Bill Lowe and his party saw the new technology applications and learned of our plans for the centre in relation to M2000 — the setting up of an Interconnect Showcase facility to enable Just in Time manufacturing operations.

A video camera featured again in a demonstration relating to the set-up time reduction project, a six-stage analysis of the work method, which is one of the JIT showcase strategies.

With smaller batches resulting from the JIT strategy, the number of setting up operations will increase.

Ways are being sought to reduce that set-up time and the cost involved.

During stage 1, setting operations — initially on wire-cutting machines — are being recorded on video and a QIP team is analysing the various activities carried out.

The aim is to ensure that the majority of internal activities (those normally carried out when the machine is *not* running, such as fetching materials and setting up tooling for the next job) are converted to external activities (those carried out while the machine *is* running), thus minimising the time that machines are non-operational.

New moves

THE 5012/14 line was due to move into the focussed factory in building 1 as we went to press. Work has also commenced on the next move into that building of 5018/28 assembly from building 4, in order to make room for the electronics operations being

transferred from Welwyn. Developer housing activities are being located in building 13. The transition is being managed by a team led by Kevin Horrobin and controller Phil King has taken over Kevin's responsibilities as M2000 project manager.



Here harness assembly manager Des Halliday shows how a video camera is being used to analyse the setting activity in wire-cutting operations.

What CAD/CAM can do for us

THE LAST stop on the tour was made at the CAD/CAM facility in building 6/2.

Here six Intergraph workstations, similar to the one used in building 5/1 for prototype parts manufacturing processes, were set up to demonstrate four specific applications.

- Pat Madley demonstrated how the technology was being used for facility layouts with a detailed drawing of building 1 south complete with details of sprinkler valves and other civil services.

On top of this were layered an M2000 block plan and a three-dimensional layout for a typical assembly station for the showcase facility which our guests had viewed while in 5012/14 assembly.

- Roger Bailey showed the design on screen of prototype parts created on Intergraph machines at Welwyn and transferred to Mitcheldean electronically for subsequent manufacture using CAM.

One was an experiment to evaluate a plastic mould against a steel pressing, the other involved an aluminium master used to produce liquid resin parts from a rubber mould.

Specific applications being demonstrated in the CAD/CAM facility.



- Gordon Davis had on screen a drawing of a harness for a new product designed by Xerox and electronically sent to us for quotation.

- The fourth significant application was demonstrated by Matt Jackson (recently transferred from Welwyn) who showed how a Fuji Xerox design for a new product had been converted from their CAD system language to ours and then electronically transferred to Mitcheldean — our new way of doing business.

Other items of equipment on display in the facility included an electrostatic plotter which reproduces images from the Intergraph screen in sizes up to AO, and an inkjet plotter which prints out, in colour, the solid area image from the screen.

Our visitors showed great interest in the total CAD/CAM activity, Bill Lowe proving very knowledgeable about this type of operation.

As elsewhere on the tour he asked some searching questions which were well answered by Mitcheldean staff, and the tour came to a finish on an enthusiastic note.



Members of the award-winning team — from left, Allan Edwards, Charlie Walker, Colin Butler, Rob Miles and Mike Cooper — who went to Leesburg.

Unique project wins top award

ONCE AGAIN a Mitcheldean team has succeeded in winning a Corporate Team Excellence Award at Leesburg, USA.

But the Unified Job Evaluation Team is a 'first' in one respect. Never before have we had trade union senior representatives and RXMP management working together on a QIP project.

The project has enabled the introduction of a single bargaining unit to replace the previous three (industrial, commercial and technical) thus helping in the development of flexible working practices and so improving Mitcheldean's performance and competitiveness.

Instead of three job evaluation schemes, all with different job descriptions, processes and evaluation teams and three different pay structures, there is now one small grading team and one pay structure consistently applied to all jobs across the site.

The achievement called for a high level of commitment from the team members, who had some 120 meetings over a 15-month period with 100 per cent

attendance.

They brought a great deal of experience to their task. There was Mike Cooper, works engineering manager; Colin Butler, works convener; Rob Miles, chairman, shop stewards council (industrial); Allan Edwards, chairman, MSF (technical); Billy Malsom, chairman, GMB/APEX (commercial); and Charlie Walker, manager, employee relations, who acted as independent chairman and secretary.

Commented Mike, "In all the grading schemes I have been involved with over the years, this was the most challenging. We started off with some 200 different jobs and managed to whittle them down to 69.

"It was also the most rewarding because, although there were differing opinions, we were always able to discuss these and reach a consensus."

The result is that, as we move into JIT manufacturing with M2000, there is now an accepted structure in place which enables any changes in roles or responsibilities to be identified, and allows new jobs to be implemented and evaluated.

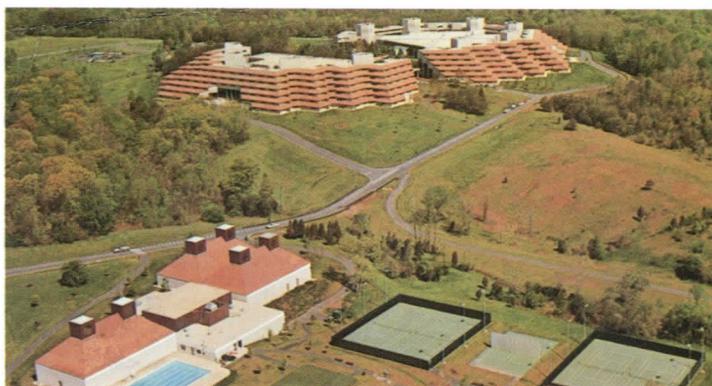
The Xerox International Centre for Training and Management Development at Leesburg, Virginia.

Any news for Vision?

If you have, then please — mail it to me in bld. 6/2, or leave it at any gatehouse for collection by me, or post it to me at Tree Tops, Plump Hill, Mitcheldean GL17 0EU.

or ring me — ext.566 or Dean 542415.

Myrtle Fowler, editor



THE TEAM'S efforts have also benefitted the community.

Their award earned them prizes amounting to £6,000 which is being shared equally between six charities chosen by the team members — Children in Need, ITV Telethon, the Stroud-based Meningitis Fund, Birmingham Children's Hospital Surgery Research Fund, Gloucestershire Royal Hospital Children's Intensive Care Unit, and the RXMP Employees' Charity Fund.

"Leesburg — here we come!"

IT WAS a case of 'Leesburg, here we come' for members of the Unified Job Evaluation Team when, having won the European Manufacturing Operations Team Excellence Award for 1989, they were invited to participate in the Development & Manufacturing event in the USA.

Only five could go, so last December, Colin, Charlie and Rob (who had never been to the States before) set off with Mike and Allan (who had) to spend a week as guests of Xerox.

Had they kept a joint diary, it might have looked something like this:

Saturday, 9 December

We leave home around 5.30 a.m., then spend four hours at London Airport. Charlie sets off alarm going through metal detector. Both he and briefcase are searched. Slides and other presentation material get unexpected 'screening'. No 'contingency Charlie' — but (comforting thought) there's back-up material in rest of luggage.

Finally board flight for Washington, plus Charlie. From there travel by hired limousine to Leesburg in Virginia. Feel at home on arrival. Xerox International Centre for Training & Management Development is in forest setting (deer but no sheep!).

Have to negotiate colour-coded underground corridors to our rooms. Then it's off again to Leesburg town for meal and first taste of American beer. Several inches of snow everywhere.

Sunday, 10 December

Rest day, much needed after 18 hours' travelling. Work off jet lag playing table tennis and pool, and explore the complex. Full information package gives us all information we could wish for.

D&M executive vice president Bill Lowe welcomes gathering at evening reception for all 30 teams from locations ranging from Venray to Brazil. We are the only UK team. Everyone given an identity badge and summary of each team's presentation. Allan has chat with 'Condor Club' — not pipe smokers but team who improved utilisation of harness machine at Webster similar to Molex AM81 on which Allan had provided technical support.

Monday, 11 December

Team presentations commence; ours is scheduled for tomorrow. We enjoy whole-day

guided tour of sights of Washington. Visit Capitol Hill complex including House of Representatives and Senate. Note 'carved' desks of senators. Each is allowed to carve his initials on his desk and is provided with penknife for that act of vandalism!

Also visit National Air & Space Museum and numerous memorials — Lincoln, Jefferson, Vietnam Veterans, and Arlington Cemetery where Rob (a boxing enthusiast) is interested to see grave of Joe Louis.

Special Team Excellence event that evening. We go to Harlequin Dinner Theatre in Rockville, Maryland, to dine and see 'Funny Girl' musical. Then early night — tomorrow is the great day.

Tuesday, 12 December

Our presentation is at 8.30 a.m. We are second team to go before panel of senior vice presidents. All arranged informally, everyone is on first name terms, everything done to make us feel at ease. But of course we are nervous.

Presentation lasts 12 minutes (strict time-keeping). Allan covers process and Charlie the results. Ends with 10 minutes' question time ("How did you get on as a team?", "What companies were used for benchmarking?"). We all take turns in giving concise answers. Then we leave while panel evaluate our effort according to Team Excellence criteria.

Reaction is favourable, we feel we've done well. Debbie Smith, vice president, personnel & support services, comes over to thank us for doing "a marvellous job." She appreciates the impact of the project.

All we can do now is await announcement of results at Recognition Banquet for Team Excellence Award recipients at nearby Ramada Renaissance Hotel. Chat with various vice presidents who congratulate us, but outcome is closely guarded secret.

All EMO people at tables in same area — senior vice president and general manager Eric Steenburgh joins our table. Bill Lowe talks about Teamwork, future of Xerox, past year's achievements. He mentions Mitcheldean and its safety, quality and 'Best Factories' awards.

Out of 2½ thousand teams participating, just 30 were selected. "You are all winners, but we have chosen seven teams to receive the Corporate Team Excellence Award," he says. Then

he reads out the names. First comes a Mexican team, secondly a secretarial workforce team. Ours is the third!

We each receive a mounted plaque engraved with our name. We feel so elated we want to tell everyone at Mitcheldean at once. But it's now about 1.30 a.m. in England. Charlie rushes to the 'phone and wakes Robin Fyffe with the good news!

Wednesday, 13 December

Fly to Rochester for a visit to the Webster plant. Collected by Webster chauffeur and given brief tour before being taken to hotel. Temperatures are below zero. We're taken to shopping mall, then dine with Webster employee relations manager Bill Roscoe (we'd met him in Washington) and chauffeur Dick Lincourt. We help Dick celebrate his 30-year service award.

Thursday, 14 December

Webster plant brings home to us the sheer size of Xerox. We go round NBO (new build operations) and CMO (component manufacturing operations) buildings. Our building 1 would go into either of them twice over. It puts manufacturing operations into perspective for us. Level of automation in CMO is high and they have introduced a new plastics section.

Have two-hour discussion with union president Peter Leuchars and Bill Roscoe on differences

between Webster and Mitcheldean. Very frank and informal. John Wigg, vice president, Webster machine manufacturing operations, calls by (many will remember when he was in charge of Mitcheldean assembly operations in the '70s). He asks to be remembered to George Cresswell, then senior steward of GMW.

Off to New York next (an hour's flight). J. F. Kennedy Airport is quite some way from the city so another limousine called for. Four lanes each way have to go into toll tunnel. Payment has to be in quarters. Never seen traffic jams like it! Colin's lifetime ambition to see the Big Apple is realised. And we can say we've now been on Broadway (our hotel is there).

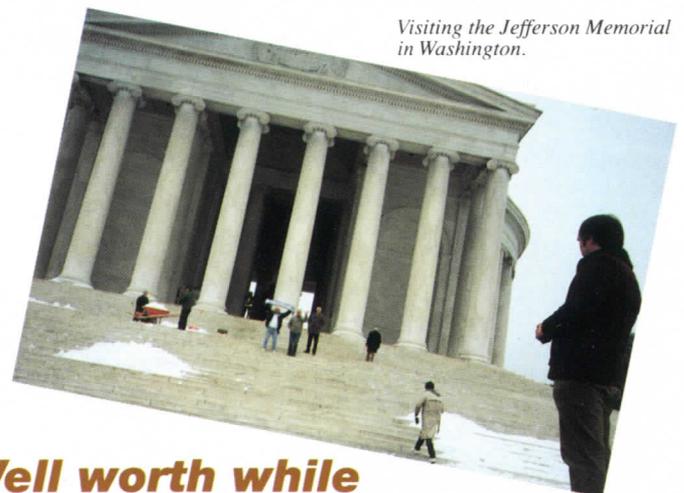
Friday, 15 December

We have the morning to see the sights — World Trade Centre, Empire State Building (some of us go to the top to get an overview of the city, and find ourselves looking down on helicopters!).

We do some shopping, too, and call in at the famous Macy's department store.

At last we say goodbye to the USA, leaving New York 7 p.m. (their time), landing back home 7.30 a.m. (our time). Incredibly, Charlie is stopped at airport again — this time by Customs. They decide not to confiscate him and we all get home safely — after 36 hours without a wink of sleep.

Visiting the Jefferson Memorial in Washington.



Well worth while

THE TEAM generally agreed that it was a well worth while event because it brought together over several days teams from Xerox worldwide, and enabled them to discuss and exchange views.

"It was good to see such commitment from the senior Xerox management and to be able to talk to them in person," said Charlie.

Our team's success was not

only gratifying for Mitcheldean. It did a good job for our site's image, judging by the reaction of those attending the event.

"It also enabled us to see how we compare on a corporate level," said Allan. "I would encourage more people to formalise their projects.

"We're better than we think we are."

Miracles won't be necessary any more

EVERY YEAR the harness centre uses 15 million cable ties (that's around one for every person in Australia), 30 million metres of wire (equivalent to six round trips to New York) and 15 million connectors.

Keeping control of it all has called for a minor miracle on the part of the materials team during the recent rapid growth of the department.

Today the centre produces nearly 100 different harnesses with up to 15 operations per harness, making a grand total of well over 1,000 operations.

Demands for harnesses are created from the build programmes of each machine. Previously, these demands were created at the completed stage, which in turn created demands for the raw material.

However, this did not recognise the fact that harnesses have multiple levels (or operations) of assembly.

This meant that all operations had to be manually progressed through the harness shop with no record of completed WIP (work in progress).

Secondly, all material used to complete sub and wire assemblies was 'lost' to the MMCS computer system. This led to over-provisioning of raw materials and piece parts.

Too Complex

The situation was becoming too complex for manual control, so a team was set up about a year ago to resolve the problem.

Said Rob Harris, who succeeded Ian Hammill as team leader when he took over as harness operations support manager, "We realised early on in



Systems project manager Roy Watkins and (right) Rob Harris, harness operations support manager, evaluate the results of the new materials control system.

the project that we needed some computer aid in recording all completed batches, so we went for a barcoded, computer-generated ticket system."

The major feature of the new control system is that it mimics the actual build process of each harness, recognising the different levels at which material is used as well as the different types of wire and sub assemblies.

Each day there is an automatic block release of orders due to be carried out.

The system automatically looks at each order for a component assembly, calculates the requirements for each piece part, and checks there is sufficient stock within the harness shop WIPLOCs to complete the batch quantity of the assembly.

If there is, it releases the order and prints a two-part batch control ticket. If there isn't it refuses to release the order and reports the shortage.

Each batch control ticket released has a batch number in the form of a barcode. The ticket is issued to the build area and when the assembly is completed, one half of the ticket goes with the parts to identify them, the other half (containing the barcode) is returned to the materials office.

Here the barcode is read with a light pen, thus recording the build and updating the stock levels in the system.

By this means, accurate stock levels of piece parts and sub-assemblies can be maintained, and this in turn enables the computer to schedule the work throughout the assembly floor.

And that's not all. Each of the different types of operation within the centre is recognised by a

Materials analyst Louise West updates the stock records, using a light pen to read the ticket barcode.



special code on the computer, and by calculating standard times for each different operation, bottlenecks and capacity constraints can quickly and easily be identified and corrective action taken.

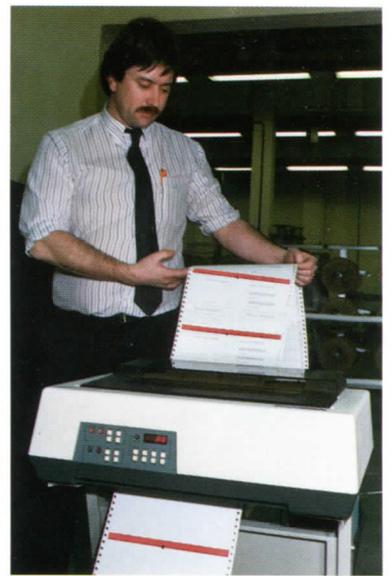
Devising such a system involved a great deal of work and considerable commitment on the part of the team, who included materials analysts Martin Haines and Louise West, plus MIS staff Dave Mahar, who wrote the business proposal at the outset, and Roy Watkins, who was the systems man throughout.

Their efforts were recognised when the WIP Tracking System for Harnesses QIP was selected for presentation at the December 1989 ORM.

The new system is being implemented model by model. It commenced with the 5012/5014 as a pilot scheme which went live in January. The final stage is due to be completed by the end of April.

"The project has produced initial savings of 15 per cent inventory," Rob told us. "But we expect it will achieve far in excess of that.

"In addition, lead times are



Martin Haines, materials analyst, examines a print-out of batch control tickets, each of which has a batch number in the form of a barcode.

being reduced and we now have full visibility of work in progress throughout the shop floor.

"The second phase of the project will be to provide a complete tracking system for work volumes."

The project has been welcomed by harness production management who say it will make their job a lot easier when fully implemented, and will facilitate Just in Time manufacturing.

"This materials systems development is, in fact, one of four segments comprising our JIT Interconnect Showcase, which is part of the M2000 initiatives," explained harness assembly manager Des Halliday.

"Some time ago we decided to review the whole harness operation through a process of benchmarking, and these strategies which we are developing are designed to make Mitcheldean the best supplier of harnesses in the Xerox world."

We set new safety record

LAST OCTOBER Mitcheldean Operations achieved 2 million hours without sustaining a lost time accident.

The new target set was 2.5 million hours, but at the end of February last we made it through to 3 million safe working hours, an achievement unparalleled throughout Rank Xerox world-wide operations.

On behalf of Rank Xerox senior management, site director David Stokes thanked everyone for making this possible.

As we went to press, we had our sights set on the new target of 4 million hours.

Success in supervisory studies

"IT'S GOOD news for you and good news for Mitcheldean."

That is how site director David Stokes described the recent success of employees who had taken National Examinations Board for Supervisory Studies courses.

Presenting them with their certificates on 13 February, he congratulated all twelve on their achievement and on the effort they had made, in their own time, to gain the awards.

He spoke of the development of activities on site and said he was confident that they would be part of that growth. "I encourage you to continue the work, to develop your understanding and to make use of the opportunities that exist."

The awards were on two levels.

Six students had successfully completed the ten-week introductory course in supervisory management, designed to introduce employees into the role of supervisor and as a preparation for the NEBSS certificate in supervisory studies.

Robert Sargent, who works in harness assembly, has already embarked on the latter course.

The other five, all former apprentices, are studying for an HNC or HND in electronics at GlosCAT. Mikela Hale (née Stewart), Ian Blethyn and Gwyn Lewis work in refurbishing operations; Colin Wynn and Julian Adams have joined the UK Co. to work as service engineers on electronic printing systems.

The six in the higher level group, who gained certificates in supervisory management, did a more comprehensive course which covered areas ranging from production planning and control to instructional and management techniques.



The NEBSS certificate group — (from left) Julian Priest, Sean Mills, Barry Clein, Jeremy Barnard, Dave Bufton and Carl Beizsley — with site director David Stokes.

Each also had to attend a residential weekend at Abergavenny and submit a work-based project of a practical nature.

Ex-apprentice Sean Mills (ROS) had particular success with his project. This was the development of a method to enable PWBA schematics for electronic printers, held in El Segundo, California, to be transferred electronically via Ethernet so that they can be promptly accessed by ROS engineers working on the repair of defective boards.

Sean's project won through the regional finals to compete with 11 other projects nationally.

Three other ex-apprentices — Jeremy Barnard, Julian Priest and Carl Beizsley — also gained NEBSS certificates at this level.

Jeremy, who has now joined group personnel, was a member of the 5018/28 technical support team when he commenced his project concerning the packaging of machines preconfigured in Venray.

He reviewed the current method and evaluated the benefits of substituting a reusable metal tote, finally reaching the conclusion that this would be cost-justified but that other

options should be considered.

Julian, who provides technical support on FR&T in 5046 family assembly, did his project when based in the electronic workshop.

He proved the case for acquiring new computers and printers for the production of barcode labels in the Markem area. Now installed, they provide a cost-effective method and make modifications easier to carry out.

One of the MIS technical support team, Carl carried out an investigation into storage media for back-up data, his project producing firm evidence in favour of the department's changeover

Those who completed the introductory course (from left) Gwyn Lewis, Julian Adams, Colin Wynn, Ian Blethyn, Mikela Hale and Robert Sargent — with young people training manager Brian Fowler.



from a reel to a VHS technology cartridge system.

Working in 5046 DMC, Barry Clein looked at the procedures in place for controlling defective materials, and his project developed into a QIP since it had to involve other material inspectors.

"We identified where improvements could be made and implemented these in areas under our control. In other areas we made recommendations so that those concerned could recognise the faults and implement QIPs on their own," he explained.

A section manager in 5018/28 assembly, Dave Bufton also saw his project — on line fall-out of main PWBAs — develop into a QIP. "It proved to be chiefly a vendor-based problem, but in the process we definitely improved our reporting practices and it drove a lot of SQA activity."

Five of the NEBSS certificate group are now doing a diploma course (Dave is doing his as part of the section manager development programme). The exception is Carl who is working for a certificate in management studies which does not fall within the NEBSS structure.



Jessop manager Geoff Barham sets up the equipment.

They saw themselves on TV

CAMERA CLUB members were introduced to Canon's revolutionary still video camera at their meeting on 12 February by Jessop, the camera and video specialists from Gloucester.

They were able to use the new iON camera which stores the pictures on a reusable video floppy disk. And with a £5 Jessop voucher on offer for the best image taken on the night, they took the opportunity to photograph each other, which resulted in some very amusing shots.

The images on the video disk were played back through the TV

monitor, providing good entertainment.

Also on show was a NEC video printer; with the press of a button by Geoff Barham (Jessop manager), the best image was instantly turned into a 6 x 4 inch colour print.

Geoff and assistant manager Mike Crook answered questions on all aspects of video and still photography, making a very interesting evening on the latest technology available today.

A former tradition was revived with the holding of a slide battle between the RXMP and Newent Camera Clubs on 29 January.

To their delight our side scored 372 to Newent's 334. The visiting side claimed the top individual scorer, who gained full marks (20 out of 20). Two of our cameramen, however, came close with marks of 19 each, and there were five who gained 18 points.

Club chairman Terry Darrington, who is also a member of the Newent club, quite rightly supported the Mitcheldean club — though it earned him a bit of stick from Newent photographers!

The 25 slides submitted by each side were judged by Bernard Baker.

Now it's all come together —

HOW HAVE parts manufacturing personnel come to be visiting an unlikely place by the name of South Bend in the State of Indiana, USA?

It all goes back to the autumn of 1987 when former EMO vice president and director Dick Holmes and Rank Xerox management agreed upon a manufacturing plan and strategy for the European fuser/pressure roll centre at Mitcheldean.

This was aimed at increasing its productivity, capturing new business, and making it a world-class supplier.

A capital investment programme over two to three years which was outlined in that plan has now 'come together'.

The majority of the proposed capital acquisitions, including three CNC lathes, are now on site, producing fuser and pressure rolls for a wide range of machines, from the 3600 to the 5046 family.

The final major acquisition has been an 'inertia weld' machine, made in — you've guessed it — South Bend.

Put simply, inertia friction welding technology allows the metallurgical or mechanical bonding of materials whether they are similar or not. In other words, the process gives us a choice of materials, which is what we need.

The trouble has been that with every new copying machine produced, differing materials requiring a different process were used for the fuser tube and the two journals (the 'handles' at either end).

But how does it work?

ENQUIRING MINDS might like to have the following technical description of the process:

Inertia friction welding is a variation of friction welding in which the energy required to make the weld is supplied primarily by the stored rotational kinetic energy of the welding machine.

In inertia welding, one of the workpieces is connected to a flywheel and the other is restrained from rotating. The flywheel is rotated up to a predetermined speed, storing the required energy. The drive motor is disengaged and workpieces are forced together by the friction welding force. This causes the surfaces being joined to rub together under pressure. The kinetic energy stored in the rotating flywheel is dissipated as heat through friction at the weld interface as the flywheel speed decreases.

as Roger Imm explains

Roger Imm and (right) Dick LaBombard from Webster discussing the configuration of a new fuser roll.



Alan Hughes calls up a statistical trend graph on the control monitor of the inertia weld machine.



For example, the 9000 family had copper rolls and stainless steel journals which had to be brazed together (a form of soldering); the 1075/1090 machines required plastic/aluminium using a pin process.

The engineering community decided that the way forward was to standardise fuser roll design by having a three-piece construction utilising inertia welding technology.

This enables steel bearing journals (which will withstand wear) to be 'joined' to aluminium tubes (giving high thermal transmission), thus giving us the best of both options for on-coming products.

The inertia welding process is not a new one. So why did we decide to buy from a certain US manufacturer and not a UK one?

The reason was that Xerox already had on order for Webster CMO (component manufacturing operations) a similar inertia weld machine, made by Manufacturing Technology Inc. in South Bend; we decided to make use of their technologies, thus helping to standardise production methods and capability throughout the



The overall length of an inertia welded roll for a new product is checked by Malcolm Norris.

company — a prime goal.

Parts manufacturing manager Larry Sterrett and I, as the engineer responsible, went out in October 1988 to finalise the order details and technical requirements.

The build cycle was 12 months and on 4 October, 1989, the machine was ready for acceptance trials.

This entailed a second visit to the manufacturers and this time setter Malcolm Norris accompanied us.

The 'direct' route to South Bend is from Heathrow to Chicago, the world's busiest airport (an eight-hour flight). Then there's a 30-minute 'hedge-hopper' flight back east across Lake Michigan to South Bend.

The latter is approximately a two-hour drive from Chicago. Years ago it was known as a 'bedroom community', due to the fact that the wealthy businessmen of Chicago lived there and commuted to work.

South Bend is also the home of Notre Dame University, one of the top engineering colleges in the US and famous for its American Football team.

Studebaker cars and the well-known South Bend lathe originated there. This lathe was familiar to many an ex-apprentice at Mitcheldean who spent time in the former training school.

The St Joseph river flows through the town and this is where the American Olympics team practises for 'white water' racing (canoe slalom to us).

MTI are a small company specialising in inertia welding technology and associated equipment. They not only make the equipment, they also use the technology in the work they carry out for various customers, including the US Government.

The capability trials on our machine were duly run and it was accepted for delivery.

It arrived at Mitcheldean in early December last and is initially being used for production of 5046 family fuser rolls, for both new build and spares.

Although the technology is common to that used by CMO, the application of each roll is different and we have had the assistance of Webster's technical specialist in materials and manufacturing technology, Dick LaBombard, in developing a quality, cost-effective process.

The machine had yet to be handed over to production at the

It was tailor-made for Tony

"THE ADVERTISEMENT offered me an opportunity to get on the production management ladder and that's what attracted me," said Tony McNally. "But I had no idea it was Rank Xerox I would be working for."

The opportunity seemed tailor-made for Tony. Having completed a technical apprenticeship with Dowty Rotol and spent a year as a jig and tool draughtsman, he had decided to go for a degree in production management and production technology, and had obtained a local council grant to do a course at Aston University, Birmingham.

His final year included six months at ICI Pharmaceuticals doing an industrial-based project; then it was back to college where he gained a BSc. (Hons).

Tony has been fortunate in both his job locations since. In 1984 he joined Plessey Defence Systems in Christchurch, Dorset — a delightful area close to the New Forest.

"It's a very popular holiday spot; I used to look forward to the winter when the tourists had gone home!"

After three years working as a production engineer on robotic and CAD operations, Tony was eager to get his foot on the first rung of the production management ladder and, following a successful interview, he once again found himself in a beautiful forest environment.

"It was not so much the Mitcheldean site as the total quality environment that attracted me," he told us.

"Quality has of course been important in other places where I've worked, but I've never before come across this continual drive to improve, project-by-project, as



Tony McNally in the harness centre.

we do here."

Having joined in September 1987 as a section manager, Tony took part in the development programme specially devised for those undertaking this role.

"It gave me an idea of what the other section managers' jobs involved and we were able to exchange useful information," he told us.

His first appointment in 1025 minor subs was a totally new experience. "Previously I only had one robot under my command and it usually did exactly as I instructed it. But you can't programme a team of 28 individuals!"

Similar appointments on the 1025 main line and FR&T followed. Then came a transfer to a totally different sphere.

In February 1989 he moved to the finance department as a business analyst, primarily concerned with reporting manufacturing cost variances.

While there he led a QIP on the subject of MCVs which, as he says, "we are all having to work on.

"It was a useful experience

but, after ten months' close relationship with a terminal, I was longing to get back to the production side."

With the recent retirement of John Haggar, he was offered the post of section manager, manufacturing and harness QA, reporting to Pete Jennings.

He has taken up this position at a critical time. With the D&M MO audit imminent, there's a good deal of preparation to be carried out, reaffirming that everything is being done according to the Grey Book of policies and procedures.

"We are also reviewing the current quality system with a view to making it more responsive, and SPC (statistical process control) is one of the tools we shall be looking to use."

Tony completed training in SMIP (statistical methods for improving performance) in the Open Learning centre.

Now he's doing an Open University post-graduate diploma in manufacturing systems which can give him a master's degree in that discipline.

"I allocate about eight hours a week to studying, which includes using a hired terminal linked to the OU computer, and audio-visual work as well as conventional book work.

"I do a couple of hours in the evenings after work, but I like to keep the weekends free for the family."

He and his wife Angela have two boys, Jonathan aged 3½, and Thomas, just coming up to six months.

Angela holds SRN and RSCN (registered sick children nurse) qualifications. As their contribution to 1992, she is learning German while Tony is

attending French conversation classes and has made use of our Open Learning Centre BBC videos.

"We're following this up with a holiday in France this year and one in Germany in 1991."

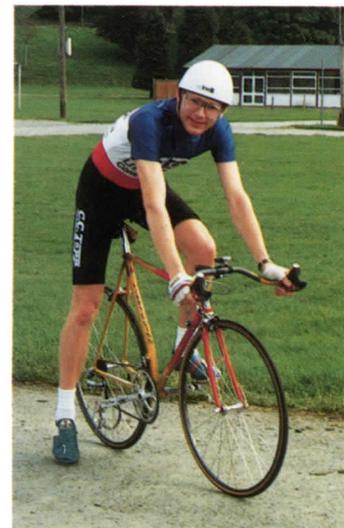
Tony tries to balance his mental work with physical exercise. He used to run in marathons and raised some £800 for ARMS and the MS Society in Macclesfield and Gloucester events.

Now he's given up running for cycling and takes part in individual time trials with the Ross Cycle Club. "But I fear it is losing the battle with my OU course."

He doesn't have to leave home to go cycling. He has a set of rollers on which his 'low profile' bike rests, enabling him to scorch along for miles in one spot.

But on one occasion he really went over the top — the bike moved forward off the rollers and left scorch marks on the carpet!

With his low profile 'Harry Quinn'.



Continued from page 8

time of going to press, but this was expected to take place by April.

M2000 projects

The next phase of development/growth in parts manufacturing is embraced by M2000. The projects include:

- Introduction of plastic moulding.
- Setting up of integrated fuser/pressure roll machining cell.
- Changeover from batch to flow production.
- In-house production of journals, at present bought in.
- Introduction of hollow tube technology.
- Just in Time manufacture.

Hopefully, all these plans will come together as successfully as the initial one.

Obituaries

TERRY ELSON was tragically killed as a result of a car accident on 15 February.

Aged 48, he had been with Rank Xerox for 14 years. He came to us as a systems analyst, progressing to become UK systems development manager.

Judo was his great interest outside work and he was a national referee as well as a qualified club coach and official judo instructor at Hereford Leisure Centre. He also did a good deal of voluntary work for the Hereford social services.

Our sympathy goes to Terry's wife Barbara and his two teenage children, Tony and Joanna.

Vernon Edwards died suddenly on 25 January at the age of 53. He worked in CBA refurbishing assembly and had been with us for 17 years. Vernon had also served

as an MWU shop steward some years ago. We would like to convey our sympathy to his wife Thelma, his son Mark and daughter Susan, and his brother Russell who works in refurbishing assembly.

We also regret to report the deaths of the following retired employees:

May Stidder, who died in Standish Hospital on 31 January at the age of 69, had suffered ill health for a number of years. She used to work in assembly inspection before she retired in 1975, having completed over 30 years' service. Her husband Bill also once worked in Mitcheldean's machine shop in Bell & Howell days.

Formerly packaging manager for Mitcheldean, reporting to Aylesbury, Eric Real died on 17 February, aged 50.

A chemist by training, he had extensive knowledge of the packaging and shipment of hazardous goods and Xerox as well as Rank Xerox people used to consult him concerning environmentally friendly methods.

He was a man of many talents. An active member of the Cheltenham Operatic & Dramatic Society, he did engraving, grew orchids and used to take part in our Chess Club tournaments.

A particular hobby of his was banger racing with cars he had built from scrap.

He had retired only last December and was setting up a consultancy business at the time of his death. The funeral service was conducted by former employee Russell Griffiths at Lugwardine Church.

We would like to express our sympathy with their families.



John Shields and friends at his 35-year service award presentation.

Service Awards

35 years

John Shields, section manager, 5046 optics, is one of our longest servers in assembly operations.

Fresh out of school, he was accepted under the then five-year leadership scheme but while waiting for a placement he "started at the bottom" as a shop boy.

"I decided I'd prefer a practical career and I didn't fancy doing national service at 21, so I opted out of the scheme."

He worked on the assembly of Bell & Howell cameras and projectors until his call-up papers arrived and then joined the Royal Corps of Signals.

"I ended up serving in Hong Kong and while there, by chance, met Bill Treasure (also now one of the 5046 team) who was on guard duty at British Forces HQ."

On demob, John rejoined the company, this time repairing B&H equipment in the service department and he subsequently moved with them to Shepherds Market, London, for just two weeks.

Back at Mitcheldean, he worked on the 914 assembly line and also on remodelling/reconditioning.

He was married in 1962 to Eileen Baldwin (then in the mail room) and a year later was promoted to chargehand. From that time on, he has been engaged on new build assembly of various models, becoming supervisor and, more recently, section manager.

Among the highlights of his career John counts his visits abroad — to Venray for three months with a quality team, two six-week assignments in Webster and Japan on tool try-out — and two months at the Welwyn pilot plant helping in the 5046 development.

After returning to base, he was made responsible for the pre-configuration operation, now integrated with the main line.

At John's 35-year service award presentation, new build assembly operations manager John Flynn paid special tribute to him for the "tremendous effort" he has put into the 5046 programme.

Neither of John's two sons is an RX employee (the elder one is setting up his own business as a power tool retailer, the younger is a jig and tool-maker). But his nephew Mark Christopher works nearby on the 5046 floor.

Mark is the son of John's sister

Phyllis, one of our retired long-servers, and her husband Vere, another ex-Mitcheldean. Phyllis, well known as a member of Mitcheldean Parish Council, is chairman of the Rank Xerox Gardening Society, and since gardening is John's way of relaxing after work, they have a common interest.

Converted late in life to rugby, John follows Drybrook RFC but has been known to watch other teams, and "I enjoy a game of skittles and a sing song, too."

30 years

Gerald Cooke, too, joined us in pre-Rank Xerox days, originally intending to become a service engineer on Bell & Howell cine equipment.

In common with all school-leavers, he was 'set-up' by his older colleagues. One of his early tasks was to view customers' cine films to determine camera faults. When the first one turned out to be of shots taken in a nudist colony he thought to himself: "This is the job for me!"

However, things were to change rapidly when Xerox came on site.

Cine equipment moved to Shepherds Bush and, like John Shields, Gerald went with it for a short time.

Returning to Mitcheldean, Gerald joined warehouse administration which was responsible for the distribution of equipment world-wide — a role which was to increase in size, necessitating a move off-site to Gloucester Trading Estate.

"The warehouse was then headed up by Henry Berry, who was impressed with the number of lunchtimes we used to spend at 'The Library', until he found out, whilst shopping one Saturday, that this was the name of a club and disco in Gloucester!"

The IDC (international distribution centre) as the warehouse became known, reflecting its change in status, moved back to Mitcheldean in the early '70s with the completion of buildings 1 and 2.

Also during the early '70s the UK joined the EEC, and from that point an ever-changing legal framework culminating in Customs 88 kept Gerald and his colleagues busy and challenged.

From being a shipping clerk, Gerald progressed through supervisory to management posts, becoming administration manager for the supply centre.

As you might expect, his job has involved travel in Europe, to the US

and to Japan. His second time out East was in connection with the QIP he led concerning box utilisation which won the Top Team Award in 1986 — "This in the company of many friends who remain in distribution and to whom I owe a great deal."

More recently, Gerald has been appointed manager, non-production purchasing, and is currently leading a project on 'In-transit tracking' which is a key enabler for JIT manufacturing.

Gerald's interests include music (something of an obsession), wine, books, politics and sport — watching now more than participating, although he enjoys squash and is an entertaining swimmer ('in joke' with those who know him!).

Tony Burcher has spent most of his 30 years' service at the sharp end of manufacturing operations.

He started as a shop boy in the old 'experimental' lab. and, after some 18 months, went into the newly set-up Xerox machine shop where, he says, "I did a bit of everything."

Two years or so later he became a dedicated tool and cutter grinder, a job which involves making special performance cutting tools for both production and prototype work within manufacturing, as well as regrounding tools to lengthen their useful life.

There was a short period in 1986 when he worked on 1025/1038 sub-assembly, and as a member of their 'family group' he took part in a Leadership Through Quality training project which involved producing a poster. With the theme "We don't cut corners," it was one of 13 selected to form the basis of the 1987 Mitcheldean calendar.

Tony enjoys skittling with the Globe Stars, but his favourite pastime is playing chess. He became a member of the Chess Club a couple of years ago and takes part in the tournaments they organise.

He, Andy Gardiner and Malcolm Wootton won the Wickstead Shield in the team competition last year, and they are hoping to retain the trophy in 1990.

"I was playing with 'Major' Bill Jones in the new doubles event but we were knocked out. However, there are two singles competitions — the Portman Cup and the new 'league ladder' for the President's Trophy in which every participant plays everyone else — so there's plenty of involvement," says Tony.

And if he's seeking an opponent at home, his personal computer is always ready to oblige.

He and his wife Marion have two daughters of 12 and 14, both of whom attend Heywood School, Cinderford.

25 years

Parts and pounds have been **Graham Beavan's** concern since he joined as a clerk in production control.

After a year working on the product build list for the then new 660 machine, he became a progress chaser and spent the next ten years

Gerald Cooke

Tony Burcher

Graham Beavan



20 years

Dennis Sherwood (refurbishing) and (right) **Mike Bennett** (production stores) — two 20-year service award men. Another who has qualified recently is **Dennis Martin** (fuser rolls).

in pursuit of production parts.

Later, as a member of a stock control team, he was involved with the disposal of excess stock in Hereford stores, transferring to inventory control as an analyst in the early '80s.

Six years ago he 'parted with parts' and switched his attention to pounds in the totally different environment of payroll operations where he is located today.

"As a member of the LSA committee for the past three years, I have found access to the records there very handy for checking on dates of membership eligibility, retirement, etc.," he points out.

Graham met his wife Joan at Mitcheldean when she was employed in purchasing and they married in 1969.

A year later saw him become chairman of the site's Variety Club and drummer in the Rank Xerox Showband, while Joan, as well as showing a leg with the troupe of Xeroette dancers, acted as helper to a magician.

The Variety Club eventually ceased to perform, but Graham still beats the drum, playing occasionally for dances in a duo with Rex Tabb (purchasing) on the keyboard.

About ten years ago Joan (who left in '83) and Graham got involved with fund-raising, collecting £1,000 plus annually for different animal charities through jumble sales. Their thanks go to all who have contributed donations and items for their stall.

With the help of supporters they have adopted a spotted axis deer, or chital. It lives in Marlow Zoological Park, near Winchester, where endangered species of wildlife are bred, and every year they visit the Park and pay £100 towards the cost of the deer's keep.

He's a worldly cook

THERE'S A gourmet in the harness materials control office.

Says Martin Haines, who seems to be cast in the mould of TV personality Keith Floyd: "We eat 'round the world' — Monday could be Chinese food, Tuesday a very hot curry, Wednesday dishes from Thailand and so on — but without all the travelling that Floyd does."

What started him on the cookery trail, we wondered.

"My mother was in the catering profession," he told us. "When I left home and had to cook for myself I tried to reach her standards."

"My wife is my kitchen help — in fact, she's getting as keen on international cookery as I am — but I don't leave all the washing-up to her. A dish-washer was one of the first things we bought."

Though Martin loves experimenting, he does specialise in a particular style of cooking when having guests and last year it was French; his current 'flavour

of the year' is Chinese.

"Recently I was bet that I couldn't do nouvelle cuisine. I accepted the challenge and did an eight-course menu (which sounds a lot, but the portions are small). I started preparing it on the Friday afternoon and had it ready for serving up at 8 pm on the Sunday!"

Choosing wines to complement the food is another pleasure. "My father is a wine freak and I 'rob' his cellar."

Unfortunately Martin's hobby doesn't make for a slim-line figure and he's desperately trying to shed some weight, he told us.

He is taking a course, but it's not a weight-watcher's one. It's a Henley Open Management Education programme which could gain him exemption from some parts of the MBA examination.

For this, he is making use of our Open Learning centre and, when not slaving over a hot stove, he slaves over a home computer.

Changing party patterns

THINGS CHANGE as the years go by, and Christmas parties along with the rest.

Discos have replaced party games, though Punch & Judy and magicians are still popular entertainment.

Jelly and very sweet items have given way to savouries, though ice cream remains a firm favourite.

At the children's parties held on 29 December (for the 5 to 7s) and 7 January (for the 8 to 10s), there were changes again.

The sausage rolls, crisps and cake came pre-packaged, which saved the helpers work and proved less messy, especially for the children who wanted to take their uneaten items home

(mothers must have been grateful!).

Father Christmas, too, was different, having apparently lost a lot of weight since last year.

Dave Lea, who had never been behind a white beard before, was very apprehensive about his debut, knowing how discerning youngsters can be.

But he received an unexpected accolade when a little girl came up and gave him a present!



Their 'away day' — from prison



Making a dash for it from Gloucester Prison. That's Kay Dixey in the centre, with Jimmy Moore coming up behind.

WE'VE ALL heard that prisons are getting overcrowded.

But is it right that no less than 11 young 'offenders' should have been assisted in making a getaway from Gloucester Prison — not only by the prison authorities but also by a number of normally law-abiding organisations?

The answer is: yes.

Involved in this latest break-out were 20-year-old Kay Dixey, materials analyst (she 'holes up' in Squirrel stores) and Jimmy Moore (22) of machine stock control in the supply centre.

They were not only anxious to put as much distance between them and Gloucester Prison in the space of 12 hours, they were also out to make money. But for very worthy causes.

Each was in a group of students from GlosCAT where both are doing BTeC courses — Kay in business and finance, Jimmy in management and business studies.

Kay's group were supporting Gloucestershire Royal Hospital's renal unit; Jimmy's were raising cash for Scoo-B-Doo (the special baby care unit fund).

To add a bit more excitement to their sponsored escape, they competed against each other. Kay's group, who did a 500-mile 'dash' up north to Inverness, finished literally miles ahead.

Both groups 'broke out' at 7.30 a.m. on Tuesday, 6 February — a day they would normally have attended at GlosCAT. (Since their effort required quite a bit of organising, particularly on the financial side, it was seen as contributing to their studies, Kay explained).

Her team were making for the

north by train, courtesy British Rail, and Jimmy's lot saw them off at the station.

"We had been given free transport to London and back by Swanbrook, but as the coach didn't leave until 8.45 a.m., we lost some time at the start," he told us.

Kay's all-girl group wore designer prison outfits with arrow motifs, plus ball and chain and explosive accessories. In case no one noticed, attention to their mission was attracted by an announcement over the train PA system.

"People kept coming up to talk to us and we managed to collect £145 on the journey alone," said a delighted Kay.

Gardner Merchant, our caterers, provided them with packed lunches which were much appreciated as food on the train was not cheap.

The girls had to make several changes, taking photographs en route to prove they had done the whole journey, and they finally arrived at Inverness at 7.24 p.m., with just six minutes to go to the deadline.

There wasn't time to look round the town — in two hours they were on their homeward journey. "We tried to get some sleep and I did manage to drop off, but the rest complained my snoring kept them awake!" said Kay.

They arrived back at 8.55 a.m., completely exhausted after their 1,000 mile trip.

On reaching London, Jimmy and his group caught the tube to Victoria Station and bought train tickets for Brighton. They took a bucket, not for building sandcastles but for collecting

contributions.

"It was bitterly cold and windy. I had a quick paddle in the sea but I couldn't recommend it. After taking a photo under a clock, we made our way back and then hit the rush hour in London."

Thanks to all their supporters — British Rail, Swanbrook, Rank Xerox, Gardner Merchant, Gloucester Prison and all those kind people who gave donations — the two groups were able to hand over a total of £787 to charity at a joint presentation held at GlosCAT in March.

A cheque for £537 went to Gloucestershire Royal Hospital for the renal unit while Scoo-B-Doo received £250. (Further sums have yet to come in.)

Record flight

WITH HIS experience, Richard Howe (materials) is well qualified to be a consultant in jail-breaks, having escaped regularly from prison in recent years in aid of the Fire Service Benevolent Fund and local Boys' Clubs.

He did a record 'flight' from jail to Geneva last October, thanks to complimentary air tickets from an 'outside' contact — which must have been a bit of a shock to anyone who was sponsoring him per mile.

He also won a special prize for the most convincing convict look. "I sported an ugly scar on my face," said Richard, "but plastic surgery has done wonders for me!"

Long-servers retire

AN 'L' plate (he joined under the learnership scheme), some cigarette paper (he has a reputation for rolling the thinnest cigarette in the Forest) and a garden gnome (he's starting a new venture in a garden centre) were among the jokey gifts for John Haggar when he retired on 19 January.

Along with these came the real gifts from colleagues — a lighter (from tool inspection), a brass plaque complete with hooks and an engraving of a fish (an 'official' gift made by parts manufacturing!), and a handsome watch from his

many friends on site "to remind him to go home on time," said MOC manager Brian Buckland, who made the presentations.

John, who had been with us for 33 years, worked in industrial engineering and resource planning before moving into the quality sphere where he became manager with responsibilities for refurbishing and, more recently, manufacturing and harness QA.

A former player for Worrall Hill FC, John has been the club's treasurer for many years.

His colleagues give John Haggar a good send-off, MOC manager Brian Buckland presenting the genuine, and jokey, gifts.



ROGER Smith, who said farewell five weeks later, joined us as a design draughtsman. During his 27 years' service he carried out various responsibilities in an engineering capacity, switching to production when for two years he was assistant manager of 4000 assembly.

In 1973 he transferred to materials department and he had been manager refurbishing materials planning and control for the past four years.

Roger, whose elder son Ian is a buyer in purchasing, will be fully

occupied doing woodwork and general DIY as well as relaxing listening to classical music during his retirement. But first he was off for a holiday "somewhere warm".

He has been a confirmed pipe smoker since the age of 17 and MOC manager Keith Grant presented him, on behalf of his colleagues, with the complete smoker's kit of pipe, tobacco pouch with tobacco to fill it, a pipe stand, and a new technology lighter. Thus equipped, Roger took his leave — in a puff of smoke, so to speak.