

Vision

The house magazine of Rank Xerox Mitcheldean



A group of our industrial placement students, now working in departments throughout the site.

Placed to our mutual benefit

OUR INDUSTRIAL placement scheme is a continuing success story.

It was introduced four years ago, since when the number of students accepted from colleges and polytechnics has steadily increased from the original nine.

"We are getting a high calibre of student demonstrating interest in a career in Rank Xerox," human resources manager Robin Fyffe reports, "and we are now sponsoring more IPs through their final year.

"They return to college after their year's placement with us and talk about it to other students and the good

news spreads.

"We keep in touch with them and aim to give them an indication as to whether we can provide employment, depending on satisfactory examination results.

"We now look upon the scheme as a valuable source of recruits."

You may well recognise some of the young people who have recently started work at Mitcheldean as having been among the 1989 intake of IPs.

We have also offered employment to graduates whose industrial placement was at other Rank Xerox locations — Andrea Brashko, who has joined the purchasing team, and David Howell, now

in finance, were IPs at Welwyn and Aylesbury respectively.

On the internal development front, we are also continuing to train electrical trainees for FR&T positions.

"They are following a two-year course, with study one day a week at the Royal Forest

of Dean College backed up by work experience on site which will lead to a BTEC national certificate," said Brian Fowler, manager, skills and functional training.

At a lower age level we have once again taken on school and college leavers as engineering technician apprentices — two of them girls. Having had two weeks' induction at the plant they are now studying for an EITB first year certificate at the RFDC.

Apart from our existing 'work experience' scheme for secondary school pupils, a new initiative we have been involved in this year is Project '92.

Funded by the Training Agency and administered by Gloucestershire Local Education Authority, who are leaders in this field, it aims to give young people going into higher education a wider experience of the working world, including a period of industrial placement in Europe.

Continued overleaf

Engineering technician apprentices (from left) Stephen Winney, Claire Owen, Alan Minchin, Claire Phelps, Barry Davies and Simon Young.



Participating in the pilot scheme is A-level student Samantha Green, whose parents, incidentally, are ex-RX employees.

She spent four weeks in purchasing last August, working in the newly set up 'vendor and cost development' section managed by Dave Partridge.

He gave her some responsible work to do, not just run-of-the-mill tasks, an appreciative Sam told us.

She developed a user manual for the material productivity system and input data to enable reporting of cost variances. She also carried out financial analysis of purchased hardware on current products.

Over the past year we have extended our links with schools to an even younger age through the Rank Xerox Primary Schools Industry Project.

The venture, begun last June, has been continuing with visits from both teachers and pupils with a view to giving children a better understanding of the world of work, and help in delivering aspects of the national curriculum.

Who knows — some time in the future we may have employees who have maintained contact with us through all stages of their education, right from primary school, through work experience, commercial or engineering training, industrial placement and sponsorship at university or college!

Communication courses

THIS AUTUMN we are involved in the holding of a 'Communication Skills in Technology' workshop for teachers, along with the GCHQ and the BBC.

Being held at Hatherley Manor Hotel, Gloucester, on 11 and 12 October, it relates to the national curriculum key stages 1 to 4.

We shall be covering 'Communication in Emergencies': communication systems for key stages 1 and 2 — preventing or dealing with accidents and emergencies linked to the fire department.

Bryan's winning way with words

BRYAN LEONARD of QA tends to be a man of few words.

But when it came to the recent Quality Breakout Competition he proved himself a real wordsmith.

His prize performance won him a five-day return ticket for two plus car on any one of P&O European Ferries eight routes to the Continent or Northern Ireland — worth up to £186.

The competition, aimed at increasing awareness of our Quality Breakout strategy, involved constructing as many words of four letters or more as possible from 'Quality Breakout'.

Brian Cooke, a colleague in parts manufacturing, was originally a front runner, but he was pipped at the post by Bryan who submitted no less than 561 words!

Using the Concise Oxford English Dictionary, John Richardson of quality management, who devised and judged the competition, whittled that number down to 397 as valid according to the rules.

Bryan's longest word was



Bryan Leonard with his 'Super Prize', presented to him by MOC manager Danny Haines; on the right is John Richardson.

'equatorial', and he came up with more words starting with the letter 'b' than the total number of some other entries.

It was the first competition he has ever entered and he did it because, as he says, he found it an interesting challenge.

"I decided I would have to work to a system, so I went through my rather out-of-date Collins Dictionary from A to Z doing one letter a night. I found words I had never heard of — it certainly increased my vocabulary," says Bryan.

"It wasn't as laborious as you

might think, because there are 14 different letters which don't appear in 'Quality Breakout' at all, so I could skip whole sections."

This is certainly a 'red letter year' for Bryan who reached his 25-year service milestone last March.

He started work in the machine shop as an inspector and has remained in parts manufacturing QA ever since. Now a leading hand, he carries out final inspection of parts, mainly fuser/pressure rolls.

A very successful workshop



The delegates to the Multinational Quality Workshop.

A FOLLOW-UP to an earlier one held in Webster a year ago, a Multinational Quality Workshop was held at Mitcheldean from 16 to 18 July.

The Rank Xerox and Xerox delegates represented a wide spectrum of functions — design and production engineering, new build and recycling operations, developer housing manufacture, marketing, customer service and quality assurance.

The objectives were to share information and process issues related to end user customer satisfaction performance for the 5018/5028/5034 product family which, incidentally, is going so well that a third line has been set

up to meet demand.

Areas particularly highlighted during the workshop concerned design and engineering related matters, manufacturing, input and output devices, CRU and developer housing.

Parts mis-assembly and labels were among the manufacturing problems dealt with and Brian Hopkins (QA) and Charlie Bruton (assembly operator) helped with the input of information at a sub-group meeting.

QA manager Brian Reeves welcomed the delegates and did the introductions, and Neill Bates (small copier QA section manager) acted as Mitcheldean facilitator along with industrial

placement student Mujib Choudhury.

Neill reports that the workshop proved highly successful in defining root causes of problems and action plans, and also on a personal level, engendering a close rapport between people whose normal contact is by electronic mail or telephone.

Excellent teamwork was displayed throughout the workshop and during a social evening held in the clubhouse on the second day, when a manufacturing side took on an engineering side at skittles, pool and darts, the engineers achieving a narrow victory (18-6!) overall.

They're hot on the trail of the trailers

"IT LOOKED like a mountain of work to start with," said Ruth Patterson (an appropriate comment from a student of the Polytechnic of Wales!).

And certainly if the average number of trailers parked on and off-site were to have been piled up in one heap, they would have reached mountainous proportions.

They were costing us thousands of pounds in rental and off-site hire costs as well as causing congestion on site.

The first objective of an *AdeltaT* project, initiated by a materials logistic team consisting of Jane Meek (operations support), Ruth Patterson (industrial placement), and Graham Jones and Lyndon Phillips (transport), was to establish the optimum number of trailers required to maintain our production lines.

A simplified trailer process was developed by the team which showed up the wastage between the actual and the theoretical time taken in dealing with trailers, from the booking and loading to the unloading stage.

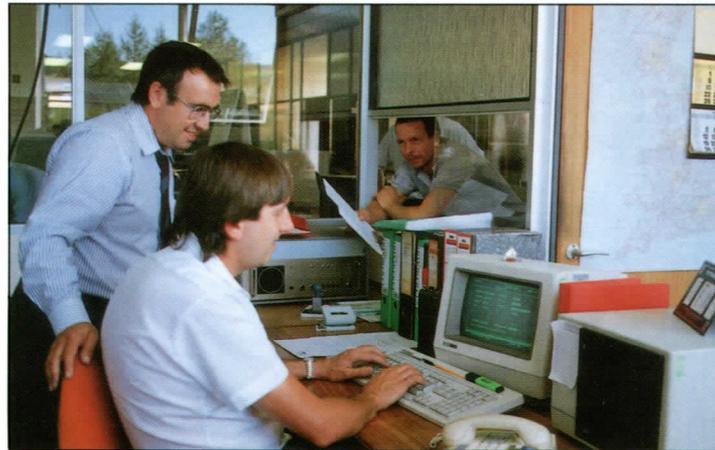
The average stay of a trailer was found to be 720 hours, so a containment strategy to reduce the number of trailers and ensure they didn't outstay their welcome was called for.

Keeping a trailer loaded with parts standing around for days, or even months, with a 'meter' clocking up the hours, doesn't add any value to its contents.

"The trouble was that trailers and trailer management were initially perceived as a transport

problem," Graham told us, "whereas loaded trailers have a dual ownership."

For some time transport had been operating a trailer management system which kept track of the trailers, and Lyndon issued reports from the system to departments concerned.



But although the data was there, it needed to be extracted and narrowed down to individual users with costs identified more specifically.

A great deal of time and effort went into collecting data, establishing the location of trailers, identifying the section managers responsible and arranging meetings with them.

The trailer management system has now been amended to highlight those trailers remaining loaded for more than five days, identifying the individual section managers to be contacted and ensuring management is made fully aware of the cost

Operations support manager Jane Meek and (right) Ruth Patterson (industrial placement), two members of the trailer reduction team.



Transport section manager Graham Jones watches as Lyndon Phillips logs the arrival of a trailer into the management system.

recycling operations, for example, within five months the number of trailers per month was reduced from 37 to nine, with an average cost saving per month of close on £20,000.

The target the team set was to reduce the average of 157 trailers to 85. In fact, they got the number down to 71 by last July and the project is continuing to reduce it further, with a four-day maximum loading time being planned.

The project has generated two QIPs — one on packaging led by Jane and another, led by Graham, on on-site trailer parking.

The trailer problem is not one confined to Mitcheldean, as Jane and Ruth learned when they gave a presentation on the *AdeltaT* project at the recent Manufacturing Operations worldwide staff meeting.

And the team's solution has proved of such interest to other corporate locations, the documented project in bound form has been sent to Marlow HQ and the States.

implications.

As part of this trailer reduction process an 'elevation process' has been developed.

"If a trailer is still loaded after five days, a form is sent to the relevant section manager and a planned unloading date agreed — there may be a very good reason for the delay," Ruth pointed out.

"If by day 10 it is still not unloaded, the matter is referred to a higher level of management.

"We did a pareto chart to identify the main problem areas and we concentrated on those first," she explained.

The amended system has produced dramatic results. In

Tips on how to crack crime

"PEOPLE COME up and say: 'I was burgled last week.' That's the wrong way round. We want people to seek our advice on how to help prevent crime — against their family, their home and possessions, and their community."

So said a member of Gloucestershire Constabulary when the latter brought their Crime Prevention unit to Mitcheldean on 2 July.

Normally the unit is taken to fetes and similar events, but now for the first time it has been taken to business sites in the Stroud, Gloucester and Forest of Dean areas with a view to establishing contacts with companies and with

the individuals who work for them.

Crime is on the increase, with car thefts and thefts from cars making up about a quarter of all reported crime, so there was quite an emphasis on keeping your car secure.

Most crimes are done by opportunists. To show people how *not* to give them an opportunity, there were displays of home and business security devices such as locks and bolts, and property marking kits, and plenty of take-away literature listing practical ways to crack crime at home, in the neighbourhood, and in the workplace.



Crime associated with cars was a key feature of the display.



Training manager Colin Court

Colin takes over the controls in training

avionic engineering school near Wolverhampton.

In the RAF you can expect to be moved at intervals of two to three years, and Colin's next assignment, in 1979, was in Cyprus where his sons Michael and David were born.

Based near Larnaca, he was attached to a signals unit, providing education and training for Army and RAF units as well as a unit of the United Nations Forces in Cyprus.

The latter was a helicopter squadron and, among his many duties (which included editing a local community magazine), Colin did various trips in 'choppers' showing visitors around.

"It was much better than travelling by car when the temperature was in the '90s," he points out.

Colin is a firm believer in his chosen discipline, as his track record shows; over the years he has completed a number of courses, mostly in his own time, to better equip himself for the demands of his job.

At the end of three 'great years' in Cyprus, he became a full-time student on a course at the Bradford University Management Centre which gained him his MBA (Master in Business Administration).

This was a pre-requisite for his next job — a senior post at the RAF College Cranwell — organising and delivering management training for engineering and logistics staffs.

Cranwell is where they also train new pilots — and it was the nearest Colin has ever got to actually piloting aircraft, he says.

From 1986 until early this year he was involved in training and management consultancy activities at RAF Support Command HQ.

Then, after having carried out six jobs in 16 years, he left to take up his present appointment at Mitcheldean where, he says, "I am happy to be joining an organisation which puts a high value on training."

Colin sees it as an exciting time, both as regards our business and the field of training generally.

"The world is continually changing and we need to develop people continually to keep up with it. Those organisations which have recognised that fact are the ones that are winning in the marketplace."

A closer partnership is being developed between training institutions and businesses, evidenced by the establishing of Training & Enterprise Councils (David Stokes is board director of the Gloucestershire TEC) and the introduction of initiatives such as the NVQs (National Vocational Qualifications).

"The latter represent an increasing trend to move away from purely academic to competence-based qualification allied to the work environment," Colin told us.

"We have a strong commitment from top management and considerable investment in our training plan for 1992, which is now being quantified, and my priority is to get this established.

"It's a major undertaking involving around 80,000 training hours to meet business and development needs.

"Besides our own resources, we are looking to local training and higher education institutions

to help us meet some of these demands."

Colin's change of job, which involves moving house to Gloucestershire, came at a convenient stage in the education of his two sons, both of whom have notched up sporting achievements.

Michael, who is starting senior school, has swum for the City of Peterborough Swimming Club under-11s; David has completed his first season in competitive football as a member of the under-10 champions of the Peterborough league.

A keen sportsman in his youth, Colin now regards himself as more of an armchair sportsman, but he says he still "dabbles in cricket".

Even when holidaying, the family are geared up for change. Fond of caravanning, they like to tour — "It gives us flexibility, variety and an escape from the interruptions of TV on family life," says Colin.

IT'S A question often asked of Colin Court, who joined us last April as training manager after a 16-year commission in the RAF:

Did he find it a great change, moving from Service life into industry?

"When I left I did wonder whether there would be a significant culture shock," he says, "but the transition is proving to be an agreeable one for me.

"The only obvious difference is that here we don't wear uniform, and we don't salute each other!"

Moving location is not a new experience for him, neither is going into a new job with a different environment, different procedures.

From living in Peterborough in Cambridgeshire, Colin is, in a sense, coming back to his roots. His grandfather originated in Coleford, and he himself attended the cathedral school in Hereford, so he has significant links with this area.

It's not his first experience of industry, either. After gaining a chemical engineering degree at Nottingham University, he joined British Steel on "the mucky end of the business". He gained experience in all aspects of iron-making and became foreman of coke-oven production before he decided that heavy industry was not for him.

In 1975 he experienced a 'sea change' (or perhaps we should say 'air') when, following in his father's footsteps, he joined the RAF, and commenced his career in education and training.

He began as a trainer of propulsion technicians (the uninitiated might like to know that means the people required to maintain the engines of aircraft) at a technical school near Cardiff and it was while there that he met and married Michelle. He later moved into the management of education and training at an

Quality car visitors



New technologies manager Keith Jones (right) explains the illustrated assembly process to the Jaguar executives in building 1. On the left is Ian Smith, UK Co.

AMONG THE many visitors we receive at Mitcheldean are world-class companies who come on a benchmarking visit to see how we fit in with the quality ethos.

Since the beginning of this year such companies have included United Glass, J.C. Banford, Lloyds Bank, National Cash Register Co. and British Telecom.

Last July we welcomed senior staff from the purchasing function of that maker of quality vehicles — Jaguar Cars. They are important customers of ours and they were brought by Ian Smith of the UK Company's

Birmingham branch.

During the morning they were given presentations on Mitcheldean's quality philosophy and processes by John Richardson, and on materials management by Dave Sanderson.

After lunch they were conducted on a tour of new build operations by Keith Jones.

Feedback showed that they were impressed by the light and open environment in building 1 and by our quality control measures such as SPC, and they showed especial interest in our illustrated assembly process.

Barcode system keeps watch on boards in electronics centre

CONSIDER THIS scenario:

At 8.30am a production engineer answers the 'phone. It's the test area shift supervisor, telling her that an operator has seen a first-pass-yield alarm on his screen.

A few key-strokes on her terminal get her a summary of first-pass-yields.

To her surprise, several of today's figures are worse than yesterday's: the overall figure at the bottom shows a 2 per cent. drop in yield — but no one product is to blame. What has happened?

She quickly calls up a breakdown of faults and causes, and finds that solder problems have come to the top of the list. She calls her colleague, the flow-solder specialist.

After a few moments' study, he calls up some further analyses. Within minutes they spot the culprit: flow-solder machine no. 2 accounts for 75 per cent. of all today's solder faults!

On the shop floor, settings are checked, and a mis-set dial is corrected. Further monitoring confirms that solder problems have dropped back to a low level again. The problem is closed out by lunchtime.

A pipe-dream? No, this could become commonplace, if systems like BoardWatch are used to their full potential.

At the very least, in a year's time we'll probably wonder how we ever managed without it.

BoardWatch? It's the title of a far-reaching project that includes —

- A new product we are buying.
- A new system we are building.
- A new way of working.

Product. BoardWatch is actually the name of a proprietary system — a suite of computer programs — for quality monitoring, and work-in-progress tracking, of printed wiring board assemblies (PWBAs).

It tracks and maintains a log of every individual board's progress and test results on a database, analyses and reports on any set of data on demand, and even ensures the correct route is followed.

System. To fit BoardWatch into our own methods of working, MIS are enhancing the material control system (MCS) to stand as a bridge between our existing databases and the BoardWatch programs.

Operating on the same data, it



Cindy Powell scans the barcode of a board to call up a display on screen of the board's history. Studying the display is test/small batch section manager Nick Pearson.



BoardWatch core team members pictured here are (from left) project leader Simon Andrews, Don Southey (MED), Rosie Khawaja (quality), Andy Cosgrove (production) and Andrew Pritchard (MIS).

will expand the tracking and data collection throughout the assembly process in building 4.

Working. To enable all this to operate, every printed wiring board (PWB) coming in will be labelled with a unique serial number, as a barcode. This label will hold the key to all the information collected about this board.

Scattered throughout the assembly floor are data terminals: screen, keyboard and barcode reader (rather like those in DIY superstores). The operator or inspector 'shoots' the barcode to tell the system that this assembly is now passing this point in the process.

If there is any further information needed at this station, the program will prompt for it — a 'form' appears on the screen to fill in. The operator is then told

where to send the board next.

Starting off. BoardWatch is being introduced in phases. At first, just one board type is being barcoded and logged, and most of the stations are in the test area.

This way we can gain confidence with using the system 'for real' and, with the feedback from users' experience, refine the system and how we use it.

Soon afterwards we will begin to take in other board types, concentrating on the 'top ten' yield monitoring boards for maximum early benefit.

Finally, we will introduce the enhanced MCS system and, with that, data collection throughout the whole assembly process.

Benefits. So why are we doing all this? BoardWatch is seen as a tool to help us in three priority aims: to reduce work-in-progress and so increase return on assets;

to improve quality information and so quality of product; to reduce waste and so drive down costs.

BoardWatch, used correctly, will enable us to achieve all these. It can tell us exactly where any board should be on the shop floor, how long it has been there, and where it has been before.

It can give us quality analyses by board type, batch, revision, date — even type of fault. And it can give information that is complete and right up to date.

Much of the information is collected automatically, without human error creeping in.

And better information equals better problem-solving and continuous improvement, as our opening scenario illustrates.

Don Southey



QA engineer Tim Davies and 5047 FR&T operator Gerald Frowen studying the operability of the ACQ-G system.

'Photo finish' in copy quality analysis

IN TODAY'S climate, the speed with which you can get products to market is as crucial as their quality; therefore any developments which can give us an edge in the competitive race, and so help to protect job security, merits serious consideration.

One such development, which has recently been undergoing line tests in 5047 assembly, promises to give us a significant saving in time in copy quality analysis.

The system, known as the ACQ-G (automated copy quality — geometric), is designed for geometric measurements only — that is, the right position and magnification — not for the cosmetic kind such as density.

Such geometric measurements and the associated adjustments are estimated to account for some 80 per cent. of the time spent by FR&T operators on copy quality analysis.

The ACQ-G looks like a normal document handler. It is a document handler, but with a difference, and it comes coupled with a computer plus keyboard.

Hidden inside a compartment under the RDH are eight mini cameras, known as line scan CCDs (which stands for charge coupled devices), each one 17 mm wide.

These CCDs work to an accuracy of ± 0.01 mm and they are positioned so as to line up with a series of solid blocks on the quality test pattern.

They zoom in on copies of the test pattern relevant to each of the four trays of the 5047 and the images are compared with the measurements concerning lead and top edge registration, etc., which have been pre-defined within the system.

The results are then displayed on screen, and the 'photo finish' gives a definite pass or fail for each parameter being measured.

The traditional method of testing involves checking each copy visually, using a template to make sure the edges, etc., fall

within the limits for each paper tray.

The beauty of the ACQ-G is that it can achieve a level of accuracy far greater than the human eye (which is a relative measurement), gives an absolute result and also quantifies SPC data, which can be printed out if required.

The background to the development of the ACQ-G is interesting.

Xerox Canada, who build document handlers, set out to develop a system to test how accurately each handler positioned a document.

Having realised the potential of the system, they adapted it for measuring copy quality, and Mitcheldean purchased a one-off to see if it could meet our customer requirements.

New technologies manager Keith Jones carried the equipment to Lille and demonstrated it at the Test Technology Council meeting.

It was duly accepted as the world-wide convergent standard for geometric measurements, and Mitcheldean was nominated as lead unit for implementation.

Keith has been leading a team consisting of Tim Davies, Dave Lesser, Chris Rawlings, Derek Shuttleworth, Clive Griffiths, Tony Scott and Graham Cooper who have been meeting to develop test requirements and an overall plan.

QA engineer Tim Davies

carried out numerous tests to evaluate the ACQ-G against our customer requirements. He measured repeatability, drift and accuracy (using an even more accurate measuring device!), user friendliness and other factors, a task in which he had the support of David Lesser.

In the process, the design was changed somewhat (Clive Cowmeadow, for example, gave some specific requirements regarding the position of the CCDs).

Tim prepared a comprehensive technical report for the team and this was circulated to Webster, Toronto and the Test Technology Council nominees at Lille and Venray, where it was very well received and evoked compliments.

Design changes were concurred in July and it was agreed that our proposals should be incorporated.

The ACQ-G was demonstrated to over 100 people on site — in FR&T, inspection and management — and after the summer shutdown it underwent line trials for operability.

Tim trained FR&T operator Gerald Frowen in the use of the system and evaluated the benefits.

At the same time he was constantly on the 'phone to Brian Sakamoto in Toronto discussing improvements.

Through the work carried out at Mitcheldean, the need for a number of hardware and software changes to extend the system's versatility has been identified, reports Keith Jones.

These changes are now being introduced so that ACQ-G can be rolled out across a whole range of programmes.

It's a question of timing

Lucinda on sign

EVERY INDIVIDUAL'S signature is different — it's one of the variations that make us human beings so interesting!

The photocopiers we build don't actually write (yet) but each one has its own signature too. By 'signature', we mean characteristics such as the exact timing of events within a machine (for example, when the paper reaches the tray).

Even the slightest variation in timing in any one event can affect the inter-relationship with other events and this can eventually build up to cause a paper jam — which a customer will *not* find interesting.

Such variations have to be eliminated and a pilot study on

signature analysis, using convergent technology, is being carried out by both Mitcheldean and Webster to see how well it can resolve these timing-related problems.

Working on the project recently with Derek Shuttleworth (MED) in 5047 assembly was Welwyn-sponsored student Lucinda Rowlinson.

She spent ten weeks with us this summer before returning to Imperial College, London, where she is doing an engineering degree course.

She was engaged in testing 50 machines just before and immediately after final run and test.

Signals from sensors within



each machine were relayed via a harness to a computer using Webster-developed software, the equipment taking simultaneous readings of 16 different signals at

Fast flow line flows faster in JIT mode

A RECENT trial in the electronics facility in building 4, applying Just in Time principles to printed wiring board assembly, resulted in throughput on the 'fast flow line' becoming dramatically faster.

An *AdeltaT* analysis carried out by industrial engineering in the 'before' condition showed that, in the case of a stable, high-volume product like a 5028 machine control board, the actual time taken to process a board was 66.69 hours.

This compared with a trial 'best time' of 16.5 minutes (once the board had started on its processing journey).

There were other benefits too. The trial showed that the test 'first time pass rate' could be increased by 10 per cent., and line fall-out almost halved.

How did EMC staff achieve such results?

Under the existing process, boards progress through six operations.

Dual in-line integrated circuit placement, axial and radial component insertion come first.

Then there's a tour round the shop floor to the hand assembly area. Flow soldering follows plus battery fitment and plug, with testing completing the whole process.

All this can take up to an average of 11 days.

For the purpose of the JIT trial, all the individual parts of the process were grouped together. The relevant hand assembly operation was incorporated into

An EMC team led by Dave Wood gave a presentation on the fast flow line JIT project at the recent Manufacturing Operations worldwide staff meeting and were presented with JIT awards. From left are: Ian Williams, Sandra Day, Roger Bye, Chris Townley, Dave Wood and Maureen Evans, pictured with Steve Tierney, vice president and director, EMO.



Neil Price (right), who is leading the JIT project, with Alan Walters, fast flow line section manager. Seen left working at the integrated circuit inserter is Chris Townley.

Joanne Lewis (on left) and Maureen Bevan assemble 5028 boards in the fast flow line, inserting components which cannot be handled automatically

the fast flow line and the test equipment set up closer to the line.

This had the effect of reducing the boards' journey from 120 metres to 70 metres.

"We used to have a three-week process lead time, from kitting to testing; now we have taken a week out of that," said Neil Price, auto assembly/JIT lines manager, who is leading the project.

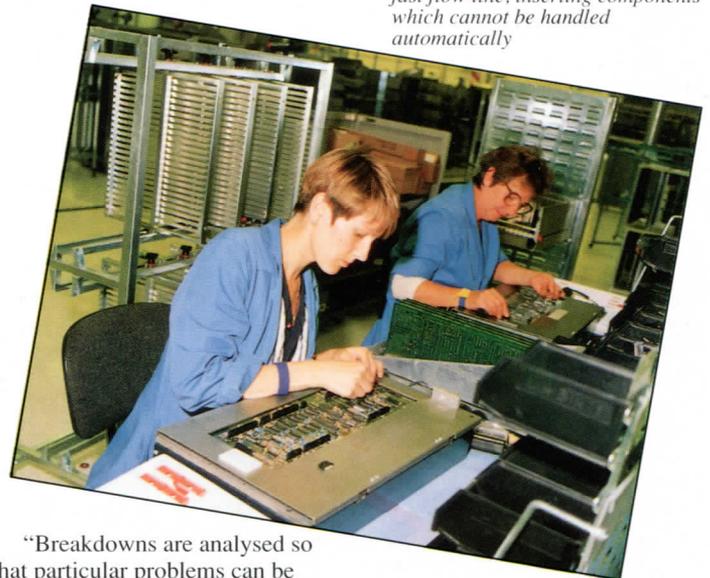
A better team environment was also created, with operators getting to know how to perform each other's jobs.

As operator Roger Bye, one of the initial team, commented, "It has made for greater job satisfaction."

The main aim of the trial was to expose the real problems in working on Just in Time principles, Neil explained. "What the project showed clearly was that the most critical factor was downtime.

"When you group equipment together like this and one part of the line is stopped, everything stops. While there are distinct benefits in terms of throughput time, machine utilisation is lost.

"The aim is now to claw back some of that downtime, making use of planned maintenance out of working hours.

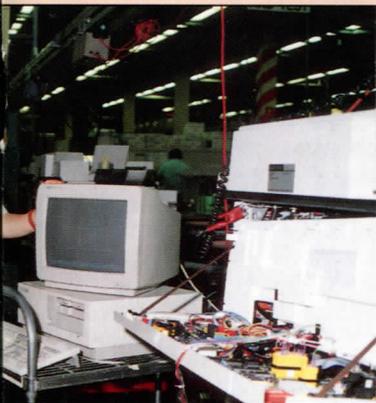


"Breakdowns are analysed so that particular problems can be prevented from developing, with operators collecting the data for analysis."

Experiments are being conducted and results monitored to effect improvements in performance, and other PWBAs are being introduced into the line with minimal set-up to increase machine utilisation.

"It's a good project and it's going very well," says Neil.

Rowlinson working with Derek Shuttleworth are analysis in 5047 assembly.



a rate of 125 times a second.

The resultant data is being analysed by Derek and will be compared with a similar set obtained in Webster.

Any news for Vision?

If you have, then please — mail it to me in bld. 5/2, 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

Three Terriers found in building 1

WHILE ENGAGED on a Territorial Army exercise, captain Neill Bates remarked that the driver assigned to him looked vaguely familiar.

"I should do — I work about 40 feet away from you on the 5012/14 assembly line," replied lance corporal Steve George.

It just goes to show what difference a uniform can make sometimes.

These two men are not the only Terriers in the focussed factory; we discovered a third — David Masson, who is a member of the technical team.

Neill and Steve belong to the Royal Monmouthshire Royal Engineers, the most senior reserve regiment in the British Army, formed in 1537 and based at Monmouth Castle.

Neill (QA section manager), who gained his three pips about 18 months ago, joined the force in 1984 while Steve was recruited five years ago.

Since Dave is an engineer we had expected to find he, too, was a sapper.

But, he told us, "I wanted something a little more action-packed," so he joined the infantry — generally referred to as 'the grunts' on account of the noise they make when they pick up their kit, which can sometimes weigh around 60lb.

About two years ago he joined 'A' company, First Battalion, Wessex Regiment, which is headquartered in Gloucester.

All three 'weekend soldiers' have recently been attending summer camps.

In June Neill and Steve spent



Reminiscing about their summer camps are (from left) Neill Bates, Steve George and David Masson.

two weeks in Scotland, based at Cameron Barracks, Inverness, where Neill's commission was to take charge of the band, a corps of drums and bugles.

Steve, who is in radio-communications, acted as his chief flag raiser.

During their time up north the sappers provided military aid for the civil community, building bridges, creating an obstacle course for the handicapped to use, and entertaining them.

They also gave performances for patients in hospitals. In case you're thinking this a rather disturbing form of therapy, we should point out that they played outside the buildings, on one of

the few dry days of the fortnight, and the patients and staff were delighted.

"The Scots love bands, even when there isn't a bagpipe to be heard," Neill told us.

On one occasion they dedicated a flag for a local school and Steve had the 'signal' honour of raising the flag, a ceremony which didn't go without a hitch!

The fortnight ended with a three-day exercise, using arms such as light machine guns (which are very heavy) but firing blanks.

It meant living out in the woods, going without food and sleep — all good character training.

Dave Masson had an equally damp time (the maxim is 'If it's not raining, it's not training!').

For their summer camp in July his unit went to Northumberland, spending one week at Otterburn (scene of a famous battle in 1388) and the other in Kielder Forest in the Cheviot Hills.

"Our first week was concentrated on getting geared up for the second week's exercise, practising on the firing range with live ammo," said Dave.

Fortunately all survived to take part in some 'counter-revolutionary warfare' - a Terriers versus terrorists struggle — using blanks this time.

Despite the gruelling conditions ("It's not exactly a holiday camp," they pointed out), the trio returned re-charged, having enjoyed the change from normal routine.

And Dave's feet are much better now, thank you.

"Doing something like this gives you a sense of achievement," Steve commented. "You learn new skills in the TA and there's great camaraderie."

In mid-August he attended the second part of a methods of instruction course at Crickhowell which qualifies him as an instructor on any subject in the TA.

So he missed out on some more shooting — this time of the Wye rapids, when Neill took his men on the river run from Hereford to Monmouth.

Another even wetter experience for them!

Victory for St Helens

THE 1991 Haggett Trophy competition between RX sites was once more staged at Stoke Poges golf club, Buckinghamshire, on Monday, 5 August.

Seven teams totalling 42 golfers took part, slightly fewer than last year, which can be attributed to the increased cost of the day and a small oversight by the organisers — the date was a national holiday in Ireland which meant that our Irish colleagues were unable to attend.

The competition was the normal format of 36-hole stableford with the best four team cards counting, morning and afternoon.

Mitcheldean was well supported with two teams, the 'A' team being very keen to bring the

trophy home after a long gap since the last victory in 1982.

The remaining teams were IHQ Marlow (2), UK Company, an ex-Aylesbury side and a team from St Helens.

The weather for the day was ideal, with hot, dry conditions, and the course was in excellent condition, so there could be no excuses in that respect for poor scoring.

Following the morning's play, St Helens had managed to build an 11-point lead, scoring 144 against IHQ 'A' and UK Company with 133.

At this point Mitcheldean 'A' were fourth and our 'B' team sixth, with 127 and 116 points respectively.

Notable scores for the Mitcheldean teams were: Mark

Barnard with 35 points and Ray Harvey with 33 points; but the morning round belonged to Keith Moylan from St Helens with an excellent 42 points.

The afternoon round demanded some higher scoring from both Mitcheldean sides if the trophy were to be won, but alas it was not to be, despite some excellent scores from Ray Harvey and Mark Barnard with 40 and 39 points respectively.

The remaining team members in both Mitcheldean sides just failed to reach peak form, although there was a consistently steady performance from Ken Ellway 31/31 and encouraging scores from newer society members.

IHQ 'A', St Helens and the UK Company all tied in the afternoon round with 136 points, which meant that overall the trophy had been secured by St Helens with a total aggregate of

280 points.

The UK Company and defending champions IHQ 'A' tied for second place on 269 and Mitcheldean 'A' made third on 251. Mitcheldean's 'B' side contested the lower placings on 242 points.

After an excellent meal Paul Donnegan, captain of the UK Company (host) team, conducted the presentation of prizes after reflecting on the day and, in particular, on how Mitcheldean captain Wilf Jones had managed to hit himself with the ball and his club on two separate occasions. Wilf was unavailable for comment!

Congratulations were extended to St Helens as winners and in response their captain promised a good day for next year at a seaside venue, where the long tradition of the Haggett Cup can continue.

M.A.B.



The Young People team and their supporters at the Speech House start — ready for the rigours of the race.

Rugger players are chair leaders

IN TOKYO on Sunday, 1 September, a British relay team was going for a gold in the World Athletic Championships.

And here, in the Forest of Dean, four local teams were slogging up and down hills in an eight-mile sedan chair race, held in aid of the Pied Piper Appeal for a new Gloucestershire children's hospital.

One of the teams was a Rank Xerox Young People's team, who were also supporting the James Hopkins Trust. Another — the Skinbacks — consisted chiefly of Drybrook RFC players who work in 5047 assembly.

The plan allowed for plenty of time, but in the end both teams had a rush to get their chairs ready.

"It was a case of crisis management on the Friday before," said Mike Keady, one of the Young People.

Using materials contributed by works engineering department, the latter put together a very well-engineered construction, topping it with two windmills — for decoration, not wind power.

Though they didn't know each other's abilities, they worked fine as a team, with Sarah Powell in the chair, and failing to win a prize was a bit of a disappointment after so much effort.

Relaxing after their efforts, the Skinbacks are pictured with their team of supporters, and the two trophies they won.



The Skinbacks' chair was welded together by Rob Lewis (EMP supplied some materials) and the others finished it on the morning of the race.

Fitted with plastic windows "it looked more like a washing machine to me!" commented Skinback Paul Marshall (purchasing).

The paint was still wet when they started the race at Speech House and although they dropped the chair twice, both it and Clayton Ryder's sister (another Sarah) survived.

The event proved to be a 'wet T-shirt competition' — especially for those who had a bucket of water thrown over them in Cinderford (kindly meant, we believe).

Fitness was as much a key to success as chair design, and it was the rugger players who clocked in the best times on arrival at RXMP clubhouse.

Cinderford RFC once again achieved the fastest time (1hr 1min. 5secs) and also won a special record-holders award.

The Skinbacks, the second fastest, won the 'best decorated chair' prize and team member David Ling was the highest sponsored individual (he raised £167.50).

The brightly draped chair raced by Pat and Martin's (the



Coming up to the finish in second place are the Skinbacks, a team basically from 5047 assembly. The body language says it all!

local hairdressers) was judged the best design, and to their team also went the trophy for the highest sponsored team with £340.

This latter award could have gone to the Skinbacks, had they all brought their sponsorship forms in on the day, since they had around £400 total sponsorship money.

Not only that; supporter Kirsty Baker (Hygiene Services) rattled her collecting box to good effect, and Dave 'Murdoch' Powell magicked £93 into a bucket while running alongside the team.

A 'guesser' on the bucket money at 50p a go later knocked that up to £105, and more raised during the evening entertainment boosted it to £140, so the overall amount raised by the team came close to £550!

Race organiser Martin Hazell was able to hand over £1,000 to the Pied Piper Appeal; the MRI Scanner Appeal also benefited by £115 from a raffle.

Thanks were extended to the Sports & Social Club for their support (club treasurer Dave Lea presented the awards) and to all who helped make the event a success.

It is planned to hold the race again in 1992 and the Skinbacks, having come third last year and second this time, are determined to come first.

They have a new design of chair already 'under wraps', so Cinderford RFC had better look out!

Obituaries

WE REGRET to report the deaths of the following:

Dave Pollock on 25 July aged 71. He joined us in 1966 as an assembly hand, becoming a chargehand two years later and foreman in 1980. He retired the following year while working at Lydney. His son, also Dave, worked in the electronics engineering lab. for a time.

Aubrey Jones on 26 July at the age of 66. Formerly in MED, where he was made a section leader, Aubrey switched to training when he became supervisor of electrical skills in the multi-discipline facility set up in the MEWS in the '80s. He retired in 1985 after ten years with us.

David (Roy) Evans on 8 August aged 52. Having joined us in 1970 he worked in the design drawing office until the early '80s. He was secretary of Ross Bowls Club for some years, later becoming treasurer of Hereford County Bowls Association; he was also chairman of the Royal Forest of Dean Business & Professional Club.

Pat Stephens on 16 August aged 67. A former nurse, she was with us for 17 years and was a chargehand in cleaning department when she retired in 1976. Every one of her six children worked at the plant at some time; daughter Susan is currently employed by Gardner Merchant, for whom Pat also worked until recently. Her husband, Ron, is clerk to Mitcheldean Parish Council.

Arthur Beard on 26 August at the age of 77. He worked in 4500/5400 assembly and retired in 1978, having completed over 13 years' service.

Owen Williams on 28 August aged 71. He worked in machine shop transport during his 11 years or so with us, retiring in 1983. His son Keith is one of our Securiguard officers.

Roy Jones on 2 September aged 71. He started in Bell & Howell assembly in 1945, transferring to work study in 1953 and becoming a section leader. He retired in 1980. An all-round sportsman, he used to play football and rugger, cricket (for the former Mitcheldean team), and skittles. In later years he was a member of Ross Bowls Club.

Service awards



Twenty-five year service men (from left) Syd Cooper, Lou Taylor, Clive Griffiths, John Treherne, Chris Gurney and Alf Parker.

25 years

THE TREHERNES are very much a Rank Xerox family.

John works in 5047 assembly, so does his son Chris. His wife Margaret is in spares packing (she received her 20-year award a year ago) while daughter Sally is the wife of Keith Burford (fuser rolls).

For his first 16 years at Mitcheldean, John was in goods inwards, a job that entailed working in a variety of stores locations — at Cinderford and nearby Northern United (a former colliery), at the Lea, Gloucester and Hereford as well as Mitcheldean.

"The Hereford location was in a really remote spot," he recalls.

In 1982 John's job changed with his transfer to dismantle & clean when it was sited on the ridge. Later he moved to building 4 to build 1020 and 1025 copiers, then returned to recycling operations where he rebuilt 5046 machines.

Today he is a stand-in in the optics section of 5047 new build and Chris is a member of the team.

John is one of a group on the shop floor who are trying to persuade people not to smoke at communication meetings and "they're beginning to respond," he says.

A former all-round sportsman, he is a member of the Opticals team who were the men's team champions in the skittles tournament last year; the Opticals have competed in the Pub Sports events too.

Louis (better known as Lou) Taylor joined us the same day as John Treherne and, like him, has worked in both new building and recycling operations.

Having started in the machine shop as a drilling operator, he switched after three years to 4000 assembly, where he was a setting operator.

A couple of years were spent at the Lydney facility working on the 660 and other products, after which he returned to Mitcheldean to join

CBA assembly where he was a stand-in.

When 9000 family new build was phased out, he continued to work on the high volume machines in recycling operations, later moving on to engineering systems which he has been involved with for the past four or so years.

Rugby has been his sport for almost quarter of a century; he played prop forward for Berry Hill RFC for some 20 years and he continues to be a member of the club.

Clive Griffiths came straight from school to work in 914 assembly, going on to become a repair mechanic in reconditioning.

In 1969 he moved into production control and was promoted to shop control supervisor in 1977. Five years later he returned to assembly operations with his appointment as foreman on small copiers. Currently section manager on 5047 FR&T, he will shortly exchange jobs with Tony Nelmes, becoming manager, employee services, in human resources dept.

Highlights during his time in PCD were a Sail Training Association cruise — an exercise in character building — and social service leave as a holiday relief worker with the Langley Trust for the rehabilitation of ex-prisoners.

Clive and his brother Pete (small copier assembly) are well known throughout the site for their charity fund-raising activities.

About four years ago, inspired by the Children in Need campaign on TV, they introduced plant-wide collections, raising £3,000 with the help of colleagues and the company.

This success led to the setting up of our Employee Charity Fund with the assistance of Charlie Walker (human resources) and since then a whole series of team and individual efforts — from skittles matches and bike rides to events like Easter Fun Night — have kept the money flowing in.

"Some £17,000 has been paid out since it all started, mainly for local children's charities," Clive told us, "but the old folks of Mitcheldean have not been forgotten."

Though chiefly a rugger and boxing man, Clive has played cricket for the village and he has supported the interdepartmental cricket competition, both on field and off.

Chris Gurney came to us straight from school. He started in 2400/3600 assembly and has worked in new build operations ever since — on mid volume, high volume and small copiers (he was one of those who went to Venray in 1974 in connection with the transfer of the 7000 to Mitcheldean).

For the past three years he has been located in the 5046/47 optics section, along with fellow long-server John Treherne.

Unlike John, however, he did not bowl for the Opticals team in the recent interdepartmental skittles competition, but was one of Wozzle's Tipsters, the men's team champions this year.

A former member of the RX skittles 'B' team, he has now 'defected' to Mitcheldean Horses. He is also a keen cricketer and has been playing for Aston Ingham for the past ten years.

Whilst he is a season ticket-holder of Hereford United, his interest in football lies as much in the grounds as the game itself, and he, together with some like-minded mates, has visited all 91 football league grounds throughout England!

"I also follow non-league football," Chris told us.

Having served his apprenticeship and completed his training at Dowty Rotol, Alf Parker started at Mitcheldean as a tool designer, becoming a section leader in the tool design department.

That was in the days when we had over 40 designers working on tools and fixtures. Today we have two, reflecting how the design of

copiers has developed over the years.

Incidentally, one of the two, Mike Gunn, is Alf's brother-in-law.

In the mid '80s, Alf spent a couple of years as team leader on various robotic cell applications and he remembers well the lessons learned from that period.

He moved from tool to production engineering in 1986 and worked with the licensing team on projects to set up manufacturing facilities in Bulgaria and Egypt.

This involved getting all the tooling and processes organised, ensuring things were on schedule and organising the training.

"I missed out on visits to those countries, but I did a couple of short tours in the USA during my tool engineering days," he told us.

About two years ago he joined the mid-volume technical team and currently works on the 5047 model.

Alf and his wife Phyllis (daughter of former 813 assembly manager Trevor Wadding) have three daughters; the eldest is married and the middle one was about to be wed as we went to press.

"I'd like to be taking photos then but I'll have other things to do," said Alf, whose hobbies include photography and DIY.

On leaving HM Service, Syd Cooper came to RXMP "so that I could have an indoor job for the first winter, and I'm still here!"

He spent 16 years in the machine shop, where he worked on various sections including the Burkhardt & Weber, and his ability to speak German enabled him to make friends with some of the engineers. "We still holiday with them on the Continent occasionally," he told us.

About nine years ago he moved into assembly operations, first on 2300 build at Lydney, then back at Mitcheldean on follow-on products, and he was involved with the 1025/1038 until that family was phased out.

In mid-1990 he transferred to the focussed factory, where he is a

Continued opposite

20 years

Some 20-year award people - (from left) Wilf Jones (spares packing), Gerald Brain (new build assembly), Ray Cole (recycling), Esmé Cox (recycling materials) and Tony Prothero (new build assembly). Others who recently qualified are Jean Downing and Stan Davies (recycling), Gwen Fisher and Brian Whittington (new build assembly), Paul Ingmire (paint shop), Blayne Williams (QA), Maurice Prout, Martin Sterry and Ronald Duce (materials), and Alan Bridges (materials logistics).



To the Med by pedal power

THOSE WHO have just returned from their continental hols and who are comparing travel times ('Cause we were held up in Customs at Dover', 'French air traffic control delays again') may spare a thought for our trip to the Med by bicycle!

Conceived over pints of beer, after our evenings cycling in Gloucestershire and during the long winter, the idea eventually came to fruition in May this year when we assembled in Lille with a colleague from our plant there to head south.

The build-up during May had been full of drama. First the trip was on, then off, then on again. Timing was also a problem as holidays had to be booked and other commitments taken into account.

Eventually we decided on the first day of June as a start date, and it was a mad scramble to buy kit and get in some training miles.

What to pack was really decided on size and weight, and I still have the image of my UK colleague — ex-RX employee Martin Saunders — holding his fully loaded bike whilst standing on the bath scales and declaring that the load was the same weight as the bike (about 26 lbs)!

And so to France on the last day of May, and our last

comfortable night's sleep at Derek and Fran Martin's house at Linselles, near Lille.

The route the next day took us almost due south through the outskirts of Lille and across the flat lands and rolling country of Northern France to the city of Reims.

Here we experienced, not for the last time, the problem of getting a meal at night. Where was the British "pie 'n pint"? However, copious quantities of vin rouge soon made amends for this shortfall.

The next night was even worse! We were camping by a lake and after a two-mile trek found all the auberges closed (Monday night).

In the end we managed to buy a dozen eggs (egg quantities are never metric!), scrounge a loaf of bread off some French caravanners and eat omelette with the remnants of a packet of digestive biscuits.

The quality of the last night's sleep was always the topic of conversation over our breakfast of tea and baguettes. French campsites seem to be located by high speed train lines, church clocks and early rising roosters. I didn't seem, however, to hear the person snoring which the others complained about.

Day 7 and our arrival in Lyon — 6 pm, pouring rain, Friday evening rush hour — marked a turning-point in our journey. Derek and Fran with tandem decided to take the Route Napoleon across the foothills of the Alps to Nice, whereas Martin and I, fearing the Alps might be our Waterloo, decided to follow the Rhône Valley to the Camargue and the sea.

By now the Mistral — the gentle, warm wind — was with us and the 70-mile-a-day journey was only interrupted by stops to apply suntan lotion, buy cherries,

Stopping for a rest somewhere in mid-France are Derek and Fran Martin and an obviously suffering Roger Hughes!



eat and drink.

And so to the seaside. Day 11 midday, Le Grau du Roi on the coast near Montpellier, total 720 miles in 11 days.

Then, after a few days' rest and relaxation in Montpellier, the return journey to Lille by TGV (train grande vitesse), time 7 hours(!), cost £45, and a reunion, with swapping of experiences.

Would we try a similar journey again? Or is Brittany to Spain in 1992 just the wine talking?

Roger Hughes

section manager on 5018/28/34 assembly.

His hobbies include skittles, playing at Berry Hill RFC, and he has held the record for the highest score (57 pins) for the past few years.

Keen on rugby, Syd supports Berry Hill RFC from the touchline and in various other ways. He has been made responsible again this season for collecting admission on the gate for home games (and takings have more than doubled since he took on the job!).

His wife Kath has served on the BHRFC ladies committee for a number of years. They have three daughters, two of whom are married.

The eldest works at Coleford Council offices; the middle one has just made Syd a grandfather for the first time; their youngest daughter travels the south and south-west of England, visiting various bank branches as a branch liaison consultant for Midland Bank.

LSA newflash

WILL ALL members please note that ties and badges are available from the payroll office, building 7/2, price £1 each.

The next function will be the annual social to be held in the Sports & Social Club on Saturday, 30 November (more details later).

Cutback for charity



THE FASHION for crew cuts has been growing in 5047 assembly.

Commenting on the trend among his FR&T team, section manager Clive Griffiths injected a bit of humour into a level 1 communications meeting by saying that *all* of them should adopt that style.

They said they would, provided that he did too, and he laughingly agreed.

But when the FR&T barbers approached him, clippers in hand, Clive backed away. Then Brian

Aitken hit upon the idea of getting people to sponsor the hair-cut in aid of Scoo-B-Doo, the Gloucester Hospital special care baby unit fund.

Confronted with a list of sponsors promising some £150, Clive capitulated, and with Alan Phillips wielding the clippers and Brian snipping away with the scissors, a new-look Clive emerged.

The difference in his appearance can be judged by comparing the picture above with

the one of him at the top of the opposite page. "Someone even mistook me for a certain member of a rugby club committee," he told us.

He agreed that it was 'real cool'. But when asked if he would keep to the new hairstyle, Clive replied cryptically: "I shan't have my hair cut any longer!"

By the time this issue appears we may be able to see what he meant by that.

Alan Phillips and (right) Brian Aitken re-style Clive Griffiths.



The wedding of Graham Timms (5046 recycling) and Marie James (developer housing assembly) took place at St Mary's Church, Ross-on-Wye, on 18 May.

Bird's team beat Judge's men

BLACKPOOL ROCK, knotted hankies, donkey rides: all are trademarks of the great British Summer.

But something is missing. No, not umbrellas and wellingtons. The missing link is cricket — the annual Rank Xerox Interdepartmental Cricket Tournament, to be exact.

Without breaking with tradition, the fifth such event, which attracted 14 teams, got off to a pretty dismal start. A couple of games were cancelled due to the weather being a tad on the damp side but eventually things got underway.

In the preliminary stages, a particularly good game was played between Ridge Rogues and Harness Robots, with Dave Elsmore knocking a fine 55 and Allan Edwards hitting 50 (not out).

Moving swiftly on to the semi-finals, it must be pointed out that a couple of teams played short,



This year's cricket champs — the Bird's Revenge team from recycling, building 3/2.

due to holidays, etc., and therefore everyone deserves a mighty pat on the back.

The first semi was played between Judge's Jury and Ridge Rogues. Notable performances came from Andy Ward, who knocked a spectacular 83 for Judge's Jury, helping them to reach a final score of 130.

Roger Yemm's 46 helped Ridge Rogues reach a final score of 110; unfortunately they were 20 runs short of their target.

The second semi saw a good match between Bird's Revenge and Seven & Eights. Bird's Revenge showed good batting, notably John Howls hitting 50 and John Meek knocking 47. Their final score was 193 for 4.

Seven & Eights saw Gordon Cruickshank hit 34 and Chris



The runners-up — Judge's Jury of materials logistics.

Hale hit 36. Their final score of 113 was a great effort as they only had six players.

The absence of Bird's Revenge's Sparky Jones was due to his second career of baby-sitting. Perhaps 'Stork's Revenge' would have been a more apt name for his team?

The final was played between Judge's Jury and Bird's Revenge. John Howls opened the batting with John Meek and got Bird's Revenge off to a sound start. Lee Osborne pushed the final score to 165 for 6 with his 55 not out.

The batting for Judge's Jury was opened by Steve Cooper and Andy Holder, the latter's 25 runs being backed up by 23 from Andy Ward, 19 by Robert Weyman and 17 by Les Lewis.

Bird's Revenge showed some fine bowling; Craig Leighton, Malcolm 'Chalkie' Robertshaw and John Howls each took two wickets and prevented Judge's

Jury from making more than 98 runs.

For the second year running, Judge's Jury had to be content with second place.

Presentations were made by Danny Haines, who played for Judge's Jury last year — he can now rest in the knowledge that it was not necessarily his fault that they lost last year!

There was slight confusion about whom to give the cup to(!) but the official captain of Bird's Revenge, Craig Leighton, accepted the trophy on behalf of his team.

Thanks go to umpires Ronald Arkle and Larry Stanton, to the organisers, to the company for supplying the trophies, and to Ruardean Hill Sports & Social Club for the use of their facilities — and congratulations to all concerned on making the tournament truly entertaining.

Hayley Fisher

Security passes



Stan receives his award from Mark Elder, Securiguard Services operations director; on the right is area manager Jim Collins.

STAN GOOD, Securiguard Services' site security manager at Mitcheldean, was among the first group of our contract security staff to receive his City & Guilds Certificate, a qualification recently instituted by the Security Industry Training Organisation.

Entrants have to achieve the required standard in a test of job knowledge covering duties and responsibilities, uniform and equipment, security patrolling, emergency procedures, fire prevention and procedures, scenes of crime, law, health and safety at work, and customer liaison.

The aim is to have all Securiguard staff on site qualified.

Tribute to Den

VAL BROWN, whose husband Den, a member of purchasing management, died last March while visiting Japan, was deeply touched to receive a handsome plaque, mounted on wood, dedicating a Multinational Procurement Workshop held in Webster in April to Den's

memory. Delivered in person by chairman Dave Mountan, it bears the signatures, engraved in gold, of all 20 delegates attending the Workshop from Xerox USA; Fuji Xerox, Japan; Rank Xerox England (Barry Hall), France and Holland; Xerox Latin American Group; and Xerox Brazil, Mexico and Canada.