

# Vision

The house magazine of Rank Xerox Mitcheldean

## SPC makes visible progress

IT WAS just a year ago when 'Vision' last reported on our progress with the implementation of SPC — statistical process control.

"Since that time, a great many control chart plots have passed between the control limits and (I suspect) a few have strayed beyond," writes Chris Rawlings, chairman of the SPC steering committee.

"Now, with 1991 marching on, we have made significant advances in all of the manufacturing areas and implementation in the business areas is gaining momentum.

"By the end of March this year,

- two-thirds of our total workforce had received the appropriate SPC training;
- 273 parameters had been identified for SPC coverage within manufacturing;
- over 200 individual control chart applications had been implemented.

"These statistics provide a good indication of the current level of activity and of the significant progress made.

"Based on corporate and plant priorities, our use of statistics is now clearly demonstrated through the tier 1 and tier 2 metrics, displayed on boards in strategic areas across the site."

That's the overall picture. For more detail, we asked the function managers who, with employee support, are responsible for SPC implementation in their respective areas.

In **recycling operations** SPC will be a key enabler to support the objective of improving quality and reducing costs.

"Our approach," says John Gurney, "has been to network the total business process: carcass flow from receipt to despatch; material flow from acquisition to application; and support process

from recycle request through to process compilation and final issue.

"From the networks, the implementation team agree critical decision points such as pre-inspection of carcasses, wash or air-blast, copy quality standard and BS flash."

Currently, SPC concepts are being used in most areas with checks to evaluate oil contamination, paint shop finishes, trolley layouts, etc.

John mentioned two projects in the customisation area which are of particular interest — failure mode tracking and throughput times, the latter being evaluated using SPC and A delta T technique.

The use of SPC in **parts manufacturing** is continuing to expand, using both manual operator charting and the computerised 'Network' system, reports Chris Clarke.

The latter, which has just been extended by the addition of new units, gives the operator a continuous update on the health of the process.

On some of the latest machine tools, closed loop feedback is in operation. The system automatically adjusts the machine and compensates for tool wear.

Employee involvement is a key factor, and those on the implementation team — Dave Paul, Steve Badcock, Andy Cleal and Martin Gunter — have commented:

"We have now seen examples where SPC has highlighted process problems, such as a machine malfunction, which were not immediately apparent. We are now looking forward to further feedback on the successes of SPC."

The **harness centre** has 11 attribute charts up and running within the final assembly area,



Geoff Williams puts an updated attribute chart on display in the paint shop. On the right, Norman Powell is seen spraying panels on the paint line.



In the fuser roll centre, Dave Paul checks the diameter and run-out (concentricity) of a roll by means of the computerised 'Network' system. The probes provide readings on the VDU and the system automatically adjusts the machine to compensate for tool wear. The readings are relayed to a QA lab monitor for further analysis. Seen left watching the operation is Jan Sologub.

five of which are being maintained by operators, and Des Halliday says that this is proving very successful.

"The next stage is to perform numerous process capability studies within the wire

preparation area.

"We need to maintain the current level of effort and employee involvement in order to maximise the customer satisfaction benefits."

Continued overleaf

"Within the **electronics** environment we are using SPC in order to support our customer satisfaction objectives by continuously striving for optimum quality and output," says Nick Hopkinson.

"For example, we have planned SPC experiments on flow solder processes where there are so many interactive variables.

"Our intent is for maximum operator involvement in the belief that they, above all, understand the operations on which they are employed. To this end we have already given the operators on flow solder an overview of Taguchi, a technique used to analyse relationships between process variables."

The **developer housing** department, as Keith Parrett explains, consists of three cells, each having five build operations which assemble the dev. housings. The housings are then fed to the toner and developer-fill fixtures where 11 specifications are checked.

From the fixtures, the completed housings are then cleaned and packed ready for onward shipment.

"Currently we are using SPC attribute charts to monitor each of the build cells and, taking the specification information from the fixtures, are monitoring both attribute and variables data to assist with the quality control," says Keith.

"Our future plans include converting the data from the fixtures into 'real time' displays and graphs that will indicate any potential problems before the



Paul Weaver and Rob Lambert study the SPC results from data provided by FR&T staff in the 5018/28/34 assembly area.

units are packed."

"This is traditionally a good time for gardening, and in **new build operations** we have been doing some weeding — of SPC charts, that is," Andrew De La Haye told us.

"We have removed 47 charts which we were unable to control directly and which were therefore causing us a lot of frustration for limited benefits.

"We have at the same time introduced a number of charts which directly affect customer satisfaction (noise, CRU problems, black lines on copies) and which have proved to be very effective in improving the quality of the machines we produce."

A key to these improvements has undoubtedly been the closer

involvement of operators in the use of SPC tools, he added.

In order to analyse and resolve customer-related problems, operators have been maintaining control charts for attributes and variable data, together with applying data analysis techniques such as histograms and pareto.

To support these excellent initiatives by the operators, the technical support functions within NBO have also been busy.

New tooling concepts are currently being evaluated that will increase the capability of our manufacturing processes, with special attention being paid to copy quality set-ups and measurements.

Systems support is also being upgraded so that SPC data can be input direct from the

production line.

This will ensure increased accuracy together with faster response times for data analysis and reporting.

"The direction for the future for new build must be more charts which customers can relate to, more operator involvement, and new product SPC for oncoming programmes — all in order to improve quality to a level where the customer is delighted."

*(We shall be featuring business area applications in our next issue.)*

## Champions meet for workshop

THE INAUGURAL Xerox Manufacturing Operations SPC champions workshop took place in Webster last April, with John Richardson representing EMO.

The brief was to initiate the development of common guidelines relating to all aspects of statistical process control.

The champions from around the world divided into four teams and tackled the following subject areas: policies; control charts; process capability (CP/CPk); and training.

All four teams worked hard in order to gain consensus on varying aspects, from training content of courses to formulae for calculating limits, most of which had as many differences as there are champions.

The workshop itself was chaired by Jack Hodgetts, MO Leadership Through Quality manager, who deserved most of the credit for welding the diversity of local policies and guidelines into a consolidation of best practices for Xerox MO, says John.

## Opinions count

RANK XEROX has become increasingly aware that satisfied employees can add significantly to the quality and competitive advantages of Xerox products.

'Employee satisfaction & motivation' is a major corporate objective, and in order to measure levels of satisfaction, employees throughout the Xerox world have been taking part in surveys.

In January this year, staff at Mitcheldean and at every EMO location were given the opportunity to provide feedback to the company on a range of topics, including job satisfaction, management styles, pay & benefits and training & development.

The 'Opinions' survey was designed by EMO human resources department, working with International Survey Research, the country's leading employee survey company.

Pilot sessions of the questionnaire were held in December, and the feedback received was incorporated into the final version which contained 106 questions covering 16 key topics.

"By developing this survey with our Rank Xerox European colleagues, we can better benchmark our results in comparison with other Rank Xerox divisions and national & European norms," said John Xerri, manager resourcing & development, who co-ordinated the survey for Mitcheldean.

"ISR has an advanced database enabling us to match our results with those of some of the world's most forward thinking organisations.

"People were obviously keen to have their say, and the Mitcheldean response rate of over 90 per cent was highly praised by ISR as being one of the highest



John Xerri

ever recorded for a European company."

The results from the survey are being communicated to all staff in family groups via a special bulletin. The data for Mitcheldean will be compared with United Kingdom averages to identify where we need to concentrate our efforts in the coming months.

But that will not be the end of the process — far from it, the commitment to improving

employee motivation is very real.

"I cannot emphasise enough how important employee motivation is. Our objective is to match and improve on our competitors and to effect that change rapidly where it is needed," said site director Gerry Lane.

Quality improvement teams will be established to look at major areas for improvement, and will rely on employees getting involved and helping to find solutions.

"This is a two-way process and requires everyone to participate in making Mitcheldean a better workplace for all," said Robin Fyffe, human resources manager.

And just to make sure that we are progressing in the right direction, another survey will be held within the next two years to measure the improvements.

## Copy centres planned for Poland

PLANS TO open a network of 'high street copy shop' franchises throughout Poland were revealed on 26 March by Eastern Export Operations.

Rank Xerox launched this new venture with the opening of a copy centre in Bayswater, which is intended as a 'working model' to which the company will bring franchisees from all over Eastern Europe.

They will visit the copy centre, see how it looks and operates and will then take the idea (and the know-how) back to their countries — to combine their local knowledge with Western technology.

The first franchisee to visit was Zespol, a company from Warsaw.

At the opening of the Bayswater copy centre, EEO regional director John Pemberton said: "Copying and printing facilities are rare in Poland, but Polish businessmen are just as interested in business presentation as we are in the West.

"There is a tremendous demand for sophisticated copying facilities and therefore great potential for high street copy centres — we intend to meet this demand."

Rank Xerox plan to have 50 such franchisees throughout Eastern Europe by the end of 1992.

# Excellent energy project



*Pictured at the presentation are (from left) Robin Fyffe, who hosted the event, Julian Shufflebotham, George Coates (Dilke Hospital), Roy Harrison, Ferruccio Marangon, Elaine Cruickshank (Magnetic Resonance Whole Body Scanner Appeal), John Lewis, Phil Townsend, Colin McHugh, Maj. Tom Calder (Salvation Army), Barbara Bevan (who administers our charity donations), and John Richardson (quality systems & business quality).*

ONCE AGAIN an outstanding QIP project has been the means of assisting local charities while bringing about improvements in operations at Mitcheldean.

"It's become an annual event," said human resources manager Robin Fyffe, when on 6 March he hosted a presentation of cheques at a luncheon in the hospitality suite.

It was attended by members of the works engineering Energy Reduction team and representatives of the charities concerned (a senior management commitment prevented site director Gerry Lane from being present).

Robin explained to our guests how, each year, every site within European Manufacturing Operations is asked to put forward a project which has demonstrated excellence in the use of Leadership Through Quality processes in achieving significant business results.

The Energy Reduction team, elected Mitcheldean's top team for 1990, generated solutions for reducing energy consumption on site (see page 4).

Said Robin, "The benefits we have seen so far have represented some £150,000 in cost avoidance

with an outlooked saving of well over £½ million.

"At any one time we have up to 250 projects in progress in the plant.

"Maintaining this level of teamwork will ensure the future of Mitcheldean and we continue to see our business grow as it has been doing over the past 18 months or so."

In acknowledgement of their efforts, the QIP team received an EMO cash award. It has become a tradition that such awards are donated to local good causes, chosen by team members, in order to put something back into the community.

Four members of the team — Ferruccio Marangon (leader), Phil Townsend, John Lewis and Roy Harrison — chose the Magnetic Resonance Whole Body Scanner Appeal to benefit from their share of the EMO award, amounting to £520.40.

Appeal representative Elaine Cruickshank (whose husband Gordon is a member of management in control department) told us: "At present we have about £100,000 in the fund as a whole, but £1½ million is our target.

"The scanner uses magnetism

which can be used repeatedly without any risk of biological damage. It will be housed in a new purpose-built block at the Cheltenham Cobalt Unit and will be one of only a few in the country available to NHS patients."

Julian Shufflebotham's award of £130.10 went to the Dilke Hospital, Cinderford, and George Coates, who is treasurer of the League of Friends, said it would be used to fund a new hydraulically-operated couch for the physiotherapy department in the geriatric ward.

"It will have a plaque on it acknowledging its donation," he added.

Colin McHugh, who received a similar sum, passed his cheque on to the Salvation Army at Gloucester.

Major Tom Calder told us "We have just opened a youth club at our Eastgate Street hall in Gloucester so this comes at the right time to help meet our costs.

"Youngsters aged from 12 to 16 can play table tennis, pool, darts and table games at the club which is becoming associated with the Gloucestershire Youth Association and affiliated to the YHA."

## PANTing for the Legion

THREE MITCHELDEAN men ran in the ADT London Marathon on 21 April as members of the Poppy Appeal national team PANT, to raise funds for the Royal British Legion.

Steve Adams (EMC stores), Chris Davis (recycling stores) and Graham Welch (5018/28/34 assembly) were among some 60 runners nationwide and it is hoped that £250,000 will have been raised for the cause.

Just to finish was a bonus, as each experienced unexpected problems.

Steve, suffering the after-effects of a cold, was pushed to the ground at the 18-mile drink station, eventually finishing in 4 hrs 20

mins 20 secs. ("No future London Marathon for me!" he says.)

Chris was running for the Scoob-Doo appeal at Gloucester Royal Hospital and the Chestnut Foundation (elderly people's home) at Ross-on-Wye as well as PANT.

He was doing well until he encountered the marathoner's worst fear (hitting the wall) with total energy loss at 24 miles, and had to walk/run the last bit to finish in 2 hrs 59½ mins.

Though disappointed, he hopes to try the marathon again.

Two other members of the athletic Davis family were finishers — Chris's father Les won the 'over-45' title, finishing 82nd in 2 hrs 27 mins to regain the title he won in



*Runners for the Poppy Appeal — (from left) Graham Welch, Chris Davis and Steve Adams.*

1989, and his mother Pauline clocked up a time of 3 hrs 56 mins. Runs in the family!

Graham was fine until at eight miles an earlier muscle strain flared up and, although he managed to maintain pace until 19 miles, the

injury plus leg cramps forced a slow-down and he finished in 3 hrs 45 mins 2 secs.

"It could have worked out better," he commented, "but I'm hoping to run another marathon later this year."

# Gen-set has power to cut costs

WITH THE tremendous amount of changes that take place — in prices, processes, requirements, environmental concerns — the benefits that are gained from energy reduction programmes can get eroded.

There can also be some nice surprises.

When we asked Ferruccio Marangon, maintenance and energy manager, who leads the Energy Reduction team, what had been achieved in the first phase of the QIP, he said:

“Our aim is to reduce utilities total spend by 15 per cent. per annum, and to retain that benefit for a minimum of five years.

“In fact, we have achieved a 19 per cent. reduction up to the end of 1990 — we were quite pleased about that.”

The savings, made against a background of major plant activity increases, amounted to £144,700 with a potential benefit of £581,000 to be achieved over the whole five years.

Electricity represents the largest budget, and this continued to be the main target with various economisers, electronic controls, etc., providing the means of driving down consumption.

It was expected that unit costs would increase both before and after privatisation. But, as it turned out, the latter yielded some unexpected opportunities for cost saving.

A succession of mild winters had resulted in our accumulating a large stock of surplus diesel fuel, used for oil central heating systems.

## Capable Caterpillar

It was decided to use this fuel to carry out tests with the largest of our five generators (the yellow ‘Caterpillar’ in the main boilerhouse) to see if it could provide a reliable and economical alternative to MEB supply.

The tests proved that the ‘gen-set’ was capable of supplying on-line power and provided some useful data about running costs.

“We used £11,000 worth of fuel and converted it into electricity three times that value!” Ferruccio told us.

“This has proved it would be cost-effective to fill our tanks during the summer when diesel prices were low and run the generator during the high cost periods.

Then, out of the blue, came an unexpected opportunity.

The MEB, responding to fierce competition, offered a new type of pool price option tariff.

“With this new tariff,” explained site services engineer

Julian Shufflebotham, “the cost of electricity changes every half-hour with higher costs reflecting an increased use in the country as a whole.

“We have an arrangement with the MEB whereby a fax is sent to us in the late afternoon giving details of the expected prices for the following day and the times they apply.

“Since the scheme began one month ago, the highest costs have been between 5 pm and 7 pm when people go home from work, start cooking and switch on the telly, and between 11 pm and 1 am when night storage heaters come on.

“Advance information of the next day’s prices will allow a decision to be made as to whether it is cost-effective to run generators during the time when electricity cost is at its highest and so reduce the demand on site.

“It’s a totally computerised system. The MEB have installed special metering on site, and data about what has been supplied is sent daily through a modem to the MEB computer at Gloucester which prepares our invoices.

“The generator control system has now been modified to allow synchronisation with the main supply so the switch-over is automatic — all we shall need to do is press a button.”

“We already make significant savings on our purchase of electricity through pool price purchase; soon, by using our own generator at high cost times, we can reduce the bill even further.”

Motive power is the largest user of electricity on site; and yet air tooling is being phased out in favour of electrical tooling.

The reason is that big electrically-powered compressors are hungry animals, and the change to electrical tooling will in fact reduce consumption. Where

compressed air is essential, a small compressor can be provided locally.

Lighting represents 28 per cent. of the total electricity bill and various schemes to reduce consumption have been introduced. High frequency lighting was installed earlier in production areas; now high efficiency reflectors, giving a 1-20 per cent. increase in light output with a 50 per cent. reduction in cost, have been fitted in all areas.

As mentioned in ‘Vision’ a year ago, various types of occupancy detection devices have been tried out and are being used where appropriate with areas zoned for lighting controls.

In building 6/2, the Ripul lighting control scheme, which is time-based with infra-red controls, has been introduced.

This is unique as far as Mitcheldean is concerned since it uses the local supply cabling to pass messages, thus reducing installation costs.

Not an occupancy detection system, it simply provides a means of switching lighting on or off in individual zones by handheld remote controllers.

In order to ‘throw more light’ on the reasons why electricity consumption goes up and down, a computerised monitoring & targeting (M&T) system is being put in place.

“The tracking and monitoring, which should have been a piece of cake, surprisingly proved to be a very difficult part of the process,” said Ferruccio. “Data has now been collected, stored and analysed, and targets will be set later this year.”

In addition to the awareness package designed to inform all staff about energy costs and show how we can each play our part in reducing consumption, energy

conservation has now been incorporated into the weekly audits carried out in all areas.

Answers to questions such as: Have lighting/heating/machines been left on? Have doors/windows been left open (in winter)? are reported back for possible action along with all the other energy data.

“Energy conservation is an ongoing requirement and there is always something further that can be done. We are looking at a number of areas where we could do more innovative thinking,” Ferruccio told us.

“For example, we are now considering the possibility of burning general waste, suitably treated, in our boilers, or using it to raise steam to generate electricity, thus avoiding using landfill and incurring transport and other costs.”

## They’ve signed a £1m contract

AN AGREEMENT has been reached between the Weston-super-Mare firm of Expedite (South West) and Xerox Supplies Division to buy £1 million worth of office supplies.

Expedite have sold the RX ranges of office supplies to business users since they started trading in 1982; now they and Rank Xerox (UK) are working in partnership to increase their market share within the South West and South Wales.

The company, who also have offices in Exeter and in the MEWS at Mitcheldean from which they operate a mail service for this site, have received two Multinational Supplier Awards of Excellence for their work with Xerox Corporation and Fuji Xerox in recent years.

*Boilerman Ivor Sleeman checks the gauge on the panel which was specially designed to allow the generator to run in parallel with the mains electricity supply.*



# Shuttles to bring JIT supplies

DURING THE past six months a multi-functional team led by Mike Bendall has been working to implement the inbound material consolidator project.

The project aims are to introduce a single European freight carrier, Frans Maas (UK) Ltd, with an integrated off-site warehouse facility supporting the delivery of material to site users on a Just in Time basis.

Frans Maas has a major presence throughout Europe and is able to provide a good transport network for the movement of all inbound material from suppliers to the required destination, while maintaining visibility on its own material control system.

Phase 1 was implemented in February, with material movement on Frans Maas transport starting on the 1st following extensive work by Phil Davies (warehouse, ISC admin, & transport), and the Gloucester warehouse operation, for which Mike was responsible, commencing 18 February.

The decision was made in mid-1990 to proceed with the project and introduce considerable Mitcheldean material control system (MMCS)

enhancements, providing further tools for reducing inventory and increasing Just in Time material delivery.

A series of project teams consisting of site users from all departments have worked closely with Mitcheldean information systems (MIS) staff to define and implement software and hardware changes.

Malcolm Pearce and Jim Andrews have been responsible for co-ordinating related MIS activities and developing the Mitcheldean and Frans Maas computer system interfaces.

"With both systems talking to one another, we are now able to send details of material pick-up schedules directly to the appropriate Frans Maas European office (e.g. Germany, France, Belgium) without manual intervention for action," says Mike.

"We will similarly be able to access directly the status of goods movement by part number throughout Europe, enabling inventories to be reduced.

"All computer information is exchanged via EDI (electronic data interchange) which is consistent with all site strategies supporting data transfer."



From left: Mike Bendall with some of the project team — Mike Bradley, Malcolm Pearce, Neil Howell, Bruce Wallace and Chris Cinderey.

Significant changes to the material stock control routines have had to be made, ensuring material issues are allocated to the appropriate stores areas whilst maintaining all stock control requirements.

This has included the introduction of an on-line material pull system, replacing the previous 'hard copy hand-carried to stores' process.

Gary Sleeman and Neil Howell (production control) worked with MIS to develop the systems programmes supporting material transfer from off-site warehouse to user via the 'shuttle' trailer process.

The shuttles leave the warehouse to a predefined schedule and all material loaded is recorded on the material control system with details of part numbers, quantity, destination,

trailer number and despatch time.

A number of enquiry facilities have been implemented, including shuttle history which will be used for automated invoicing.

Andy Herridge (MIS) with his team have been responsible for the system hardware planning and installation at the Gloucester warehouse, providing on-line access to both Rank Xerox and Frans Maas material systems.

"All system testing, a very key activity, has been supported by site users from all areas and they must be well pleased with the final systems performance," says Mike.

"Throughout phase 1 of this project we have also been working to establish both phases 2 and 3 developments which we are sure will provide a sound base for further developments in 1991/92."

## Busy on the boards

AS PRODUCTION engineering manager in the EMC, Heather Pilcher fulfils a very dynamic role.

"There's a phenomenal amount of work on hand," she told us. "I've practically lost count of how many new boards we are looking to launch into production in coming months."

Currently there is a board mix of between 80 and 100 types for low, mid and high volume copiers and printers.

Some are for the 5046, and the low volume machines being assembled in building 1; others are destined for Lille, Venray, Coslada and the USA.

"We also do some reconfiguring, and deal with line returns," Heather told us, "plus some third party business."

To handle this work, she has a team of seven production engineers and a technical clerk who provide all the processes and tooling for PWBA manufacture — right from when the board hits the floor to when it arrives at the testing stage.

"They are very hard working



Heather Pilcher

and dedicated," says Heather. "In fact, that goes for all in the EMC."

Hailing from Merseyside, Heather trained as a chemist, becoming a graduate of the Royal Institute of Chemistry while working for Unilever, where she was given day release for her studies.

It was there that she met her husband Ian, a physicist.

"I left the company because

we were getting married and would be moving south, and I eventually found a job as a chemist with Ferranti Computer Systems at Bracknell, Berks."

The area she worked in manufactured PCBs and Heather was placed in charge of the lab, which controlled all wet processes involving chemistry — etching, plating, etc.

In 1983 she joined Marconi in Swindon where they were engaged in producing electronic assemblies of many different types.

Then last October she entered the rather different environment of the EMC, where her management skills and chemistry background augment the mechanical and electronic skills in production engineering.

When both partners have technical expertise (Ian has an engineering job with Plessey in Swindon), what happens about the division of labour in the home, we wondered?

"We both take a hand in doing whatever has to be done, though Ian tends not to garden," said

Heather. "He's a keen do-it-yourselfer and he's refurbishing our house near Malmesbury in Wiltshire."

With a 45-mile drive to work, she has to leave home at 6.15am and doesn't usually get back until around 8pm, which means there isn't much time for hobbies during the working week.

She enjoys the relaxation of swimming and "I read a lot". But her chief leisure-time interest centres around her horse — though she doesn't do any competing nowadays.

At one time she had to keep her horse at livery. Now, with the move to Malmesbury, they have acquired a paddock — and a helper in Heather's mother, who agreed to move in with them.

She has two horses of her own and is happy to look after Heather's mare Kali too, so it's worked out well. (Kali, incidentally, is the name of a devouring, destructive Hindu goddess!)

Ian doesn't ride, but he and Heather do share an interest in the theatre, and "we go to the Theatre Royal in Bath most weeks."

# The Xerox 5047 makes its debut world-wide

MAKING ITS worldwide debut at the Hanover Fair last March was a new 35 pages per minute copier that is bringing new and improved features to the Rank Xerox mid-volume range.

Designed by Welwyn engineering and now being built in building 3/1 at Mitcheldean, the Xerox 5047 is a performance upgrade to the existing 5046 product for which demand was recently at its highest peak.

Keith Horrobin, who is manufacturing resource team manager and programme manager for the new copier on site, told us:

"It is a fast track programme working within the product development process and therefore new to us.

"We have done a pilot production in parallel with 5046 build within the existing main line facility. This is a 'first' for Mitcheldean plant and it is largely thanks to the co-operation and flexibility of staff in all disciplines that we have been able to do this.

"The transition is still in its early days and we are operating in a mixed model phase on the line."

This new variant on the 5046 utilises some 150 new parts intended to maximise customer satisfaction. The new machine is aimed to become the benchmark copier for productivity, copy quality and reliability.

Major areas of change have been in reliability and operability improvements, noise reduction, expanded duplex capability, and an improved feature set.

These have involved changes in logic and internal workings, but, as you can see from the photograph, the most noticeable

change is in the 5047's shape and colouring.

The edges are more rounded and the front panels of the paper trays have been re-styled with curving contours; these are replaceable independently of the actual trays.

Three configurations of the product are available: re-circulating document handler with finisher; re-circulating document handler with offsetting catch tray and off-line stapler; or automatic document handler with sorter and off-line stapler.

As with the 5046, pre-configuring is carried out within the main line.

The product offers both A4 and A3 two-sided capability with up to 50 sheets capacity.

Electronic enhancements include the ability to edit up to

*Members of the forward product procurement team (from left) planner buyer Alan Worsfold, Terry Perkins (WGC) and Barry Watkins of configuration control, and buyers Simon Hanson (WGC) and Gordon Grey, seen discussing new parts delivery and cut-in dates.*



*A 5047 programme team meeting with (from left) Dave Partridge (USMG MRT interface manager), Frank Yenny (marketing), Steve Dolton (PED), Keith Horrobin (Mitcheldean MRT manager), John Jones (engineering), Ray Harvey (PDT materials), Ian Hirst (programme planning), Tony Cudok (procurement) and Ian Foster (configuration control).*



eight areas on a document, to store up to eight edit patterns and to store up to eight customised job programmes with security protection.

Following its introduction in Germany, the 5047 is being launched initially in the UK, France and Region A.

## EEO at Hanover

FOR THE first time our East European Operations division, which is responsible for selling and servicing Rank Xerox products in Eastern Europe and the USSR, had a presence at Hanover.

Previously it was a major exhibitor at the Leipzig Fair in former East Germany.

Now, however, it is acknowledged that Hanover will be the major platform for sales to the east, and the company will be showing a number of products with which it hopes to interest Eastern European potential dealers, and Western businesses wishing to purchase for their facilities in Eastern Europe.



*Above: Replaceable covers for the paper tray operator Denise Morgan clips tray 3 cover. Terry Peates and inspector Rob Lewis.*



*At operation 10, Colin Jones fits the harness section manager Roger Preece (far left) and*

## New director

DAVID THOMPSON retired as director at the beginning of April.

He joined Rank Xerox in 1965, as a director of the Far East Region and as a director of the Xerox Latin Group. He has held his post for 15 years.

He is at present non executive chairman of Rank Xerox Pension Fund Trustees and a director of Lyell Holding, which will continue with these responsibilities.

Bernard Fournier, RX managing director for 10 years with the company, David has succeeded him and has tackled some tough overseas assignments with considerable skill and great charm. We wish him well through these years and wish him well in his new post.

Lyndon Haddon, currently director of Region B, will succeed David as director, Region B.

The Region, which includes Eastern Europe, Xerox operations, now also embraces the Xerox Operations, following their recent transfer to the Region.

# Rank Xerox showcases world class products



are a feature of the Xerox 5047 — here panel place. On the right are section manager



ompleting the frame assembly; looking on are s Ellway (PED).

## for Region B

Region B, with effect from the

as been general manager, Netherlands, al manager Australia, and president nt position since 1984.

an of Rank Xerox (UK) Ltd, chairman airman of Xerox Engineering Systems a subsidiary of Xerox Corporation; he

ctor, comments: "During twenty five some very significant contributions gnments. All of this he has done with ank him for his positive support

marketing support, has been appointed to

uropean Operations, Africa and Modi xerox Middle East and North African er from Americas Operations.

MORE NEW products and systems aimed at providing solutions to the increasingly complex document management market were introduced by Rank Xerox at the Hanover Fair last March.

They ranged from personal copiers and workstations to the DocuTech Production Publisher, the first in a series of document publishing products that will bridge the gap between computer workstations and business publishing by using advanced technologies in scanning, filing, printing, finishing and networking.

### High, mid and low volume copiers

In addition to the mid-volume Xerox 5047 featured here, the company introduced to Europe for the first time a new high volume copier, the Xerox 5100 (it does 100 A4 copies a minute) and the industry's fastest product able to cope with fully automatic handling and copying of A3 documents.

Xerox 5100s for European markets are being assembled at Lille plant, while the US manufacturing operation will be shipping substantial numbers of the 5100 to Japan.

The fastest growing segment of the plain paper copying market is in personal copiers, and Rank Xerox introduced the Xerox 5009 and 5009RE (reduction/enlargement).

Made for Rank Xerox by Sharp in France, these products are intended for the user needing up to 1,000 copiers per month, and they operate at eight copies per minute.

Copy quality is as good as on larger Xerox machines; automatic exposure copes with coloured originals whilst copies can be made in black, red, blue, green or brown.

### Systems products

These were represented by the international debut of the Xerox 6540 workstation.

This product is based upon the SunSPARCstation 2 and is bundled with Xerox GlobalView software. It is the latest result of a technology agreement between Sun Microsystems and Xerox Corporation in the USA.

The first results of this agreement were announced last year, and the Rank Xerox workstations are being produced at Sun's new production facility in Scotland.



The high performance Xerox 5100 has technical features geared to the Japanese market.

Three other products to be seen openly for the first time at Hanover were the Xerox 4030 II Electronic Printer, the Xerox 3010 Editor, and the Xerox Telecopier 7033.

Produced at Coslada in Spain, the 4030 II operates either as a stand-alone PC printer, in a multi-workstation environment, or in a PC network. It prints eleven pages a minute with a resolution of 300 x 300 dots per inch.

The 3010 Editor is a device combining the functions of the facsimile transceiver, copier and a scanner. It can be used to create a

composite document from existing images.

The 7033 facsimile terminal is a high-speed hub fax unit that also functions as a digital copier. It can send and receive a standard business letter in seven seconds, whilst it can also scan and print letter quality documents.

### Engineering Systems

Xerox Engineering Systems also had some products new to Hanover — the Versatec 8900 colour plotter and the Xerox 2520 wide format printer.

The 8900 produces consistently high quality colour plots, enhanced by a choice of 30-line widths and a range of tones and patterns at a rate of up to 51mm. per second, regardless of complexity.

The 2520 produces sharp, top quality prints from any document from A3 to A0 format, as well as long prints up to 914mm. width and at a speed of 3.7 metres per minute.

## Dave wins top award

AMONG THE 25 people from all parts of the Xerox world who won the 1990 President's Awards was Dave Wood, EMC operations manager.

"These awards are given to Xerox employees each year," said Paul Allaire, Xerox president and chief executive officer, "to recognise extraordinary individual accomplishments, whether they are exceptional one time innovative contributions or sustained performance of unusually high quality over a period of time.

"We are especially proud of these 25 employees and their achievements."

Dave was honoured for the significant role he played in moving electronics manufacturing from Welwyn Garden City to Mitcheldean.

His contribution involved easing the group's closure at WGC through good communication and job counselling, as well as starting up the facility at this site, which directly affected the successful achievement of all transition objectives.

During the transition period, which extended from January



Dave Wood with his award.

until the autumn of 1990, he was working a seven-day week (with no holidays), rising at around 4am and commuting between the two sites two or three times a week, attending meetings and holding interviews while carrying out the day-to-day management of operations during their phasing out at Welwyn and start-up at Mitcheldean.

Though the award is an individual one, Dave sees it as a recognition of the efforts made by the whole operations team, both at Welwyn and Mitcheldean.

Last March Dave attended a banquet in New York City to receive the award from Paul Allaire. "We were all made to feel like VIPs," he told us. "What made it particularly interesting was that I met people from such a wide spectrum of job functions, and I made some useful contacts."

# Helping with audit up the Amazon

JUST SIX months after returning from Mexico, Larry Williams of product quality audit (PQA) was off on his travels again, this time making his first journey south of the Equator — to Brazil.

His mission, as in Mexico, was to assist in ensuring consistency of the product evaluation test (PET) with all product quality labs throughout the Xerox world.

But this time he wasn't part of a multinational team, he was on his own.

His destination was Manaus where Xerox do Brasil, part of the Americas Operations organisation, has two manufacturing facilities (there are others in Resende and Salvador).

Leaving Heathrow on Friday, 22 March, he made the 11-hour flight to Rio de Janeiro and on the Saturday was able to see something of its tourist highspots.

He was whisked upwards by cable car to the Sugarloaf Mountain and by funicular railway to the statue of Christ the Redeemer which dominates the city, though unfortunately mist obscured much of the view of the famous Copacabana and other beaches.

A visit to the football stadium where Pele scored his 1,000th goal was also a must.

On the Sunday, Larry flew northwest across plains, mountains and forest to Manaus in the heart of the Amazon Basin.

It gave him an opportunity to appreciate the sheer vastness of the Brazilian rainforest with its innumerable waterways.

Manaus is built right in the middle of the jungle and the fight to hold it back from invading the city is never ending.

"It grows at a fantastic rate," Larry told us, "and it is difficult to get some Brazilians to understand

*Rio's famous statue of Christ the Redeemer emerges from the mist.*



*Boating on Lake Salvador.*

why we are so concerned about the extent to which it is being destroyed. They don't see it as 'the lungs of the world' helping to regulate our climate."

The flora and fauna are incredibly varied, Larry found. "There are birds as small as our butterflies, and butterflies as big as blackbirds.

"Coconuts, pears, oranges and exotic fruits grow by the roadside for the picking. As for orchids, they grow like weeds!"

He had a good introduction to the forest's ecology at the Tropical Hotel (one of a chain run by the national airline Varig) where he stayed for a fortnight.

The hotel has a mini zoo with typical Amazonian species — pumas, monkeys, alligators, parrots and macaws. There's also a tropical garden, a Lake Forest trail and a park with trees that yield food, timber, and a wealth of extracts used in the manufacture of products ranging from varnish to chewing gum. "Not a fir tree among them!" noted Larry.

Formerly the world's rubber capital, Manaus with its population of around one million is now the capital of Brazil's electronics industry, due partly to the fact that it has been made a free port.

Buildings range from older, stucco structures (the Opera House is splendid) to modern high-risers.

The River Negro on which Manaus stands is a high-riser too, with an annual rise and fall of 15 metres, hence the floating docks and native houses built on piles in the water.

At the Xerox do Brasil plant, which employs some 300 staff, there is new build of 1035 machines.

The 5012/14 is built under



*The tropical evening sun shines on the River Negro.*



*Take a picture of a sloth?*

contract in another plant, run by a firm called Reprofax which carries out work for other companies.

Reprofax is on an industrial estate where about 500 companies, including many big names, are located. When the projected new models come along, Xerox operations in Manaus will be centralised in one plant on this estate.

There is a PQA lab. in each of the present plants; they also have a CCT area where they 'mirror image' the PET. "They rely a great deal on audit for the measurement of quality," says Larry.

"I was chiefly engaged in checking the paperwork, and seeing that the procedures came through translation correctly, and I went through the audits with the people on the line.

"The language is Portuguese but the staff spoke English well enough to make an interpreter unnecessary."

Nicolino de Luca, who is audit manager for both plants, was very co-operative, Larry told us. He recently came over to Holland to take an intensive course in English and a PET lab. manager course, and he visited this site in May before going on to Lille and Coslada.

In Manaus, work at the Xerox plants starts at 7 am with an hour for lunch, and finishes at 4.38 pm. Night falls very quickly between 6 and 6.30 pm.

The temperature was around 34C. when Larry was there and the rainy season made it even

more humid than usual (paper has of course to be kept in heated cupboards).

During the weekend (it was Easter), Larry explored the jungle. He went on a trip with a group by motorboat, staying overnight at a lodge on the shores of Lake Salvador ("Jungle nights are incredibly noisy," he told us).

During a canoe trip on the lake they went looking for alligators. "They lie in the water during the day with just their snouts above the surface but at night they climb on to the bank and if you flash a torch you can see their eyes glinting. It's all part of the jungle show."

There are piranhas too, but Larry didn't risk swimming to check on that!

The vegetation is so dense you can't see creatures in the wild, he told us, though a scorpion did make its appearance in the hotel, and snakes, pickled in jars, were placed around to remind people to take care.

"There's no 'phone, no serum, and you've got 20 minutes to live if you're bitten by certain poisonous snakes!"

On the Sunday Larry went on to the 'Meeting of the Waters'; this is where the Negro (black) and Solimoes (yellowy) rivers join to become the mighty Amazon, the two running side by side for 11 miles before becoming one — a remarkable sight.

The Brazilian rainforest gets considerable publicity today but few of us have the chance actually to go there (Michel Fasen, EMO/PQA manager, is the only other person we know of at Mitcheldean who has been to Manaus).

Larry reckons he is fortunate to have been able to visit two such fascinating Latin American locations recently as part of his job.

As he points out, "The wonderful thing about travel like this is that you work with the local people so you get to see and learn far more than someone on a package tour."

# Service awards



From left: Tony Wood, Ken Nicholls, Dave Robinson and Bernie Gibbs — all 30-year service men.

## 30 years

**Tony Wood's** progress at Mitcheldean has always brought him back to the parts manufacturing environment.

After a start in the machine shop, he spent two years in work study, returning to become section manager of the fuser roll centre.

Again, in 1985 he moved to QA (first in recycling, where his brother Richard works, then new build), but 1989 saw him return to parts manufacturing, this time as operations support manager.

It's a very varied role with responsibilities covering materials as well as audits, MCVs and other aspects of small batch and fuser/pressure roll activities.

"In the latter centre we currently make and repair rolls for some 14 models and we have two types in the design stage," he told us.

Recent travel restrictions prevented a visit to the USA concerning some pressure roll development with which the department is assisting Webster. But Tony and engineer Roger Imm still managed to hold a conference with their opposite numbers in Xerox — by going to Welwyn and using the video link-up there.

"We had an overhead camera to focus and zoom in on documents which showed up on a TV screen. Another screen showed the people we were talking to 'over there', and on a third small monitor we could see ourselves.

"There was also a fax so we could send hard copies on the spot. It was the next best thing to meeting in person."

Tony and his wife Margaret have two sons. Simon, the elder, did a project at Mitcheldean last year for his A-level business studies (he has his sights on being a quantity surveyor). Matthew is taking GCSE this year too, "so the tension in the house is building up!"

Though he doesn't do as much carpentry as he used to, Tony is still a DIY enthusiast and he enjoys photography.

**Ken Nicholls** has worked in parts manufacturing throughout his time with us — the first half in the Bell & Howell machine shop, then on the first machine shop production of Xerox copier

components; the latter half in small batch/tool room.

But that's not where he is generally to be found today.

Ever since EMC became operational on site, he has been engaged on preventative maintenance and modifications on flow soldering carriers and hand assembly tooling machines in building 4.

Every April Ken starts flying — his racing pigeons. He has some 40 birds and is chairman of two flying clubs — the Three Shires, which is a mid-week club, and the Drybrook & District, which is a weekend club that flies greater distances down into France.

This latter club belongs to the Gloucestershire Federation of some 42 clubs, ranging over an area from Avonmouth to Bromsgrove.

When his birds are 'grounded' in September, Ken's interest switches to Gloucester RFC whose fortunes he has been following for around 30 years.

Ken's father George used to work at Mitcheldean as one of RXMP's trio of gardeners.

His younger brother Philip works in inspection in 5012/14 goods receiving department, while Eric, his other brother, is a director of W. F. Giles, our contract builders, and as such is a familiar figure on site.

Yet another who has worked for many years in manufacturing, **Bernie Gibbs** moved into small copier new build in the early '80s.

After working on 5046 pre-configuration and FR&T, he transferred last June to recycling.

Bernie was a member of the Wozzle's Tipsters team which recently won the men's finals in our interdepartmental skittles competition.

This is the second time within three years that he and colleague Dave Tyler (alias Wozzle) have reached the finals (in 1988 they helped the Snipenin team bowl their way to victory).

Bernie also plays skittles regularly as one of the Mitcheldean Horses — the new name adopted by the former village sports club team.

And he recently spent an enjoyable 24 hours, along with 19 others, carrying out a skittles marathon at the White Horse to

raise funds for the Severn Sound Money Mountain which supports local charities.

The organising committee, of which Bernie is a member, had the pleasant task of handing over £1,024, raised by their previous year's fund-raising efforts, at a subsequent skittles event in which the radio station staff took part.

Bernie used to play cricket too, for a number of local clubs; nowadays he just takes part in interdepartmental competitions. "Our team reached the final two years ago so we reckon we're in with a chance this year."

A former member of our Sports & Social Club committee, he joined the committee of the Mitcheldean Community Association at the beginning of this year.

After some 24 years providing technical support to new build programmes (he was latterly involved with the IAP (illustrated assembly process) for the 5012/14 showcase), **Dave Robinson** changed direction last July when he was appointed QA section manager in recycling operations.

Together with his team of inspectors in three different buildings, he provides 'quality' data on the numerous products currently being recycled.

Then, for the first three months of this year, he went 'on loan' to production which, he told us, offered ample opportunities to work on his man management skills.

"I found production operations quite a challenge," he told us. "Apart from the cost of schedule pressures similar to new build, achieving the same quality standards certainly keeps you on your toes."

Dave has changed sides in skittling too. Until recently a member of Milkwall Club, he has transferred his allegiance to the more local Nag's Head team in Yorkley. Says Dave, "This saves problems with travelling, considering that skittling is a thirsty business!"

He is also a keen member of the Golfing Society, his present job on the committee being to assess and set members' handicaps in conjunction with the present captain Wilf Jones.

That includes Dave's own, too — he's been playing off an 8 handicap for the last five years.

Dave is an ex-apprentice and now his son Nicholas is following in his footsteps; he was pictured on our front cover recently as one of the latest intake of apprentice technicians.

Dave's wife Carol is an ex-Mitcheldean and now works in the finance department of the Royal Forest of Dean College; their daughter Kelly, who attends Whitecross School in Lydney, completes the family.

## 25 years

A frequent visitor to Mitcheldean over the years, **George Alderson** took up residence here last year within EMC materials department as SQA manager, electronics.

For George, it was a case of

'join Rank Xerox and see the world.' Apprenticed with CAV-Lucas, he first worked as a draughtsman in the old Denham film studios. Then, with the arrival of the Telecopier (our first fax machine), he embarked on a 'grand tour' of France, Italy, Sweden, Denmark and Germany in a Cortina Estate, helping to carry out line trials in his capacity as electronics engineer.

In 1967 RX moved to Welwyn, and George became involved with test engineering on the 9200/9400 when the company, having started electronics manufacturing, made 'black boxes' for those CBA machines.

Appointed manager, advanced manufacturing engineering, in 1975, he later carried out a two-year assignment in Los Angeles with Southern California Manufacturing Operations, liaising between SCMO and the design function at Welwyn.



George Alderson and (right) Mike Overbury, both with 25 years' service.

"It was quite an experience and I made many good friends while there," he told us.

On his return he held management posts in production and in the QA and reliability field, becoming SQA manager for EMC within materials department.

Another opportunity for travel — to the Far East — came in 1988 when he visited PWB vendors in Taiwan and Hong Kong.

Now having moved west to Mitcheldean, George, his wife Jose and daughter Tamzin have settled in Cheltenham (Tamzin attends Bournside School and was recently selected to play hockey for Cheltenham Under 16s).

The Aldersons' two sons, Iain and Barry, have remained in Hitchin, Herts. Iain works in the Inland Revenue (as does Jose); Barry has just come out of the Army.

George also left his golf clubs and car behind in Hitchin ("They were stolen during my last weekend there!"). When he's re-equipped he hopes to join our Golfing Society — as a 'rabbit'.

A quarter of a century in quality, sums up **Mike Overbury's** career with RXMP. He has worked in inspection on numerous models from the 813 onwards, with spells in the paint shop and spot weld, and currently works on the recording

## 20 years

A group of 20-year service award people — (from left) Phil Ballinger (EMO finance), Derek Davies, Gary Brown and Andrew Bromage (a trio from materials in buildings 3/1, 1 and 5/1 respectively) and Bob Reid (QA systems). Others who recently qualified were Joyce Hardy (spares packing), Dave Addis (5046 assembly), John Lewis (works engineering) and Roger Dutton (QA).



and analysis of defective material for 5012/14 in the receiving inspection department.

"I reckon it's the best job on the shop floor," says Mike. "It's never dull; you've always got variety because every piece part is different."

Philately has been his hobby — on and off — since he was a child and now he specialises in first day covers. "I've got hundreds of them, mostly dating from 1972."

He is also a keen gardener; he used to compete in the RX Gardening Association annual show and at one time had ambitions to become the heaviest onion champion, but he hasn't done any showing for the past two years.

Reaching the 25-year milestone means that Mike and his brother John, who has technical

responsibility for low volume products, now have level pegging in the league of long-servers.

And Mike's wife Jean (formerly production control) clocked up 20 years' service before she left.

### 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

## Swinging into action

THE VENUE for the first Golfing Society outing of 1991 was Herefordshire Golf Club at Wormsley, where 25 keen members visited to do battle for three trophies.

These were: the Spring Bowl — high/low handicap pairings; Denis Ede Vase — best individual stableford score; and the Rabbits Cup — best individual stableford score for 18-28 handicaps.

A very strong wind forced everyone to wear many layers of clothing to combat the cold conditions, but thankfully the threatening skies yielded only a couple of rain showers during the morning round.

Given the unfavourable conditions, some good scores were returned with Bob Pritchard and new member Phil Mitchell tying on 34 points.

Having been fortified by an excellent lunch, it was back to the changing rooms, back on with the extra warm clothing and back out on to the course.

Although slightly abated, the wind was still very strong; as

afternoon play began, however, the sun shone, making conditions a little more pleasant. Surprises were in store though, with the odd rain shower, a couple of snowflurries and one particularly heavy hailstorm adding to the difficulties of the wind and cold.

For some, the morning's experience of playing the course benefitted their afternoon scores, Phil Mitchell and Roger Vine tying with 37 points each, and Graham Meek with 35 points.

The competitions proved to be a rather one-sided affair with Phil's name very prominent, a measure of some good golf on the day and a handicap that will undoubtedly come under close scrutiny by the handicap committee.

Results were as follows:  
*Spring Bowl* — 1st Phil Mitchell/Ken Ellway, 85 pts; 2nd Bob Pritchard/Wilf Jones, 83 pts;  
*Denis Ede Vase*: 1st Phil Mitchell, 71 pts, 2nd Bob Pritchard, 68 pts.  
*Rabbits Cup*: 1st Phil Mitchell, 71 pts, 2nd Graham Meek, 64 pts.

A pleasant surprise for the

## Reasonably good year for club

THE PAST year had been a reasonably good one for the Sports & Social Club, reported chairman Geoff Duggan at the annual general meeting held on 26 March.

A great deal of work had been carried out — new carpets in the function room and hallways, a new cooling system in the cellar ("It really proved its worth last summer") and the installation of an electronic pipe cleaning system to cut out wastage, plus "a new roof at long last".

Then there's a new compact disc player on trial in the bar.

Secretary Nora Powell reported that the inter-departmental skittles and Pub Quiz events had proved very popular and encouraged members into the club, thanks to the hard work of organiser Chris Warren, who was made a life member in recognition of his efforts.

Many charities had benefited from the use of the club facilities for fund-raising events and the function room had proved very popular for holding wedding receptions and parties.

"The menus available are very competitive," she added.

However, more support from membership for club functions was needed. The committee tried to put on a selection of good and varied entertainment and the message was: "If you are not satisfied, let us know."

They were looking at some ideas obtained through a questionnaire and, said Nora, "We are trying to encourage back the skittles, darts, pool and snooker

teams by helping them with their registration fees."

Financially, this was the third year of steady growth the club had enjoyed.

"Although trade during 1990 was down on 1989 we still managed to enjoy a small profit," reported treasurer Dave Lea.

Changing the company the club hired its machines from (with an annual saving in machine hire cost of around 48 per cent. per annum); a reduction in the overall wages bill (though staff had had a rise); and an increase on its investment income, all helped to keep the club out of the red.

A change of accountants had also achieved a cut in expenditure.

But these factors could not be counted on to help the balance sheet in 1991, Dave warned.

Geoff thanked the committee and staff for their hard work throughout the year and he had a special word of thanks for "the ladies who keep the club looking smart and clean."

Geoff was re-elected chairman and Dave Lea treasurer. Chris Reed was elected secretary, replacing Nora who was stepping down after completing three years in that post.

Dave, who has joined Richard Morgan and John Gurney as a trustee, was also made a life member in acknowledgement of his valued services.

Committee members are Nora Powell, Phil Collins, Mike Day and Mick Manns.

society was the gift of two extra prizes donated by Ron and Ted Greeno from Grafton Golf in the MEWS.

The first, a made-to-measure metal driver, was awarded to the best combined score of front nine in the morning round and back nine in the afternoon round.

You've guessed it — Phil Mitchell was the recipient with 37 pts, just pipping Bob Pritchard and Neil James with 33 pts.

The second prize was a 'Grafton Groover', a swing training club which was on offer as the booby prize, won by Tim Beale. Better luck next time, Tim, and many thanks to Ron and Ted for donating the prizes.

The next outing is to Knowle GC, Bristol, on Thursday, 27 June, where more new members are most welcome, and the weather should be much better.

M.A.B.



The wedding of Julian Horrobin (recycling assembly) and Sheridan Pugh (harness assembly) took place at St John's Church, Coleford, on Saturday, 20 April. Son of Keith Horrobin, who is manager, 5046 assembly, Julian played for Berry Hill RFC for many years; he is now a member of the Div. 1 Bristol team.



The new lady champions — EMC Knockers, captained by Alison Fox. Sharing their moment of triumph is their 'mascot', four-year-old Shellie, daughter of Kim Hopson.



Runners-up were Ridler's Rogues from harness assembly, led by Carol Ridler, seen holding the Sadie Pritchard Cup.

# The first of the finals

IT WAS finals night part 1 on Saturday, 27 April. The trophies up for grabs were for the ladies' team, the men's individual and the Wooden Spoon contests in the 1990/91 Business Park Interdepartmental Tournament.

Nine teams entered for the ladies interdepartmental and were split into two groups which were played on a league basis.

Group 1 was won by the EMC Knockers with the Dillies (Hygiene Services) finishing in second place.

Group 2 was a very close affair, with EMC Suckers & Blowers and harness assembly teams Ridler's Rogues and Panduit Girls all winning two out of their three games.

Unfortunately for the Panduit Girls (last year's winners) they just missed out of the semi-finals

on the number of pins scored.

Both the semi-finals were very close matches, especially the local derby between the two EMC teams. After six legs, both teams were level on 192 each. On the deciding leg the Knockers bowled brilliantly, hitting 43 with the Suckers & Blowers replying with 33.

Ridler's Rogues defeated the Dillies 214-209 in a high scoring match in which Joan Boseley hit 45, the highest individual score of the ladies' team competition.

So to the final. The alley was absolutely packed, with both sides well supported by their workmates. The atmosphere was 'electric' and the match between two sides in the final for the first time, was again close and exciting.

All hinged on the final leg, the

Rogues leaving EMC 29 to win. Up stepped the captain and, just to make the game a little more interesting, scored 0; but Carol Wright came to the rescue, flooring a 14 spare.

In the end EMC totalled 32 to win by 4 pins, 192-188, and it was a pleasure for the presenter to hand over the trophy to the ladies from his own department.

For Junior Mr Europe, body-builder Martyn Wynn, who came third in the world Mr Universe Championship in Italy last year, joined EMC's pre-form section last February.

Now aged 21, he will be going to Chepstow next spring to qualify for the Mr Universe Championship in the senior 85-kilo section.

Both of the finalists in the men's individual competition had defeated previous champions in the semi-final — Terry Brown (small batch) beat Dave Robinson (1989 champion) while Mike Harper (spares packing) beat Terry Wood who won last year.

Terry Brown emerged this year's victor with 38 while Mike scored 37.

In the 'least successful team' contest for the Wooden Spoon, Gandhi's Boys (works fire brigade) fought the Flintstones (fuser rolls), and we saw Colin



Finalists in the men's individual were Mike Harper and (right) winner Terry Brown.

Lewis siding with the brigade and bowling against his colleagues!

The trophy, donated by Gardner Merchant, went to well-tanned Brian Fisher's 'Boys' who scored 225 against Pete Sladen's team score of 212.

Top scorers were fire-fighters Adrian John and Bob Young with 43 apiece and Flintstone Andy Gibbs with 41, who shared an award of two bottles of wine.



Gandhi (captain Brian Fisher) and his Boys pose with the Wooden Spoon, donated by our caterers Gardner Merchant and presented by body-builder Martin Wynn (right). Sharing the picture are stickers-up Lee Jenkins and Wayne Joyce.



The Flintstones (captain Pete Sladen) who lost to Gandhi's Boys.

The ladies' individual and men's team finals will be featured in our next issue.

## Obituaries

WE REGRET to report the deaths of the following:

**Trevor Key** on 29 April at the age of 39. Trevor joined product engineering early in 1977; a member of the small copier technical team, he did a two-year assignment in the USA and also went to Japan during his time with us.

**Horace Cornwall** on 2 April, aged 60. A materials analyst in Squirrel stores, he joined us in 1975 and retired two years ago. He was well known in the community, having been a strong supporter of Harrow Hill Football Club and a member of Holy Trinity Church, Drybrook. His wife Marion, who deals with the accounts administration in the MEWS, was manager, cash operations, before she took early retirement after 39 years' service.

**John Lloyd** on 3 March at the age of 63. He worked in the tool room and retired in 1983 after completing 14 years' service.

**Lionel Boyce** on 17 April, aged 64. He joined us in 1977 and retired in 1983, having worked as a marshaller in production stores. His son, Andrew, currently works as a marshaller in building 3/1.

# Easter fun — and mystery

MAKING YOUR own entertainment can be great fun, and Easter Fun Night, held in the clubhouse on 28 March, proved great for children's charities too.

MC Pete Griffiths got the audience participating right at the start of the programme when he introduced a mystery guest — a skeletal figure whose identity the audience paid 25p a go to name.

He later revealed himself to be works convener Colin Butler — and Roger Meek won the prize for seeing through his disguise.

In a breathtaking contest Andrew (Wilf) Williams, Adrian Meek and Charlie Bruton, wearing eye protection in the shape of Roy Orbison glasses, vied with each other to blow up three balloons to bursting point. It was Charlie who outpuffed the others to win the prize.

Rob Miles recited some of his own humorous poems in Forest dialect, and Bill Walters sang folk songs, including one written specially for him by Rob and set to music.

More songs with an Easter message followed in foot-tapping style from KC & Co. (Keith Jones

and Chris Reed with a Mitcheldean Fellowship group).

The evening's mystery deepened when magician Mike Barnard — our very own Paul Daniels — puzzled guests with illusions in his Spellbound act which has been featured in several TV shows.

In one act Mike's assistant, his wife Angie, was shut in a box where she risked being riddled with holes; in another, she was 'levitated' horizontally with only a chairback under her neck for support.

In a third illusion, Mike tried to get two section managers out of one when, trying first a hand saw then a power saw, he appeared to cut through Tim Lakin!

The Management Choir next appeared in a different guise — as 'laughing policemen'. Donning helmets, they competed to produce the most arresting chortle, PC John Evans capturing the prize.

'Julie's Guesser' — a competition in which people paid to guess the number of screws in a bucket guarded by Julie Thomas — brought in extra cash. The total



Magician Mike Barnard cuts through Tim Lakin's protests!



Colin Butler appearing in ghoulish disguise.



A 'special' line-up of laughing policemen (alias the Management Choir).

was 1,719, and Brian Daughtrey, who was only two out, won the box of fruit donated by Roger Aitken.

Yet more money was raised by means of a raffle, all the prizes again having been generously donated.

Fun continued until midnight with rock'n roll sound from Shoemeadow (Barry Osborne as vocalist, Clive Cowmeadow lead guitarist, Roger Dutton on the drums, and others), plus a surprise solo turn from Hugh Cromie.

Practically all the performers were 'home produced' and the disco, Two's Company, gave their

services free, while the company funded refreshments for them.

Over 200 tickets were sold for the event, which was organised by the Employee Charity Fund committee, with the assistance of Nora Powell who looked after the finances, and many others who helped out in various ways.

All this enabled a total of £800 to be donated to charity; £100 went to the James Hopkins Trust for children with special needs, the remainder being shared equally between Oakdene School for children with severe learning difficulties, and the NSPCC local branch.

His triple blow-out made Charlie Bruton (right) the winner.



## Electronics on display

THE RANK Xerox stand at Nepcon — Europe's largest springtime electronics exhibition held at the NEC in Birmingham in March — was designed as a giant printed circuit board assembly, 10 metres long by 6.5 metres wide.

The central office area, furniture and display cases were modelled on electronic components, and the overall effect attracted much attention from other exhibitors as well as a large proportion of the 16,000 people attending the event.

An eye-catching feature of the stand was the wire harness display developed by Graham Powell, Peggy Grice and Elaine Gwilliam

from a concept produced by our marketing consultants, Guthrie Tett & Millard.

This display, which it is planned to locate in building 6/1 for the benefit of visitors, showed a wiring harness fixed to a relief map of Europe, with wires in colours of the flags of various countries emanating from the UK and spanning the world.

To support the display, a brochure was produced giving details of Mitcheldean operations and achievements and illustrated by Terry Darrington.

Roy Salmon, who co-ordinated the project, expresses thanks to everyone who contributed to this effort, "especially those people who gave time to answer enquiries on the stand during the three days we were at Nepcon."



Elaine Gwilliam and Peggy Grice beside the harness display on the stand.