

Vision

HOUSE MAGAZINE OF XEROX MITCHELDEAN

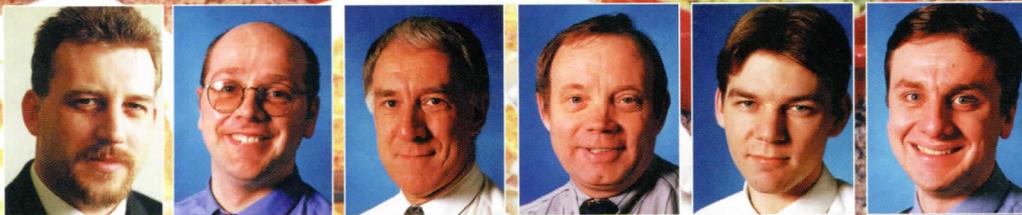
January/February 1998 No. 247

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Cover shot: One of the six new catering areas at Mitcheldean



THE DOCUMENT COMPANY

XEROX

Achievements, investment, and a truly European business



■ Gerry Lane

Gerry Lane

One of the major events of 1997 for us was the creation of the European Manufacturing operation and the business channels. This recognised our need to develop a stronger European base to compete in the global market. In 1997 we established new digital product assembly lines in both Venray and Mitcheldean, we commissioned the Viton plant, and built new automated lines for electronics. In addition, we invested substantially in new catering facilities, site security and safety, and many other areas such as offices and environmental improvement. 1998 represents a big opportunity for us to build on this successful performance.

In rising to the challenge of the new digital products and achieving productivity gains, we have clearly demonstrated our world class business strength.

Each of our business centres has a clear business strategy. They all share a common commitment to keeping our customers first, growing our revenue, raising our productivity and living our corporate values. This essentially focuses on customer loyalty, employee motivation and satisfaction, a profitable financial return, achieving quality and excellence in everything we do and behaving in an ethical and responsible manner.

In 1998 the business climate will continue to change rapidly as our customers introduce new digital and colour technology in the workplace.

We will continue to develop new products, introduce new technologies and find new ways of creating customer value. This means we must become a truly European business, acquire better skills, be more flexible, and open our minds to changes in the way we work.

Our future depends on you - the people in the business; you are the business; your talents and skills drive its achievements. Satisfied customers depend on motivated and satisfied people. 1998 will be a year when we continue to invest in you - by helping you improve your skills, by improving your working environment, and by creating the conditions for success.

Your efforts in 1997 laid an excellent foundation for progress in 1998. I look forward to an exciting and rewarding year for us all.

Exciting new opportunities for Asset Management and Printing Systems

Mike Bendall

The Xerox product transition from light lens to digital technology has been very evident in the last two quarters of 1997, with the demand for traditional remanufactured products dramatically reducing. As we look forward, our challenge is to actively support the appropriate utilisation of returned light lens machines and enable the rapid turnaround of digital off-lease products for resale.

Throughout 1997 we have clearly demonstrated how we can effectively support a premier used equipment market, with the sale of 4,500 machines including printers and copiers, both mono and full colour. This business is well set for substantial growth in 1998, and a target of 10 to 15 thousand machines is not unrealistic.

Our high volume printing systems products continue to be market leaders, and the 1998 direction will be to grow sales in the publishing environment, offering combinations of existing product derivatives and colour printers. These systems will deliver significant productivity improvements for our customers, utilising Xerox-unique document solutions and demonstrating our ability to lead the document world.

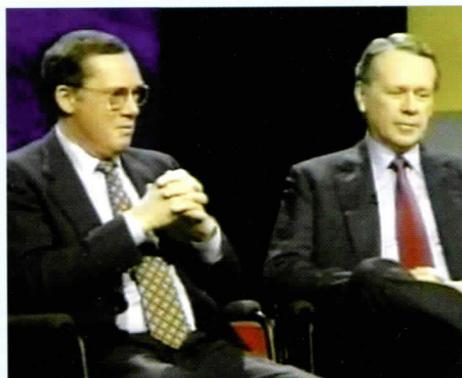
Implementation of the Printing Systems Groups's (PSG) full value chain initiatives throughout 1998 for all European-marketed products offers significant challenges. All aspects of the value channel, including customer satisfaction, product quality, demand planning, order to install time, distribution costs and inventory, require significant work to optimise processes throughout Europe.

Parts and assembly reprocessing for both the service support spares network and product assembly areas will continue to offer significant opportunities for asset utilisation and service cost reductions.

All services we provide throughout the organisation will continue to be under pressure to intensify customer focus, deliver improved flexibility and reduce costs. 1998 will provide us with exciting new opportunities which I am confident can be achieved by working together and taking the business challenges in our stride.

1997 was a good year!

In a worldwide satellite communication on 3rd February 1998 chairman and chief executive officer Paul Allaire and president and chief operating officer Richard Thoman thanked all Xerox people for the excellent 1997 performance.



■ Paul Allaire and Richard Thoman during the satellite broadcast

1997 results showed a 20 per cent increase in Xerox income (profit) to \$1.5 billion, while pre-currency revenue (turnover) increased 7 per cent to \$18.2 billion.

The key theme for 1998 was emphasised as 'Taking Ownership'. Paul Allaire said that 'This is our company - own it!', highlighting the way in which personal actions and running the business as though you own it helps everyone achieve success.

A detailed report on the broadcast will appear in the next issue of Vision - March/April 1998.

More volume in 1998 for Electronics

Neil Price

1997 was good. 1998 will be better, as the volume growth in Electronics continues to reflect the increased emphasis on electronic products as the Xerox business moves from light lens to digital products.

The achievements last year were considerable, especially the increase in volume from 5,000 to 8,000 assemblies each day, the move of Interconnects into profit after major efforts over the past three years, and the Best Factory Award, which recognised the impressive business results achieved by everyone in the business.

As volume grows, everyone in EIBC can achieve success by recognising that it's our personal efforts which can make our own business prosper - by keeping Customer First, growing our revenue, raising our productivity and living our values.

Customer First

Our prime customers are the systems assembly operations worldwide, and one of the main thrusts of 1998 will be continuing the development of our business to give a complete service, extending from design concept to bulk supply of finished boards.

Revenue growth

One of the key actions to maintain our revenue growth is increased investment. Our planned programme includes substantial investment to maintain our growth and improve productivity.

Raising productivity

EIBC has a continuing history of productivity gains - last year we achieved 19 per cent. While some of the 1998 gains will be from new technology, one of the key actions in 1998 will be to implement a suggestion scheme throughout EIBC which will involve everyone personally in their own small group productivity initiatives, allied to local X team work.

Living our values

In 1997 we succeeded by satisfying our customers, valuing our employees, delivering quality and excellence, achieving productivity gains and taking a responsible attitude to the environment and our business. We will do it again in 1998.

Fuser & Frames 1998 - moving towards total control of the business

Chris Clarke

1997 was a landmark year for Fuser & Frames. It saw the business centre taking full accountability for European spares planning, and bringing a major investment, Viton, successfully on stream. The business centre also achieved excellent financial results while achieving over 99 per cent of our target schedules.

1998 promises to be a successful year also, as we capitalise on our investments in plant and people, but our vital few initiatives will be in the four key areas of empowerment, our customer connection, productivity and growth.

Empowerment and training

Fuser & Frames led the way with three validated X teams in 1997. We will further develop our X teams and invest in more skills training to upgrade our people's skills to match our new and technically advanced equipment.

The customer connection

Our key actions in 1998 are to improve our reaction time to solve problems, become more responsive, enhance our relationships

by achieving more customer contact at all levels, and improve all our processes to ensure that Customer First pervades everything we do.

Productivity

Fuser & Frames invests substantially in expensive machine tools and process plant. One of our key goals for 1998 will be to improve volumes and plant utilisation. In addition, we will continue to implement OMAF to improve our reaction times and use all our resources more efficiently.

Growth

Short term growth will be driven by the development of colour and digital markets worldwide, but we will also be making substantial efforts to reduce our time to market so that new products generate revenue more quickly. During the year we will be working towards the manufacture of complete modules, developing our design skills to become a fully recognised design centre, and working to achieve more third party business.

Light Lens - a key market sector

Steve Pomeroy

Light Lens products are still highly valued by our customers, and 1998 will offer us all a substantial production challenge.

In 1997 there were many success stories; two new models were introduced and we achieved considerable breakthroughs on costs, especially for 5815 and 5830. Our production flexibility enabled us to deal efficiently with massive variations in demand. The introduction of direct ship, together with a major reduction in warranty returns and rapid reaction field support, provided real achievements upon which to build in 1998. A gain in employee satisfaction and increased opportunities for personal development will also help us this year.

Our key challenge in 1998 is to maintain our strong performance. While there is a lot of movement in the market from light lens to digital products, we expect to see a substantial demand for light lens products, which still represent good value to the customer. In 1998 we aim to improve upon this value by making our products even more reliable, responding quickly to our customers' needs, improving our relationships in terms of customer support, and reducing actual production costs.

1998 will be a year when we take more ownership of reliability to reduce field maintenance costs, increase the level of technical support to our customer care teams, and invest more in our people to improve their satisfaction and provide a better skill base for customer support.

As we meet our changing customer demands, we plan to relocate our production to new facilities in Building 3, and work hard to share our best practices with the other production units in European Light Lens manufacturing, with the aim of improving employee satisfaction and extending our successful X team initiative to give more empowerment and ensure that everyone has the skills and training to improve on last year.

Digital/colour value chain

Danny Haines

1997's key achievement was the successful operation of the digital/colour value chain. This new organisation, designed to give everyone in assembly a clear link to our end users, helped us all to satisfy the huge production challenges we faced in 1997.

As we introduce colour products in 1998, we will maintain our Customer First focus throughout the digital/colour value chain, from piece part suppliers through product build and delivery to customer installation.

Another aim is to ensure that everyone in the business clearly understands our direction and how we plan to get ahead of the competition. There are two main priorities:

- to improve Customer First by concentrating on Reliability, Responsiveness, Relationship and Value (3R+V)
- to help all our people improve their skills and readiness to face the production challenge.

Reliability

- *'Improved parts & installed product quality'*

This will be achieved through quality intensification, order accuracy and crew commissioning improvements.

Responsiveness

- *'On time spares and product delivery'*

Our priorities here are improved material leadtimes and faster build to order/ship to order processes.

Relationship

- *'Keep commitments and inspire confidence'*

Our actions here will include the introduction of a customer service office on site, regular customer (entity) 'relationship' reviews, and improved contact between engineering, production and business divisions.

Price/value

- *'Delivery of appropriately priced offerings'*

We will work to improve value by reducing costs in distribution, production, installation and Unit Manufacturing Cost (UMC), and by optimising material sourcing.

People

- *'Satisfied and motivated employees'*

We will establish the 'value chain learning institute' to equip all staff with required new skills, organise proactive management of employee satisfaction, and introduce a major initiative to support empowerment.

The colour revolution is here!

The move to digital documents, the increased use of colour in the office and the desire to achieve more impact are all driving the colour revolution throughout business worldwide.

One critical element in The Document Company's strategy is a mid-range digital colour printer/copier - DocuColor 5750. At present production is carried out by Fuji Xerox, but the growth of colour business has led Xerox to invest in production at Mitcheldean.

The first stage of production development is already well advanced, with systems integration to customer order (SITCO) already in operation in Building 2/1 using modules and kits supplied by Fuji Xerox. The experience gained here is being used to help plan volume production in Building 1, scheduled for Quarter 2 of 1998. This will be accommodated within the planned expansion of the footprint of DC 220/230 family.

Simon Jones, whose team is pioneering the 5750 build activity and the allied infrastructure development and skill acquisition, feels we all underestimate the impact colour will make. "5750 is such an advanced product that even our team members can have difficulty identifying the differences between a copy and an original. Apart from the problem of unauthorised colour copying - not to mention counterfeiting, this level of technical excellence means that quality issues take on a different dimension altogether.

"Now, our operators have to become familiar with the concepts and measurement of hue, saturation and colour balance as well as the much higher standards of mechanical precision needed to achieve print accuracy with four passes to obtain one single colour copy."

The training investment in systems and processes is considerable. Richard Andrews spent more than six weeks in October/November 1997 at the Fuji Xerox Ebina plant in Japan to prepare for the Mitcheldean start-up.

Using the work already done on digital processes for the DC 220/230, Mikela Hale of the training group is developing courses to prepare production and management staff throughout Systems Assembly for the colour revolution.



■ Shirley Hayward and Mike Townsend with the 5750 in Building 2/1

This activity, with support from the European Learning Institute at Aulnay, France, will continue throughout 1998.

"One of our critical training issues," says Mikela, "is colour appreciation. Here we are building on the experience of field service teams who are already servicing the colour product lines."

One of the crucial points about colour printing and copying is that the final digital print is fixed by a single fuser unit. This means that every sheet of paper makes four passes through the fuser unit, more than trebling the speed of paper movement if comparable operation rates are to be achieved against those of mono copiers. "Naturally," says Simon, "these additional complexities have to be addressed throughout design, module production, systems integration and installation. We are now well into the final phase of developing the illustrated assembly process for every aspect of 5750 manufacture so that we can have fully trained people in place ready to meet our first production targets later this year."

Fancy dress tour raises £125 for Children in Need

When the dancing team from the Occupational Health Department did an impromptu (well almost) tour of Buildings 3, 4 and 7, their quick whip-round for Children in Need raised £125 in one and a half hours - an effective rate of more than £13 per hour! Perhaps they should be full-time fund raisers ... or on the stage.

Well done Jacqui, Brenda and Karen. We all look forward to the next Children in Need fund raising effort.

Farewell 5622

After six years as a mainline product, the last newly-built 5622 rolled off the production line in December 1997. Over 5,000 of this work group copier were produced in Building 3 during 1997 following five years' production in Building 1. In 1998 remanufacture commences in Asset Management.

"Many Mitcheldean people have worked on 5622," said 5622 assembly manager Nick Farr, "and I would like to thank everyone who has contributed to the success of the product over the years."

■ *Members of the 3/1 team are seen here with the last newly-built 5622. The two people pictured closest to the machine, both with six years' unbroken work experience on the product, are Gerald Brain and Mike Wilcox (the one with the hat) ... guess who's looking for a job on the colour assembly lines! Other members of the build team are John Bown, Ron Dixey, Nicola Tingle, Yvonne Bevan, Brian Castree (hiding), Tanya Melhuish, Alan Jordan, Gavin Jones, Sharon Clift, Richard Murphy, Julian Gwilliam, Robert Meek, Paul Davies, Roger Dutton, Reid Hopkins and Nigel Houldley.*



Building for success

Customer First is all about meeting the customer's needs. Often these needs don't coincide in a nice neat way with our production plans but customers are our lifeblood and we must do all we can to meet their requirements.

This was precisely the team reaction in Systems Assembly when a major Swiss international business, ABB, required DC 230 family printer upgrade kits - months before the formal product launch. Not only did ABB require the kits before they were available on the market, but the company also required the product within two weeks.

A Systems Assembly team, including Sean Mills, Julian Priest, Alec Davis, Kevin Norris, Richard Cooke, Andy Portlock, Kean Gunton and Gene Lewis, worked all hours to meet ABB's order for three upgrade kits, and delivered them on time. This performance pleased everyone at the Swiss OpCo and ABB but there was one slight hitch. Product performance was so good with the new upgrade, that ABB decided to carry out the same upgrade on another 39 machines - and with the same tough two-week delivery schedule the team had met for the previous three units.

The task was considerable. The only way the order could be satisfied was to disassemble a batch of units intended for other markets and match these with upgrade modules destined for a product launch later

in the year. This meant the team had to disassemble 39 units and associated modules, re-program the units with new software to meet ABB's requirements, then rebuild the modules, test them to the different standards and ship them to Switzerland to meet the deadline.

"In the event," said Sean Mills, "we met the delivery. This meant working on a series of 14-hour days straight through a two-week period in October and November to complete the order on time for the Swiss OpCo."

The team's success in meeting this very tight deadline not only safeguarded future business, but avoided an expensive contract penalty clause.

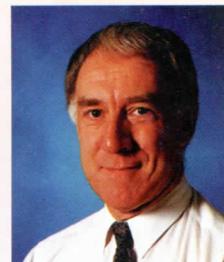
Digital and colour manager Paddy Weir commented, "Our challenging build schedule continued throughout the second six months of 1997 and into the New Year. This kind of performance from the team - when they were already under pressure with their normal workload - was a marvellous reaction. Even though DC 220/230 printer/copier is building market share, we have to recognise that our customers and end users still have other choices. Unless we help them when they need us, they can still go elsewhere if we can't deliver quickly! The team made sure the customer didn't have to wait to see our promises turned into action."



■ Sean Mills



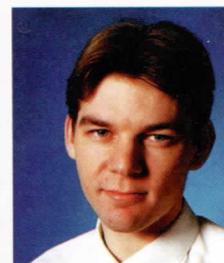
■ Gene Lewis



■ Alec Davis



■ Richard Cooke



■ Kevin Norris



■ Julian Priest



■ Kean Gunton

New catering facilities for all

Tempting baguettes from the deli bars or freshly made soup, a wide range of main meals and puddings, not to mention a really good choice of vegetarian meals, have all helped to make the £500,000+ investment in catering at Mitcheldean a real success.

The aims of the project were quite simple: to provide everyone on site with a really wide choice of healthy, satisfying and good value meals at any time of the day or night. This is expected to improve the work environment for everyone.

It wasn't quite as simple to provide, since the project included a total overhaul of catering throughout the site. This involved new infrastructure services such as plumbing and electrical services, new decor and new catering layout schemes. The project also included a complete re-design of menus to meet the best nationwide standards of business on-site catering, as well as replacement of ovens, heated and refrigerated cabinets, and cook-chill facilities, as the existing facilities in Buildings 1, 3, 4, 5 and 13 were upgraded.

In addition, a central service unit has been established in Building 9 together with a completely new catering area to meet the needs of GBAS, XBS and other Mitcheldean staff in Buildings 6, 7, 8 and 9. This new facility will also be available for visitors and other businesses on the Mitcheldean site.

The catering operation, managed by Eurest, is led by Trevor Leigh. "We are already close to our planned target of 1,800 meals a day," he says. "As one of the largest operations of its type in the South West, we and our team of 27 are managing a full breakfast service, featuring the 'X-Breakfast', lunch, twilight and night service, as well as hospitality and function catering."

■ A final quality check by the management team



One of the major priorities was to give everyone the opportunity to choose healthy eating options. As part of this a range of salads and vegetarian meals has been introduced which meets the best nutritional standards. As part of the total overhaul of Mitcheldean catering, Eurest has introduced catering suggestion boxes in each area. In addition, menus are changed on a six-weekly cycle to provide variety.

The local catering areas are managed by a team of seven supervisors; Bev Williams, Jill Daunter, Ann Sysum, Dilys Lewis, Paul Lewis, Vicky Preece and Esme Gwynne.

Resources manager Charlie Walker sees this considerable investment as a landmark for Mitcheldean site services. "We are committed to meeting high standards. Now that our business operations have changed radically, with much increased round-the-clock working, and our workforce has a much wider and more developed taste for various types of cuisine, we have to be flexible as well as efficient. We will be making regular reviews of menus, healthy eating options and the needs of our customers over 2,000 people on site. We aim to make our catering services throughout the site the preferred option for eating at work. Please make sure we understand your needs and preferences. Let us have your suggestions and we will try to make catering at Mitcheldean enjoyable, healthy and good value."

Laser technology Mitcheldean



"When I say clean, I mean really clean!" Dave Wightwick

Every digital printer/copier produced at Mitcheldean relies on the Raster Output Scanner (ROS) for the basic task of converting a digital signal to the myriad of dots which give the finished image. These costly and complex devices produce a beam of intense red or infrared laser light. This beam is chopped into a series of pulses (one per pixel) and reflected in a scanning pattern across the photoreceptor drum using a segmented mirror rotating at up to 22,000 rpm. As each laser pulse hits the photoreceptor surface, it removes the electrical charge at that point to create a negative image pattern on the drum. This then produces a positive image on the paper which attracts the toner particles to give the finished print. The toner particles are then fused to complete the process.

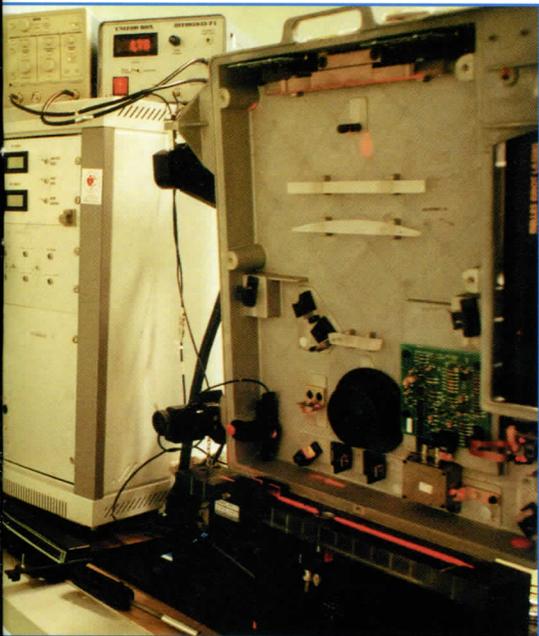
The laser beam is incredibly small. It has to be, to produce up to 400 dots per inch on the latest colour printer/copier, DocuColor 5750, or up to 600 dpi on the DocuTech. The latest units use lasing diodes to produce the laser beam, and the earlier units such as DocuTech use gas lasers.

Aligning the beam from a gas laser is a high precision task, and because each dot in the image is a circle three thousandths of an inch in diameter, even the tiniest piece of dust can cause a problem.

Five years ago it was decided to service ROS units at Mitcheldean in a small clean room within Building 12 for DocuTech service support. As the volume of digital work increased, covering 4235, DCS 35 and advanced colour products, Xerox invested £100,000 to upgrade and extend the services with a new facility in Building 13 within the Asset Management Business Centre.

3R+V means you

Everyone at Mitcheldean has heard the magic phrase '3R+V', but what does it mean and why is it so important?



■ Bill Hall operating the electronic alignment system.

This new unit is certainly the cleanest area in Mitcheldean. All air in the room is filtered to US Class 10,000. "This means," says process engineer Dave Wightwick, "that we all have to wear overalls, hats and special shoes to protect the laser systems from the dust carried by our production staff and technicians. US Class 10,000 air has less than 10,000 3-micron (three millionths of a metre) particles per cubic foot. Dust at this level is invisible. It would take 200 of these particles to equal the diameter of an average human hair."

Once the laser assembly is set up using electronic alignment systems (designed at Mitcheldean by Bill Hall and built by Ahead Technology of Cheltenham), assembly is finally completed in an even cleaner enclosure which has filtered air containing only 100 of the tiny dust particles per cubic foot.

All the ROS room staff have to be highly qualified on all aspects of laser technology, and also receive special laser safety training. The team, led by Dave Wightwick and supported by electrical opportunities engineer Stuart Love, includes five technicians, Daren Green, Colin Arkel, Ian Davis, Terry Zimmerman and Bill Whitlock, processor Steve Townsend and analyst Sarah Kear.

"Our ROS facility provides repair and service facilities for all digital products in Europe including 4235, 4045 family, 4700 family and 5775," says Dave Wightwick, "and we are currently working to provide facilities for DC 220/230 family and colour products including Regal, Majestic and DocuColor 5750 when production starts in the near future."

It's important because it is an essential part of our Customer First strategy. No business will survive long in the competitive global market unless it meets customers' needs efficiently ... and customers place continuing business with it. Very satisfied customers are more likely to remain loyal to Xerox and provide us with the opportunity to grow. 3R+V is the code we use to summarise our actions to improve customer satisfaction.

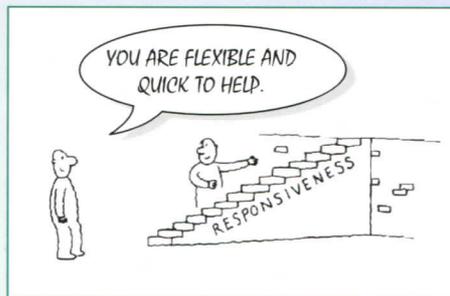
3R+V

To satisfy our customers, they must see us as Reliable and Responsive. We must have a good Relationship with them and give them good Value.



Reliability

Our customers must trust us. This means that we must keep to our delivery times, fulfil our promises, answer customers' questions, give our customers the right information when they want it and ensure quality right through the process.



Responsiveness

It's not enough to deliver our product. In today's markets many businesses can meet some of their customers' needs by delivering the product - but these needs frequently change. For instance, they may want a different product in a different place ... and sooner rather than later. They may want quick answers to questions, a product modification, or additional services. We all need to respond quickly, accurately and in a flexible way if our customers are to be truly satisfied.



Relationship

If we know our customers, understand their needs, value them as people, support them in times of difficulty and go that extra mile to help them, we will achieve a good relationship - where it is easy for them to do business with us. This will be translated into more business opportunities over the years, as our customers come to see us as the preferred supplier.



Value

No matter how reliable we are at producing the product, no matter how quickly we respond, no matter how good our relationship with the customer, long term success depends on value. If we concentrate on the total service to provide products and services which give all our customers the right product at the right time and the right price, we will provide solutions which fit the customer's needs. If we don't, we fail. It's as simple as that.

"We have underestimated the pace of technological and market change, and have been too slow to implement the direction which we have set. As we move towards the new millennium, we must do so with a far greater sense of urgency and a far higher speed of action."

Paul Allaire 1997

The power behind the printer



■ Guy Rainforth

Focus on Venray's Electronics Delivery Centre - Europe

Today's multifunction printer/copier/scanner/fax machines have a great variety of electrical and electronics sub-systems, many of them operating at different voltages with substantial variances in current requirements. For instance, the corotron assembly, which charges the paper to attract the toner, operates at 7,000 Volts dc, while a typical main circuit board assembly with a microprocessor operates at 5V. Motors to move the paper transport system operate at between 12 and 24V. Then there are lights, displays, scanners, sensors, keyboards and accessories all with their own very different electronic and electrical requirements.

The power supply unit meets all these varying needs. In addition, it has to maintain operator safety and protect the whole system against public power supply fluctuations, power surges and electromagnetic interference caused by lightning or other electrical disturbances, while continuing to meet all the power needs at accuracies of 0.1 per cent or even better.

Most printers or copiers have two power supply units; one for the low voltage circuit boards and motors (5-24V), and one for the high voltage required for the corotron and other Xerographic process related components. These units, however, are getting smaller; DC 230 has a single combi-unit for both low and high voltage requirements.

Europe's centre of excellence in power supply manufacture is at Venray, home of the Electronics Delivery Centre - Europe (EDC-E). Established in 1980, this unit, which currently employs around 250 people, designs and manufactures all types of high and low voltage power supply units, supported by laboratory services, test facilities and all the production plant you would expect to see in a mainline electronics manufacturing plant. This includes a full range of automated insertion assembly and test plant. The operation is supported by an experienced logistics management team which supports the entire supply chain from component procurement to production planning, customer delivery and service.

This is a major task. The EDC-E builds in excess of 850,000 power supply and associated units each year for Xerox build programmes and to supply third parties in Europe, the USA and other worldwide manufacturing locations. This includes power supply units for DC 220/230/265, DocuTech and 5837 family. Over 60 different types are produced.

In addition to the new build operation, the repair group offers a competitive repair service for a broad range of electronics, such as power supplies, micro-processor boards, driver boards, monitors, lasers and optical units. Repair processes are developed in-house including software and hardware. Electronic repair



supports the asset recycling and environmental strategy through process development for all electronics at the major worldwide manufacturing sites. To meet the increasing necessity to guarantee second life cycle for repaired units, the repair department makes use of sophisticated signature analysis techniques. The Electronic Repair group repairs and manufactures about 120,000 items per year.

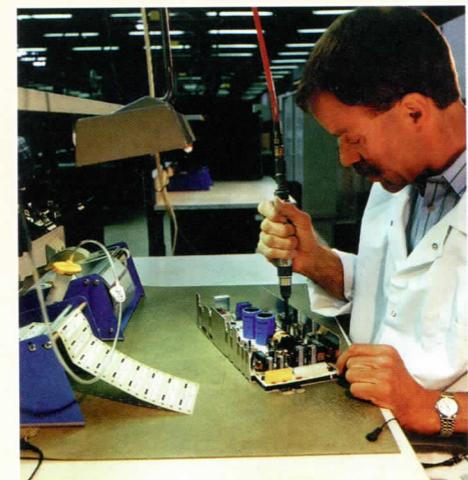
Like all Xerox operations, EDC-E meets all recognised quality, safety and environmental standards. Since 1994, EDC-E has been both a Xerox certified internal supplier and an IBM certified supplier.

Following the development of the European Electronics Business Centre last year, EDC-E, like other parts of the Centre, is experiencing rapid growth as a full service supplier. Production grew by 25 per cent in 1997 and is expected to grow by 5-10 per cent in 1998 - mainly to meet the needs of European digital and colour digital build programmes.

Guy Rainforth, who moved to Venray from Mitcheldean last year to lead the EDC-E into the digital and colour programmes as a full service supplier, sees an exciting future for the power supply business. "The team here have proved their abilities to produce power supplies to worldwide standards of excellence for both Xerox and demanding third party customers," he says. "The next year will see us introducing new products, and already we have been selected for a number of new programmes which will take us into the future."

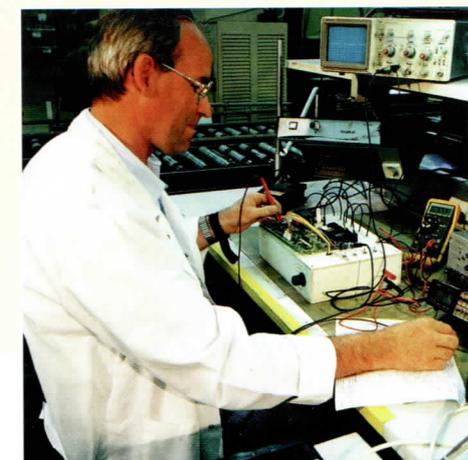
Guy also sees a big opportunity for expanding the business. "Our design, production and repair skills here at Venray are suitable for many other industries, notably medical, telecom and computer products, as well as mainline printers and copiers. We are working hard on reliability and expansion of the business as well as meeting our Xerox commitments in 1998."

■ From left to right: (front row) Theo Claessens, Ingrid Renjaan, Guy Rainforth, Hans Denissen and Lambert Rooijendijk, (second row) Frank van Eck, Theo Gramser, Jan Ewals and Ger van Rijswijk, and (third row) Leon Mintjens, Eddy Bardeel, Sjaak Keijsers, Peter Schoeber, Fred Zegers and René Honig.



■ Harry Arts - assembly

■ Bert Logtens - testing



Those were the days?



The bubbly winner for the Christmas archive photograph in the last issue of Vision was Pat O'Hare. Pat was a manager at British Acoustic Films back in the 1940s, when radar plotting table equipment was manufactured at Mitcheldean. The photo was of a Christmas fancy dress party in 1944 and included Pat in his Sheik of Araby robes ... good to know we were export-oriented even in those days! This issue's archive pic looks like a clip from 'the day Bill brought his ferret to work'! ... but, seriously we would like to know which copier it was and we would welcome any suggested names to put to the faces those you can see!



Karaoke and chips

A junior disco, karaoke, and sackfuls of presents from you-know-who delighted the young customers at the Christmas parties held on 21st and 29th December in the Sports & Social Club.

Sausages and chips laced with tomato sauce, plus pop and ice cream went down a treat with both 5 to 7 and 8 to 10-

year old groups, while crackers went off and balloons went up.

Martin Williams, contracted as Santa Claus, delivered quality presents to the younger set, and he was joined by an almost exact copy in the form of Colin Brown on the 29th. The team of helpers did sterling service before, during and after the events, and we'd like to say a big thank you to all involved on behalf of the boys and 'sugar and spice' babes!

LSA Christmas draw

The LSA Christmas draw took place on 27th November 1997. The picture shows, from left to right (standing), Christine Aston, Pete Waugh, Robin Fyffe, Sally Meek, Charlie Walker and Jane Whitlock, and (seated) June Pinfold, Janet Hart - pulling the winning number for first prize out of the bag, and Dave Morris.

Also pictured here, with some of the prizes for the Christmas draw, are committee members Brian Powell and John Spratley.



DC 230 machine display



Our picture shows Tim Gargan and Lisa Howells with the DC 230 display.

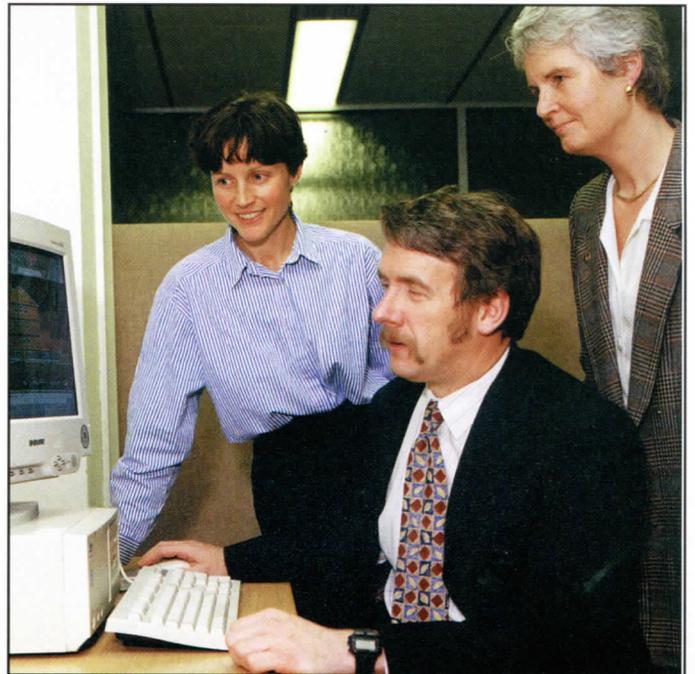
A display of the DC 230 was recently set up in EMC in Building 4 by production engineer Tim Gargan to aid staff in understanding how the circuit boards they manufacture contribute to the operation of the product. The display included information on the PWBAs' location inside the machine, its main operating functions, and details of the customer within Building 1 for its assembly.

Tim explained, "The display enabled employees to appreciate how their

contribution is located in the finished product. Knowing how and where your own personal work ends up adds a little more care and attention into product build."

The display was received with enthusiasm, and other products will be featured in the future. EMC's sister plant in California were impressed with the idea and are hoping to put on a similar display for their own staff soon.

Forest Business Unit opens



Our picture shows, from left to right, Gill Stott, lead trainer, Steve Astington, business unit manager and Erica Rye, business administrator.

The Forest Business Unit, based in Building 7/3 on the Xerox Business Park, was officially launched on 11th December 1997.

Part of the Royal Forest of Dean College, the Forest Business Unit provides training on computer applications including MS Office and Computer Aided Design, First Aid and other aspects of health and safety. These services are available to individuals and businesses on the site and throughout Gloucestershire. Call Erica Rye on Intelnet 1299 or 01594 544858 for details of the course availability and enrolment.

35 YEAR Service Award

30 YEAR Service Awards



Our original computerised building management system was installed in 1976 and since then, under the care of JULIAN SHUFFLEBOTHAM, has been constantly upgraded, modified and expanded. "The original system was based on analogue technology but component parts are rapidly being replaced with the latest digital devices," he told us.

Julian's time in Works Engineering has presented many challenges, one of the biggest being the recent Viton project in which he and colleague Martin Exell were closely involved. "The next challenge is the access control system which we are going to totally computerise and expand to cover additional areas."

At home he gets a kick out of speculating in stocks and shares, playing the UK market on his own PC. But DIY, along with gardening, is his main hobby.

Come the better weather, we may spot a trike parked on site. TONY WALTHAM of Convenience Copiers sometimes comes to work on his "motorbike with stabilisers" and says: "There's nothing like it for when the sun shines." He enjoys "messaging about" with this hybrid vehicle which has a VW Beetle back end and motorbike front part.

His other novel 'toy' is a juke box for which he collects old 45 rpm records. He also likes to do a bit of woodturning.

Tony spent his early years with us in the machine shop, transferring to the electrical side of assembly work. After 20 years or so as an electrician, he became a leading hand on the 5828/30 and a year ago was promoted to section manager.

He and his wife Sue have a 17-year-old daughter, Tina, who is taking a business studies course at Hereford College of Technology.

IAN HALE joined design engineering after apprenticeship, and worked on medium volume machines. In 1979 he married social worker Hilary and they spent the next two years in Webster along with the resident team.

Later, his involvement with low volume products led to a visit to Japan on tool tryout. Two more years were spent in Lille as a 'methods engineer' working on the Memorywriter

electronic typewriters, enabling his son Joshua (now 14) to become fluent in French. He and Hilary also have an adopted son of nine, Daniel.

After returning to base as a section manager in CBA recycling operations, he was appointed manager of PQA, then environmental manager. When the growing activity was moved into HR, he stayed in AMBC and took ownership of UK Entity servicing/recycling operations which has now expanded into light remanufacture.

Ian has long been a rowing enthusiast; he's a member of Ross Rowing Club ("though it's more a social thing these days") and Joshua is following in his father's wake!

Ex-apprentice ROGER IMM pursued a different course when he joined components planning, later absorbed into what is now Fuser & Frames, where he has made his career.

It has taken him on various visits abroad - to Venray to assist with the 1045 pressure roll transfer to this site; to the USA concerning the purchase of an inertia welder and Viton coating line; to Fuji Xerox to pick up the technology on the low mass roll section; and to Switzerland regarding a profile grinding machine.

Engaged on the Viton project for the past three years, Roger says: "We're now starting to develop the Majestic colour printer fuser roll."

His daughter Kelly has also embarked on a technical career - she's a trainee engineer at Mabey & Johnson, Lydney, and has started a degree course at Bristol University. Roger and his wife Alison also have a younger daughter, Rachel, who is pursuing business studies at the FODC.

DIY and woodworking are Roger's main hobbies.

A member of the electrical maintenance team ever since he started at Mitcheldean, GEOFF DUGGAN has a long record of service in other areas too.

In 1996 he retired from the Gloucestershire Fire & Rescue Service after 22 years, for the last 12 of which he was in charge of the Newent station.

He also served on our S&SC committee for some seven years, and was chairman from 1989 to 1993.

Gardening is an interest he shares with his wife Mavis. They have two daughters - Helen who is married and has given them their first grandchild, and Sharon who manages the Barclays Bank branch at Hucclecote. They also

have a son, Andrew, who is an ASDA trainee supervisor. Geoff and Andrew are both members of Wolverhampton Wanderers and keen followers of the Wolves.

For over five years KEN BUFFIN has been a member of the LSA committee (which is now gearing up to prepare for the next annual dinner on 8th May).

Engaged initially in assembling subs for our earliest machines, Ken then worked on the 4000 family. He came into the Supply Centre when the changeover to a computer system was taking place, and he took up a permanent job in Stock Control where he has worked for well over 20 years.

He and his wife Brenda have two children at school - Michael aged 14 and eight-year-old Jennifer. Ken's relaxation used to be coarse fishing but "I haven't had the time recently."

TREVOR JONES started in Building 12/2 in the days of the 813, our first small copier, and he can be found there today as one of the Remanufacture team.

He had spells at Gloucester Trading Estate on sorter work, and at our former satellite plant at Lydney in the 660 sub-assembly press section, since when he's continued to be involved with small copier remanufacture. He is currently engaged in assembling consoles.

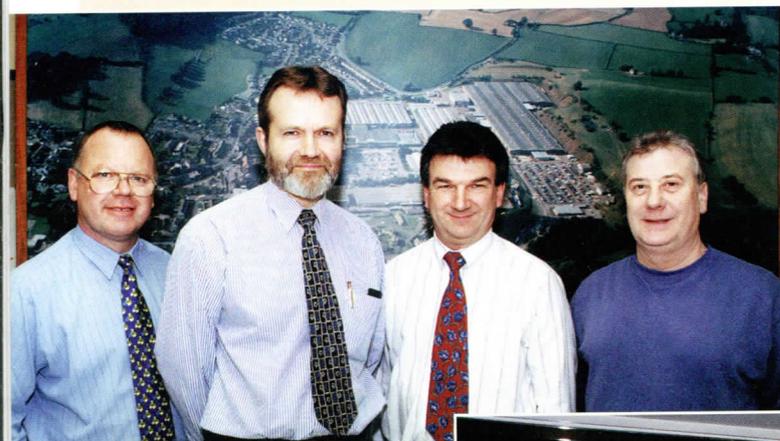
He and his wife Marjorie enjoy Old Time Dancing at the Evergreen Club and taking their son's two young children on outings.

25 YEAR Service Awards

From being shop boy, ROB BUTLER moved into production control where he was engaged successively in inlet/outlet checking, progress chasing, updating Xerox changes and build analysis. In the late '80s he spent four months at Welwyn as assembly analyst on the 5046 and after its return to this site was a planner analyst in recycling. About five years ago he transferred into Procurement as planner buyer where he deals today with suppliers in places ranging from El Segundo to the EMC.

He plays skittles for the Free Foresters, and runs the Forest Rangers Under-10s in the Gloucestershire Youth Football League.

He and his wife Deborah have two sons - Daniel who plays for the Under-11s and son Marc (14) who used to play but "he retired early due to leg injury."



From left: Tony Waltham, Ian Hale, Roger Imm and Geoff Duggan. (Trevor Jones and Ken Buffin couldn't make the photocall.)

Left to right: Rob Butler, Elaine Gwilliam, Robin Richardson and Keith Johnson.



Apprenticed at Rolls Royce, ROBIN RICHARDSON joined us as a production engineer. He was appointed a machine shop foreman and, apart from a spell in small copier assembly, he's worked in that sphere ever since. In the late '80s he switched to programme planning/materials management for four years, returning to Fuser and Frames production as section manager.

Since '95 he has been in charge of high volume printer assembly operations. "It's a growth area - the potential is tremendous," he told us.

He and his wife Valerie have two sons - Clive who is 17 and studying information technology, and 14-year-old Keith preparing for GCSE. Both are Manchester United fans and Mick



■ Left to right: Chris Marriott, Dave Wightwick, Mick Scriven and Graham Morgan.

In his own workshop at home he's building a 2in. scale model of a steam engine - Fowler's Superba! - and he holds a certificate in traction engine maintenance and driving. He enjoys sailing, but his most challenging venture was when he motorcycled from Land's End to John o'Groats in '96 and raised £651 for the RNLI. "I'm now thinking of doing the trip in reverse order!"

This last Christmastime his wife Carol, who runs a hairdressing salon, presented him with a son, Kieran.

KEITH JOHNSON, and both his sons, provide technical support on site. Moving from design to production engineering, Keith worked on the 4000 family and then the 2300/50 at Lydney. He's been involved with convenience copiers ever since and has been to Japan several times for tool tryouts.

Eleven years ago he helped set up 1025/1038 production in Bulgaria and in Poland. He also went to Xerox Webster prior to the introduction of 5034 on site, and again on a cost-down engineering assignment. Early last year he moved to Customer Focus covering all reman. CC products, and he's now a member of the DC 220 family technical team.

Keith's wife Carol works at Tony Box Television, Lydney. They have an 11-year-old daughter, Hannah; their elder son Mark is an ex-apprentice working in Asset Recovery, while Lee is into his second year of apprenticeship. Both are "heavily into Lydney RFC"; Mark has been selected for Gloucestershire Under-21s, and his father is understandably delighted, having been coach for the Lydney Under-19s for the past six years.

MICK SCRIVEN's first 15 years with Rank Xerox were spent at Welwyn working in the R&D lab, after which he made a 'career move' to Mitcheldean as section manager of 5018/28 production, going on to be quality manager on the 4235 activity. He then transferred to the Paint Shop and was closely involved with the introduction of the phosphating plant.

enjoys watching football too. He's also an occasional golfer - "It's a hobby, not a sport for me," he says.

We found another golfer - ELAINE GWILLIAM - in Interconnects. She plays at Bell's Club, Coleford, and it's an interest she shares with her husband Mike.

Elaine used to assemble subs on our early machines, the 914 and 3600, then went to our facility at Lydney where the 2300/50 was being built. After returning with it to Mitcheldean, she transferred to the 1025 line, switching



■ A 20-year group (from left) Bruce Bowdler (Convenience Copiers), Adrian John and Neill Bates (Printing Systems) with Margaret Phillips and Dorothy Titmuss (Interconnects). Trevor Foxwell (EMC), Lynden Phillips (Transport), Roger Yenn (Reman.), Brian Jordan and Graham Hudson (Printing Systems) also recently reached this milestone.

to wiring when the harness section was in Building 6. Later she moved on to prototype work and has done that ever since - for many years 'in harness' with Peggy Grice, now retired. "It's challenging and varied work because we carry out all the Interconnect operations from start to finish," she says.

She and Mike have three children, one of whom, Julie Moore, works in Asset Recovery, and they enjoy taking Julie's two children on camping holidays.

Apprenticed as a mechanical engineer, DAVE WIGHTWICK spent five years as a service engineer with the UK Co. before joining refurbishing operations support and, apart from two years in design, remained there until 1992. Then he switched to writing processes for laser printers and "I've been associated with them ever since."

Today he's involved with the repair of raster output scanners (ROS) and has led the new clean room facility project in Asset Recovery.

Dave isn't a twitcher but enjoys bird-watching. He and his wife Lyn, who runs a nursery school in Coleford, celebrated their 25th wedding anniversary last year. They have twin daughters of 17 - Laura who plays piano and Elizabeth, a cellist. They perform in youth orchestras in Monmouth, but are following different career paths in their A-level studies.

GRAHAM MORGAN started in our former Cinderford plant machine shop and apart from four years in the IDC, has stayed in the manufacturing environment ever since. Today he is a development sprayer on the low mass cell in Fuser & Frames; he has served as a GMB employee representative for Building 5 and has recently rejoined the joint bargaining unit.

Graham's community service record is impressive. Now a district councillor, he was elected to Cinderford Town Council in 1983 and has twice been mayor. He chairs Cinderford Regeneration Group and has been closely involved with the Candi Drop In - a meeting place for young people. He is also a governor of Forest View Primary School and of Oakdene Special School.

He and his wife Julie have two sons - Philip aged 14, and 18-year-old Stephen who is studying information technology at the FODC.

school age, Katie and Helen, and a son James who is studying physics at Bristol University.

HUGH CROMIE ended 1997 with a dream holiday - a Caribbean cruise, during which he and his wife Susan celebrated their silver wedding. "It was marvellous - we visited places like Tahiti, Jamaica and Mexico." They returned in time to spend Christmas with their daughter, Rachel, who works for Gloucester City Council.

Hugh has spent his quarter century in small copier assembly and has carried out final run & test for nine years. For the past five he's worked in Reman. and is currently a member of the 5317 FRT team.

He used to play rugby and likes to follow local sides; but his chief sport today is squash and he says: "I wish I had started playing it years ago."



■ Hugh Cromie

Obituaries

We regret to report the deaths of the following pensioners:

Dennis Brain (68) 28th October;

Reg Beard (74) 7th November;

John Cooper (63) 9th November;

Ken Shurmer (66) 10th November;

George Howells (71) 13th November;

Bev John (69) 17th November;

Leonard Oatey (84) 23rd November;

Kenneth Mayo (72) 29th November;

Bill Thomas (83) 4th December;

Dennis Grey (72) 6th December;

Gilbert Roberts (78) 9th December;

James Newby (68) 10th December;

David Gwynne (74) 11th December;

Albert Sheers (64) 18th December;

Clifford Turner (83) 18th December;

Ewen Martin (71) 20th December;

Percy Stait (83) 23rd December;

Ivor Baldwin (85) 31st December;

Sidney Hodges (79) 13th January

Bernard Smith (83) 20th January

Profile - Robbie and Dave Allen

Finding something that has lain hidden in the ground for thousands of years is very exciting. "That's the attraction of metal detecting. It's also a fascinating way of acquiring historical knowledge," says Robbie Allen.

He and his brother Dave were keen coarse anglers until metal detecting took over as their main hobby.

Such is their enthusiasm that, while chatting with Robbie about his 25 years with the company, the conversation tended to focus on field walking, and the fun of wondering what will come to light when they search the furrows.

"We prefer ploughed land because each time the topsoil is turned over, fresh finds come within range of our detection machines. Most metal detector finds are made within the first six inches or so of soil," says Dave who introduced Robbie to the activity.

Their discoveries in the Forest have included a mediaeval bronze document seal (29mm long), showing a head with the inscription 'Peter De Dene' (Peter of the Dean), and a mediaeval bronze casket mount of a Knights Templar (65mm); an Edward the Confessor silver penny (14mm diam.); and an 18th century snuff-box lid picturing a game of blind man's buff (42mm long).

Other non-metallic items, such as Neolithic flints, tend to turn up in the process of searching.

The detection machines are interesting in themselves. We learned that the first modern metal detectors (other than the wartime mine detectors) were called Prospectors. They had a radio mounted on the stem and the tuned signal would often drift to a radio station while in use.

Comments Dave who once owned a Prospector: "Technology has improved somewhat over the years and it would be very easy to spend thousands of pounds trying to update and improve on your previous model."

The Prospectors first appeared just about the same time that Robbie joined our former machine shop at Mitcheldean. He had moved from London with the Allen family at the age of 15 and, like his parents, Dave and other relatives, worked at Engelhards in Cinderford. It was here that he met his wife Shirley, who today is a receptionist at the Drybrook Surgery.

A 'pipefinders' licence was required to use a detector when the hobby first started and this had to be acquired from the Home Office. Both brothers are members of the Dean Archaeological Group (DAG) and they report all finds of



■ Dave and Robbie geared up for detecting.

importance. They always get permission to search from landowners and hand back finds to them; some of these have gone to museums.

One of Dave's most impressive finds - a middle Bronze Age palstave (a type of axe 160mm long) - has been donated to the DAG for display. It had received recognition among archaeologists when it appeared on the front cover of the monthly magazine 'The Searcher' some ten years ago.

Robbie and his 20-year-old son Simon, now in the second year of his business apprenticeship at Mitcheldean, also made the cover in December 1986 with a picture of them doing a search in the snow! (Simon is more interested these days in delving into the mysteries of computers.)

Most of Robbie's 25 years have been spent on assembly lines, building products ranging from 9000 family and engineering printers to small copiers. Today he carries out a variety of repair operations in Remanufacture.

Knowing 5018/28 machines 'back to front' recently led to his spending a few days just before Christmas at VALO, a Xerox distribution centre near Venray. Along with technician John Sterry he carried out software checks on a hundred machines. It all went very well and gave much customer satisfaction.

Robbie so enjoyed his first visit to our Dutch colleagues he sent VALO a Christmas pudding - with coins hidden inside for them to detect!

Dave is engaged in testing machines too - he's one of the team building 5824/26/30 models in Convenience Copiers.

"We sometimes carry out surveys for landowners," Dave told us. "Another interesting (and helpful) aspect is the rallies held annually around the country. You pay to go to a piece of land and detect prize tokens hidden in the ground as well as natural finds. The money raised often goes to charity."

Michael, the middle brother, who is also a detectorist, often joins them on such a rally.

Robbie, though he's relinquished coarse angling, does enjoy fly fishing for trout in local reservoirs. Having been a skittler for many years, he's now given that up to play bowls at Cinderford Bowling Club.

And that's a stretch of ground he definitely wouldn't seek permission to search!

Any news for Vision?

If you have, then please -

- Mail it to Vision at The Mews
- or leave it at main reception for collection
- or ring Ewart Woolley on Ext 1496 or Dean (01594) 544314.