

Quality circle find solutions to a reject rate problem

The House Magazine of

Rank Xerox Mitcheldean

March/April '81 No.148



Members of the fuser roll quality circle discuss problems of damage to rolls in handling and totting; from the left are: Brian Vaughan, Tony Wood (leader), Gareth Clowes, Alan Miles, Arthur Ward, David Bale, Harold Ennis, Bill Jones and Mike Brain. (Missing from the picture is Stuart Holloway.)

The fuser roll area in the machine shop has long had a puzzling problem.

Variations have occurred in the quality of the rolls produced by the same process and with the same raw materials and, as foreman Tony Wood put it 'We haven't been able to understand why sometimes we produced better rolls than at other times.'

This problem was a natural for the quality circle set up in this area last year (one of two such circles created as a pilot scheme).

Since that time the members, with their inside knowledge of fuser roll production, have identified three main areas where problems arise, and have done a great deal of intensive investigation into the factors that govern the processes in those areas.

They have re-examined the whole PFA spraying process, studying the relationship between the thickness of the coatings and the reject rate to discover the 'variables', and are hopeful of establishing an optimum thickness.

They have also looked closely at the incidence of defects in the aluminium coatings, and damage to the finished rolls which can occur in handling and totting.

In some cases, fairly simple solutions have been found and put into effect without delay; for example, a change of sourcing for the aluminium wire resulted in better quality raw material at no greater cost. Other proposals have involved continued monitoring over a longer period or technical changes necessitating financial outlay and results have yet to be assessed.

But already circle members are confident that their studies can result in a dramatic cut in the overall reject rate—which means a saving in cost and time as well as parts.

This is good news for Mitcheldean, at a time when quality improvement is of paramount importance (see page 2).

Their investigation has been good for circle members too. Says leader Tony Wood: 'There has been an educational value in what we have been doing—we have all added considerably to our detailed knowledge of fuser roll production.'



Quality improvement programme launched



We must raise our sights

Readers will have learned by now of the major 'quality improvement programme' which is being mounted at Mitcheldean. The reasons for it bear repetition.

Although we have done consistently well against our quality and reliability targets, these targets have proved not tough enough to meet and beat our Japanese competitors.

Fuji Xerox, our Japanese associate company, has successfully faced this same problem and now, in the words of director Ron Morfee, 'we must raise our sights in the same way to maintain and improve our position in the eyes of our customers.'

'There is no magic about it; it is a programme that requires a lot of hard work over a period of years.'

'In one way or another, it involves just about everyone at Mitcheldean as well as all of our suppliers.'

'One of the most important parts of this quality improvement programme is the "people" side — getting everyone at Mitcheldean to understand what is required, and why, and wanting to play his or her part.'

'I am quite certain that, given this explanation and training, Mitcheldean people can first equal, then beat, anything the Japanese can do.'

Quality is everyone's concern

This is the message that has to be got over to everyone, no matter what their job.

To tackle this fundamental task, an 'awareness and involvement' team has been set up under the chairmanship of personnel manager Derek Knibbs.

Their first strategic move has been the preparation of a tape/slide presentation which is being shown at normal departmental communication meetings across the site.

This enables local management to relate it to the needs of their particular area and to encourage the involvement of their workforce in sharing ideas on how to improve the way things are done.

Director Ron Morfee introduces the presentation by outlining the seriousness of the market situation and the new tougher rules this has created that we must work to.

Ken Fox continues on this theme by describing the efforts engineering are making to meet these quality challenges.

In brief, the programme means a gradual switch to *prevention* of defects instead of trying to correct them after they have occurred; it means refusing to accept that quality defects are inevitable (Lydney has set an example here — 'getting it right first time' has resulted in figures that compare very favourably with Fuji Xerox).

'It is possible that, if we take enough trouble to really understand the cause of the defect, we can fix that cause permanently. This means change not only to things like design, tools and materials, but also to the ways in which we think about and carry out our jobs.'

Key areas

Apart from 'employee awareness', the quality improvement programme has already set in motion a number of improvement tasks in three other main areas of activity:

- **Design** — Knowing that our designs are right before production starts and to specifications which are really cost-effective.

- **Supplier conformance** — The quality of our final product is very largely dependent upon the quality of the parts going into the product; we therefore have to make our suppliers aware of the new standards which we now require of them as well as of ourselves.

- **In-process defects** — This aspect covers the correction of errors in the building of the product *before* they reach end-of-line audit.

To support the steering committee, which meets regularly to plan and review progress, a number of task teams carrying out more detailed work on a cross-functional basis have been set up.

Already engineering, manufacturing engineering and materials functions are working together on the top 50 component defects. A number of critical vendors have been visited and considerable support has been received.

Significant progress has been made in the totting task, known as 'Totem', and

rapid action taken by assembly and quality assurance in agreeing a procedure for closing the loop on defects on the line.

The excellent contribution people at all levels have been making in their own work area through taking part voluntarily in 'quality circles' has already been publicised.

The use of the usual internal communication channels for the setting up of training programmes is expected to provide further opportunities for the sharing of ideas.

Our maxim

'However specialized our service, however remote from the shop floor our work may appear to be, everything we do should be directed at making better machines at lower cost than those of our competitors'. That is the maxim that everyone is asked to adopt.

'Quality improvement affects us all. Improvement won't be painless — change never is!'

'But working together improving results will be a satisfying achievement.'

'There really is no alternative for our survival — let alone if we are to "beat the world".'

(We shall be reporting on the progress made in the various key areas in future issues.)

Tackling the task of employee awareness.





A At a recent meeting the QIP steering committee received a presentation from Kevin Horrobin on the centralized corrective action (CCA) programme being started within the assembly areas.

B This picture marks a milestone in our Lydney operation. It is now 21 months since the start-up of 2300 assembly and in that time it has kept on schedule, meeting quality targets, and has acquired a company-wide reputation for outstanding reliability. Congratulations, Lydney!

ISA Letter

The association's annual dinner takes place this year at the Chase Hotel, Ross-on-Wye, on 15 May and once again Rank Xerox chairman Hamish Orr-Ewing is to be our principal guest.

Retirements

Lilian Cridle is a 'no fuss' person but it was because of ill-health that her retirement in March had to go unmarked by a fitting presentation.

With 38 years' service, Lilian was our longest serving female employee; she first worked in the coil-winding department, transferring to electrical sub-assembly, and in recent years was engaged on harness assembly prototypes — a task in which she acquired great expertise.

Said manager Richard Matthews, 'She has always been a first-class operator and a very loyal company person.'

Another member who also 'went quietly' in March was **Jack Cooper** of works engineering.

Jack joined us 19 years ago, starting as a fitter in the old bld 18 machine shop and, as Manager Keith Jones says, he has covered most aspects of works engineering at the sharp end' in his time.

He moved into supervision and was manager, production maintenance group 1, in the plant and services section when he retired.

Both Jack and Lilian have our best wishes for the future.

Earthquake victims visit us

'That was where I went to school', said one Italian student pointing to a picture of a devastated village near Naples which appeared in the recent **Rank Xerox International Review**. He was one of a party of 12 earthquake victims from the disaster areas near Naples who visited Mitcheldean on 23 March. They were enjoying a 12-day holiday in Ross-on-Wye, arranged by Len Harper, mayor of Ross who is one of our pensioners, following an appeal by Mrs Eunice Roberts.

The party toured the site and then enjoyed lunch at which Len was presented with a £150 cheque towards the cost of the holiday (Mitcheldean also provided transport). Rank Xerox as a whole has contributed some \$100,000 towards the relief of the stricken areas. Seen with the Italians and their hosts in our photo is Ferruccio Marangon of works engineering (centre front) who helped out as interpreter, along with Barbara Snell (language services).



In our line of vision

A royal reception

Although Rank Xerox holds the royal warrant, a visit to Buckingham Palace is not a frequent occurrence for Mitcheldeaners — or so we thought.

Now suddenly we have three such visits to report.

The first occasion was on 12 February when a royal reception was held for winners of the Queen's Award for Export and Technology in 1980.

Invited to represent the company, together with Rank Xerox chairman Hamish Orr-Ewing, were two Mitcheldean people — mechanical adjuster Tony East of CBA assembly and machine shop foreman Norman Rudge.

Chauffeur John Bowkett drove them to London and they met Mr Orr-Ewing at Rank Xerox House; he took them on to the palace in his car for the evening reception.

After waiting in a gallery, their names were announced and they went forward to shake hands with HM the Queen, Prince Charles and the Duke of Gloucester.

Then they joined the rest of the 300 or so people attending — among them the Prime Minister, Mrs Margaret Thatcher, Sir Keith Joseph, the Industry Secretary, Trade Secretary John Biffen and members of the Queen's household.

They had refreshments and while the three of them were chatting with a group from another company, the Queen came over. 'Mr Orr-Ewing did the introductions and she talked with us in a friendly way about our line of business', said Norman. (Note for the ladies: she was wearing a green dress, pearls and ear-rings and a sapphire and diamond brooch).

To round off the evening right royally, Mr Orr-Ewing took Norman and Tony out to dinner. The conversation took a mechanical engineering turn as 'he told us all about his workshop at home and the steam launch and traction engine he is working on', said Tony.

They thoroughly enjoyed themselves and eventually arrived back home after midnight having had a most memorable day. (For Tony it was also a landmark in his 30th year with the company).



Norman Rudge and Tony East with chairman Hamish Orr-Ewing pictured at Rank Xerox House before attending the reception at Buckingham Palace.

Energy director sees Delta

After attending a two-day energy meeting in London last January, Merritt Chandler, Xerox energy programmes director, toured EMSD sites and had discussions with the respective site directors.

Jack Tester, EMSD energy co-ordinator, told us that Mr Chandler was impressed with the level of activity and achievements in EMSD over the past months.

Here at Mitcheldean he showed particular interest in our Delta 1000 energy management system which controls much of the site's heating, lighting and ventilation, and our picture shows him (fifth

from left) hearing about its capabilities from Julian Shufflebotham of works engineering.

Within the next 12 months energy control will be extended to Lydney and Cinderford giving maintenance the facility to check temperatures, write programmes and so on from Mitcheldean. 'In fact, we shall be aware of problems at Lydney before they are!' said Julian.

Seen with Mr Chandler are RX energy manager Gordon Webb, Mitcheldean's energy conservation manager Tony Newman, Jack Tester, works engineering manager Graham Bunt and, on Mr Chandler's left, Keith Jones, manager plant & services within works engineering.



The next story concerns not two people on one visit, but one person on two visits to Buckingham Palace — both in connection with personal achievements.

On his first visit on 10 March, 20-year-old RX apprentice Dave Barrell accompanied the High Sheriff of Gwent. The occasion was a conference and reception to bring together people in various counties who had joined in the Queen's Silver Jubilee scheme whereby half the local celebration proceeds were invested in a trust for future good works, and half were spent on some kind of community service.

Dave's contribution had been to organize a squad from the Army Cadet Force (with whom he was recently commissioned as a second lieutenant) and help clear the way for the conversion of an old school building into a community centre.

Dave was given a day off work for the London event. The conference was held in the Commonwealth Building, after which they attended the reception at the palace. And that made Dave surely the first person at Mitcheldean to talk with the newly engaged Prince Charles and Lady Diana Spencer.

'It was all quite informal', said Dave, 'and they were extremely friendly.'

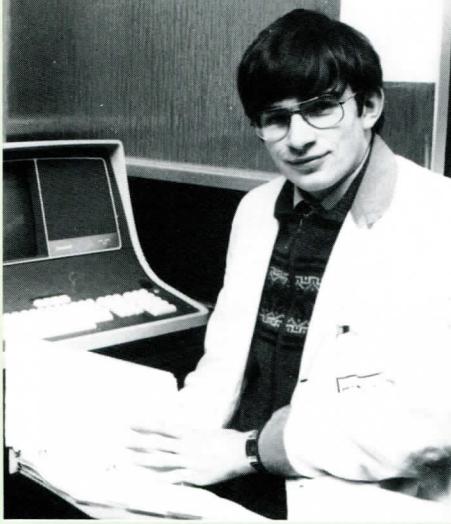
Some weeks later the postman must have been intrigued to have to deliver a second large white envelope, stamped only with the royal 'ER', to Dave's address. This was to summon him to receive his Duke of Edinburgh award certificate from the hands of the Duke himself.

To win this award, yet more physical exertion was called for, including a 50-mile hike; Dave also helped to set up a scout group in Gwent and completed several years' service in the county Army Cadet Force.

We'd like to add our congratulations to those he received from royal circles.

Dave Barrell, now in the fourth year of his electronic technician apprenticeship, has been working closely under Julian Shufflebotham's direction on developing the Delta 1000.

Dave meets Lady Diana



A Migration that is saving Millions

At Mitcheldean we currently have 14 Diablo terminals in various locations around the site that are linked into TIMS 68.

TIMS is short for 'timesharing information management services', and TIMS 68 is a computer service run by general services division based in Webster that uses the APL programming language.

This language — one which is easy for mere human beings to understand — was developed by a company named I.P.Sharp and, prior to September 1980, Rank Xerox was using the Sharp computer in Toronto via Sharp transatlantic data lines.

However, since we already had a computer in Webster that had spare capacity, it made sense to use it and save ourselves between three and four million dollars a year across the whole of Rank Xerox.

The task of transferring the Mitcheldean timesharing usage from the I.P.Sharp computer bureau to the Xerox TIMS system 68 was undertaken in two phases.

The first was to 'migrate' the users' programmes and data but to continue using the I.P.Sharp transatlantic network to access the Webster computer.

This was achieved in Mitcheldean by Bill Constable and Andy Herridge of MSIS group technical support, together with other project team members, Xerox, Rank Xerox and I.P.Sharp, assisted by Mitcheldean users and Brian Down of information services as timesharing co-ordinator.

Phase 1 was finally completed with a minimum of disruption on 8 September last.

The second phase was to install a transatlantic line to interface with the EMSD telecommunications network, thus giving direct access to Xerox computer services.

This was achieved by the end of February 1981 in Mitcheldean with the help of Tony Wilson and Tony Kraneveld of group technical support, again with the co-operation of the users and Rob Powell who succeeded Brian as co-ordinator.

This further reduced costs by the introduction of a nil charge for data transmission.

Mitcheldean site timesharing users are divided into a number of separate cost centres, based on their particular function (technical services, business planning and control, inventory control, commodity operations and others).

A timesharing steward is appointed within each cost centre and he liaises with Rob Powell in the event of problems or for general support.

Owing to the fact that it is very easy to spend large sums of money in computer time, a tight control is kept on the budget allocation and the spend that is incurred by each cost centre.

One of the more interesting aspects of the system which has increased in usage since migration took place is the 'mailbox' facility.

Sometimes referred to as electronic mail, it is a means whereby timesharing users are able to communicate with each other anywhere in the Xerox world.



Bill Constable of MSIS group technical support (left) discusses a query from a user with timesharing co-ordinator Rob Powell of information services.



Lorne Baynham of inventory control uses the terminal in the bld 44 telex room to produce the Mitcheldean inventory monthly outlook. In the foreground is telex operator Karen Mason.

One of its tremendous advantages is that the cost of sending a message is the same no matter where a user sends it. For example, it would cost no more to send a message from Mitcheldean to South America than it would to send a message from building 44 to building 50.

The method of operation is quite simple. A timesharing user at Mitcheldean signs on to his mailbox account by tapping in a special code on his terminal and specifying the unique mailbox destination code of the addressee.

After the message is sent it will remain on file in the TIMS computer at Webster until the addressee 'asks' for his mail; he does this by feeding in his personal access code via any terminal connected to the network, whereupon it prints out the message(s).

In short, mailbox is an electronic system of communications between people, not places.

The system enables messages to be edited on the terminal before being transmitted, 'carbon copies' it to several persons if requested, and informs the

sender if his message has been received.

Messages can even be classified (for example, if marked 'urgent' they will be printed out in advance of non-urgent messages) — it's all part of the mailbox service.

R.C.C.P.



Among the users of mailbox at Mitcheldean are international maintenance engineering (formerly known as field engineering) who look after the interests of RTSDD and TS&D on site. Here Trudy Hook, secretary to IME site manager John Barratt, demonstrates the use of an additional facility — a portable terminal known as the 'Silent 700' — which came in handy at a multinational conference held in Cheltenham some time ago.

**What
TIMESHARING
means**

'Timesharing' (renting computer time) offers a means of using the services of a large mainframe computer which may be thousands of miles distant, and accessing any files held by that computer. The only equipment needed is a terminal and a conventional telephone fitted with a device called a coupler for converting signals. The service, which is essentially for low volume enquiries, makes it possible for a user to assess the value of different strategies, test various programmes, or do complicated arithmetical calculations; it also allows users to develop their own programmes.

We aim to be unbeatable

It was certainly a 'day for stars' on 30 January when Mitcheldean people gathered to receive financial awards for success in their professional studies.

Apart from the trophy winners featured in our last issue, there were others who had given 'sparkling' performances: Brian Moore (industrial engineering), who gained distinction in all subjects in a production control diploma course; David Powell (business planning and control), IIM diploma gained with distinction; Peter Rutsch (works laboratory), best student of the year in the IIM certificate course; plus a high degree of success from John Bearham (personnel) with an MPhil. and Roger Garlick (engineering) with a BSc.

Further indication of our determination to become 'the best in the Xerox world' lies in the fact that we have no less than 21 people now studying for HND, both in the technical and commercial sphere, reported Peter Grainger, manager,

organization, training and development.

Although a record sum of £2,000 was handed out by director Ron Morfee in financial awards, the actual number of students receiving them was lower than in previous years.

This, explained Peter, was a result of the careful approach taken to ensure that people embarking on further education did not do so without the support of their local management, and that their studies were in line with their development on site.

'We are making the whole thing more business-orientated', he said.

Mr Morfee reaffirmed that it was the company's policy to encourage everyone to develop their potential and give them a chance to use that potential. And after congratulating the students, he filled in the background to their good work with a review of how the company as a

whole, and Mitcheldean in particular, were doing.

Referring to the financial results for 1980 earlier announced by Rank Xerox he said: 'It is not the sort of performance we are used to. Because of currency problems and the strong pound, our profits were 11 per cent down.'

But there was no cause for pessimism. 'I hasten to assure you that you are still working in one of the major growth industries, and for one of the most successful companies around.'

Our very success was attracting competition. Last year 28 new plain paper copying machines were introduced, making a total of 130 plain paper copiers now available from 30 different companies in Europe, America and Japan.

'That is why life is getting tougher and our profit margins are being squeezed. We used to regard it as normal that income and profits would go up by about 15 per cent every year, but last year our income rose by only 6 per cent. We don't want this trend to continue.'

To the question: What shape is RXMP in to face the future? Mr Morfee replied: 'Never better.'

'In the last couple of years we have completely restored our reputation as a factory that can be relied on to meet its production schedules and quality and cost targets. Such a reputation was hard to build up but it is so easy to lose.'

But pressure from Japan continued and at the low end of the market Japanese companies could beat us on cost and quality. All Xerox plants faced this same problem — 'Our products are too expensive, and that is a continuing noise you are going to hear from me', he emphasized.

The shop floor was where everything came to fruition and every effort must contribute to that.

As well as producing on schedule, we must cut our costs — on energy use, on the rents paid for off-site storage, on wages — and we must improve quality — get all defects out.

'We don't want to be second best. We insist we want to be best', he said, 'and we must work towards that objective.'

'With well qualified people and good teamwork (and I see more and more of that), then I think we shall be unbeatable.'

The successful students

Technical

Apprentice of the Year: Paul Ward.
First Year Training Certificate: Noel Jury, Richard Lee, Stephen Lewis, David Pudge, Paul Ward, Steven Wynn.
Craft Studies, Part III: Mechanical — Gerald Drain, Keith Evans, Christopher Glayson, Kevin Gray, Martin Wyman; Electrical — Graham Read.
EITB Module Certificates: David Barrell, Keith Evans, Christopher Glayson, Colin Harris, Richard Jones, Adrian Lewis, Graham Read, Martin Wyman.
Technical Education Council: Electrical — Jeffrey Morgan (South Wales Institute of Engineers Shield), David Barrell, Richard Beard, Keith Bell, Phillip Birch, Phillip Bowdler, Shane Cherry, Martin Edwards, Graham Ellis, Stephen Greenaway, William Greenman, Mark Harris, Alan Holdaway, Paul Kibble, Debbie Lowen, Simon Powell, Robert Smith, Andrew Tempest, Andrew Walford; Mechanical — Colin Cackett, John Curtis; Chemical — James Bates.
Technician's Certificate: Electrical — Patrick Burke, Gary Knight.
Full Tech. Certificate: Mechanical — Alan Miles and Brian Stephens (Arthur Watts Trophy), Robert Murrell (Ken Whitfield Cup), Brian Adams, Lyndon Creswick, Jeffrey Hawkins, Graham Jones, Stirling Jordan.
Higher National Certificate, Part II: Stephen Hill, Martin Hughes, Nicholas Mason, Wayne Ruddy.
Higher National Diploma, Part III: David Beach, Kevin James.

Indentures

David Beach, Kevin Beard, Keith Evans, Martin Hughes, Kevin James, Gary Knight, Michael Mould, Colin Price, Anthony Walding, Martin Wyman.

Safety

Institution of Industrial Safety Officers:
Certificate — Tony Joynes;
Member — John Spratley.

Supervisory and Management

National Examination Board for Supervisory Studies: Keith Murray (Michael Jarrett Award), John Bright, Michael Cookes, Gordon Davies, John Foote, Brian Fowler, Terry Randall, Keith Wilding.
Institution of Industrial Managers:
Certificate — Peter Rutsch (best student of the year), Roger Ball, Philip James, Peter Rounce, Michael Short, Gordon Smith; Diploma — David Powell (distinction), Paul Butler, Alan Carney, Tony Day.

University Degrees

BSc. (Electronic Engineering): Roger Garlick.
Master of Philosophy (Occupational Psychology): John Bearham.

Secretarial and Commercial

Shorthand and typing: Anne Brain, Bridgette Jones, Rosemary Meek, Patricia Perrins, Joy Wheeler.
'A' level English: Cheryl Hynam.
Teacher's Certificate: Linda Smith
Ordinary National Certificate, Part II: Sue Keen (Runnymede Dispersions Cup), Sarah Davies, Stephen Morris, David Mulford, Mary Nash, Andrew Williams.
Higher National Certificate, Part II: Graham Beach.

Institute of Cost & Management
Accountants: Foundation A — Douglas Bevan; Foundation A & B — Sue Ireland; Final — Stephen Greenwood.

Institute of Purchasing & Supply: Parts 1,

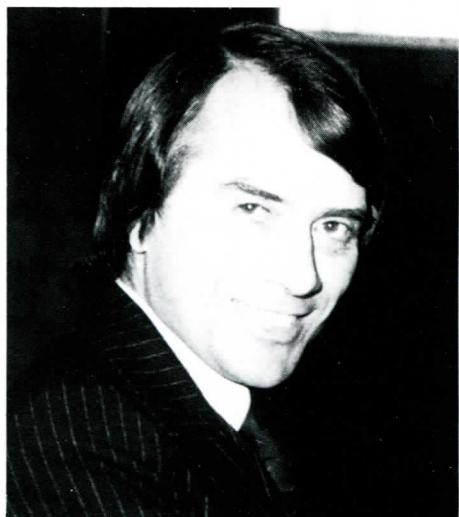
2 & 3 — Derek Knight; Part 3 —

Martyn Cox.

Diploma in Production Control: Brian Moore (distinction in all subjects), Stephen McCormick.



Peter Grainger opens the proceedings.



John Bearham, manager area personnel service, gained a master of philosophy degree in occupational psychology.



A



Roger Garlick (technical assurance) achieved a BSc in electronic engineering.

C



B



D

A. Paul Ward receives the Andrew Dowding 'apprentice of the year' award from director Ron Morfee.

B. Commercial and management award winners — among them several who achieved marks of distinction.

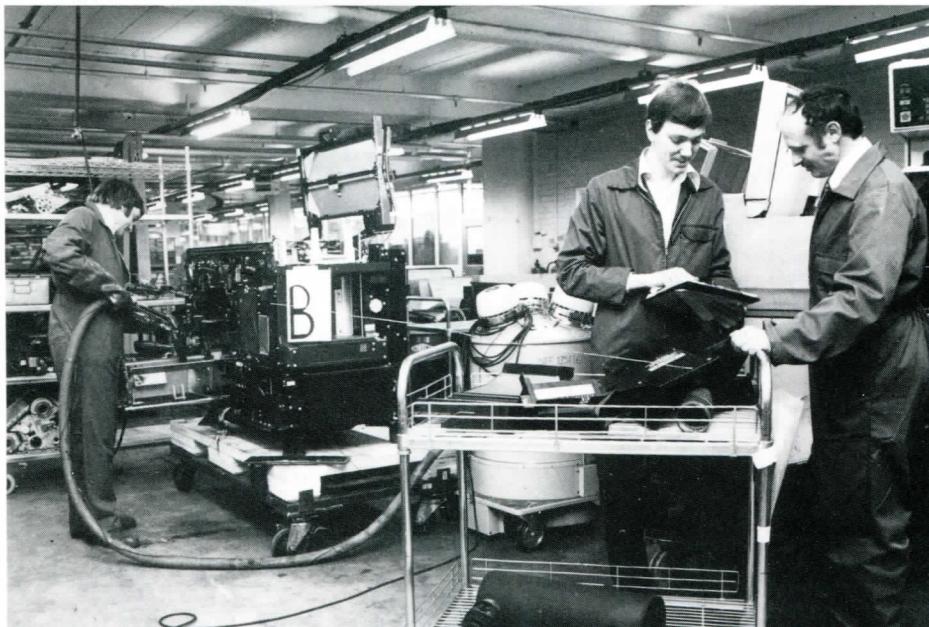
C. Successful NEBSS students.

D. Some of those who received indentures, having completed their apprenticeship.

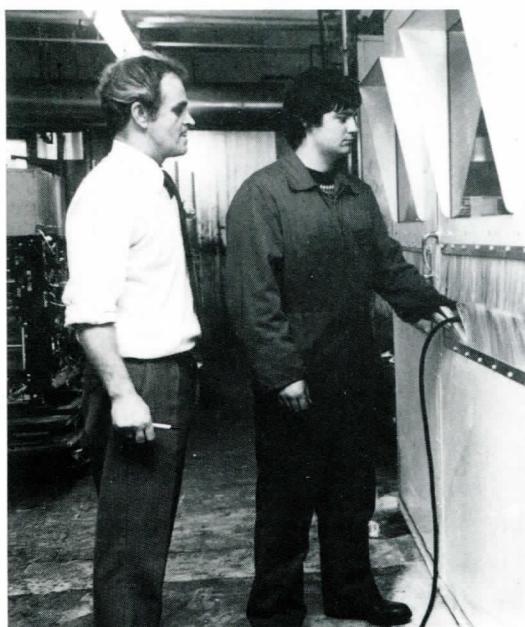
New Facilities bring greater savings



Discussing plans for further improvement are (from left) Phil Kelly of plant engineering, refurbishing manager Graham Linley, Phil James from the works laboratory and Eddie Hill, finishing planning manager, MED.



Gerald Newman vacuums off as much loose toner as possible from a 9400 processor before it goes in the de-dusting booth. On the right are inspector Alan Haines and Tony Cole of MED.



'Eyelashes' keep the dust inside as Paul Elliss operates an air gun in the de-dusting booth. Watching is foreman John Parry.

Refurbishing gets an uplift

Waiting in the queue for examination are bodies in varying conditions. Some have a few minor disabilities; some are 'burnt out cases'; others have even been the victims of cannibalisation and are in urgent need of spare part surgery.

The bodies we're talking about are DBA and CBA machines which arrive at Mitcheldean from anywhere in the field — from Didcot to Denmark.

And the department where they come for a new lease of life is the refurbishing area in bld 24/1 which is itself being 'refurbished'.

Refurbishing is a rapidly growing activity on site. It took off last year — initially on 5400 machines — when teardown was transferred back from Lille.

'Then', says manager Graham Linley, 'when we started "scoping" on the 9400, we realized that we would have to enhance our facilities to cope with the bigger machines.'

'What drove us was the desire to improve environmental conditions for the operators, and increase efficiency by reducing the amount of sheer physical effort required. At the same time it was important to achieve cost savings by recycling solvent as much as possible and reducing energy consumption.'

The most significant step in this direction has been the installation of new cleaning booths.

After initial inspection, each arriving machine is given a classification which controls the extent to which it is stripped.

The panels are taken away for washing and possibly repainting, while the sub-assemblies being retained and the machine base itself have to go through a cleansing routine.

First, dust and toner must be removed, and this is now done in a new, totally enclosed air blasting (or de-dusting) booth.

After the machine or sub-assemblies have been wheeled into the booth, the doors are shut tight. Then the operator inserts a special angled air gun through one of two openings with plastic 'eyelash' fringes.

This way he can blow the dust off without getting dusty himself and he gets a full view through the window of what's happening inside. Instead of drawing on the surrounding warm air, and wasting energy, outside air is ducted into the booth. As particles are blown off they are carried away outside to a kind of giant vacuum cleaner.

This extraction system, known technically as a pulse-jet bag filter, collects the dust on fine filters which are designed to catch 99.9 per cent of the particles. The cleaned air is discharged to the atmosphere while the collected dust falls into a hopper at the base.

Since the filters are self-cleaning, the plant needs minimum attention and is expected to speed up the cleaning process.

Previously machines had to be moved round on their own castors while in the booths and this required considerable effort, particularly in the case of the larger machines.

The problem has been 'got round' by having a turntable set in the floor — motorised in the de-dusting booth and manually operated in the four new solvent spray booths.

In complete contrast to the two original cabins, all the new booths have been painted white (two-pack acrylic paint which can be washed down made this feasible), while overhead fluorescent tubes have improved the lighting without increasing energy consumption.

In order to reduce losses in the solvent spray booths, the extraction system has been changed and a grid floor installed so that droplets of solvent are blown down and away from the atmosphere. Even the type of solvent used has been changed for the better.

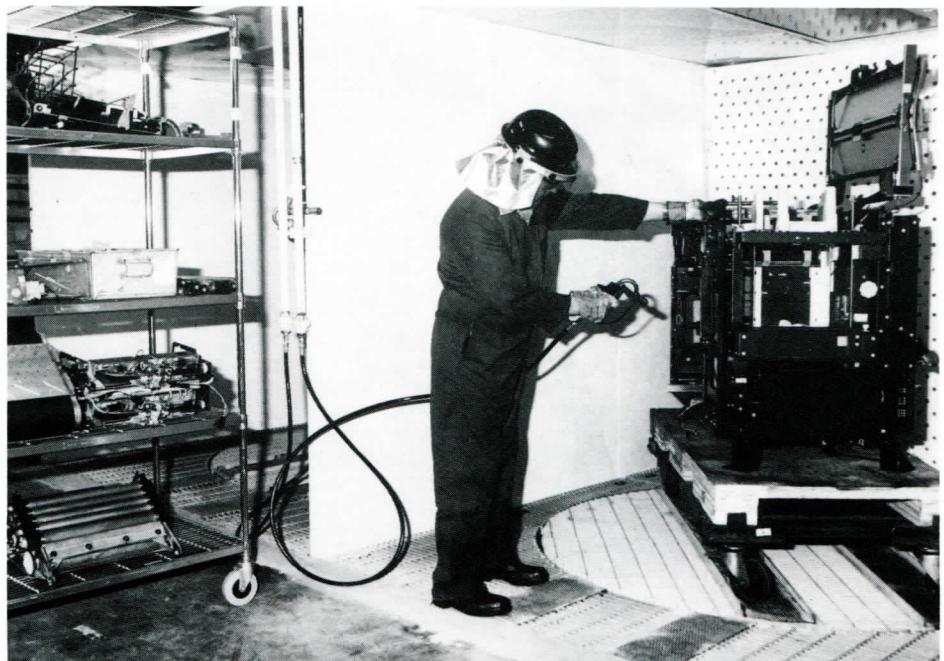
Gleaming chromium-plated trolleys are another acquisition. When each machine is stripped, the sub-assemblies are placed on one of these, and both trolley and machine stay together throughout the whole operation — cleaning, re-working of any components, and rebuilding to the required configuration.

'We haven't reached the end of the line yet', says Graham. The next major step will be the installation of a tunnel washing and drying machine which will cope automatically with the side panels.

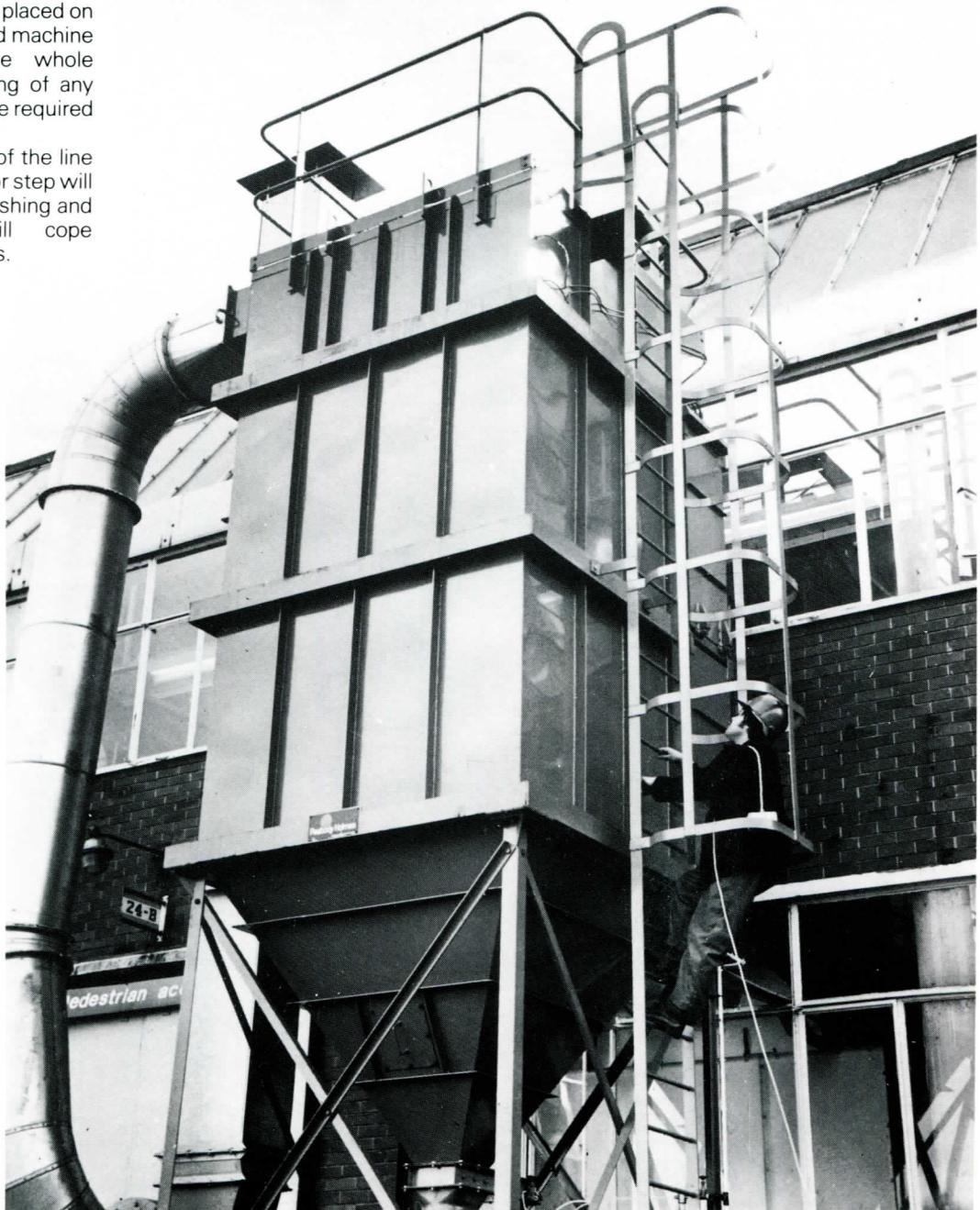
Good technical facilities alone don't guarantee a good end product; what counts is how people perform using those facilities.

Says Graham: 'I've a good team and they are doing a remarkable job'.

The giant vacuum cleaner outside bld 24/1 filters off 99.9 per cent of the dust from the de-dusting booth. Our picture was taken prior to the commissioning when plant electrician Andrew Hoare was working on the installation of controls.



Jock Findlay in protective gear cleans a 9400 machine in one of the new solvent spray booths.



Clubs



Top specimens

At the Sea Angling Club's annual general meeting on 19 February, awards for specimen fish went to Dave Adams for a black bream of 4lb 10oz, and to Ollie Evans for a bass (8lb 12oz).

Dave's bream, being 15.625% over the club's official specimen weight, also won him the club's 'best fish of the year' shield.

Pat Aston, former treasurer of the club, kindly presented the awards.

Officers elected for 1981 were: *chairman* — Ray Carter; *secretary* — Roger Aston; *treasurer* — Ollie Evans; *social secretary* — Roger Kempster; *fish recorder* — Terry James; *other committee members* — Dave Adams, John Gwilt, John Stanhope.

Boat trips to Dartmouth or Brixham are taking place every month during 1981 right up to December, and anyone who would like further information is asked to ring Roger Aston on ext. 345.

Programmed for the future

The Amateur Computer Club plan three open evenings this season (hotel venues had still to be decided as we went to press). The first will take place on 13 May, the other two on 14 October and on 13 January in 1982.

Previous ones have been very popular and we strongly recommend them, especially to non-initiates who would like to discover painlessly how amateur computers tick (or bleep).

Another highlight on the new programme will be a visit to the Bristol Apple Computer Club, and there will be regular meetings with guest speakers.

Tony Burke having moved to Welwyn, the club has acquired a new president in Terry Gardner, while Mev Shelley continues as vice-president. Other officers/committee members are: *secretary* — José Vega-Lozano; *treasurer* — Keith Jones; Geoff Barnes, Steve Hardcastle, Paul Milsom.

Rubber Duck is coming

September 5 — keep this date free in your diary for the 'Rubber Duck' — the largest roadshow disco in Europe, to be held in the ballroom by arrangement with the **Motor Club**. You'll need to bring your dark glasses, the computer-controlled lights show is fantastic!

Book your ticket early to avoid disappointment by ringing Graham Jones on ext. 427.

Those who enjoy treasure hunts will be glad to know the club hope to arrange two or three this season; watch your noticeboards for details.

Last Waltz

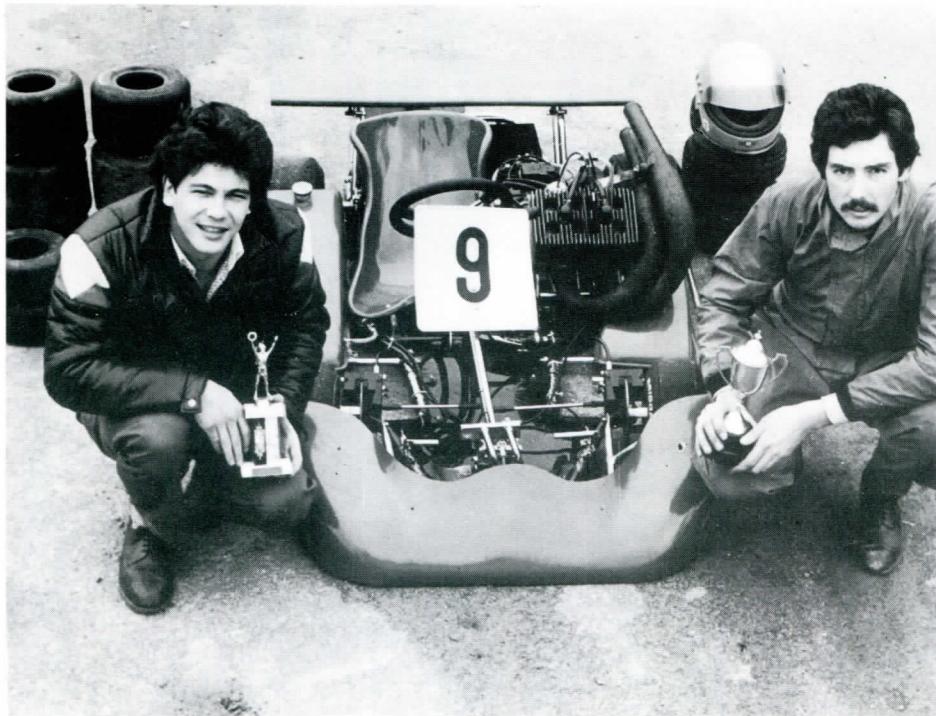
The Dancing Club has danced its last waltz. Sadly, at the annual general meeting held on 10 March, it was decided to wind up the club because of lack of sufficient support.

Looking back to 31 January, the club ran a coach trip to the Tenth Anniversary National Custom Car Show. It was the first time the show had been held at Olympia (change of venue was mainly because of the bonfire they had at Alexandra Palace recently), and the much larger hall enabled all the vehicles on show to be displayed in the main arena, not in the back alleys as at Ally Pally.

It seems people prefer looking at custom cars to seeing new production line cars — the proposed trip to the Motor Show at Birmingham NEC last October had to be cancelled, due to lack of interest.

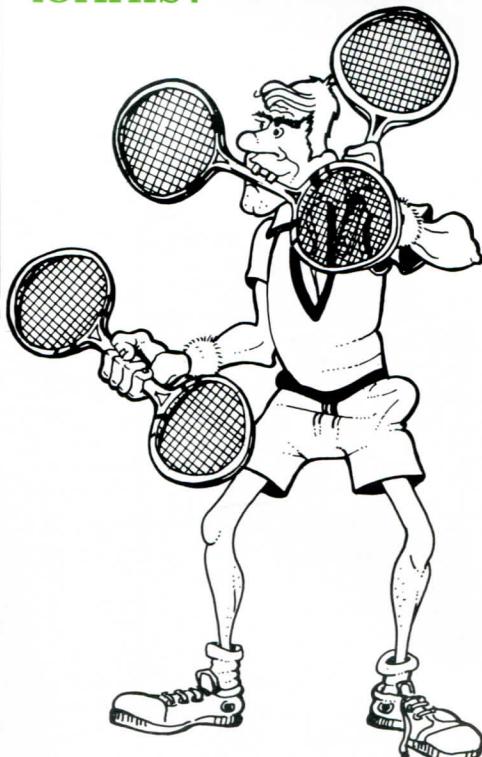
As we went to press the club was planning to have Neil Forrest and Graham Cox of Ross & District Motor Sports Club, to show those who intend to navigate on rallies or road tests what they ought to know. Everything was depending on enough response from navigators and prospective navigators . . .

Spotlight



With the karting trophies already in hand, **Roger Ellis** (right) of MED electronics, assisted by his mechanic **Tim Morley-Jones** (tool room), would appear to be well on the way to achieving a fine track record. The RX Motor Club is demonstrating its confidence in Roger by sponsoring him this season, so both club and company get a quick commercial in motoring circles every time Roger goes round the track. (This picture was taken by Roger Baldwin, also of MED electronics).

Who's for tennis?



The Tennis Club starts its season this May, and two courts will be available to members at Crosfields, Ross-on-Wye, on Tuesday and Thursday evenings.

A number of one-day tournaments have also been arranged for Sundays throughout the season, so if you enjoy a game of tennis in competition or just for fun, the club would love to add your name to its list of members.

Subscriptions are £5 per season; if you're interested, contact Mike Keen (ext. 986), Helen Richards (219) or Ken Blackwell (1316).

Ken, by the way, is a smash hit when it comes to cartoons, as you can see by the racquet raver here whom he dreamed up to attract attention to club notices. (Resemblance to any current member is, we believe, entirely unintentional!)

Darkroom brightened up

The Photographic Club are happy to report that their darkroom in the old club house has now been completely refurbished.

They have stripped it out, painted the walls a matt black, put down new floor coverings, supplied heating and installed 'safe lights' interlocked with the airlock.

Members Martin Stock and Larry Williams did all the hard work and 'we didn't ask for funds from anybody,' says chairman Mike Wilkinson.

Now that members have light, warm conditions in which to work and need not fear having their prints ruined by a sudden intrusion, the use of the darkroom has greatly increased.

That's the good news. The not-so-good news concerns the programme.

The club lost to the CEGB in a colour slide battle on 9 March — but nevertheless all credit to our opponents for whom it was their first competition.

Club prize nights have always been a highlight of the season, but in view of the prevailing circumstances, it has regrettably been decided not to hold one this year.

As we went to press, preparations were in hand for the AGM on 30 April.



Party tactics



After being lulled into a false sense of security by the fives-to-sixes age group at their party on 17 January, few were prepared for the onslaught which took place the following weekend.

Montgomery of Alamein would have been proud of the tactics used: let the adults think that they are in control the first party, soften them up on the second, then send in the heavy mob on the third and final party to show beyond all doubt who was in charge.

The entertainer for the seven-to-eights on 24 January was 'Uncle Johnny' — a conjuror who totally captivated his audience and actually achieved total silence from them on more than one occasion.

The party continued with the annual confrontation between the 'Liverpool' team (all the girls) and the 'United' team (all the boys). As the competition ended in a draw, it was decided that the adult captains of each team would play a tie-breaker; this resulted in a momentous slide down the polished surface of the ballroom floor by the boy's captain, who limped off, thus conceding victory to the girls.

The evening was rounded off happily with the annual visit from Father Christmas (by special arrangement with Stan Seaborn).

On the following day at the nines-to-tens party, the scene was set by the entrance of several demure young ladies who, with their sophisticated hairdo's and long chiffon party dresses, seemed set to put the rowdy and rumbustious boys firmly in place but, contrary to expectations, were quite willing to prove that they could 'mix it' with the best of them.

After gathering strength at the customary film show, and gaining even more energy from the magnificent spread put on in the canteen downstairs (where several orbiting trifles were to be seen), the children were greeted by a million decibel disco (at least it seemed that way to me, I must be getting old . . .) where inhibitions were shed and, encouraged by the DJ, dancing commenced.

We're sure the children would like us to say a big thank you to all who gave up their time to make the three parties such a success.

Putting you in the picture

This much-labelled and apparently fragile parcel (it contained a portable TV) was presented to security operations manager Guy Bedford (right) by personnel manager Derek Knibbs on his retirement last February. It came with his colleagues' good wishes for success with his new business venture. Guy joined advanced planning in 1967, later moved into the transport and materials handling sphere and in 1977 became our first security operations manager. As a Fellow of the Institute of Materials Handling, he lectures on that subject as well as on security, and until recently was very active with the Coleford Amateur Dramatic Society in the various roles of president, chairman and stage manager.



Tony Nightingale joined us in 1963 as assistant to Jack Tester, then chief tool engineer, at a time when we had just started tooling up 813, and with his previous wide experience helped to build up the technical function at a crucial time in Mitcheldean's history. He succeeded Jack in 1970 and took over as manager of tool engineering department. Photography has long been a major hobby ('that's why I have one shoulder lower than the other,' he jokes); a former member of our own photographic club and currently a member of Cheltenham Camera Club, he intends to develop this activity further. Our picture shows him with colleagues at a February farewell party when MED manager John Roberts presented him with an engraved glass tankard, and wished him well in his retirement.



Service Awards

The black beret that is so familiar a part of Arthur Moore's appearance has acquired a classy touch. It now sports a three-diamond pin, marking its owner as a 30-year service award holder.

For all that time, Arthur has worked in the same surroundings—among the steaming cauldrons and bubbling baths that are an essential part of the manual plating operation down in the maltings area, where piece parts for our machines get the 'finishing' treatment.

Arthur is a man of few words and we couldn't persuade him to be photographed, but we're pleased to be able to record his achievement in this column.

Other awards

The following also recently became eligible for company service awards:

20 Years

February — Don Baldwin (supply), Nigel Bayliss (engineering), John Goode (TED),

Francis Jones (finance), Ewen Martin (MED), Don Meek (MED), Ralph Morris (finishing), Myrtle Rosser (RX Lydney), Bill Stephens (assembly), Tony Wood (machine shop), Dave Young (RX Cinderford); March — Bernie Gibbs (machine shop), Tony Harris (small batch), Ken Hobbs (RX Cinderford), Vic Morrell (transport), Dave Robinson (MED), Roy Sterry (CMSA).

Engagement

Steve Morris (finance) to Judith Cross on 14 February.

'Sweet' Diplomacy

When President Reagan was inaugurated last January, a news item concerning his addiction to jelly beans caused 14-year-old Louise Miller to have nightmares in which she was being attacked by thousands of the wretched things.

Never a person to take things like that lying down, Louise — whose mother, Angela, works in our finance department — decided to write a letter (dare we say) of complaint to the President, fully expecting it to be relegated to the presidential bin.

Imagine her surprise when, two months later, the following reply was received from the US Embassy in London:

Dear Louise, The President, Mr Ronald Reagan, has asked us to thank you on his behalf for your good wishes for his term in the White House.

We are sorry to hear about your "jelly bean" nightmares, and hope that by now they have turned to pleasant dreams. Jelly beans don't like being eaten late at night, it makes them aggressive, so if you like them, eat them well before it's bedtime.

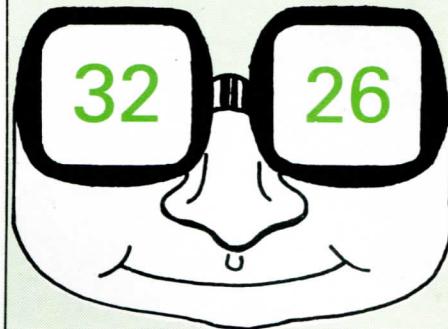
With all good wishes, Sincerely, J. M. Ball, Public Affairs Office

Eyes on Safety

Total number of accidents for period:

Jan/Feb '80

Jan/Feb '81



The cumulative total for the current safety year so far is 44, compared with 56 for the same period last year.

ANY NEWS FOR VISION?

If you have, then please — mail it to me c/o Corporate Affairs, Bld 51/4, or leave it at any Gate House for collection by me, or post it to me at Tree Tops, Plump Hill, Mitcheldean, or ring me — ext 566 or Dean 542415.
Myrtle Fowler, Editor

Retirements

Edward Aston (off-site stores) nearly 8 years; Jack Brooks (MED) 18 years; Betty Hart (electrical subs.) 15 years; Ivor Jayne (production stores) nearly 18 years; Wilf Marfell (stores) 12 years; Doreen Motterham (cleaning services) 10 years; Dave Owen (MED electronics) nearly 5 years; Bill Warren (parts mfg PCD) 18 years. (See also 'LSA Letter').

Births

Louise Marie, a daughter for Roger Aston (QA) and his wife Pat (formerly secretary to Nigel Percival), on 6 March.

Simon John, a son for David Williams (machine shop) and his wife Denise (formerly spares packing), on 1 April.

Obituary

We record with regret the deaths of the following: pensioner John Coyne on 30 January, aged 67; Les Sterry, aged 55, on 17 March — he worked in the supply centre warehouse and had been with us for eight years; assembly operator Pearse Hancox on 22 March at the age of 59 after more than 15 years' service.