he bikers made an impres

#### site as part of a tour in July naking their way around the taff at Harwell might have heard the distinctive sound

Sun Beam, a 1938 New Imperial and post-war Ariel, BSA, AJS and her Harley Davidson. BMW. One visitor chose to ride the varying vintages of the bikes which included a pre-war 1926 from 30 to 70 - was matched by The age range of the visitors -

With 14,000 members

### HARWELL HISTORY

lans are under way to display

to extend the display, in a modest way, to include other part of a permanent display Harwell history that should be historical items as they come to please contact UKAEA sewhere on site. It is planned Already on show are exhibition nodels formerly on display rtefacts of reactor history and anels from the last Open Day the DIDO Shell building store before leaving in 1998.

to the Berkshire section that they sioned DIDO reactor at Harwell. astic response when he suggested some interesting sights along the treasured bikes for a spin and see month, this popular club is always might like to visit the decommisway. Gilbert received an enthusilooking for new outings to take the worldwide and 68 UK regional

working for John Buffery, who in the workshop. He was later Harwell for over 17 years, joining first in 1981 as a shift Gilbert also worked in the waste pond where they were greeted DIDO and also to the irradiation arranged the club's visit to decommissioning supervisor becoming maintenance foreman technician on DIDO, before supervisor, Barry Reynolds. Gilbert had worked at on particular days. Hardy, an osteopath who works

rounded off with a bar meal in enjoyable day which was nicely like to thank everyone for a most MTRs and can pass on this ease," says Gilbert. "He has a and interesting way. We would technical know-how in a simple wealth of knowledge about the visit and put everyone at their "John Buffery hosted our

## A healthy addition

improve health and well being. at 363 Curie Avenue in Griffiths is the proprietor of this former beauty studio. diverse range of treatments to refitted inside and will provide a complementary therapy clinic which has been imaginatively Touch of Health' has recently opened its doors

to leave you relaxed and calm neck, shoulders, arms and back a healing art practised across the five days a week. Reflexology is yet energised and alert - a great stress release points on the head fort. Seated acupressure, or on-Pressure is applied to treatments which Ann will offer trust. She is a qualified reflexolmany years in the NHS, latterly nursing, Ann is an RGN and site massage, involves over 100 and relief from pain and discombring about a sense of well being accupressure. These are the two ogist and has trained in seated as a board director of an NHS district nurse, having worked for points on the feet or hands to world for thousands of years. With a background

assemble a group of experts in other fields who will be available a range of health promoting possible standards by dedicated, are delivered to the highest complementary therapies which pists. She has taken great care to well trained, professional thera-Her aim is to make available



Griffiths offering a range of

later in the year. Reike healing, Chinese massage. to offer Indian head massage. the clinic and Ann is also hoping be available. On Fridays, John and advice on menopausal issues Hill, a sports therapist will be at chiropodist, Jane Cumming, will apist, Jenna Hoff, will return on Beauty therapist and aromather from the end of this month Harwell on Monday mornings from Didcot Hospital will be at uesdays, and on Thursdays

stressbuster, according to Ann.

01235 821259. www.hiway.co.uk/ up its own website atouchofhealth or call on The enterprise is setting



# THE COPY DEADLINE FOR THE NEXT ISSUE IS: Monday 20 September for publication on Wednesday 6 October 1999

the George & Dragon at Upton."



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## THE NEWSLETTER OF THE CULHAM SCIENCE CENTRE & HARWELL BUSINESS CENTRE SEPTEMBER 1999

## £150m joint venture **AEA Technology and BNFI**

support technology in the UK company to offer nuclear new joint venture EA Technology and BNFL are forming a

million, the new company will employ some 1,360 people – 930 from AEAT and 430 from the Nuclear Science, Consulting, technology and central engineer-BNFL Magnox Generation's operations. A name and location Energy and Nuclear Engineering AEAT staff will be drawn from in the new subsidiary company will hold a 65% majority stake ing division. AEA Technology With a turnover of £150

has yet to be announced. Subject to government to support the Royal Navy's and continue AEAT's contract Magnox nuclear power stations Initially it will serve BNFL's begin operations in April 2000. approval, the new business will



likely to include British Energy and the Ministry of Defence.

in March of this year. in partnership with BNFL? recent acquisition, Westinghouse, company in Europe, particularly growth opportunities for the new technical services in the nuclear industry is expected to offer The trend to outsource

"The joint venture will push bringing together all our market that we believe has constrengthen our position in a activities. It will enable us to nuclear science and technology ing our business structure by forward the process of simplify AEA Technology chief

"In the years ahead, conti

executive officer, siderable potential for growth."

John Taylor, BNFL chief



"Following the Westinghouse

acquisition BNFL is now a global player in technical of our generating assets. nuclear power plants and this part of the business now strengthen the economic future our Magnox fleet of stations to technical capabilities to support new venture as a robust means o our turnover. BNFL regards the accounts for more than a third of support and fuel supply securing the necessary range of

economic electricity production that benefits both the UK's nuity of technical support for against global warming." economy and the world's figh are to maintain safe and around the world is vital if we existing nuclear power stations



This Month

Eclipse images



companion Walking





## Dave Trotman retires

Staff at UKAEA Fusion at Culham gathered to celebrate the retirement of Dave Trotman after almost 44 years.

included the introduction division and was paid the at Harwell in 1955 as a scientifearly transistors, and later equivalent of early electronics systems for nuclear m a group developing advanced ic assistant in the electronics computers and used valves and physics. These systems were the spent the first years of his career princely sum of £249pa. He recounted how Dave had arrived Fusion and Industry department Tom Todd, manager of the dedicated

manager of the electronics group. ments, finally becoming the diagnostics and fusion experiprovide electronics solutions for Culham where he has worked to wide range of systems and In 1970, he transferred to

cool in his cool box! MAST while drinking wine kept and colleagues commissioning and would remember his friends colleagues. He planned to go to box and an electric drill by his France to watch the solar eclipse presented with a Peltier freezer Dave Irotman

modern integrated circuits.



have is pictured with his wife Janet receiving flowers from Lom Lodd.

## Looking at īomorrow's World

had helped the Year 10 pupils prepare their concepts for the Tomorrow's World Live event at Earls Court which is based on the BBC's popular science and technology programme. Innovative new product ideas devised by John Mason School students were on display at a national event in London to encourage interest in science and technology. AEA Technology

One team had designed a

recycling bin prototype to be placed at bus stops or on buses. It could be used by people who not have a car to reach out-ofwas a cheap, environmentally project, called 'Blazing Glazing' town recycling points. want to recycle products but do Another

collect solar energy to run a neon light at night. The third powered traffic sign. Sainsbury idea was a wind or solar-The team used a window to Education minister, Lord and TV presenter

triendly way of room lighting, students about their projects. the opening day and chatted with

Johnny Ball visited the stand on

Maurice Hyde, who recently retired from Harwell Radwaste Services, would retirement gifts, cards and good wishes, and for the beautiful flowers presented to his wife. He soys 'cheerio' to all those colleagues he and colleagues like to thank all his friends for their

## Obituaries

Dr Ken Duncan
CB FRCP FRCPE



myriad of papers.

pectedly at his home in Steeple Aston, on 26 June 1999, aged 75. Kenneth Duncan died unex-

before starting medicine Ken was the son of a Church of Scotland padre and the United Kingdom Atomic British Steel Corporation, South Western Gas Board, the including British Rail. into industrial medicine general practitioner he moved working for organisations studied Divinity. From being a the

National Radiological chief medical officer and was regarding radiation. From 1958 to 1969 he was UKAEA Energy Authority.
At the U Protection Board (NRPB).

Moving to the Health and pioneered safety regulations UKAEA he

the director of medical services (1975-82) and then the deputy director general. In 1985 he medicine. During his career he held academic appointments, notably as examiner in occupadirector general. In 1985 he received the Companion, Order of the Bath for his services to University (1970-74), examiner tional health at Dundee Safety Executive (HSE) he was

Society of Occupational Medicine in 1970 and a founding Fellow of the Faculty of Occupational Medicine. He was a member of the Medical Research Council (1975-83), president of the to the Society of Apothecaries (1974-79) and visiting professor in occupational health at London University (1977-82).

Ken joined NRPB in 1985 as assistant director (Biomedical Sciences) leaving for the first time in 1988. He then returned in 1992 to be the Medical Adviser until 1994. Since 1996 he had been assisting the board with the verification of death cer-

complex appeals' cases involving radiation. In this latter role he Registry for Radiation Workers and the Nuclear Test Veteran brief often producing a succinct summary of a case from a was the absolute master of the Database, and dealing with tificates for the Nationa

Gillian Crow a fellow medical practitioner and they had four daughters, who all survive him. had a multitude of interests, none more treasured than gardening. In 1950 he ma Apart from his high ievements in medicine Ken

#### Len Longshaw

megawatt hours of electricity,

died, aged 89. and a mayor of Didcot has transport manager at Harwell en Longshaw, former

served in the Western Desert. Volunteer Reserve and during the Second World War he before becoming a civilian driver with the RAF at worked roundsman for the Co-op Harwell. He joined the RAF Born in Didcot Len first as

20-miles around the site. buses which carried 5,000 staff to work from a range of over He returned to Harwell, being employed by the Atomic 30 single and double-decker promoted to transport manager with responsibility for a fleet of Establishment. Energy Authority at the new Atomic Energy He was

mayor between 1981 and 1982. District Council and Didcot former Didcot Parish Council, Conservative, elected to the then Wallingtord Rural Len was life-long

## Dr Jack Howlett CBE

(1912-1999)

J.E.Hailstone, 26 Brooksl Road, Tilehurst, Reading RG 6LY. Tel: 0118 942 8345, colleagues are invited to share in this tribute to him. Please inform Coffee Lounge, All friends and A celebration of his life and work will be held at the RAI you wish to attend. JEHAIL@AOL.COM Brooksby

## storage breakthrough NP launches electricity

development of power systems of the future. ne year after moving to Harwell Business Centre, National Power has unveiled a revolutionary electricity storage technology that could fundamentally change the

to call up more expensive power plants. It can store thousands of are low and releasing it when chemical system operates like a demand is high, reducing the need electricity when demand and costs giant rechargeable battery, storing Called Regenesys, the electro-

of 36 National Power staff. carried out at Harwell by a team work for Regenesys is now being deliver it instantly. for hours at a time, and can Research and development



year ago and now work from company moved to the site a

sufficient to supply whole towns

About Regenesys...

Regenesys is the world's most advanced fuel cell technology. At

buildings 418.15 and 447, the a dedicated assembly plant. Harwell is now producing full-

a pilot plant at its Aberthaw power station in South Wales its first full scale commercial National Power plans to build world with the capacity to storage plant of its kind in the argest commercial electricity plant at Didcot. It would be the

tally attractive. commercially and environmenlike wind and solar power more consumers for a day ation from renewable sources Regenesys can help make gener National Power believes that

its heart is a fuel cell module made of low cost materials that operate at ambient temperatures can be mass-produced and can

latter becoming operational earlier this year. The team at size electrochemical modules in

supply around 10,000 domestic Following successful trials at

UKAEA's Peter Greenhalgh (left) and Neil Sweeney of National Power.

fuel cell to produce electricity. battery the process can be reversed with the 'charged' elecout of the cell for storage they change state and become 'charged', before being passed on either side of an ion exchange trolytes flow through the fuel cell trolytes flowing back through the tanks. membrane. and low pressure. oltage across the electrolytes Like a rechargeable By applying a Two elec-

## Satellites, bacteria and trees harnessed in clean-up £700m per year. As excavation and disposal become less acceptable, AEA Technology Environment is offering sustainable new with around 100,000 contaminated land sites in the UK, the market for investigation and remediation is worth some techniques that employ a range of methods including satellites to

of pollution and is compatible to chart maps of radiological con-Contaminated Land Solutions, map the pollution and trees that draw it up through their roots. GroundView<sup>TM</sup>, to help remediadeveloped to map different kinds tamination. The system is being uses Global Positioning Satellites carried on a surveyor's back and Groundhog<sup>TM</sup> system that is provides a one-stop-shop for filed a patent for its revolutionary AEA Technology has recently andowners and developers This new generation of high-AEAT's Solutions will also draw on

Contaminated Land Solutions, Neil Spurway, manager of

Contaminated

expertise. Nutrients are added to the ground to stimulate water cleaning systems. can design and install ground through their root system - and aground in 1996, spilling its cargo of oil. AEAT can also to clean up beaches at Milford which then eat pollutants. This technique was successfully used naturally occurring bacteria trees can draw up pollution offer phyto remediation - where Haven after the Sea Empress ran bio-remediation

descent and spilled its formaldehyde cargo. The contamination was conta

mentally-friendly. both cost-effective and environ of contaminated land. said, "Britain has a huge legac Technology has developed some to speed the clean-up operation. and rainwater collected. Natural biological processes were also stimulated sustainable techniques that are



SAFETY Update

ECHO. These were reportal as lost time accidents to hree days' lost time.

灣 UKAEA



#### fransport survey

vas a former member of farwell. Gilly is doing a Filly Otlet, of the Inst d Nick Hance, Harwell ntial survey into att urn of replies during Septe UKAEA bas neys. Her father, Bob Otlet

#### Coffee morning

October and buying a cup of offiee. It's as easy as that! ou can take part in the biggest Coffee Morning' ulham or the Ridgeway Café at millan Cancer Relief by

### Name that restaurant!

ment and extn number. Hand in your entry as soon as possible to the cluding a camera, beach towel gether with your ess about why you like ant. The prize is a beach pack

#### **NVQ** success

NRPB is to host a three-day

themselves.

During the visit, which

International Workshop on

Ultraviolet

Radiation

and Stan Gordelier, director southern division, UKAEA (right) look on.

NRPB hosts UV workshop

Inlimited in Curie Ave mber of NVQ

> 1999 at St Catherine's College, Protection from 18-20 October Exposure, Measurement and

One of the most widely used Dose guide NRPB on 01235 822628. sorship is invited. For more details contact Sarah Bullock as be a small exhibition and spo

#### **BNES** lecture

the ETSU confere Two Way Exchange of Idea Wed 22 September. The ver

and

protection

and showing which to use in

It also

questions and a glossary. publications are linked and has a list of frequently asked explains how other important various situations.

layperson and policy makers. The workshop will examine UV sources, measurement techniques, environmental

be of relevance to the informed and much of the content will with keynote speakers from primarily for the UV specialist Oxford. The event is intended

to understand booklet, giving

readers an overview of how

Europe, the USA and Australia

## Asphalt wastes resurface

close to the Harwell site and site at Harwell explained what subsequently taken to the adygrove Estate at Didcot. sphalt removed from roads ohn Wilkins, UKAEA head of seen local media CHO readers may have

there was no problem. before and afterwards proved was nothing more serious undermeasure, partly to ensure there places as a precautionary the surface layer was removed in levels. tivity levels higher than usual some areas of road with radioac on the Harwell site had shown He said that sensitive surveys Although these were low Careful monitoring



and well below the levels Analyses showed activity was due to natural uranium requiring special disposal pre-

risk to public health? District Council (SODC) said in its press release, that the the levels that would pose a waste was 'considerably below South Oxfordshire

He said that references in

there was now some public interest, UKAEA invited Mike housing committee and col-leagues to Harwell to see for environmental health and McNulty, chair of SODC's However, recognising that core for a building site material being taken as hard uncontrolled tive waste. There was nothing technically defined as radioacthe road materials to have been uranium were not sufficient for trace amounts of natural place. This was not true. The uncontrolled act had taken tive waste' implied some the media to 'dumping radioac about

quantities in radiological pro-tection is the dose coefficient dose calculations are made Coefficients' which is an easy has published a 'Guide to Dose for internal dosimetry. NRPB intormed via the Intranet. Estate residents and kept staff tory letters to the Ladygrove UKAEA also delivered explanacomparable levels to those found in the affected roads. natural uranium, which emitted memorial stone, also containing shown the granite D-Day asphalt waste, the party was included demonstrating the low levels of radioactivity in the

ultimate disposal to a landfill site. Local newspapers later carried a letter from the Head of around 1000 tonnes, was brought back to Harwell for Site setting the record straight. asphalt, totalling

## lipse experiments

media attention, keeping the already busy scientists on their toes. some to carry out experiments and some to enjoy the experience. The following two experiments attracted a great deal of cientists from CLRC Rutherford Appleton Laboratory were scattered along the path of totality during August's eclipse -

Secis experiment. He took this sophisticated digital imaging system to Bulgaria, and his long journey was rewarded by clear images of the Sun's corona. "We over 12,000 high definition travelled the furthest with totality, his equipment captured skies. During the two minutes of Professor Ken Phillips his than its surface.

the key to a question that has are fully analysed, they will hold equipment worked perfectly", he commented on his return. Ken hopes that when the images the skies were clear and the been puzzling scientists for years why the Sun's corona is hotter

Bamford stayed closer to home. Drs Chris Davis and Ruth

couldn't have hoped for better -

equipment at Helston, nine Radio Communication Agency They installed equipment at Helston School in Cornwall, which was used to study the sites across the UK also tool phere. As well as taking detailed effect of the eclipse on the ionos the

eclipse. "We are interested to see can normally only be heard at night in the UK, and reported to a Spanish radio station which whether they heard it during the members of the public tuned in Over 1560 time we can measure this effect"



School in readiness for the eclipse. ohn Smith from RAL helping to set up

what effect the Sun's corona has on the ionosphere", said Chris, "and during an eclipse is the only

## £3m laser upgrade Amateur photographer, Bob Talbot, who works for AEAT Nuclear Engineering at Harwell, travelled to France and captured these magnificant images of the eclipse. For other keen photographers, here is the key to Bob's success. The shots were taken south of Neufrehärd-en-Bary, within a few kilometres of the central line of totality. His Canon EOS camera was tripod mounted and prefocussed on the horizon, and aimed indirectly at the sun, without looking through the viewfinder. The film was a Fiji Senia 100

transparency, no filters were used and the focal length was 600mm.

million million watts output power allowing focus to an area the size of a sharp pinpoint. This enormous power density will be generated in an extremely short pulse, less than half of one fulcan, one of the world's most powerful lasers, is to receive a £3 million upgrade which will enable it to produce a thousand nillionth of one millionth of a second in duration.

reactions, electron and ion accel-eration by light waves and the exotic world of plasma physics photon These include the interaction of high intensity light with matter, damental physics processes. tists new insights into many funhigh power beam will give sciencompleted in 2002 Vulcan's new Rutherford neodymium glass laser sited at aboratory. When the project is Vulcan is induced the high power Appleton nuclear

work.

dominated by relativity. ment of energy's Nova laser at metre in diameter, are being aperture optical components required such as laser amplibuilding to house experimental being decommissioned. sourced from the US depart formance mirrors up to one fiers, lenses and ultra-high peraboratory which is currently lawrence Livermore National The upgrade includes a new Some of the large

## A relatively short exposure just as the sun disappeared behind the moon. A very clear solar prominence is shown at 2 o'clock. 1/250th sec at f8. A much longer exposure, about 30 seconds into totality, to illustrate the extent of the corona. 1/4th sec at f8

#### Ito Space!

The UK's best-known stargazer, Patrick Moore, brings his Into Space! lecture to the Wyvern Theatre, Swindon, on Tuesday 10 November at 7.30am. This fascinating and entertaining performance celebrates 40 years of 'The Sty

# A wilderness walk to remember

with chicks, and groundhogs.



holiday of a lifetime were a

long way from reality.

in the Woods' and the trip advert to spend eight days walking 72 miles through the forests of the Appalachian trekkers who answered an NSPCC through sponsorship. had written the book, the Allegheny Trail with travel writer Bill Bryson. The author would raise funds for the Mountains of West Virginia on She was one of a group of 30 , 'A Walk

dog Ben out more than he liked! clambering over frequent obstacles like fallen trees. In temher training of walking each were seriously challenged by the part for all the party was the unchtime at work and taking her itness at several points, despite peratures well over 80 and high ugged terrain, steep ascents and sleven up to a 73-year old but all walk. Ages ranged from a girl of nighly demanding nature of the umidity, Janet did question her Perhaps the most unexpected when, on the fifth day, the

15 years and although it had been while out walking was not as straightforward. Walkers had to was very easy to get lost! ask someone to wait for them - it camp. To answer a call of nature arranged portaloos at each clothes but the organisers for washing yourself and your

sing the finishing line with bears. two, luckily, but did spot plenty

make up time when they came to camp. The other major hindrance at only one mile an hour, trying to Sometimes progress was very slow walked for ten hours to reach logging road. One day they

walking groups would stop if their colleagues were out of carry emergency supplies. With names like Braveheart, Banjo, challenge. It was quite a relief two litres of water - which had back pack containing food and took her turn at leading a llama creatures are pack animals and soon found out that these benign Rio and Mr Big, they were and this, together with a heavy when split between the three likeable enough but the party principle to use six llamas to be drunk! - added to the It was a good idea in Janet like everyone else hard ground" she recalls.

Streams provided running water snoring of their tent companions. deprived of valuable sleep by the her fellow travellers were morning by birdsong. Many of llamas were taken back to camp. was woken at 5.30am every Sleeping under canvas Janet

The trail had not been used for

them be' - ticks, snakes, even poison ivy - 'leaves of three, leave briefed from the start to avoid The group had been well They didn't see the last

found a bit claustrophobic." that he didn't really enjoy the Sydney Olympics so that experiences," says Janet. "He walked with me on the first day to each member of the party and hiccups he didn't arrive until the Mr Bryson himself. Australia is! He also revealed Americans would know where Australia should come out before and said that his latest book on was interested in you and your lovely man. He took time to tall was very apologetic and a really certainly worth the wait. hour drive from his home. It was but due to some organisational author as a constant companion had expected to have the affable valking in the woods which he second evening, following a 14-The party

everyone. chair. the trip was a comby collapsible party bought before the end of walkers each evening accompaeveryone. A delicious meal would be ready for the weary day it was too much to sit on the wine in Janet's case. The other nied by their favourite tipple, red The food was a highlight for "After a long exhausting which virtually all the

Amazingly everyone finished



at the s

nother day's bike

with no serious injury, apart from a few blisters and sore feet. By the time they walked under exclusive to those who've friendships and the camaraderie and singing along. by some of the organising party evening with live music played memories One of Janet's treasured it!' they had struck up many new the banner saying 'You've done survived a unique experience is relaxing in

£40,000 in total. UKAEA and other sponsors who contributed so generously to thank everyone from sum of £1,800, and would like The trip has generated around

## Free extinguishers



free fire extinguisher for their home. Robert Jackson, MP for Wantage, visited Harwell to make the presentation with Stan Gordelier, UKAEA director who said, "I am thanking n the workplace by giving them each a fire extinguisher to outhern division staff for their care and attention to safety accidents' in 1998, each was given a clocked up a first time

## Green villagers visit



ed after the demolition of one of the former RAF hangars. grassland, at the centre of Harwell, looking at the fish in the lagoon

planner Tim Cockerill spent 3 hours walking the 600-acre site. Business Centre. HEG members, escorted by UKAEA property filiage members of the Harwell Environment Group (HEG) saw how UKAEA's nature conservation works at the Harwell

the Harwell site had not been several colonies. exposed to pesticides for over 60 Pyramid Orchids, flourished in orchid, including the Bee and insect life. Three species of wild and diverse habitat for birds and grassland supported a very rich years the underlying chalk-based Tim explained that because

example from China 61 species, including a rare UKAEA had replanted new trees contained almost 10,000 trees of silver birch trees from Snelsmore 2,000 since 1992 - including during the past 50 years with trees on the wartime airfield but In 1936 the RAF felled all Harwell now

recently been carried out and professional advice taken to An environmental audit had

turn attract birds. the grasses provide ideal habitats spaces that had been sown with buildings had created new open facilities and redundant Demolition of former nuclear life at the business centre and food for insects, which in meadow grass seed. Kept long mprove the variety of natural

ecology. included specific references to all internal planning projects campus. Bird and bat boxes had wildlife to migrate across the grass and trees to encourage the involves creating corridors of been installed on some trees and Landscaping the site now

established plant."

ed to balance rainwater surges and two of the wild orchid sites. The environment group visited a woodland at the former reactor site, a lagoon construct-The next Blood Donor Session Social Club, Harwell from 10.3 Wednesday 15th & Thursday asked to note that the transf for two days. New donors a made particularly welcome.

always needed and will

14.00 to 15.45 on

## **New orchid** colony found

KAEA staff, Jane Treavis and Margaret Rowlands, discovered a new colony of wild Bee Orchids growing near the UKAEA eadquarters building (\$21) at Harwell recently.

correct time of the year. habitats are not cut until the programme operated by Johnson fed into the grass-cutting at Harwell. The locations will be showing the deposition of orchide reported to Bill Temple (AEAT) Controls so that the orchid who is compiling a site map Their find was quickly

they will flower. and it takes several years before specific conditions to germinate from the nearest colony at Harwell," said Bill. "The seed these orchids came to the reactor seeds but they require very pods contain over a million site because they are a mile away "It's a bit of a mystery how

very large seed pods showing that it is a mature and well that particular habitat. One of the reactor orchids had seven has almost eliminated them from the reactor site but crop spraying from the Ridgeway overlooking "They might have come

The orchid is so named because part of the flower resembles a bee taking nectar, as our photo shows.

Please give blood

## **Backing bright ideas**

ed to attend a meeting on Tuesday 5 October at Rutherford Appleton Laboratories. Entrepreneurs looking for start up capital you answer yes to either of these descriptions, you will be interest someone who is looking to invest in an exciting new venture? seeking investment opportunities will be presenting their business plans to a group of 'business angels re you someone with a bright idea that has great business potential and looking for suitable investors? Or are you

support organisation. the government's business

Bradstock (pictured), said "Investors are willing to take OION chairman, Paul

The network is supported by the Oxford Trust, a technology

Opportunity Network (OION).

Oxfordshire

Investment

The meeting is run by the

Business Link Heart of England,

and many relish the opportunity

risks for reasonably high returns

can provide tremendous support for a growing company." to work with small and medium their money. acumen which they can invest bring a wealth of business their ambitions. The investors sized firms to help them achieve into a small company along with This experience

for more details. Whitehead, on 01865 790910 for more developed business start-up projects up to £700,000 ranged from £10,000 for smal have received more than £4.5 So far over 25 companies The investments have

## VIP system goes live at Harwell

The new system, known as VIP Visitor Manager, is based around a product designed and written by Wilson Graham ssociates, a Thame-based software company. Harwell's Main Gate Reception and North and Fermi

September 1999. UKAEA Constabulary, to select and install a Y2K ompliant SaT, Security, Safety and the orising Harwell property manvork by a project team comnation of over twelve months' ement, Johnson Controls. The launch was the culmisystem

he Harwell licensed site ime basis. As before, visits to visitor information on a real-The new system is fully etworked and enables the nmediate provision of current submitting an authorised ould be notified to reception

> to identify any areas of the system's performance. meetings will shortly be held the first of the system review User training is ongoing and timely provision of training final development phase and key users (i.e. the constabulary improvement and to monitor and reception staff) during the tion involved close liaison with

### Culham pass office

The UKAEA security pass office at Culham is now located in building K2, room 021. If you have any problems, please contact Lisa Moyes on C3607.

## Harwell telephonists go for gold



June has now retired. The girls are now aiming to achieve the gold award in the near future. here, includes Jackie Taylor, Jenny Wells (who also received the (Telecommunications Human Resources Association) at a presented by Grace Lawrie, chairperson of THRA 1998 operator of the year award), Trudie Holder and June Craig ceremony held in B329 telephone exchange. The team, pictured bronze certificate for call handling. he team of JCL telephonists at Harwell has been awarded a The certificate was

## Tour with a difference zents co-ordinator. Deniese Willis, said "This visit was the first of its kind and although very challenging, proved to be a complete success and everyone involved found it very rewarding." MUKAEA FUSION

Bristol summer school recently visited UKAEA at Culham with Aimpaired students ttending the University of

to represent the fusion process. Colin said "I had no idea how magnets, golf and ping pong balls with the aid of paper tokamaks duction to Fusion by Colin Roach The group was given an intro-

the day it seemed that everybody was well briefed and very interestquestions about the main engi-Clark worked a real treat, and they raised some very challenging Chris Carpenter and Heather ed in fusion. The props from neering issues we will face in the

of the Fusion experiments with the help of Ann Maynard, Kathy This was followed by a tour

Alan Sykes and Glenn Counsell guided the students sensing the vibration and sound of the tank under vacuum, made the spare centre column - and copper and solenoid winding of copper bus-bars, graphite ciated with the experiment touch of various materials assoexcitement in experiencing the Alan said "their interest and around the START experiment

their visit very rewarding to us." particularly concerning safety and environmental issues." David Ward who guided them around the model of the fusion John Hill and Garry Voss guided the visitors around the MAST Watkins guided them around future potential of fusion power a great deal of interest in the power plant said "that there was experiment and scale models the COMPASS experiment and scale models. Mark Nightingale, Andy Cullen and Ra

## Add two years to your life!

for people to cycle to and from easier and more commonplace HarBUG aims to make it safer, due at RAL around the week had already visited Nirex and is past few weeks the exhibition at NRPB last month. Over the Bicycle Users Group took place out more about the Harwell

Off road routes to the Harwell campus from Wantage and Didcot were set out in informato be completed in year 2000. to Oxford and beyond are due can add two years to your life! a week from the age of 35 you that by cycling for just 60 miles of cycling, including the message mean that routes from London Millennium funds awarded supports local authorities on the Cycle Network (NCN). NCN promoted through the National Sustrans, a charity designed and maps, along with details of tion leaflets with easy to read information about the benefits mplementation of the Network The exhibition had plenty of

tigating further develop-HarBUG is always inves-



NRPBs Naomi Jarvis wh

news and events tion on membership details www.harbug.freeserve.co.uk where you will find informapaths. They can be visited at opportunities for new cycle

to have the exhibition at your place of work then please If you would like to arrange

## Pelebrity chef Ross Burden is lending his support to TV chef supports ABC

team's focus on diet and nated by the ABC research Ross says, "As a chef I am fasci-As a long-term ABC supporter cake stalls and coffee mornings lunches or, more traditionally recipe auctions, fundraising such as cook-off competitions 'foodie' fundraising activities will be encouraged to organise campaign and has created two front ABC's 'Cook for Cash' (ABC) during October, breast the Culham-based charity, Action against Breast Cancer demonstrations, Supporters Ross will 01865 407384. is the inspiration behind the

cookery

exclusive recipes.

'Cook for Cash' campaign I've designed to raise funds for their vital work." For more information please contact ABC on

## Cycle challenge

microscopy services at MRC. That started off as a whim has now become a firm commitment from Terry Hacker, head of histology and electron

complete the journey in just two on the weather, in particular the Nolan Bone Marrow Trust. If days, but this will largely depend all goes to plan he hopes to Cornwall, in aid of the Anthony Trevellas near St Agnes, in home in Compton, Berkshire, to attempting to cycle unaccompa-nied the 260-mile route from his On 23 September he will be

prevailing southwesterlies! In preparation Terry has en cycling and running for

Adele on 370.

support Terry please call him MRC on extension 360 trust - and all those who have sponsored him, including Adele donated some kit - the value at Didcot who have kindly fundraising. If you would like to Seymour, whose idea it was and which has been donated to new saddle before who is co-ordinating He would like to thank Halfords some time and he plans to buy a departing

Mammalian G Radiation and Mouse Genon

Adele wishes Terry well before the off!

## Handy study

brother or sister who would like to take part. Please contact Mrs Judith Rue, handed volunteers, aged between 18 and 50, are needed. You must also have a Warneford Hospital, on 01865 226290 or email: University of Oxford, running a fascinating study into the genetics of handedheaded by Prof. Tim Crow, is department of psychiatry, A team at Oxford University ness and its links to personal-Both right and left-

### Left-handers unite

specially designed for them. She also gave out information about the Left Handed Club. such as kitchen utensils. information about products to give fellow left-handers more the event on Friday 13 August handed herself and organised secretary, Sue Potts is leftdisplay in the Harwell Social was the inspiration handed knitter, Nicky Sanford An ECHO feature on left Day. Rec. Soc. Club on National Left-Handed tor

Due to UKAEA's stated intention to close
B161 (Hawell Social Club) on 31 March 2000,
an Extraordinary General Meeting will be held
on Wednesday 22 September 1999 at
12.30pm in the upstatic function room of the
Social Club. The single agenda item at the to support this proposal will be supplied at the namely 24 December. Background information the officers that the Social Club bar and catering EGM will be as follows: Motion in the names of

All members are asked to make a special effort to attend. Please arrive early and bring your membership card with you.

## Rounders round-up



UKAEA head of site at Harwell. Than b thank Tony



After rain had threatened to disturb its scheduled date the final was played between the two main protagonists of the last five years, namely, With A Wet Kipper (WWK) and the

coming close on several occasions but only scoring one in their first innings. Then WVVK went into bat knowing the field was weaker nine without their captain. They had a job to score any past the quality field of WWK, The UUs batted first and were down to due to re-arranged and

> and gaps were found with accurate shots to the lo'clock position. Half time score was 1.5 depleted opposition. They soon started scoring

batting. A couple of early departures sealed their fate with an innings unplayed. Final score.
- With A Wet Kipper I I.5: Up and Unders 2.5. The second innings for UUs was a pressured situation that makes for difficult The plate competition, run in parallel to

the main event, involved those teams not reaching the top half of the tournament, and saw a final between Wutherford Wackers

reached the knockout stage of the tournament but lacked the edge to go any further. WW batted first and started to score immediately with some good strikes and a number of halves (WWW) and Judge and Jury (JJ).

JJ are an AEA Engineering Software team.

WWW based at RAL have for many years scored by the female members of the team. They had notched up 9 by the end of their first nnings, Paul Rabbetts (3).

needing 10 to equalise. They fought hard but ended up scoring another 4. Final score Wutherford Wackers 14: Judge and Jury 8. climb as batting is not their strongest asset. They achieved 4 by half time. WW's second innings produced some sharp fielding by JJ and then batted with rather a mountain to

### 220 Hat-trick!



third year in succession while their opponents, the B.A.T.T.E.R.S. were trying to secure their In the final of the Harwell inter-departmental cricket competition, the 220 Pensioners were bidding to win the Vice-Presidents cup for a

first victory.

Batting first, the B.A.T.T.E.R.S. made steady progress and after 18 overs posted a respectable total of 123-4 with Allan May (32) of the steady of 124 with Allan May (32) of the steady of 125 batting very well. In Butcher started to accumulate the runs to the reply, the 220 openers Alec Inns and Paul This left Andy Burton to stride out to the point where both scored 50 and had to retire.

e to complete the victory for 220.

Chris Wright, director of AEA
Technology, kindly made the presentation of
the Vice-Presidents Cup to Kevin Sanders and
traks presented the bowling award to Andy
Rimmer (Bookham Gentleman's XI) and the middle to hit the winning runs in the last over

batting award to Martin Ridley.



the match ball. HLRA for once again sponsoring the competition and for Johnson Controls who provided The organisers would like to thank the

## Quiz time again

The Quiz League starts again on 28th September. New teams are always welcome. If the property fee is 46 per team for a 10-week league. Teams of 4 answer 50 general knowledge of the league with prizes for the league witners and runners-up. There is also a weekly spot quiz. The quiz is held on Tuesdays at 12.45 in the upstairs function room of the Harwell members must belong to the rec. soc. For more information contact Richard Bull on Laboratories Recreational Association . Team H4669 or lan Adsley on H5717.

#### football league New 6-a-side

off the ground. Any departments or referees wishing to take part in this proposed competition should contact either Tony Betteridge, rec. assoc. secretary on H3296, or Colin main sportsfield in Maxwell Avenue and open to all rec. association members, with both men's and women's sections. Qualified referees or unqualified competent individuals will also be needed for the competition to get evening cricket league and rounders competi-tion. All matches would be played on the 6-a-side football league throughout autumn and winter months, run along the lines of the Moody on H3343 as soon as possible. There are plans to run an inter-departmental

exchange Adverts on this page are free to all staff at Culham, Harwell, JET, MRC. Nires, NRPB and RAL. Please submit your ad (30 words maximum) to the editor, Valerie Judd, by e-mail to the properties of the properties

SCOTTISH BORDERS, fully equipped holiday cottage. Sleeps 4. £140 per week. Tel: 01235 anytime. Fax: 01235 anytime. Ambleside. Quiet feliside location in 10 acre grounds. Fine mountain views.

house near the station, Mon-Friday, 2200 a month including bills except telephone. Please ring 01235 or 0797

SOUTH WALES, Gower, holiday cottage, panoramic seclusion, sea

(Hallmark Electric four ringed (white), double oven, fan excellent condition, move DIDCOT, double Didcot (Ladygrove

DINING TABLE, mahogany, seat up to 8 people, with extens rardly used £150
IL Lesley on 01235
In weekends

DIPLOMAT Instant Heat' ceramic hob in mocha, as new. Worth £320, accept £100 ovno. Contact

colours, some crested, all happy, healthy babies & very tame. Females £11 each, males £10 each. Helen tel C (723) 3873 or ccmail/Groupwise or tel 01235 OLD RADIO, Murphy, valve, early '60s vintage, Free to collector. John H4457.

(eves & w/ends)

NORTH ABINGDON, single room B&B in modern family house. Non-smoker preferred. £16 per night. Contact Mrs afternoons or

SANDFORD ON THAMES,

rooms to rent in shared house. £50

WOODEN COT. Must be good condition. Tel 01235 or

WANTED

BINGDON, unfurnished, two ACCOMMODATION

### HOLIDAY

juliet area, with a small garden and off oad parking for two cars. Oxford 7 miles, Didcot 5 miles. A34 access few miurtes. £500 pcm. Full references required. Contact David (wk), or 01865 CORNWALL, Newquay

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AKE DISTRICT, luxury apartment leeping 4 in Lakeland mansion. English Fourist Board 5 Keys rating. Edge of

H3814 or 01235 **DIDCOT,** single and double rooms to let in quiet modern house. Shared facilities - all mod cons. £55/70 pw

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TUCSON, ARIZONA, USA, house exchange, 3 weeks starting April 27th, 2000. Details Tel R5291 WEYMOUTH BAY (Haven), 2 and 3 bedroom caravans,

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e, sm fridge, towels ed and laundered.

nal. Ring 01235

£100. Anne @ Harwell 3280 or email

fit 8V/16V - £150. Set of

TWIN PUSH CHAIR, Mamas & Papas (seats side by side) in SMALL TOURING CARAVAN, sleeps 3, £50 onc. Slight dent in roof, needs cleaning, (019934 (near

valiable part furnished or ved. Off road parking. No voking. £325pcm.

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METRO VAN, F-reg. MoT until July 2000, taxed to Oct 99, recently serviced. Good condition. £400.

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Tel 01235 evenings.

coes. Excellent co

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veek (including bills except phone) month in advance (+ one month sit). Contact David- 01206

## ACCOMMODATION

arking, beach 10 mins walk, arden, 0118

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ular charm. £420 per week

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### MISCELLANEOUS

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## it's good to talk

f public speaking is something you have to do or would like to loo, why not join the Ridgeway Speakers Club. Guests are always wdcome and the club provides a friendly amnosphere, meeting on the first and third Wednesdays of the month at the Guildhall in ngdon. Staff members from Culham, Harwell and Rutherford e always played a significant role and have benefited from the ning in communication and leadership provided by the club, Gallagher-Daggitt on 01235

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