



School of thought Students rise to the challenge pages four/five



Young talent Orion inspires science winner page six

the newspaper for AWE's neighbours

ISSUE 12/WINTER 2012



connect

Path provides vital village link

Walkers, cyclists and dog owners helped celebrate the opening of a new footpath and cycleway between Aldermaston village and Aldermaston Wharf.

The area has been in desperate need of a safe link between the wharf and the village for decades as residents had been forced to walk along the busy A340 which has no payement.

The path is approximately two kilometres long and cost around £500,000. Funding was provided by Section 106 money from an AWE planning application process.

The new path will bring many benefits, the top one being safety. It means village residents and those living by the wharf now have easier access to each others' facilities including the church, local recreation ground, the railway station and the Canal Visitor Centre.

It also links with the National Cycle Path along the Kennet and Avon Canal towpath.

The official cutting of the ribbon was carried out by local nine-year-olds Kyle Brown and Ed Hiscock, who both attend Aldermaston CofE Primary School and were commended for their excellence during a cycling proficiency test.

Also at the ceremony were AWE director Site Steve Fussey and Wasing Estate owner Josh Dugdale, who had donated the land for the pathway, which has been named Wasing Way.

West Berkshire Council oversaw the construction and finalised the plans which were prepared by cycling charity Sustrans.

Mr Fussey said: "Working together with a number of important local stakeholders including West Berkshire Council and Aldermaston Parish Council, we are delighted to have supported the project to



connect | 2 | 3 | connect

Cyclists and walkers turn out for opening

• from page 1

provide a tremendous local amenity.

"This path will provide real benefit to the community and it's a great addition to the local area."

Families, cyclists and others gathered at either end of the path and then met in the middle for the official ceremony.

Cllr Dave Shirt of Aldermaston Parish Council addressed the audience of more than 200: "When this project started, we had nothing but a blank piece of paper. We got in touch with Sustrans, and boy did they help us!

"They helped oversee everything from planning through to land negotiation. We are extremely grateful to Wasing Estate, who gave us the land at peppercorn rent, also to AWE which provided the finance, and to West Berkshire Council which managed the actual construction."

The Rev Becky Bevan, rector of the Aldermaston and Woolhampton benefice, who gave a blessing, said: "Aldermaston



is a village which has a strong sense of community. The footpath opens up new ways for us to get together and to reinforce the links between the wharf and the rest of the village – it's a very positive development in the life of this community."

Whisky work is a winner

AWE was one of the sponsors of a national awards ceremony recognising students' achievements in science, engineering and technology (SET).

The company backed the best chemical engineering undergraduate student category at the 2012 SET Awards, billed as "Europe's most important SET education awards".

Shortlisted candidates present to a panel of judges, with the judging for the best chemical engineering student taking place at the Institution of Chemical Engineers in London. The panel included representatives from AWE. Sellafield Ltd and Imtech.

The best chemical engineering student award was won by James Truesdale from the University of Edinburgh for his study on the application of lean manufacturing techniques to whisky production.

James' award was presented by AWE's head of production engineering Keith Hall, who said: "This is a significant event in the academic world and the universities make a real effort to enter their best candidates. It was an honour, alongside a range of major international companies, to sponsor the awards and to celebrate the winners' achievements. Academic outreach plays an important part in AWE's programme delivery."

The ceremony was attended by several representatives from the chemical engineering community at AWE.

Physics demo team hits inspiration trail

A team of five AWE scientists inspired hundreds of pupils at the Physics at Work Exhibition.

The AWE team of Josh Dugdale, Sara French, Karla Hardman, Matt Childs and Andrew Davies gave a physics presentation at the Cavendish Laboratory, University of Cambridge called "Under Pressure", about the effects of pressure, pressure waves and explosions

"It was a really enjoyable event," said Josh Dugdale. "It was good to have the opportunity to inspire the next generation to study in the maths and science field. It was also great fun as a teambuilding experience."

The three-day annual event was attended by 150 groups of secondary schoolchildren from around the country – with 25 representatives from Cambridge University departments and industry taking time out from their day jobs to demonstrate how physics is applied in the real world.

More than 2,500 GCSE pupils who attended the event were asked to rate the presentations – and the AWE team was voted second overall.

Professor James Stirling, head of the Cavendish Laboratory, said: "AWE's level of engagement at this event is impressive. It is one of the few presenting organisations which brings a fresh team every year with a changing demonstration."

 AWE works with young people to encourage interest in science, engineering and technology as part of its schools liaison programme.



Second spot confirms outstanding training

AWE's Skills Academy is celebrating after being named second in the Top 100 Apprenticeships Employers' List.

The national recognition follows regional success, with the academy named Thames Valley's best large apprentice employer in the National Apprenticeship Awards and National Training Awards.

The Top 100 list, compiled by the National Apprenticeship Service and City & Guilds, recognises excellence in businesses that employ apprentices.

Paul Gardiner, the manager of the Skills Academy, said: "This award and recognition in the Top 100 show AWE is being recognised, both locally and nationally, as an outstanding provider of technical training.

"This award recognises the commitment throughout the organisation to developing our employees and providing them with the full range of skills required to ensure they can enjoy a rewarding career.

"It's great we've received this as we celebrate 60 years of developing the skills of more than 4,000 young men and women."

The National Training Awards recognise



organisations that have delivered outstanding training programmes, while the National Apprenticeship Awards celebrate the achievements of the country's most outstanding apprenticeship employers and their apprentices.

Both awards are organised by the National Apprenticeship Service, which received more than 1,500 high-quality entrants this year.

Dr John Chudley, the National Apprenticeship Service's divisional area director, said: "This year's awards were a terrific showcase of the outstanding wealth of talent we have across the Thames Valley. Given the volume and high calibre of entries we received, I'd like to take this opportunity to congratulate AWE for this superb achievement."



AWE team takes UK Challenge title

A team from AWE saw off opposition from more than 40 companies to win the 2012 Intelligent Sport UK Challenge.

The UK Challenge is a multi-discipline corporate team event which combines adrenaline sports with strategy and mental agility.

Three AWE teams took part in the event in Stirling, Scotland. AWE's mixed team came seventh and AWE's novice team finished 10th and won the best novice category.

Phil Haycock, principal engineer and a member of the winning team, said: "It

is a great feeling when all the time and effort put into training and working as a group pays off."

As part of the build-up to the event, AWE raised more than £12,000 for charities including the NSPCC and the Dame Kelly Holmes Legacy Trust. connect | 4 5 connect

AWE graduates spend a lot of their time learning – but they also dedicate themselves to developing challenges for talented school students who may one day follow them into the engineering profession. Connect reports on three 2012 school challenges...

Talented students rise to engineering challenge

Schools put their design and engineering skills to the test when they competed in AWE's annual Schools Engineering Challenge

A team of AWE's graduates challenged the students to build a device to launch an object. Advice and help were available from the graduates as well as a group from the AWE Skills Academy.

The event for the 14-15 year olds, which has been running for 16 years, demonstrated the importance of teamwork, material selection and planning – all vital aspects of a career in engineering or science.

Murray Purves, an AWE physicist and a member of the graduate team, said: "Everyone really enjoyed taking part in the challenge, and it was clear the teachers enjoyed it, too. I was really impressed with the range of ideas and designs that the students came up with, many of which showed real talent and originality."

Gary Butler, a senior manager at AWE, said: "The event was a great success: the whole day was both well thought out and well organised. The pupils learned a great deal about how AWE works and how engineering can be challenging, at times, but also a great deal of fun."

AWE managing director Andrew Jupp presented the prizes. First place was awarded to the team from St Bartholomew's School, Newbury who received £1,000 to spend on

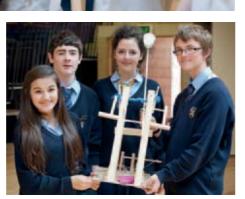


scientific or technical equipment for their school.

Second place and £400 went to Park House, Newbury, while third place, and £200, went to Kennet School, Thatcham.

The schools that took part were: Hemdean House School, Reading; St Bartholomew's School, Newbury; Park House School, Newbury; Kennet School, Thatcham; Aldworth Science College, Basingstoke; Robert Mays School, Hook; and The Vyne Community School, Basingstoke.







Excellent reactions...

Children from seven local primary schools took up AWE's annual Chain Reaction Challenge.

The event, held at Tadley Community Centre and run by a group of AWE graduates, aims to encourage young people to develop a passion for science by showing just how much fun it can be.

Pupils from years five and six are tasked to design and construct a chain reaction device using only classroom and household objects.

The first challenge tested the pupils' engineering skills as they were asked to build a tower out of newspaper and tape to carry an "Olympic flame"

The children then looked at recycling as they made and decorated watering cans out of milk bottles and planted seeds in kitchen roll tubes. This was followed by several chemistry demonstrations.

During the afternoon, the pupils, aged between nine and 11, put the last touches to their Olympic-themed chain reaction devices and talked the judges through their designs.

The judging was carried out by AWE's Graeme Nicholson, director Science & Technology and acting director Production Operations; Shan Martin, director Human Resources; and Duncan Broughton, a materials scientist.

Graduate Rachel Strickland said: "The pupils' chain reaction devices were excellent, making the judges' decisions difficult. The graduate team has received nothing but positive feedback. Seeing how much the pupils enjoyed themselves during the day was very rewarding."

The schools that took part were: Aldermaston CofE Primary School; Ashford Hill Primary School, Thatcham; Brimpton CofE Primary School, Reading; Sonning Common Primary School, Reading; South Lake Primary School, Woodley; The Willows Primary School, Newbury; and Whitelands Park Primary School, Thatcham.

The winners were Whitelands Park Primary School, who received the trophy and a cheque for £300. Second place and a cheque for £200 went to The Willows, and third place went to Brimpton CofE Primary School, with a cheque for



Moment of pride as graduates' hard work stretches schools



Bright sparks from local schools impressed organisers at this year's AWE A-level Science

The event forms part of the company's AWEsome Science campaign, which aims to foster an interest in science at a young age. The challenge is intended to complement schools' curricula and encourage students in their study of science, through a series of challenges and puzzles.

Nine schools attended the event at Tadley Community Centre, with the students tackling a variety of problems, including creating an energetic pyrotechnic reaction, solving a "crime" by using

forensic science techniques, navigating a laser through an optical maze and using trebuchets to fire at specific targets.

The challenge was organised by a team of 10 AWE graduates with the help of project sponsor John Ansell, one of the company's assurance governance managers. The day finished with a talk from chief scientist Peter Roberts, who shared insights from his career.

The feedback received was very positive, with all students finding the challenges stretching but

AWE graduate Heather Lacy said: "I feel

incredibly proud of our achievements; we have spent 10 months designing the challenges, using a trial day at Park House School in Newbury to develop them to ensure they stretch the students. It's great the students have participated with such enthusiasm, and the positive feedback has made us want to do it all over again."

The winning team from St Bartholomew's in Newbury won £500, a selection of signed science books, AWEsome Education t-shirts, a trophy donated by AWE's rapid prototype team and a tour of Orion.

The Willink School in Reading came second,

winning £250, a selection of science books and a trophy, and Kendrick School, in Reading, was also awarded a selection of science books as the most innovative team for demonstrating excellent time management and efficiency throughout the day.

Every student received a goody bag as well as information packs on careers in science from a variety of professional institutes.

The other schools that competed were: The Abbey School, Reading; Highdown School, Reading; Kennet School, Thatcham; Little Heath Secondary, Reading; St. Gabriel's School, Newbury; and Trinity School, Newbury.

connect | 6

Leaders of the future will benefit from PONI

One hundred and fifty scholars and experts gathered at the second annual AWE co-sponsored UK Project On Nuclear Issues (UK PONI) Conference.

The conference, opened by the chairman of the Nuclear Industries Association Lord Hutton, centred on "Nuclear stability: from the Cuban Crisis to the Energy Crisis" – themed to coincide with the 50th anniversary of the Cuban missile crisis.

Lord Hutton said PONI has created an environment where lessons learned from the past 50 years could be conveyed to the next generation of nuclear decision-makers and policy-makers through innovative thinking – crucial if new and changing threats to global

security are to be managed in the future.

UK PONI is a forum allowing nuclear scholars to engage with experts on a wide variety of contemporary issues. As part of the US PONI, founded in 2003, UK PONI aims to promote the study on nuclear issues with a European focus.

The conference was attended by representatives from UK government, industry and academia – including the Royal United Services Institute, MOD, the Foreign and Commonwealth Office, Jacobs, Rolls-Royce, Lockheed Martin, NATO, Babcock, King's College London and Cambridge University.

AWE's Martin Gilmore said: "It is vital

AWE continues to support and contribute to the broad discussion on nuclear commerce in the 21st century.

"AWE, as the lead and custodian for weapons and national nuclear security activities, must ensure technical and programmatic issues are communicated to, and understood by, all of our stakeholders: our allies, customers, military, decision-makers and, most importantly, our community

"PONI provides the AWE leaders of the future with an invaluable opportunity to develop the issues and discussion points with their international peers across the security and civil domains."

Orion inspires young science winner Will

A student from The Hurst Community College has been named AWE's Young Scientist of the Year.

Will Maidment, 14, of Tadley, won the prize after impressing judges with his commitment to science as a regular contributor to class discussions and through his ability to inspire others.

Teachers across North Hampshire and West Berkshire were invited to nominate a student from Year 9 who they consider to be an outstanding young scientist.

The entries were blind-judged by a panel of AWE's most senior scientists who were impressed by the standard of entries and enthusiasm of all the students who had been nominated.

The quality of entries was so good that the judges said it was hard to choose between Will and runner-up Alice Laidler, from Kennet School, in Thatcham. Therefore, both promising students were invited to tour the Orion facility and meet some of the company's scientists and engineers.

The trophy was presented to Will by Andrew Randewich, AWE's head of plasma physics, during a visit to the stunning new Orion laser facility. Alice received an engraved photo plague.

Will said: "It was fantastic to be given the chance to go round the Orion facility and to hear how the lasers work. It was also a great opportunity to meet scientists and to get an appreciation of what it's like working in their chosen field. It's encouraged me to



think about taking my science studies on to A-level."

Andrew Randewich said: "Hopefully, we have further increased their already considerable enthusiasm for science by showing them the kind of facility operated to achieve world-leading 'big science'."

Three other entrants – Leela Richardson from The Willink School, Burghfield Common; Saskia Tilbury from The Clere School in Burghclere; and Phillip Coulam-Jones from Denefield School in Reading – received a small trophy to recognise they were finalists in the competition.



Cash injection will help air ambulance

A generous donation from AWE will help the work of the Hampshire and Isle of Wight Air Ambulance service and the many volunteers who help its fundraising activities.

AWE's Community Committee presented the cheque for £1,000 on behalf of the company after the charity was nominated by a member of staff.

June Leatheam, community and

corporate fundraiser for the air ambulance, said: "We are very grateful for the marvellous support that has been given by

"The service receives no funding from central government, relying solely on voluntary donations. It costs the charity £110,000 a month to keep the air ambulance flying and we couldn't do it without the constant support we receive

from companies, and individuals, across the region."

Michele Maidment, secretary of AWE's Community Committee, said: "The work those involved with the air ambulance do is often unrecognised, yet extremely vital.

"The difference those minutes can make in getting someone to hospital quickly can never be underestimated. AWE is delighted to support the service in this way."

On top of the world...

AWE's business resilience team is celebrating after winning the team of the year title at the Business Continuity Institute (BCI) Global awards.

The team was praised for implementing a cross-organisational resilience programme that includes threat planning and horizon scanning, as well as an incident response.

Lesley Grimes, AWE's business resilience manager, said: "It's a huge achievement as we were competing against major global companies, and this is great recognition for AWE and all the team's efforts over the last few years."

Steve Fussey, AWE's director Site, said: "This is proof of the real progress we have made in business resilience."

"Ensuring we are able to respond to any situation with tried and proven processes is an essential part of supporting the AWE mission, and this award is testimony to the real progress we have made."

The awards formed part of the BCM World Conference gala dinner, with around 350 guests celebrating the outstanding achievements of business continuity professionals working worldwide.



Charity praises outstanding supporter

AWE has further strengthened its ties with a popular local charity through an additional donation and several supermarket carrier bags of stamps.

The company has given £550 to Naomi House, based near Winchester, which provides support to children and young adults with life-limiting conditions.

The stamps are being collected by the charity so they can be sold on by the kilo to collectors hoping to find a rare stamp.

The charity needs support so it can continue to provide respite breaks, emergency support, hospice at home care and family support free of charge to local families

AWE was recognised as an outstanding long-term supporter at an awards evening hosted by the charity.

Fiona Hansford, corporate fundraiser for Naomi House, said: "AWE has supported us since 1998 and has raised more than £30,000 in many different ways. Their continuing support is invaluable to us and we wanted to recognise and thank them for this at our awards evening."

Michele Maidment, AWE's Community Committee secretary, said: "We are delighted to be able to offer continued support to Naomi House as it is a popular charity with our staff and the local community."



Look what's cooking...

AWE has helped one of its charities of the year, Cornerstone, in a number of ways this year.

In the summer, the company made a donation of £500 to Children 1st West Berkshire (Cornerstone) which provides a vital stepping stone for those leaving foster care.

The charity is often referred to as Cornerstone, after the name of the house where the young adults are based.

The money will go towards a new cooker for the main house which urgently needs to be replaced. A separate cheque, for £150, was also handed over from a charity pot the company makes available if key areas of the business can demonstrate a consistent and

excellent safety record.

The aim of the home, which can house up to four young adults, is to bridge the gap between officially leaving care and taking the daunting step of achieving independence and self-sufficiency.

The residents are aged between 16-21 and the house not only provides a roof over their heads and a safe environment, but also gives them the opportunity to acquire essential life skills including social skills, learning how to cook and organise their time, and how to budget on a set income.

Julie Barclay Clark, one of the charity's trustees, said: "It is our ambition to do all that is possible for those in our care, to see that

they flourish rather than fail.

"We're delighted to have been chosen as one of AWE's charities of the year – and, as we are a new charity, the potential value of this exposure is tremendous."

Fiona Rogers, AWE's head of corporate communications, said: "Cornerstone makes such a difference to young adults with the help it gives them at such a critical time in their lives. We're very happy to be supporting this impressive project."

The support continued when AWE staff rallied to the call to provide several kitchen items, including a couple of microwaves, baking equipment and utensils, cutlery and crockery.

