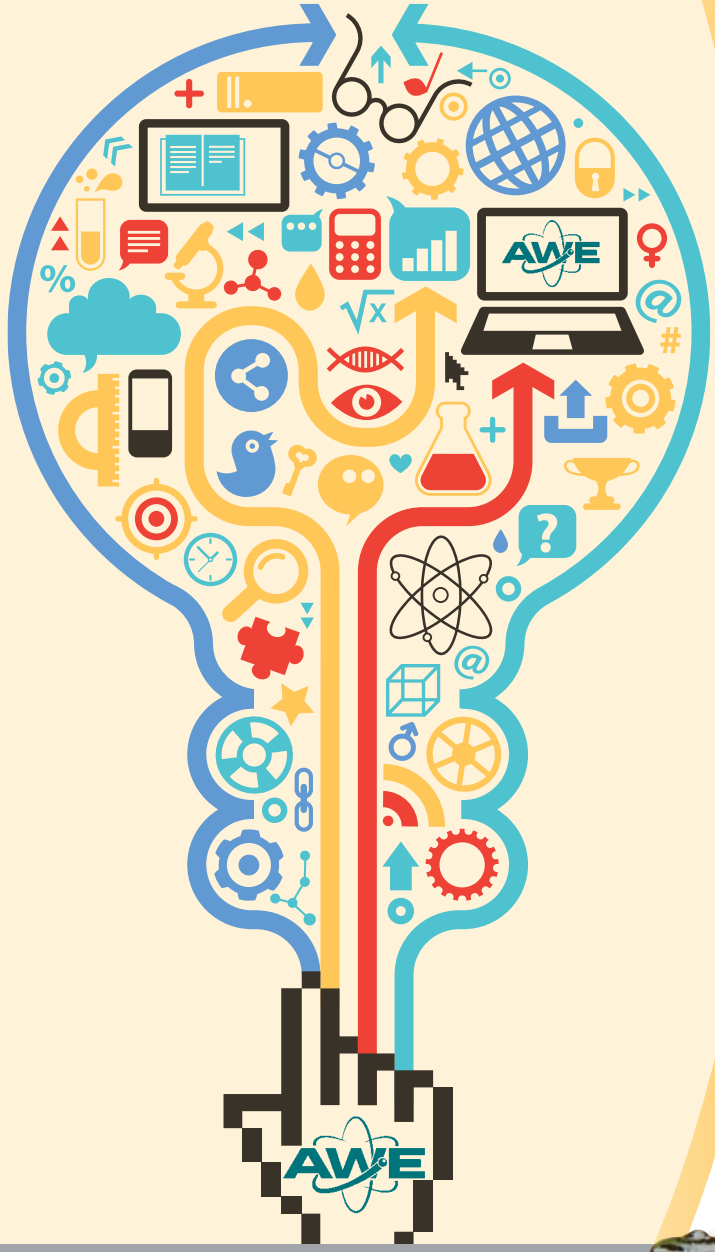
the newsletter for AWE's neighbours

Connect



We're going digital too…

AWE would like to send out a big thank-you to readers of *Connect* who took part in our 2014 community survey.

The feedback was that you enjoy hearing news from AWE in our twice-yearly newsletter.

We are delighted to announce that we are launching a digital version of *Connect* which will be available via email and on the new, improved AWE website **www.awe.co.uk**, due later this year.

We will continue to deliver a paper copy of the newsletter to neighbours on our distribution list who prefer a printed version.

As part of our continued commitment to inform you, our neighbours, we welcome feedback – at the email address below – on how well *Connect* is keeping you updated on AWE's work with the local community and schools.

If you would like to sign up to receive *Connect* by email in the future rather than in its current printed format, email us at connect@awe.co.uk

INSIDE THIS ISSUE • AUGUST 2014

AWE's director of human resources Shan Martin, centre, skills academy instructor Andy Salter, bottom, AWE skills academy manager Rob Cottrell, right, and Andy Mackinder from the MoD, left, presented the certificates of graduation to the apprentices

Skills graduates 'vital to the future'

There were smiles all round at the 2014 AWE skills academy graduation.

Twelve apprentices received certificates after completing a three or four-year apprenticeship at AWE.

Andy Mackinder, head of the strategic weapons project team at the Ministry of Defence (MoD), said he was very proud of the apprentices.

"I would like to thank the graduates and the people who have supported them along the way on behalf of the MoD," said Andy.

"I am hugely proud of the AWE apprenticeship scheme. It is an integral part of the skills base to manage the nuclear weapons programme today, tomorrow and in the future."

Rob Cottrell, AWE skills academy manager, said: "As a former AWE apprentice, I am proud to play a small part in the graduates' working life.

"The skills, determination and passion of the graduates are vital to delivering AWE's future programme."

NEWS IN BRIEF

Sword shows we're a cut above

AWE has been awarded a British Safety Council sword of honour for the third year running.

The sword of honour represents the pinnacle of achievement in the world of health and safety management.

Delivering safe and secure operations is a core priority for AWE, with the health and safety of our employees, the community and the environment at the heart of everything we do.

AWE was awarded the sword of honour twice in 2013 for its construction programme.

Andy McCluskey from AWE construction said: "We don't enter these schemes to achieve the awards, but to benchmark our construction environment, safety and health (ESH) performance against the best of the best worldwide."

AWE has won five British Safety Council five star awards for occupational health and safety management and a British Safety Council five star award for environmental management.

Andrew Jupp steps down as MD

Dr Andrew Jupp is stepping down as AWE managing director after a career with the company that has spanned nearly 30 years including nine as a member of the executive leadership team and four as MD.

Under Andrew's stewardship, AWE has achieved a number of important milestones including the successful negotiation of the current MoD contract pricing period, the creation of the ABL alliance to sustain and develop the existing expertise at Coulport, a stronger profile and reputation across the wider defence nuclear enterprise and significant growth in the highly regarded skills academy and graduate programme, championed by his personal passion for investing in scientific, engineering and technical talent.

John McLachlan, chairman AWEML, said: "Andrew embodied the behaviours that underpin AWE's values and ethics today, including those of safety and security of all employees and the local community."

While the search for Andrew's successor is under way, Rob Fletcher, previously director Commercial, has been appointed acting managing director.

Orion is the star of summer exhibition

Scientists from AWE and Imperial College London wowed schoolchildren at a joint science exhibition showcasing cutting-edge science and technology research.

AWE's attendance at this event demonstrated our firm commitment to promote the national STEM (science, engineering, technology and mathematics) agenda through our links with UK academia.

The exhibition at the Royal Society in London, called "Set the controls for the heart of the sun", showcased fusion research at one of the world's most powerful lasers, Orion, at AWE Aldermaston.

The interactive display showed attendees how the laser recreates conditions close to the centre of the sun.

At Orion in Aldermaston, a combination of laser pulses, lasting for just a fraction of a second, is fired at an area 10,000 times smaller than a pinhead, producing temperatures of millions of degrees at more than 10 times the density of water.

These experiments are getting closer to the conditions in the centre of the sun and many other stars in the universe and are helping scientists understand how energy is transported around the sun.

The interactive display was a big hit with the pupils

We've beaten jobs target

AWE has beaten a target of having five per cent of its workforce on apprenticeships, student or graduate training programmes.

Earlier this year, AWE signed up to the 5% Club and committed to meeting this target.

The 5% Club is focused on creating momentum behind the recruitment of apprentices and graduates into the workforce. Its members consist of public and private companies in the UK who want to make a difference and support the UK's ability to compete in increasingly tough global markets.

The signing of this charter illustrates the company's continued contribution to ensuring the UK retains its reputation for innovation and addresses the problem of youth unemployment.

Signing the charter, AWE's director of HR Shan Martin said: "AWE recognises the need to develop a skilled and diverse workforce for the future.

"As one of the country's leading apprenticeship providers, AWE has never been more committed to providing opportunities for young people.

"We are proud to be one of the first to sign up to the 5% Club, and look forward to supporting this industry-wide initiative in the months and years to come."

Rare colony has the perfect habitat

AWE Aldermaston has a rich eco-system which includes many protected species.

One of the special inhabitants is a colony of great crested newts, the least common of three species found in the UK.

At AWE, we recognise our responsibility to preserve, protect and improve the environment for present and future generations.

Great crested newts are Britain's largest newt species and, although given legal protection, populations have declined over recent years as a result of destruction of their habitat.

To protect the species at AWE, Aldermaston ecologist Piran Borlase-Hendry and environment specialist Simon Tapley lead a survey of great crested newts every year.

To survey the newts, the team first has to catch them and this requires a licence, because as a protected species, not just anyone can legally handle a newt.

Piran, one of 10 licenced newt handlers at AWE, said: "Having a small group of enthusiastic and licensed staff enables AWE not only to monitor the newt population, but also to remove them from harm's way on construction sites.

"This, in turn, enables us to reduce delays to projects and eliminate the cost of external contract support."

AWE has the perfect habitat for newts, with several ponds at Aldermaston where they flourish.

The annual survey employs a range of techniques to catch the newts, including non-lethal traps made from bamboo canes and plastic bottles.

This year, the conservation group recorded the two other native UK newt species – palmate and smooth.

The females are not only larger than the males, but also sometimes eat them!

Newt handlers at AWE examine a great crested newt caught in this year's conservation survey

Members of AWE's environment team helped rejuvenate the wildlife area of Aldermaston primary school. Three staff from AWE were joined by three members of NSG Consulting to clear scrub, remove vegetation from the pond and create features to encourage greater biodiversity

Bats, birds, badgers, reptiles...

The AWE conservation group holds licences from Natural England enabling it to do an annual survey of the population of great crested newts that breed in an old pond system on site.

We also host three species of bat which roost in various structures and the varied habitats are favoured by nesting birds, most notably black redstarts and woodlark.

There is an extensive badger sett in a quiet corner of site and the lowland heath, itself a vanishing habitat nationally, is a good place to see adders and slow-worms.

FACTFILE
Great crested newts

- **The great crested newt (*Triturus cristatus*) is the UK's largest newt, reaching a maximum adult overall length of up to about 170mm, although size varies between populations. Adults are easily distinguished from the two other native newt species, the smooth and palmate, by size and colouring; these two smaller species reach a maximum of around 100mm.**
- **The skin of adult great crested newts is granular in appearance. It has a black or dark brown background colour with darker spots that in males extend on to the crest. It has very fine white spots on the lower flanks. Both sexes have a vivid orange or yellow belly with an irregular pattern of dark black spots or blotches.**
- **Although now afforded a high level of legal protection, great crested newts populations have suffered a major decline over the last century, primarily as a result of habitat loss. The species may be abundant locally in parts of lowland England, but in much of the country it is scarce.**

The male newt, below, is identified by its luminous crest during the breeding season

Enthusiastic Alex takes STEM message to schools

AWE senior mechanical engineer Alex Taft mentors at local schools to help children with STEM subjects.

Alex joined the AWE school mentoring scheme in 2009 after completing a BEng and PhD in mechanical engineering at Swansea University. He said: "I have always felt that certain careers are poorly represented in schools, particularly those with a basis in STEM.

Alex Taft

"I have always had a desire to return to school to help promote the opportunities available in STEM and mentoring seemed the ideal opportunity.

"I have been lucky enough to work at all levels of the Schools Mentoring Scheme during my time at AWE and I have to say it has been a most rewarding activity."

For more information about the scheme visit **www.awe.co.uk**

Schoolchildren enjoying a spectacular chain reaction

Towering effort wins it for St Nicolas

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

The Chain Reaction Challenge is run by a group of graduates as part of AWE's schools programme, which aims to foster and inspire an interest in science, technology, engineering and mathematics (STEM) subjects.

In the challenge, schoolchildren aged between nine and 11 are tasked to design and construct a chain reaction device, using only classroom and household objects.

This year, the first challenge tested the engineering skills of the pupils from years five and six. They were asked to build towers from straws and masking tape to hold a weight.

The judging was carried out by The Mayor of Basingstoke and Dean, Councillor Roger Gardiner, Councillor Mollie Lock, Mortimer and Stratfield Parish, and AWE's Professor Andrew Randewich and Dr Duncan Broughton, project sponsor of the chain reaction.

Cllr Gardiner said: "AWE is to be congratulated for the great work it does in the local community and for promoting science and engineering in our local schools. Thank you AWE for a successful, fun day."

The winners were St Nicolas CofE Junior in Newbury, who received a cheque for £500. Second place and a cheque for £300 went to Aldermaston CofE Primary, while third place went to Fir Tree Primary in Newbury, together with a cheque for £100.

Other schools that took part were Burnham Copse Primary in Tadley, Whitelands Park Primary in Thatcham, Spurcroft Primary in Thatcham, and Tadley Community Primary.

Pupils dip into world of water

Bucklebury Primary School pupils had lots of fun using pond dipping equipment supplied by the AWE schools liaison scheme.

Children aged seven to 11, members of the lunchtime science club, were very excited to inspect frog spawn and insects with underwater magnifying pods.

Parent Sarah Strong, who set up the club, said: "The equipment AWE has lent us has been brilliant. The children love discovering creatures in the pond."

Through AWE's schools liaison scheme, schools can borrow equipment which supports the science curriculum. For more information go to **www.awe.co.uk**

AWE backs local transport

As part of AWE's commitment to support local and national charities, the company donated £1,000 to Basingstoke Dial a Ride and £200 to Shopmobility Basingstoke.

AWE engineer and community committee member Sharon Vasic, centre, presented donations to the two Basingstoke charities.

PROFILE

Heather Parkes
chartered chemical engineer

As a champion of women in engineering, Heather Parkes from AWE talks about her experience at one of the UK's leading centres of excellence for engineering.

AWE employs experts in a range of disciplines – scientists, engineers, technicians and craftspeople. For information about careers at AWE go to www.awe.co.uk

Heather explains why engineering is a great career path for women.

Why did you choose AWE?
"My main draw to AWE was my desire to work in a challenging environment. Ultimately, as a chemical engineer I was intrigued by the variety and scope of the technical work AWE engineers do. AWE is committed to supporting diversity and the development of female talent."

Why do you enjoy engineering?
"I love engineering because I feel challenged on a daily basis in my role. Being an engineer, I get to create solutions to real-world problems. There is still a belief out there that engineers have to get their hands dirty fixing things, when in fact there is a very diverse scope for a career path within engineering. I think a large part of the reason why fewer women take up engineering is a perception issue."

How would you encourage a young woman into this field?
"I would aim to inspire them, as I was inspired; by letting them know how engineers impact the world. Nearly everything we touch in this world has been engineered, from mobile phones, to clothes, to food. I would also tell women that a career in engineering offers a path of opportunity that can lead them across the world. Being an engineer can take you places."

Published by AWE, Aldermaston, Reading, Berkshire RG7 4PR. Designed by Pages Creative (www.pagescreative.co.uk).
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