



# desider

the magazine for defence

'Outstanding' support from DE&S has helped deliver world class helicopter capability





A Puma is pictured going through its paces during an open day at RAF Benson to showcase the latest capabilities of the UK's helicopter fleet

### desider

www.gov.uk/government/publications/desider

#### Editor:

**Steve Moore** - 9352 30537 or 0117 9130537 **stephen.moore544@mod.uk** 

#### Distribution Manager:

Dick Naughton - 9352 34342 or 0117 9134342 DES HR-Corp-BusMgr1a@mod.uk

#### Advertising:

Richard Stillman – Ten Alps Media, 1 New Oxford Street, High Holborn, London SC1A 1NU Tel: +44 (0)20 7657 1837

Fax: +44 (0)20 7379 7155 richard.stillman@tenalps.com

#### Printing:



desider is distributed free to DE&S employees and the equipment capability organisations. Copies may be sent to readers outside MOD, including in the defence industries. While the editor takes care to ensure all material produced is accurate, no liability can be accepted for errors or omissions. Views expressed in desider, and products and services advertised, are not necessarily endorsed by DE&S or the MOD. All editorial submissions must be cleared by the relevant MOD authorities with content for advertorials to be cleared by the relevant MOD project team before publication.

#### © Crown Copyright

This magazine is produced on Cocoon Silk 90gsm which contains 50 per cent recycled and de-inked pulp from post consumer waste and Forest Stewardship Council certified material from well-managed forests.





### **FOREWORD**

by Bernard Gray, Chief of Defence Materiel

he appointment of Tony Douglas as the first Chief Executive of DE&S is, to my mind, an inspired one for the organisation.

Over the last few months we have welcomed our Transformation Partners from PwC, CH2M Hill and Bechtel, with their undoubted skills in finance, human resources and project and programme management. Paul Skinner, with a lifetime's experience of managing big ticket projects, is in his first year as Chair of our non-executive board which is now taking shape; he is putting the final touches to a team which will boast a wide range of skills from an even wider range of companies and organisations.

Now another major piece of the jigsaw is in place, with a Chief Executive who will arrive at DE&S by the end of this year to continue the organisation's transition to its 'match fit' status in 2017

In my report on defence equipment procurement six years ago I underlined the importance of DE&S having private sector skills and leaders with a record of delivering big projects. Tony has these skills and experiences in abundance. He comes to us from Abu Dhabi Airports where, as Chief Executive, he spearheaded infrastructure development.

Anyone who has seen pictures of the airport's Midfield Terminal complex – 700,000 square metres of space-age construction ready for airline operations in 2017 – will know the scope of projects that Tony has been involved in. He also lists Abu Dhabi Ports, Laing O'Rourke, British Airports Authority and Heathrow Airport – where he delivered Terminal 5 – on an impressive CV.

While the public sector may be somewhat unfamiliar to him, I believe this is no disadvantage. He will bring a new approach to our business, a fresh pair of eyes, and an abundance of energy and enthusiasm. He will be just what DE&S needs.

It may be a few months before you see much of him at Abbey Wood, but I look forward to introducing him to as many of you as I can in my remaining time with DE&S.

I know you will make him welcome.

#### **NEWS**

- 11 New DE&S chief welcomes 'chance to serve'
  Tony Douglas has described his appointment as Chief
  Executive of DE&S as a chance to serve his country
- 16 New green generators for RN Minehunter A Royal Navyminehunter has received new generators as part of a support period in Bahrain, a first for DE&S and contractors Babcock
- 18 Another £285 million invested in Successor
  Design work for the Royal Navy's next generation
  nuclear deterrent submarines continues with another
  announcement of investment
- 19 New hearing protection arriving this summer Sophisticated hearing protection will be provided for UK troops on overseas operations and local training under three contracts for new earplugs
- 20 New Merlin support

  The latest helicopter support arrangements signed by
  DE&S has been hailed as an example of the flexibility of
  support to UK Forces
- 22 Naval refit: new RN uniforms launched
  Sailors on board HMS Lancaster are the first to wear the
  Royal Navy's newly-designed uniforms
- 26 Sutherland back at sea after 13-month refit Type 23 frigate HMS Sutherland has sailed for the first time after a major refit with her captain praising the partnership of organisations which successfully completed the work



#### **FEATURES**

#### 32 Helicopters for the future

DE&S is providing one of the most capable and advanced helicopter fleets in the world, with enhanced capability going on show at RAF Benson

- The perfect package get it right first time!
  Packaging military equipment is serious business for
  DE&S, a complex and vital process for small items up to
  spare parts for ships and submarines
- 36 UK munitions transformation job done! DE&S' long-term partnering agreement has seen upgrading of ammunition factories
- 38 Making the most of a virtual world
  Training and education for soldiers in the land
  environment is facing revolutionary change

#### 40 Carrier updates

Latest progress on the building of *Queen Elizabeth* and *Prince of Wales* 

#### 44 21st century mine hunting

New contracts will demonstrate a fresh approach to clearing sea mines to keep the Royal Navy safe

#### 46 Training to succeed

The UK  $\overline{\text{M}}$ ilitary Flying Training System is approaching major milestones







#### **REGULARS**

#### 48 First Person

Tony Graham, DE&S' outgoing Director Ships, gives his perspective on his time at DE&S, the highlights of his career and his favourite ways of relaxing away from work

#### 53 DE&S People

A round-up of news about people in DE&S, including a 60-second snapshot of a chosen member of staff

**Learning and development**Safety, technology innovation and reform of acquisition lead the agenda at events to improve professionalism in DE&S





## AIR MARSHAL SIMON BOLLOM, Chief of Materiel (Air), uses his 17 years in acquisition and support to reflect on recent successes in the Air domain and the fundamental part that leadership and risk-taking has in making the job at DE&S better.

e have brought fantastic new capabilities into service – a historically unprecedented recapitalisation of the RAF which makes it the envy of many air forces. At the same time we have made huge savings in cost of ownership through support transformation.

In the last year the Fast Air Support Team has generated approval for Brimstone onto Typhoon; the Airseeker team has overcome challenges to bring the capability straight onto operations; the C-17 Team successfully exploited an off-the-shelf solution to provide crew and passengers with secure beyond line of sight communications and, through exceptional project management, delivered full operating capability three months ahead of schedule; and the Air Commodities Team delivered a bespoke solution to improve defence's CO2 charging rigs now being used at 12 tri-service locations. These demonstrate commitment, pro-activeness and sheer determination of the 'Air Team' and the wider DE&S.

DE&S' best cost performance since 2005 and the best time performance since at least 2001 is clear evidence we are improving, but we still have much to learn, particularly in understanding risk to delivery and managing it effectively. This does not mean that we should become risk averse – far from it. The nature of military operations is that 'things happen', requirements will change rapidly and we need to be able to respond to this and the needs of the front line.

I arrived in DE&S for a second stint in 2003 as the deputy team leader on Tornado, became the team leader, the Operating Centre Director and then Chief of Materiel (Air) in October 2012. During that time I have lived through many change programmes. We now do things that we used to do with significantly fewer people, less money and greater time pressure against a backdrop of more stringent regulation, particularly in finance and airworthiness.

So why is the DE&S transformation different this time? The one significant difference to me is the focus on the process of getting the job done efficiently and deploying the right people with the right skills. Most past programmes have focused on organisational change, not the way we do business. Our Transformation Partners (Managed Service Providers) are skilled and experienced people bringing new tools and techniques and a different approach for the long haul. But - and this is important ultimately we still own the responsibility and accountability for outputs; we decide how we take the new ideas forward; and we need the courage to put aside any preconceptions and undertake a 'shift of thinking'. If we can achieve this it should make the job easier,



allow us to concentrate on the important things and create some headroom for us to innovate and to do more.

All change sinks or swims on the commitment of leaders at all levels within an organisation to make it happen. Whenever I have been driving through change – whether restructuring an Operating Centre or driving new support contracting arrangements – I have first had to convince myself the change was necessary and, having done that, convince the team to follow and to take leadership responsibility themselves.

We need to understand and articulate why change is necessary, what part we have to play in making it happen, and then personally commit to putting our time and effort into making sure that it does.

I am looking forward to the challenge ahead. The freedoms that we have been granted as a Bespoke Trading Entity provide a unique opportunity to make a difference by doing different things. Opportunities like these are often fleeting and need to be grasped by all.



## DE&S Non-Executive Board Members

he Non-Executive Board which will help guide DE&S towards and beyond its 'match-fit' status in 2017 has been unveiled.

And the five board members can boast massive experience in management and delivery of some of the world's largest and most complex programmes.

The board will be led by its chair Paul Skinner, whose track record in delivering big ticket programmes in the resources industry, often with a high technology



#### Paul Skinner

#### DE&S non-executive chair Paul Skinner

is an experienced leader of major global corporations in the basic resources industries and looks forward to bringing his skills to the transformation of DE&S.

He also has board experience as a nonexecutive director of financial services and industrial companies, and in other public sector roles.

"The non-executive governance of DE&S that I now lead will help better define the boundaries of DE&S and will challenge and support it to deliver on its objectives," he said.

He added that he had built a strong nonexecutive board with relevant specialist experience which aligns with what DE&S is doing and would provide a helpful challenge for the organisation.

Paul joined the Royal Dutch Shell group of companies as a student in 1963. During his career he worked in all Shell's main businesses, including senior appointments in the UK, Greece, Nigeria, New Zealand and Norway. From 1999 he was CEO of the Group's global Oil Products business and was Managing Director of The Shell Transport and Trading Company, and a Group Managing Director, from 2000-2003. He was Chairman of Shell Canada, then a publicly-quoted company, between 2001-2003.

In 2001 he became a non-executive director of Rio Tinto, the global mining and minerals company, dual-listed in the UK and Australia, and was Chairman over the period 2003-2009 which saw a major programme of expansion across all its product groups. He was Chairman of Infrastructure UK, within HM Treasury, over the period 2009-2013 and oversaw the development of the UK's National Infrastructure Plan and related policy initiatives.

He said: "My own experience has been in the basic resources industries which are about the delivery of large scale, complex capital projects, often with a high technology component, and managing supply chains of comparable dimension to those at DE&S. I'm hoping, and my early involvement bears this out, to be able to use that experience to support DE&S in what it is trying to do.

"The board is not here to run the organisation. We are here to challenge and support and help it improve performance. DE&S will benefit from our different set of skills. We are a group who are essentially an extension of the team."

As well as a host of appointments including being a member of the Defence Board at the MOD between 2006-2009, he was, at the invitation of the Prime Minister, a UK Business Ambassador between 2008-2012.



#### Katherine Harmestor

Transformation of the Royal Mail's procurement team to achieve world class status stands Kath Harmeston in good stead as she joins DE&S as a non-executive director.

As Group Procurement Director she managed a spend portfolio of £2 billion and directed a team to deliver more than £650 million savings for the business.

"I have many years of public and private sector experience in procurement and DE&S interests me due to its diversity and complexity," she said.

"My experience in procurement change and transformation is particularly relevant to the DE&S transformation programme. I'm really proud of the work I did with the Royal Mail procurement team, which enabled us to achieve Platinum accreditation with The Chartered Institute of Purchasing and Supply."

Katherine added: "I'm delighted to join the DE&S NEDS team who all have vast experience in leading and delivering organisational change. Collectively we can help DE&S become more flexible, creative and connected to its customers and suppliers."

Ms Harmeston's latest role is Group Procurement Director at The Co-operative, responsible for a vigorous business efficiency programme.

She has held key technical advisory and change roles within a diverse range of multinational organisations including Atos Consulting, Diageo, Smithkline Beecham, Astra Zeneca, the MOD, Kaizer Permante, Shell and Caterpillar.

Her career began as a research chemist for Courtaulds Research UK progressing into commercial roles with BASF and Phillips before moving into consulting.

"It is very important to me to be a part of something as significant as the DE&S transformation programme, as its success plays a vital role in defending national security," she said. component to them, saw him work for all Shell's main businesses, including senior appointments across the globe.

He has also worked in the public sector as chairman of Infrastructure UK where he oversaw the development of the UK's National Infrastructure Plan.

His fellow board members have been chosen for their experience in both public and private sectors and for their successes in bringing about organisational change.

Andrew Wolstenholme led delivery of

the Terminal 5 programme at Heathrow Airport before becoming Chief Executive of Crossrail. He also has military service behind him, giving him an empathy with the world of defence.

James Dorrian has worked in all main sectors of the global oil and gas industry with huge experience in human resources.

Kath Harmeston took the Royal Mail's procurement team to world class status and is skilled in making businesses more efficient.

And Paul Smith brings a wealth of experience from his time in the public sector, including working alongside top level budget holders in the MOD.

"We have built a strong non-executive board with the relevant specialist experience which aligns with what DE&S is doing, and will provide a helpful challenge for the organisation," said Paul.



#### Andrew Wolstenholme

An empathy with the world of defence will help Andrew Wolstenholme in his support role to DE&S.

Andrew, who led delivery of the £4.3 billion Terminal 5 programme at Heathrow before becoming Chief Executive of Crossrail, served as a Queen's Royal Irish Hussar and a Royal Engineer before resigning his commission to pursue a career in business and engineering.

"With my engineering and military background I feel a strong empathy towards the world of defence," he said. "I am in a position to add value."

Mr Wolstenholme joined engineering consultants Arup as a bridge designer before working in the USA and Hong Kong on major infrastructure projects.

He joined the airport operator BAA in 1997 as Construction Director for the Heathrow Express rail link and has led a construction industry review which has helped steer government policy.

He said: "DE&S has huge professional capability and delivers across a very complex set of requirements which are ever changing. Organisations that stand still will never ask themselves the difficult questions about how to continually improve and how to give the customer increasingly more value. What I have sensed from my short time so far is that there is recognition in DE&S of the opportunities to improve still further.

"I have 20 years' experience in handling very complex programmes, mostly in the private sector. I look forward to giving support to a board that has only recently been formed."



James Dorrian

James Dorrian is a global HR leader with extensive international business experience and is looking forward to the opportunity to contribute to the public sector.

"DE&S is in a unique place, which is to play a pivotal role in what is the most important priority for a Sovereign government – defence of the realm. And that is a very different level of responsibility and accountability," he said.

"I also sense it is an organisation which has gone through some rapid change and will continue to do so. This will require a lot of flexibility from employees, leadership and management. Some of my own background is very much in that transformation space. I have been involved in leading and transforming big organisations and I hope I can contribute some of that experience."

Mr Dorrian's most recent role was as Executive Vice-President, Learning & Organisation Effectiveness for Royal Dutch Shell but he has worked in all of the main sectors of the global oil and gas industry and has covered the full breadth of HR, with extensive networks and contacts throughout the world. His roles have included HR Director of Shell Gabon, Marketing & Retail Director Shell France, HR Director of Shell UK, Vice-President HR of Shell's European Downstream businesses and Vice-President HR of Shell's global Manufacturing businesses.

"I have only ever worked in the private sector so I am embracing the opportunity to contribute in the public sector. It is a privilege to have a window into the world of the MOD and be part of the process of delivering," he said. "I am hugely excited, very much in learning mode, but at the same time I am keen to share my perspectives and to support the Chief Executive and Board and have a dialogue with them."



Paul Smith

Wide experience of the public sector, including working alongside the leadership of a number of agencies and top level budget holders in the MOD, will give Paul Smith an invaluable role as a non-executive director of DE&S' board.

Paul worked for the Ford Motor Company for 28 years in a variety of finance roles, including three years as Finance Director in the UK.

Since taking early retirement in 2006, he has carried out non-executive director roles in a number of organisations in both public and private sectors. These include the Harpenden Building Society, Herts Valley Clinical Commissioning Group (NHS), Driver Vehicle Standards Agency (in the Department for Transport) and Defence Business Services (MOD).

He also sits on the MOD, DfT, and HM Revenue and Customs departmental audit committees.

"Since leaving Ford, I have thoroughly enjoyed working on the Boards and audit committees of a range of government departments including a number of TLBs and MOD agencies," he said.

"I want to bring this experience to bear on our shared objective of making DE&S a world class delivery organisation, by helping establish an underlying control framework that gives the Board, the Permanent Under-Secretary and the taxpayer assurance that control, risk and governance also are world class."

Paul lives in Hertfordshire with his family and two dogs. In his spare time he enjoys watching most sports and is a keen Tottenham supporter.

## NEWS **V**BRIEF

The Atomic Weapons Establishment has launched the Centre for Computational Materials Science at University College London to support its technical programme, and help nurture and potentially recruit the next generation of computational chemists at AWE. The Centre is expected to provide a pipeline of suitably trained engineering doctorates from which AWE can recruit in the future. The four-year Engineering Doctorate affords significant opportunities for interaction with the students and hence enables strong relationships to be built with AWEsponsored students.

### 82 million

#### Supply of aviation fuel

The Government Pipeline and Storage System has been sold to Compañía Logística de Hidrocarburos of Spain for £82 million. The System's network supplies aviation fuel to UK military bases, including those supporting US visiting forces, and the UK civil aviation sector. An enduring contract has been agreed by the MOD which will protect supply of aviation fuel to the military, while also protecting UK national civil resilience. The company operates a similar network in Spain serving major civil airports and military customers.

#### Sea King Mk4

The final handover has taken place of a Sea King Mk4 from Serco engineers to the Commando Helicopter Force's 845 Naval Air Squadron engineering unit after 23 years of support to the front line. Serco staff have undertaken depth maintenance since 1992 of all the Mk4 fleet before taking on operational support in 2006 to all Sea King aircraft with the Commando Helicopter Force. The Mk4 is earmarked to go out of service next year.

23 years of support to the front line

#### Marchwood military port

The preferred bidder to run Marchwood military port near Southampton is Solent Gateway, a joint venture between port operator GBA Holdings and ferry company David MacBrayne.

#### **MOD Finance Awards scheme**

The MOD Finance Awards scheme is now open for

The awards will recognise the good work of the MOD's finance community, sharing best practice and promoting both individual and team achievements. All MOD staff working within core finance and supporting finance roles are eligible to receive an award. This year there are five entry categories: Emerging Talent of the Year, Effective Leader of the Year, Unsung Hero of the Year, Most Improved Finance Team of the Year, Finance Team of the

Nomination forms can be found on Money Matters Online, accessible via the Defence Intranet. Closing date is Friday 29th May.

## Memorial Appeal

#### Memorial to military and civilians

Former Chief of the Defence Staff, Lord Stirrup, is helping to lead the appeal for a memorial to all those, military and civilian, who served in recent conflicts in Iraq and Afghanistan. Text and phone donation lines have been set up in the quest for £1 million. More details at www. thesun.co.uk/memorial.

#### Queen visits HMS Ocean

Devonport turned out in force to welcome the Queen as she paid her fourth visit to HMS Ocean since the helicopter carrier was commissioned in 1998. She was welcomed into the base during the late March visit by military and civilian staff lining the route and inspected a 96-strong Royal Guard of sailors. HMS Ocean's secondin-command Commander Tony Rackham said: "It was the culmination of years of preparation of the ship from refit to getting ready for sea and operations and then rehearsing for our Royal sponsor."



## New DE&S chief welcomes 'a chance to serve'

ony Douglas has described his appointment as Chief Executive of DE&S as a chance to serve his country.

Mr Douglas, Chief Executive Officer at Abu Dhabi Airports, succeeds Chief of Defence Materiel Bernard Gray and is expected to have completed the handover towards the end of the year.

Appointed by the Prime Minister in March, he will be responsible for Armed Forces' equipment and DE&S transformation.

He will be an Accounting Officer accountable to Parliament for DE&S' annual running costs of around £1.3 billion and will report to the DE&S Board, which was established last year.

"I am absolutely delighted to have the privilege of serving my country and supporting Her Majesty's Armed Forces," he said.

"Delivering their requirements with the utmost service quality and providing best value to the taxpayer is a responsibility that I take with real pride."

Paul Skinner, Chair of the DE&S Board, and a member of the appointment panel, added: "I am delighted that we have been able to attract someone of Tony's calibre to this vitally important role in the national defence structure.

"Together with my Board colleagues

I look forward to working with him in building on recent performance improvements under Bernard Gray's leadership and transforming DE&S into a genuinely world class organisation."

#### The Job:

The Chief Executive Officer is the UK's National Armaments Director and is responsible for DE&S;

- providing equipment and logistic support to current operations, including delivery against urgent operational requirements
- delivering funded equipment acquisition and support outputs, as agreed with Front Line Commands and Head Office
- delivering projects to performance, time and cost targets, in accordance with agreed asset delivery plans
- managing safety, risk and environmental issues in accordance with mandated requirements and appropriate best practice
- representing UK interests in international military and political fora, including Nato and the EU

#### Latest NAO Report

he Government's spending watchdog has praised progress in reforming procurement and support of UK Armed Forces.

But improving the performance of DE&S remains the most challenging element in acquisition reform.

The National Audit Office's latest report found progress in stabilising the equipment plan and in clarifying the roles of MOD Head Office, DE&S and the Front Line Commands.

There is now a clearer separation of responsibilities between the Commands, which request equipment, and DE&S responsible for delivering it. Further improvement in capabilities and skills of DE&S staff and their systems and tools is encouraged.

NAO head Amyas Morse has urged the MOD to ensure it can track benefits to establish whether DE&S' bespoke trading entity status is delivering acquisition reform

"Halting the GoCo competition and shelving that option cost acquisition reform two and a half years' work and £33 million, but has yielded some useful learning," he said

"DE&S now needs to demonstrate how, as a bespoke trading entity, it will address systemic weaknesses in defence acquisition to ensure the MOD can deliver an affordable equipment programme and sustain this over the longer term."

- Tony Douglas joined Abu Dhabi Airports as Chief Executive Officer in 2013 to spearhead the development of the airports' infrastructure in the Emirate of Abu Dhabi, including its iconic 700,000 square metre Midfield Terminal Building.
- Prior to this, from 2010, Tony was the CEO of Abu Dhabi Ports Company where he successfully completed the extensive Khalifa Port and Industrial Zone project on schedule and below budget.
- Before working in the UAE, Tony was the Chief Operating Officer and the Group Chief Executive designate for Laing O'Rourke. As a member of the Group Executive Board, he led accountability for the Group's largest and most complex project delivery activities.
- Before that Tony held senior positions with BAA, the UK's leading airport infrastructure operator, and Chief Executive in charge of Heathrow. He was previously Heathrow Terminal 5 Managing Director, with responsibility for the £4.3 billion Terminal 5 build programme.
- Tony worked for the Kenwood Group as Manufacturing and Global Logistics
  Director. This was his first role on the board of a major internationallyfocused PLC. A mechanical engineer by training, his career began in
  1979 at General Motors, as an apprentice industrial engineer. In 1990 he
  moved to British Aircraft Engineering where he rose to become Product
  Manufacturing Director in its regional aircraft division.



#### Gloucester

#### It's rocket science

DE&S apprentices have been out and about in the community, sharing their knowledge and engineering skills with the next generation.

Ashley Hodgetts, Grant Johnstone and Alastair Milne ran a series of STEM sessions (science, technology, engineering, maths) at Dean Close School in Gloucester, passing on their knowledge of rocket power, both theoretical and practical.

An audience including British, Russian and Chinese students got clued up on power sources, propulsion and the theories of rocket flight as DE&S plays its part in inspiring youngsters towards careers in engineering.



#### Porton Down New cyber lab

Defence Science and Technology Laboratory (Dstl) is opening a new facility to assess cyber threats. The Cyber Evaluation and Assessment Laboratory will help streamline cyber assessments to better understand where vulnerabilities in cyber defence capabilities could lie, and make recommendations on better protection.

Professor Penelope Endersby, Head of Dstl's Cyber and Information Systems Division, says: "Dstl is proud of its record in helping to defend our critical national infrastructure and also in developing new and novel capabilities to preserve the freedom of our Armed Forces to operate on a digital battlefield."

#### Porton Down

#### New facilities for scientists

The first phase of work to provide new facilities at the Defence Science and Technology Laboratory's (Dstl) Porton Down site has finished. The buildings will allow Dstl scientists and engineers to conduct trials which range from testing protective equipment for UK Armed Forces to forensic analysis work on behalf of UK police.

The facilities will also cater for additional equipment and staff moving as part of the multi-million pound Helios project – the planned relocation of Dstl from Fort Halstead in Kent

#### Leading a new generation

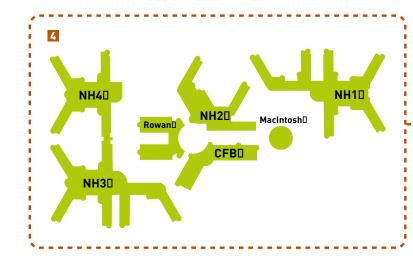
Man and machine will be the theme of the biennial Air Engineering Officers' Conference on Wednesday 15th July at the Royal Naval Air Engineering and Survival Equipment School, HMS Sultan. The conference is open to all serving and Reserve Air Engineering officers and Warrant Officers. More details, including how to book, can be found in 2015DIN07-048.

## NEWS N BRIFF

#### Abbey Wood Staff honoured

Major Jeremy Giles led the way for DE&S in the latest operational awards list with a Queen's Commendation for Valuable Service. Major Giles, of the Royal Regiment of Scotland, works in Land Equipment at DE&S.

He was joined by Lt Wendy Frame of the Royal Navy, who was awarded the MBE. She works on Type 45s within DE&S Ships.



#### Non-lethal kit to Ukraine

The UK is providing non-lethal equipment to the Ukrainian armed forces to help save lives This includes 2,000 Mark 6 helmets, 150 helmet-mounted monocular night vision goggles, 200 global positioning units, 220 hardened laptops, 1,000 first aid kits. The total value is £850,000, including transportation and contingency costs.

global, multilingual support

#### AEA: a three year contract

Ricardo-AEA's chemical risk practice, the National Chemical Emergency Centre will provide the MOD with emergency telephone advice for the next three years. The contract includes 24-hour global, multilingual support as well as access to the Centre's hazardous chemicals database to help the MOD respond to chemical emergencies such as a spill or exposure. The Centre will also manage the MOD's Safety Data Sheets for the chemicals it uses. In an emergency, fire services will use the SDS to respond to incidents.



# 19% of its procurement with small companies in 2013/14

#### 5 Farnborough

#### Drumgrange one in 150

Drumgrange, a small independent contractor, has become the 150th member of Niteworks, the Farnborough-based MOD-industry partnership.

The company has delivered technology to UK Forces, Nato and overseas militaries including  $\ensuremath{\mathsf{GPS}}$  units to the Royal Navy, development and support of ComSim (a Bowman Radio training simulator) and Hull Vibration and Monitoring Equipment, also in service with the Royal Navy.

Figures show the MOD spent more than 19 per cent of its procurement with small companies in 2013-14.

#### Yeovilton

#### Wildcat pilots converted

Eighteen pilots and aircrew from 847 Naval Air Squadron and 652 (Wildcat Fielding) Squadron, Army Air Corps, based at RNAS Yeovilton have been awarded their Conversion To Type training completion certificates and Wildcat badges, marking a historic occasion for the Commando Helicopter Force and the Army Air Corps' Aviation Reconnaissance. Conversion to type began last July with ground school syllabus and courseware delivered by the Wildcat integrated support and training contract. The course progressed onto the Wildcat Full Motion Simulator to carry out the rudimentary aspects of emergency handling and systems learning.

"ground school syllabus and courseware delivered by the Wildcat integrated support and training contract.



#### 3 Yeovilton

#### Cold War returns to Yeovilton

A MiG-15 will be making a rare UK appearance in the flying display at RNAS Yeovilton International Air Day 2015 on Saturday 11th July. The Cold War classic jet fighter belonging to the Norwegian Air Force Historical Squadron will be the first of its kind to display in this country since the late-1990s. The MiG-15 is also well known for its role in the Korean War – a conflict which involved Royal Navy operated Hawker Sea Furies. One such Sea Fury FB11 made history when it downed a MiG-15; one of the few times when a piston-engined aircraft has gained superiority over a jet.



When you're tasked with procuring hardware, software and security solutions via Lots 1 and 3 of the new pan Government framework including the MoD, you need suppliers that are 100% proven.

You need Centerprise and Panasonic.

Through our long-standing partnership, we can provide you with CESG End User Guidance compliant technology – integrated with products from world-leading encryption specialists that mean security is never in doubt.

So when compromise isn't an option and security is paramount, look nowhere else.

To find out how we can meet your procurement needs, talk to us today.

Call +44 (0)1256 378 004 Email mod@centerprise.co.uk



FZ-M1 and FZ-G1 featuring Intel® Core™ i5 vPro™ processors









## Team's past helps shape the future

n Abbey Wood team has been helping the Royal Signals Museum at Blandford enhance its collection of military communications kit.

The Battlefield and Tactical Communications and Information Systems (BATCIS) delivery team has been collecting redundant Clansman and Bowman communications equipment to add to museum displays.

The museum has already used some of the radios in a series of high profile events. The most prestigious was a four-month UK tour as part of the BBC's World War at Home which marked the centenary of World War One.

Museum staff used some of the Clansman radios to illustrate the use of wireless in a "Wireless Maze" and visitors were challenged, in pairs, to navigate the maze blindfolded. This became so popular that it became a

competition to see who could achieve the best times.

By the end of the tour more than 137,000 people had visited the Royal Signals display. TV and radio coverage then extended the audience to a

"We in BATCIS are very proud of the kit that we deliver and are thrilled that generations to come will be able to dip into history and understand how past communications kit has helped shaped the future."

further four million people.

Major Darrell Skimming from the BATCIS team said: "Communications has always been the crux of successful military operations and the Royal Signals Museum offers a fascinating insight into how the methods and kit has changed over the decades

"We in BATCIS are very proud of the kit that we deliver and are thrilled that generations to come will be able to dip into history and understand how past communications kit has helped shaped the future."

Nick Kendall-Carpenter, Director of the Royal Signals Museum, added: "The Royal Signals is grateful to BATCIS and other parts of ISS for their support in ensuring that important parts of the Army's heritage are preserved and available for public education and enjoyment."

Radios will be used to illustrate the use of wireless at the Royal Signals Museum in Blandford

■ Odette makes her debut: page 17

## New green generators for RN minehunter

Royal Navy minehunter has received new generators as part of a support period in Bahrain, a first for DE&S and contractor Babcock

The new sets, part of the Volvo Generator Programme for Sandown class ships, have been fitted to HMS Penzance, replacing her now ageing Perkins diesel generators with more efficient and environmentally friendly Volvo Penta D13 Marine sets.

All seven Sandown ships will be fitted with the new sets over 18 months - HMS Bangor was the first in Rosyth last year; HMS Penzance is the third - easing the maintenance loading while improving generator reliability and therefore ship availability.

Penzance received her generators

while deployed in the Gulf alongside other key work including air conditioning improvements. In-theatre engineering support was delivered by the Arab Shipbuilding and Repair Yard in Bahrain.

Strategic Class Authority team leader, Captain Giulian Hill, said:

"This has been a complex project requiring close collaboration between DE&S Warship Support, Babcock and the Sandown class output management team.

This is a Royal Navy first and this project will help inform the overall

approach to Gulf Engineering support, demonstrating our ability to provide a high level of engineering 'support at reach' to the Fleet.'

Babcock's *Sandown* team leader Ambrose McDonough added: "There were a number of challenges in successfully delivering this project, not least overseeing it at a distance of over 3,000 miles from the UK support infrastructure, in addition to the engineering challenges themselves.

'A very effective partnership was developed from the start between the team and the deployed DE&S Warship Support Project Sponsor, as well as the very supportive collaboration developed early with the ASRY engineering teams."

Work on *Penzance* was completed ahead of schedule



year in Rosyth.

Below: HMS

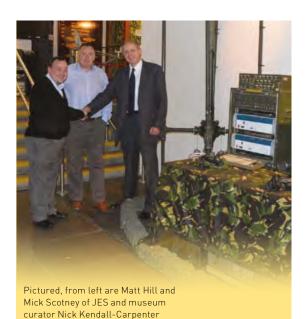
Bangor was

the first of the

Sandown ships to

be fitted with the

new generator last



### **Odette makes** museum debut

urveillance equipment which has been removed from service has gone on show at a Dorset military

DE&S' Joint Electronic Surveillance (JES) team acquires electronic surveillance and attack systems, mainly for maritime and land users. The systems are critical for success on operations and are at the leading edge of technology.

In the past the team has donated equipment to the Royal Signals Museum at Blandford, including Sourdust, Scarus and Seer systems.

The latest is Odette, which was removed from service

Odette enjoyed a distinguished career of more than a decade, providing vital support to operations, initially in Bosnia and Kosovo, as well as Iraq and Afghanistan.

It is a tactical communications electronic support measures system mounted on mobile platforms. It has a persistent monitoring capability which contributed to the UK's overall battlefield intelligence picture.

## Comms kit storage hits the mark

hanges to the way communications kit is stored and sent to front line troops have been delivered on time and to budget.

Over seven months, more than 27 million items of essential communications equipment was moved from sites across the UK and Germany to a single storage facility in

The programme - a £234 million Logistic Supply and Support Provision contract (LSSP) - has been delivered by the Battlefield and Tactical Communications and Information Systems (BATCIS) team with work carried out by General Dynamics UK (GDUK) and Wincanton. It was supported by the Defence Support Group and DE&S' Logistic Commodities and Services.

The LSSP contract was awarded to **GDUK.** The company was also awarded the Design Services **Provider contract for** the Bowman radio system that is used by personnel across the Army, Royal Navy and RAF.

Working with industry, BATCIS maintained availability to the Armed Forces at all times, delivering essential kit to troops around the UK and abroad such as Afghanistan and Sierra Leone.

Mike Childs, LSSP Delivery Manager, said: "The way assets are stored and managed is crucial to ensuring that service personnel have the kit they need at all times. Once an order is made it must be delivered within seven days.

"Storing all of our kit in one place will lead to much greater efficiency in providing support to troops but this centralised location should also lead to savings in storage and transportation costs.

Brigadier Richard Spencer, BATCIS Head, said: "Delivery of a project of this scale on time and to budget is testament to the hard work of the BATCIS team and our industry colleagues.

The two five-year contracts secured 140 jobs at GDUK's site in Newport. Wales, with a further 50 iobs secured with subcontractor Wincanton.

"It is vital that we are able to store and maintain our kit properly in order to support the Armed Forces in their role protecting the UK's interests around the world. I am delighted that we are now in an even better position to do this '

**BATCIS** is responsible for more than 13,900 different products such as Bowman. ground to air radios, computer terminals and cabling.

## Another £285 million invested in Successor

esign work for the Royal Navy's next generation of nuclear deterrent submarines continues with another £285 million of investment

The work is within the existing Successor programme's £3.3 billion assessment phase and follows previous contracts awarded to BAE Systems in 2012 valued at nearly half a billion pounds to start initial design.

DE&S' Chief of Materiel (Fleet) Vice Admiral Simon Lister said: "The announcement on the third phase of design funding is another step forward in the programme to deliver the Successor submarine.

Over the next year, work on the design of the submarine will draw on cutting edge capabilities in innovation, design and engineering available in the UK to ensure we are able to meet the future defence needs of the UK."

The Successor programme employs around 2,200 people in the UK, working for BAE Systems, Babcock and Rolls-Royce.

For BAE Systems alone, the funding will sustain more than 1,400 jobs on a programme that has already engaged with more than 240 suppliers.

The work is largely based at the home of the UK's submarine manufacturing industry in Barrowin-Furness, but also across the UK including sites in Raynesway in Derby and Bristol

BAE Systems will proceed with £257 million worth of design work, with a further £22 million at Babcock and £6 million at Rolls-Royce.

Tony Johns, Managing Director at BAE Systems' Submarines, said: Designing a new, nuclear-powered ballistic missile submarine is one of the most challenging engineering projects in the world today. The Successor programme is the largest and most complex project we have ever faced. This funding will now allow us to mature the design over the next 12 months

to enable us to start construction in 2016.

All Royal Navy submarines will be based at Faslane by 2020, including the Astute and Trafalgar class attack submarines.



2028

Below: Under

current plans.

four Vanguard

submarines, which

currently maintain

the UK's nuclear

deterrent, will be

replaced from



## New hearing protection arriving this summer

ophisticated hearing protection will be provided for UK troops on overseas operations and local training under three contracts for new earplugs.

A Tactical Hearing Protection System (THPS) will allow people to hold a conversation while wearing earplugs – helping to increase their overall effectiveness.

Marcus Bruton, Dismounted Close Combat Team Leader at DE&S, said: "As a military force in training or on operations, servicemen and women often make and experience loud noises, but this should not just be "part of the job".

"We are committed to preventing hearing loss due to noise exposure, while providing a step change in comfort and situation awareness."

THPS-BU [Basic User] consists of three different types of re-usable ear plugs that include a device which reduces impulse sounds such as weapon noise but continues to allow sounds such as voices through. The earplugs are low profile and have been tested with in-service helmets, headsets, glasses and goggles.

As everyone's ears are different, servicemen and women will be offered the choice of three different types in a

"We are committed to preventing hearing loss due to noise exposure, while providing a step change in comfort and situation awareness."

range of sizes.

As well as the basic user ear plug, THPS-SU (Specialist User) provides troops, such as mortar crews, with another layer of protection consisting of an electronic ear muff.

THPS-DCCU (Dismounted Close Combat User) will also be provided for those needing full situation awareness and integration with communications. Equipment from a number of suppliers is being evaluated, including user trials in Kenya.

The hearing protection – which will be supplied by Marlborough Communications, Edgar Brothers and 3M - will be delivered from this summer.



"Next Easter, both front line Merlin squadrons will be at Yeovilton along with the Wildcat. This will mark the beginning of a new era in the Commando Helicopter Force as we take forward these new capabilities. There are exciting times ahead"

- Capt Niall Griffin, Commanding Officer, Commando Helicopter Force



### £580 million, for 5-year MERLIN SUPPORT

he latest helicopter support contract signed by DE&S has been hailed as an example of the flexibility of support to UK Armed

The contract is worth £580 million to AgustaWestland and will provide maintenance support to the Royal Navy's 30 Merlin Mk2 and 25 Mk3 and Mk3A helicopters over the next five

It is the third five-year contract in the 25-year Integrated Merlin Operational Support (IMOS) contract, which began in 2006. It has been signed a year early and is expected to save more than £140 million up to the end of March 2020.

DE&S Director Helicopters, Air Vice-Marshal Julian Young, said: "The Merlin is an important part of our overall helicopter force, providing a variety of specialist and general roles in all weathers over land and sea.

"We are bringing in the contract one year earlier than planned to meet the requirements of the Front Line Commands and to deliver financial benefits, which is a great achievement and shows how we can adapt flexibly to support the needs of our Armed Forces.

The Merlin Mk2 anti-submarine

helicopter achieved its in-service date last May ahead of schedule and to cost, with 19 of 30 aircraft so far delivered to the Royal Navy at RNAS Culdrose in Cornwall.

IMOS sustains more than 200 jobs at AgustaWestland in Yeovil and RNAS Culdrose in Cornwall where the depth maintenance and the Royal Navy's Merlin training system are located. A further 800 jobs will be sustained in the wider supply chain.

Six Merlin Mk3 helicopters pictured over Somerset as 846 Naval Air Squadron returns from RAF Benson to be reunited with the Commando Helicopter Force at RNAS Yeovilton. Personnel have been trained at Benson by RAF instructors. The marinisation programme will see the Mk3 equipped with a folding main rotor head and modified undercarriage

for deck

landings.



THE MK2 anti submarine carriers, along with the F 35B

The Merlin Mk3 is a Battlefield can carry a range of cargo either internally or underslung including more than five tonnes of freight. Under the IMOS contract,

Total Support Services (TSS), an alliance between Selex ES, Thales UK, GE Aviation and the Defence avionics and with Lockheed Martin

service delivery.



Established in 2002, Abbott Risk Consulting (ARC) Ltd has grown consistently to become the UK's largest independent safety consultancy servicing the Defence and Nuclear industries

ARC are a FATS/STS approved supplier for all Safety and System Safety Technical Services in the Land, Sea and Air environments, including:

- System Safety Risk Assessment
  - System Safety Management
    - Independent Safety Audit
      - Safety Hazard Analysis
        - Safety Cases

For further information about our services or to join our expanding team,
please visit www.consultarc.com

ARC is committed to equal opportunities to all







### Naval refit: new RN uniforms launched

ailors on board HMS Lancaster are the first to wear the Royal Navy's newly designed uniform. Replacing the Action Working Dress known as No4s - the traditional lighter-blue shirt and trousers worn by sailors at sea - it is the biggest change to naval dress since World War Two.

The new uniform, brought into service after much hard work by DE&S' Defence Clothing team, is now dark blue and more modern, comfortable and fire retardant.

Commanding Officer of HMS Lancaster, Commander Peter Laughton, said: "We are extremely proud and genuinely delighted to be the first ship to wear the Royal Navy's new uniform.

"It is a really practical, smart and modern uniform, and the extra branding allows us to much better represent our service. This will most certainly be the case during our current deployment where we are due to transit in excess of 30,000 nautical miles and visit up to 18 countries."

Introduction has been greeted with delight by DE&S too. "The Defence Clothing team is proud to see the new Navy uniform in service," said Wg Cdr Odette Hardcastle, the team's Chief

"It is the culmination of the team's persistent hard work and attention to detail, and has resulted in a uniform that meets the Navy's requirements in the 21st century."



#### The Royal Navy Personal Clothing System, to give it its official name, comes in multiple layers to help meet the Navy's global deployments. It is based on the Army's

operational uniform but adapted for comfort on ships and submarines.

Personnel in the Gulf and the South Atlantic can wear the same uniform and adapt it to suit their requirements. The first layer is a T-shirt, and personnel can put the shirt over the top or add the thermal layer in between the two to suit colder climates.

The trousers are lighter weight, but also fire retardant, and have slanted pockets for ease of access. Belt loops are smaller and the trousers have a side adjustment and tabs at the bottom to reduce snagging as sailors move around the ship. The flame retardant finish will last the life of the garment

The badge is now on the front, to increase visibility while the cap is to be worn on the ship. Berets will be worn in port.

The uniform has been trialled extensively in ships and submarines including HMS Daring, HMS Westminster and HMS Talent, with crews commenting that the new uniform is modern, professional and comfortable.

Vice Admiral Sir David Steel said the input of sailors was vital.

"It is time for the individuals in the Navy to change the way they are presented," he said. This is a modern uniform which suits a modern Navy. But the most important thing is that it is comfortable to wear in the extremes of climate in which the Royal Navy operates – from the Antarctic to the Gulf.'

Around 22,000 sets of the new uniform are being issued to operational and sea-going ships before being rolled out across the rest of the Royal Navy and Royal Fleet Auxiliary.



**HMS Lancaster** is also the first ship in the Royal Navy to deploy with the new Wildcat multi-role helicopter.

This first deployment by 201 Flight provides an ideal platform for the aircraft to demonstrate its capability in the challenging embarked environment.

The Commanding Officer of 825 Naval Air Squadron, Commander Glyn Owen said: "The deployment of 201 Flight with HMS Lancaster is the culmination of 825 Squadron's efforts to deliver first class training to aircrew and engineers while pioneering the generation and sustainment of front line Wildcat Flights for embarked operations worldwide.

Extremely versatile, the Wildcat is designed for a variety of roles - antiship, anti-submarine, ship protection, casualty evacuation, battlefield reconnaissance and general utility.

## Diamond to shine again

he crew of HMS Diamond have been reunited with their ship after its multi-million pound upgrade.

The Portsmouth-based Type 45 destroyer has undergone extensive maintenance and improvements since it returned from operations last July.

Work included installation of the Harpoon missile system and upgrades to communications and IT equipment.

The ship also has a new gas turbine and stabilisers plus upgraded highpressure salt water and air systems.

ship's company move back on board is a big day for us. It marks the point at of our ship and begin the process of regeneration.

"While it is a long process, we are all, ultimately, working towards our deployment in 2016, getting back out on operations and doing what the Royal Navy does best."

The new systems and equipment will now be fully tested during several months of trials at sea and alongside in Portsmouth.

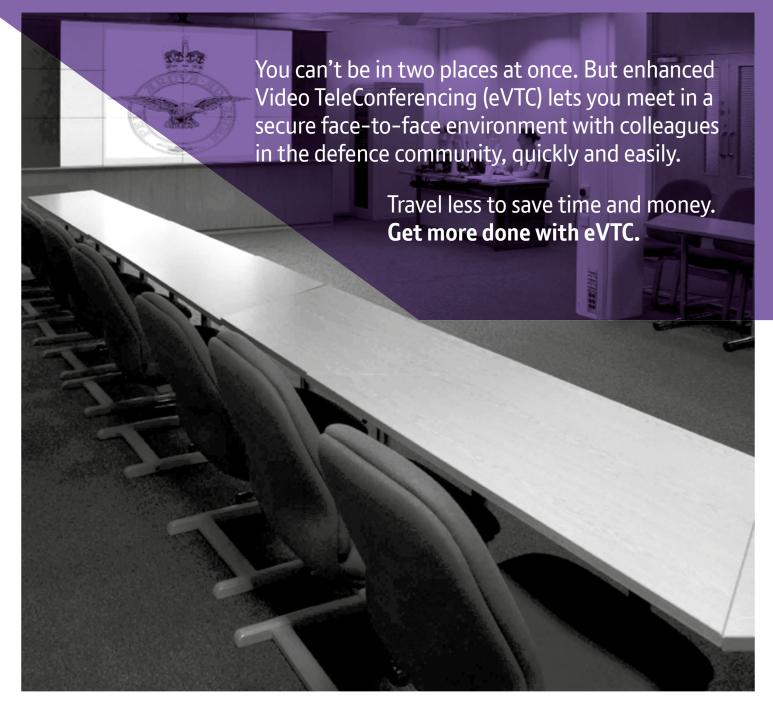




Powering our nation's defences today. Creating a force for tomorrow.



# Be where you're needed with enhanced Video TeleConferencing



To find what we can do for you: Call us on **0800 389 2272 (option 8)**. Email us at **dfts.comms@bt.com**. Visit **www.dfts.r.mil.uk** (available on the RLI). Visit us at stand **S9-146** at DSEI **15-18 September 2015**.

## LCS(T) gears up

E&S' new contract to improve efficiencies in warehouse procurement and stock control of food, fuel, clothing, general and medical supplies along with storage, distribution and inventory management will hit the ground running in August.

Leidos will help provide improved responsiveness and agility to supply UK Armed Forces as part of the transformation of Logistic Commodities and Services, known as

The aim is to provide services in line with industry best practice in efficient and effective processes while ensuring best value for money for the UK taxpayer.

The contract, signed last month, is

£6.7 billion

over the next 13 years, and will save half a billion pounds

over the lifetime of the contract.

DE&S Chief of Materiel, (Land), Lieutenant General Sir Chris Deverell, said: "This contract meets the changing military requirements of our Armed Forces while also maintaining levels of quality and service.

By working with Leidos, we will modernise our commodity procurement, warehousing, and distribution and secure a supply chain that will be responsive to the needs of the military, while at the same time saving money for defence."

Leidos will invest in new facilities and IT systems as well as in staff development. The company also plans a new centre next to the existing LCS site at Donnington.

Around 1,500 civilian posts are affected by LCS(T), at 16 sites, the majority of them at Donnington and Bicester. Around 250 staff at Abbey Wood will be included.

The new arrangements begin on 1st August with a vesting day.

#### Who are Leidos?

Team Leidos consists of Leidos, a US company, supported by its key subcontractors Kuehne+Nagel and TVS Supply Chain Solutions. Together they are a skilled and experienced



team of private sector defence and logistics experts.

Construction of a new centre next to the existing LCS site at Donnington in Shropshire will be part of the new service along with £40 million in new IT systems to provide the modern and efficient logistics services that the UK Armed Forces need.

### **Teamwork ensures DE&S** is geared up for emergencies



simulated work based incident involving the accidental dropping of an Aster missile from a crane has proved DE&S is well capable of dealing with a major incident on any of its sites.

The exercise – called Subsequent Response - showed how the processes of dealing with such an incident are robust and fit-for-

The Ex Subsequent Response scenario involved a missile being loaded onto HMS Duncan at the Defence Munitions site in Gosport when operator illness caused it to be dropped from the crane onto Bedenham Pier. This caused a number of 'casualties' and resultant operational issues to be dealt with.

In tandem with the DM Gosport Operations Room, the DE&S' system for dealing with incidents swung into action, with mobilisation of the **Incident Management Cell at Abbey** Wood by the Defence Support Chain Operations and Movements (DSCOM)

Real time management of the seven-hour incident included dealing with damage, injury, loss of life, media interest and temporary loss of defence capability. Relevant DE&S Operating Centres were also involved taking control of the situation during the react to recover phases.

The incident was well managed and the practices and procedures were fully tested," said Incident Cell coordinator Mike Telfer.

Passage and management of information was successfully controlled into and out of the operations room, external organisations were kept appraised of events, personnel were briefed on operational consequences and the media was kept fully informed."

The incident management system was refined, tested and proven to be robust. Although we can't fully anticipate the type and scale of incident DE&S may face, detailed lessons at the tactical and operational levels were learned and will be applied to make sure our incident management responses are even better in future."

## Sutherland back at sea after 13 month refit



ype 23 frigate HMS Sutherland has sailed for the first time after a major 13-month refit with her captain praising the partnership of organisations which successfully completed the work.

The ship left Devonport on sea trials having been fitted with the latest equipment and radars to keep her world-leading ability, welcomed by commanding officer Cdr Stephen Anderson.

This occasion is the most significant step yet towards HMS Sutherland's return to the fleet after a maintenance package that will extend our in-service life considerably," he

"This is the culmination of a successful partnership between military and industry stakeholders, who along with my ship's company have consistently demonstrated professionalism, drive, enthusiasm and the initiative necessary to complete the large number of commissioning and acceptance trials to allow us to safely return to sea."

Sutherland's refit, undertaken under the Surface Ship Support Alliance between DE&S, Babcock and BAE Systems and its Class Output Management arrangements, has seen industry take the lead.

Upgrades to the ship have included installation of the DNA(2) Command System, central to the ship's capability against air, surface and underwater threats, and the Artisan (Advanced Radar Target Indication Situational Awareness and Navigation) 3D Radar Type 997 to improve the ship's air-defence, anti-ship and air traffic management capabilities.

Babcock Programme Manager Gary Simpson said: "The delivery of HMS Sutherland ready to fight long into her extended life will add to the continuing development of knowledge and experience in undertaking Type 23 upkeeps at Devonport.'



#### Redevelopment of South Yard

The MOD has transferred land at South Yard, Devonport, to the local authority to allow the Plymouth City Deal to go ahead. More than 40 companies have expressed interest in the site, development of which is expected to create 1,100 jobs as a dynamic new centre of marine industry. Commodore Ian Shipperley, Devonport Commander, said: "Redevelopment of South Yard will be a shot in the arm for the Plymouth economy and the south west in general. The unique facilities make this a prime location for the industries that have been the lifeblood of Plymouth for hundreds of years."

## NEWS N BRIFF

#### 2 Lyneham

#### CGI provide training

CGI will provide Training Needs Analysis at the Defence College of Technical Training as part of a programme to transform training and education. The  $\,$ company will help improve training for British Army Signallers – communications specialists who operate radios, networks and telecommunications equipment. The project will aim to identify areas of the training programme to benefit from a more digitally focused strategy.

### £1.4 million awarded

#### Barnstaple

#### SEA awarded £1.4 million

SEA, a Cohort company, has been awarded a £1.4 million five-year contract to support core elements of the Royal Navy's weapons systems.

Subsidiary J+S, will continue to support the Magazine Torpedo Launch System, the SeaGnat decoy launcher and a range of air weapons handling equipment.

Steve Hyde, Head of Maritime Combat Systems at DE&S, said: "J+S has consistently provided excellent support services to the Royal Navy, and I am delighted that it will continue this support of core weapons systems."

Steve Hill, Managing Director of SEA, added: "This contract is a clear indicator of how SEA is continuing to strengthen its growing export business in this area.

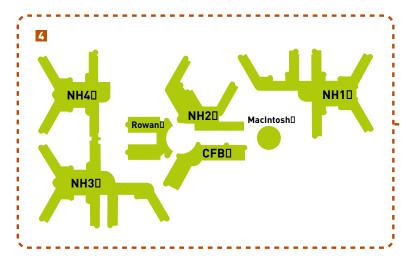
#### Help to Buy scheme

MORE than 4,000 personnel have had applications approved to buy a home of their own under the Forces Help to Buy scheme. More than £40 million has already been given to 2,700 applicants to buy their first homes or move up the property ladder since the initiative was launched less than a year ago. And a further 1,400 personnel are awaiting completion of property purchases. The £200 million scheme allows military personnel to borrow up to half their annual salary towards buying a home and has proved most popular with those between the ages of 20 and 39. The vast majority of recipients are non-officers.

million has already been given"

#### Haynes Manual

A new Haynes Manual is offering an insight into restoration of the only surviving British World War Two submarine. HMS Alliance went back on display last year after a £7 million restoration at the Royal Navy Submarine Museum in Gosport. The new Royal Navy Submarine Manual examines her construction and restoration as well as describing what it was like to live, work and go to war in a submarine.



#### Free Space for Growth programme

The MOD has made part of its surplus estate available to small businesses and social enterprises, for free, as part of the Government's Space for Growth programme. For the first time, the move will see disused military engineering workshops in Aldershot made available to support start-up businesses by veterans and their families. The scheme is being pioneered by X-Forces and Solv Ltd, both signatories of the Armed Forces Covenant, who are working in partnership to provide veterans with the support they need – from creating a product through to launch their own business

#### Comms satellites over the Pacific

The UK will move one of its communication satellites to the Asia Pacific region for the first time to deliver protected and secure satellite communications services. Airbus Defence and Space will reposition one of the Skynet 5 satellites with secure communications and a greater ability to support regional humanitarian and peacekeeping operations.

Airbus – which operates the satellite on behalf of the UK Government – will also build a ground station in Australia. The move represents significant export opportunities for the UK as any spare communication capacity will be sold.



#### **BAe 125 retirement**

The BAe 125 – which has provided a passenger service to the Royal Family, government ministers and senior military officers - is being retired from service with the RAF's 32 (The Royal) Squadron. Piloting aircraft ZD703 on its return from operations to RAF Northolt for the final time in March was Wg Cdr Jon Beck who flew the first BAe 125 out to the Gulf on Operation Telic in 2003. He

"The aircraft has been a reliable and faithful workhorse down the years, loved by the crews who operate it and enjoyed by its passengers."

119 year old clock tower bell



#### 3 Devonport Historic Bell

The bell in the historic 119-year-old clock tower in HMS Drake at Devonport is chiming again. Changes in signalling meant the bell went silent in the early 1960s. Simon Cowls of industrial partner Interserve said that during restoration work on the tower they discovered the bell and infrastructure was virtually intact from its original installation. He said: "With help from the diocese of Truro it was found the bell and mechanism could be brought back into service, and that manufacturer 'Gillet and Johnson' of Croydon, the foremost clock manufacturer of their time, was still trading." The company was re-employed and has now completed the work.

#### M-LINK TEXT CHAT SOFTWARE

THE FIRST XMPP TEXT CHAT SERVER ON DISA'S APPROVED PRODUCTS LIST AND CHOSEN BY NATO AS THE SERVER SOFTWARE BEHIND JCHAT+, M-LINK FROM ISODE ENABLES SECURE 1:1 AND MULTI-USER CHAT.

PROVEN OVER STANDARD INTERNET, SATCOM AND HE RADIO CONNECTIONS, M-LINK IS THE BEST CHOICE FOR STRATEGIC AND TACTICAL CHAT.

FIND OUT MORE AT WWW.ISODE.COM

Isode

Messa ing and irectory Server Software

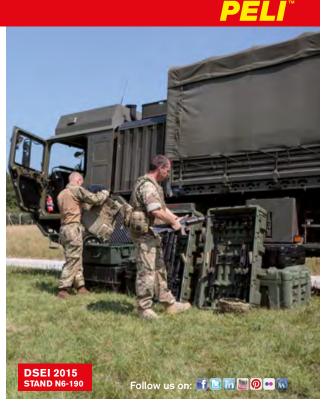
## FIELD TESTED & BATTLE PROVEN

#### PELI-HARDIGG MILITARY TRANSPORT SOLUTIONS

Meet the returning troops. **Peli-Hardigg Military Case** categories boast cases that are not only virtually indestructible as well as airtight, watertight and decontaminable – but are also reusable.

Mission after mission, they can be called upon to protect, deliver and defend vital equipment under the harshest of conditions. Nothing protects like Peli-Hardigg.









Peli-Hardigg UK Case Center: Hardigg UK Ltd

Unit 4, Brookfield Industrial Estate | Leacon Road | Ashford Kent TN23 4TU (UK) | Tel +44 (0) 1233 895895

EMEA headquarters: PELI PRODUCTS, S.L.U.

C/ Provença, 388 Planta 7 | 08025 | Barcelona, España | Tel +34 93 467 4999 | info@peli.com | www.peli.com

Advertising feature

## The leading showcase for unmanned systems

**DEFENCE AND SECURITY EQUIPMENT** INTERNATIONAL (DSEI) is the largest integrated defence and security exhibition in the world and is becoming increasingly recognised as a unique venue to showcase and demonstrate the full capabilities of unmanned systems spanning air, land and sea. Hosted at London's ExCeL every two years, DSEI continues to serve as the premier meeting place for global defence and security communities.

DSEI organisers, Clarion Events, are building on the record breaking success of the last DSEI which was staged in 2013 and saw 32,000 visitors from 121 countries worldwide - including 158 programmed delegations - engaging with 1,489 exhibitors representing 54 different countries.

#### Award winning

Following the award winning success of the inaugural Unmanned Zone, a series of stakeholders, including the Association for Unmanned Vehicle Systems International (AUVSI), have increased their support for 2015. The result will be a much larger Unmanned Zone which will give visitors the chance to see the latest innovations in a dedicated feature area. There will also be a series of capability demonstrations from a range of air and ground-based unmanned systems responding to different threats and scenarios.

The 2015 Unmanned Zone will host the complete spectrum of unmanned system designers and manufacturers for all applications and developments across all of the military and security sectors.

current exhibitors participating in the Unmanned Zone include AIE, Airware, CES, DOK-ING, ELI Military Simulation, Galleon EC, HDT Global, IAT 21, Linwave, Milrem, Northwest UAV, Panvion Technology, Planet Ocean, Reamda, Rotron Power, Spectracom, Trimble, Velodyne and Wolfstone. In addition to the zone, companies presenting unmanned technologies in the wider event include primes such as Selex, Northrop Grumman, QinetiQ, BAE Systems and Thales.

#### **DOK-ING MV-4**

At DSEI 2015, DOK-ING will promote its latest MV-4 enhancements, which was originally designed as a mine clearing system but now further developed as a combat engineering system with a number of possible applications.

The DOK-ING MV-4 is a tracked remotecontrolled system (to a maximum distance of 2 000m) designed to clear all types of antipersonnel (AP) mines. The MV-4 is effective in clearing booby traps and dispersed munitions, area proofing, checking soil for explosives and improvised explosive devices (IEDs), and clearing hazardous roadblocks.

The system can be remotely-controlled from either an armoured vehicle or at a safe distance. The engine and vital components are protected by steel plates. Mine clearance is carried out by a flail or additional tool attachments, all mounted in front of the prime vehicle that either activates or shatters AP mines. The MV-4 is small and manoeuvrable and is therefore suitable for demining housing areas, forest paths, river

banks and other types of terrain inaccessible to larger vehicles.

"DSEI 2015 is the most important event this year for promoting one of our core business products. Although already working in more than two dozen countries around the world, and the most purchased system in its light category, we have been developing and upgrading the MV-4 to provide practical engineering solutions for a range of different combat, military and civil missions," said Vjekoslav Majetić, owner and member of the Managing Board of DOK-ING.

#### **West Theatre**

This zone aims to facilitate pragmatic and expedient test and evaluation solutions for a wide range of emerging issues ranging from operational capability problems through to studies relating to future UAS test and evaluation. Set in the heart of the zone, the West Theatre will offer a specific area especially for presentations and product briefings from the unmanned systems

DSEI Event Director, Duncan Reid, said: "DSEI 2015 will attract more than 30,000 quality visitors and by increasing the footplate for unmanned systems, there is no doubt that this year's event will again provide an international showcase of key products, systems and technologies that will be crucial to future air, land and sea operational capabilities. The larger Unmanned Zone, including its theatre, will be a key attraction for the many delegations and military visitors from around the world to check the latest developments in unmanned systems."





DSEI: 15-18 September 2015, ExCel, London

www.DSEI.co.uk



# Helicopters for the future

E&S is providing one of the most capable and advanced helicopter fleets in the world. Pete Worrall, Chief of Materiel (Joint Enablers) and responsible for helicopter procurement, delivered that verdict as enhanced capability of Chinook Mk6, Merlin Mk2, Puma Mk2 and the new Wildcat went on show at RAF Benson.

"I am extremely proud of the work undertaken since the agreement of the Rotary Wing Strategy in 2009, to ensure the delivery of major helicopter capability and the transformation of the helicopter support solutions," he said.

"This is a complex portfolio that has been executed extremely professionally. As a result, DE&S is providing our Armed Forces with one of the most capable and technologically advanced fleets in the world."

In the last 12 months, the Puma Mk2, Merlin Mk2, Chinook Mk6 and both the Royal Navy and Army Wildcats have all been declared ready for operational use.

Merlin Mk2 delivered vital support in Sierra Leone to tackle the spread of Ebola, Puma Mk2 contributes to Nato's training and assistance mission in Afghanistan while the Royal Navy Wildcat is deploying for global maritime operations.

Successes already delivered across the

Chinook, Puma, Merlin and Wildcat fleets are providing improved platform performance, mission capability, role flexibility and safety to help support operations across the world.

Major General Richard Felton, Commander of Joint Helicopter Command, said:

"Our investment and collective endeavours are now beginning to deliver the next generation of battlefield helicopters for UK defence, and these will enable the Joint Helicopter Command to remain at the forefront, projecting and sustaining key battlefield helicopter capabilities into the future."

His views were echoed by Royal Navy Commodore Matt Briers, Assistant Chief of Staff Carrier Strike and Aviation, who added: "The Merlin and Wildcat HMA are now both fully digital, and as such, are 21st



#### DE&S makes it all happen

'Outstanding' support from DE&S has helped to deliver world class helicopter capability.

That's the verdict of Major General Richard Felton, Commander of Joint Helicopter Command.

"The change within the JHC's helicopter fleet has been significant with almost all aircraft types being modernised or replaced. This will enable the JHC to meet more fully the increasing frequency of contingent demands," he said.

"It will also raise the confidence of JHC's personnel, in being able to do complex tasks more effectively and safely.

"Delivering a world class helicopter capability is a tough job and will only be possible with a continuation of the outstanding support we receive from many and especially DE&S. It is a level of support for which I remain truly grateful."



(Above) Min (DEST) Philip Dunne gets a guided tour of Apache.

century aircraft for a 21st century Royal Navy. Together these aircraft give the Fleet Air Arm increased capability and as such will make a manifest contribution to the security of the nation to counter threats across maritime spheres."

#### **DE&S** successes

Over the next five years £440 million will be saved on the cost of supporting the Chinook, Merlin and Apache fleets;

- investments to upgrade the Merlin Mk3 are progressing while a decision is expected next spring on replacement of the Mk1 Apache fleet with 50 latest generation Apaches;
- Initial Operating Capability (IOC) for the following platforms have been achieved over the past year:
- → Puma Mk2 in February 2015 (defined as six aircraft and crews ready for worldwide operations). All but one of the 24 aircraft have been delivered following major modifications undertaken in France and Romania, and are now being made ready for operational use;

- → Chinook Mk6 in January 2015 (three helicopters ready for use). Six of the 14 required airframes have been delivered to the UK;
- → Wildcat Mk2 Helicopter Maritime Attack (Royal Navy version) in January 2015 (one helicopter and logistic support, able to deploy for six months). Twelve of the 28 required airframes have been delivered.
- → Wildcat Mk1 Army Helicopter (Army version) in August 2014 (three helicopters plus logistic support, ready for operations). Twenty-seven of the 34 required airframes have been delivered.
- → Merlin Mk2 in May 2014 (six helicopters delivered to RNAS Culdrose and ready for operational deployment). Nineteen of the 30 required airframes have been delivered.



## The perfect package – get it right first time!



he nearest many of us get to serious packaging is when we open our Christmas presents.

But packaging military equipment is serious business for DE&S. From small items for vehicles or spare parts for ships and submarines, it is a complex and vital process. Suppliers have to comply with a raft of regulations before equipment leaves a factory or depot for the support chain and eventually the front line.

The Defence Packaging team, historically based at Fort Halsted in Kent, is now a threestrong operation at Abbey Wood and is part of the Inventory Management Operating Centre. It is led by Bob Deary, who brings private sector experience in packaging management in commodities from medical supplies to

Packaging, its functions, failings and effectiveness in times of crisis holds global lessons relevant to the Defence Support Chain. A study after the Asian tsunami and Japanese earthquake concluded that packaging should make life easier for relief workers and refugees. So it is with defence packaging. The wrong packaging might prove useless in an emergency.

"All the time that packaging works effectively - and for the most part it does - then people aren't interested," said Mr Deary. "Only if something is damaged when it arrives does it become a problem. So we advise on packing anything and everything bar munitions, a very wide remit. Teams will come to us to ask about how they should be packaging their kit. We set the standards within policy and give advice to teams about how to comply with those standards. When companies don't comply with those standards, equipment can arrive damaged and not fit for purpose. It causes wastage and delay, costs money and creates unnecessary risks.

Packaging and labelling should be of a consistent standard so that materiel arrives in the right place, at the right time, in the right condition and at an appropriate cost. It should also be labelled properly so it can be recorded on MOD consignment tracking systems. Often companies will use commercial packaging, which may be initially cheaper, but could prove costly in terms of equipment availability, usability, reliability, serviceability and safety. Project teams, companies and Defence Packaging need a constant dialogue.

"It's very much about partnerships," said Mr Deary. "It's about teams and suppliers having a conversation to find out what is needed, and I am happy to meet suppliers to explain what we need from them. If we don't state our case and set the standard, suppliers can package inappropriately, because if we store products for several years, and then ship them across the world, the packaging (still) has to do its job. We are in the business of providing military capability by ensuring products are packaged appropriately and arrive fit for purpose.

Sometimes the cheapest option isn't the least expensive!

A register of approved commercial suppliers has been set up - the Military Packagers Approval Scheme - so DE&S can contract via suppliers they can trust. Training for company staff is mandatory with certification and approval at the end while there are also web-based courses for MOD team members whose role includes moving products from manufacture to end user.

Andrew Cannon-Brookes, Director Inventory Management, said: "As champion of the Defence Support Chain as a whole, I am delighted to see Bob and his professional team partnering across the Defence Support Chain process, maintaining high standards and delivering continuous improvement."



"All the time that packaging works effectively - and for the most part it does - then people aren't interested"



"Events in Iraq and Afghanistan have shown that military kit needs to be properly packed to protect it from hostile conditions"

#### What's in it for the MOD?

Modernised manufacturing facilities and processes are more closely aligned to defence needs, giving the MOD better long-term value for money through efficient production and, indirectly, through revenue sharing as BAE Systems increasingly wins export orders. BAE Systems' ontime delivery performance has risen from 65 per cent pre-MASS to more than 98 per cent.

MASS has also proved resilient to fluctuating general munitions requirements, providing even more flexibility than it was originally designed for. Between 2008 and 2010, short notice Operation Herrick demands needed some munitions at two or three times normal rates. More recently, the flexibility to order lower volumes has enabled DE&S to reduce its general munitions inventory by deferring new purchases, smoothing existing orders across 50 types of munitions and using up stockpile surpluses in training.

## **UK munitions** transformation job done!

DE&S' long-term partnering agreement to guarantee supply of munitions to UK Forces on operations and training has seen the upgrade of the nation's previously outdated ammunition factories completed on time

hree BAE Systems sites, parts of which date back to 1916, have been modernised in a £206 million investment programme. More than half has been funded by MASS (Munitions Acquisition Supply Solution), the agreement signed with BAES in 2008 which covers about 80 per cent by volume and 50 per cent by value of general munitions. This includes small arms and medium calibre ammunition, mortar bombs, artillery and navy shells but not complex weapons like guided missiles and bombs. Depending on the tempo of operational consumption, MASS is expected to be worth at least £3 billion over its 15-year contract

This programme has delivered upgraded infrastructure and allowed embodiment of lean manufacturing principles into the business, supported by employee skills development," said John Moorby, BAES Munitions programme director with responsibility for delivering transformation.

BAE Systems has been able to reduce costs of maintaining strategic capability; ensuring continuity of supply by enhancing reliability, maintainability and process capability; introducing robotics and automation and achieving high levels of safety, health and environmental performance.

At Washington in Tyne and Wear a new £75 million plant houses a modern forge to machine large calibre tank (120mm), 81mm mortar and 105mm/155mm artillery ammunition to be carried out using robotic machining

At Glascoed in south Wales a £48 million investment has enhanced its fill, assembly and pack capability with new laboratories and an automated medium calibre ammunition assembly line.

At Radway Green in Cheshire a new £83 million small arms manufacturing facility is capable of producing up to one million rounds of ammunition a day.

Mr Moorby said: "The MASS transformation programme was large and complex and the task of developing three world-class munitions facilities, from initial design concept to completion, had its challenges. However everyone involved should be proud of their efforts and the final outcome. Looking ahead, our focus will be on continuing to drive down munitions prices, improve quality standards and maximise future cost efficiencies."

Martyn Williams, leader of DE&S' Defence General Munitions team, added: "BAE Systems' completion within budget of the programme to modernise its munitions manufacturing and engineering capability marks the successful achievement of a key milestone within MASS. This will help ensure that an efficient, effective, flexible and sustainable capability for the supply of general munitions is available within the UK for years to come. BAE Systems' significant achievements form a key part of delivering and supporting our general munitions and driving the delivery of maximum cost efficiencies under MASS. I look forward to continuing to developing the MASS framework with BAE Systems as we prepare for ever changing future demands and priorities.'



#### What's in it for BAE **Systems Munitions?**

Improved manufacturing facilities have enhanced capability, production processes and efficiencies, cost reduction and delivery performance. Since 2008, BAE Systems has improved munitions production rates, including doubling volumes of mortar bombs and small arms ammunition to meet the increased UK operations. Since 2008, BAE Systems has supplied the MOD with around 1.9 million mortar bombs, 1.9 million rounds of medium calibre ammunition, 700,000 heavy artillery shells and one billion rounds of small arms ammunition.

BAE Systems can now compete to win munitions exports, for which the MOD receives a rebate against. Recent examples include mortar bombs to the Netherlands as well as small arms ammunition supply to France and other Nato countries.

# Making the most of a virtual world

### DE&S proposes wide-ranging changes to soldier training and education

raining and education for soldiers in the land environment is facing a revolutionary change under a DE&S-led

Training and Education Architecture (Land) - T&EA(L) for short - seeks to replace more than 100 synthetic training systems.

Although very successful, each system fails to take account of other projects that might be delivering similar effects, resulting in inefficiency. When adopted, T&EA(L) will bring in a coherent end-to-end system of training and education for the soldier, replacing the current disparate systems.

T&EA(L) is championed by DE&S' Director of Land Equipment, Major General Paul Jaques. It will look to manage training at

DE&S, will see bespoke systems eventually become unaffordable. With a more joined-up approach, such stand-alone training systems will be a thing of the past.

'We have some really good training for the British Army and our training for the Afghanistan campaign was first class," said Maj Gen Jaques.

But it was very resource-intensive. We have developed it in a stovepiped way, particularly in the way the requirements are pulled together. We need a more systemsorientated approach in the way we train and equip the soldier. And I believe we can do the same, or more, for less money."

Traditional leading industry suppliers, BAE Systems, Lockheed Martin and Thales were alongside non traditional suppliers Vodafone, Horsebridge, Prolinx and Skyscape at the launch in March at Shrivenham to discuss future possibilities.

They heard how T&EA(L) proposes to address those incoherencies to forge faster responses to a changing world, allow training when and where required, reduce duplication of effort, and remove the MOD from proprietary technologies which are inflexible and costly through-life.

Cost models, approved by DE&S' Cost Assurance and Analysis Service, suggest huge savings. Army driver training, for example, is projected to cost £1.6 billion over the next ten years. T&EA(L) could potentially



desider May 2015 39

Major General Jaques

saving around £160 million over the ten years if only 10 per cent of the training is done through simulation.

Matt Tovey from Training and Simulation Systems Programme in DE&S, is responsible for T&EA(L). "The launch event was extremely successful and well received," he said.
"The fact so many attended from MOD and industry and that nearly all the assistance from industry was at nil cost shows that both believe in T&EA(L) and stand ready to bring to bear their skills and innovation to make it

"It is going to be an exciting journey and we are looking forward to running a number of workshops with industry to determine how



"We need a more systems-orientated the soldier



# The Prince of Wales

he final blocks built for *Prince of* Wales at the Appledore yard have been shipped out to Rosyth. From the first steel cut in October 2008 at Babcock Marine until last month the north Devon yard fabricated nearly 10,000 tonnes of steel for the two carriers.

Two hundred and seventy five centreblock and sponson units of more than 6,000 tonnes have been built and supplied by sea and road to Rosyth.

Lower Block 01, the bow section, has been manufactured and outfit-installed for both ships, including 110 units and 12 sub-blocks totalling more than 3,000 tones.

So far, catwalks for both ships have been manufactured consisting of 216 tonnes of steelwork.

The work, carried out by a force of around ( ) has involved

**1,225,000** staff-hours



The final blocks from Appledore are on their way to Rosyth



he first gas turbine providing around 50,000 horse power has been installed into HMS Prince of Wales in Rosyth, pictured right.

The Rolls-Royce MT30 Gas Turbine Alternator is the world's most power-dense package, a key feature for naval ships where high power occupying minimum space is essential.

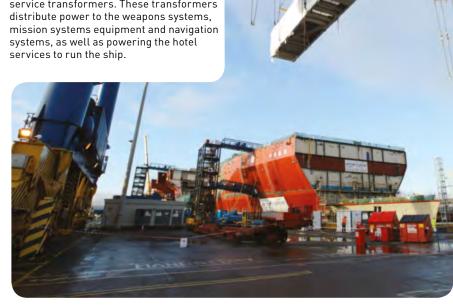
Each 120-tonne GTA package consists of a GE-supplied alternator coupled to the Rolls-Royce turbine. Two are installed in each ship and will provide two thirds of the 109 megawatts needed to power the 65,000 tonne ships - enough energy to power

Don Roussinos, Rolls-Royce, President -Naval said:

"We're proud to be working alongside such a strong team in the Power and Propulsion sub Alliance, as these highly capable ships get closer to entering service.

"We installed the very first marine gas turbine more than 60 years ago, and are delighted to continue that long and proud history of delivering advanced marine gas turbine and propulsion technology to the Royal Navy."

The GTA's will supply power to the four propulsion motors as well as the 13 ship service transformers. These transformers





# The Queen Elizabeth

### **Carrier system** passes ultimate test

large scale three-day trial has proved the capacity and capability of the communications system to be fitted in the Queen Elizabeth aircraft carriers.

Run by the Aircraft Carrier Alliance at HMS Collingwood, Royal Navy sailors operated the Tactical Voice Terminals, or TVTs, across a network to drive the system well beyond its design capacity.

The TVTs are the communications devices that provide private calls between two positions, and conference calls, known as group or open lines, in the ship, as well as external radio channels.

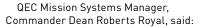
The whole network - the Tactical Command and Control Voice system – is one part of the new carriers' Mission System, which gives the ships their fighting power. It is crucial to the Fleet Air Arm engineers and logisticians readying aircraft for missions, to the damage control and fire fighting teams dealing with on-board emergencies, and to the Ops Room and Bridge teams fighting the ship as part of a Task Group.

The trial was designed to be particularly stressing on the system as design engineers made simultaneous demands across the network. The system operated



successfully at up to three times its required capacity and the trials also showed the terminals to be intuitive and readily useable by operators new to

All of the parts are being installed in the Queen Elizabeth in Rosyth. Uniquely the trials used the actual mission systems equipment to be fitted to the two carriers long before they are working on board.



"This is a significant milestone event and marks the end of the shore based testing on this unique and complex fully integrated suite of communications systems."

"This is first time a test of this nature has been conducted by the Royal Navy ahead of on-board commissioning on real equipment and could not have been achieved without the help and co-operation of the sailors borrowed from Portsmouth Flotilla and the crew of HMS Queen Elizabeth."

DE&S Director Ship Acquisition, Rear Admiral Henry Parker, added: "It is really good to see that what can be done to derisk internal comms performance is being done and that it has been achieved on schedule. For those of us who have been around a while, we have often experienced problems with these un-sexy, but hugely important and command-sensitive systems late in the programme. The joint team has done well in learning lessons from this and doing something cost-effective and innovative about it."



### **Carrier system Trial Statistics**

- Three days of trials
- 70 Royal Navy sailors involved from Portsmouth Flotilla and ship's staff from HMS Queen Elizabeth
- 120 Tactical Voice Terminals used
- 20,000 operator actions
- System can run 600 active phones, supporting 1,100 group and open line users
- System operated at up to 300 per cent of its required capacity



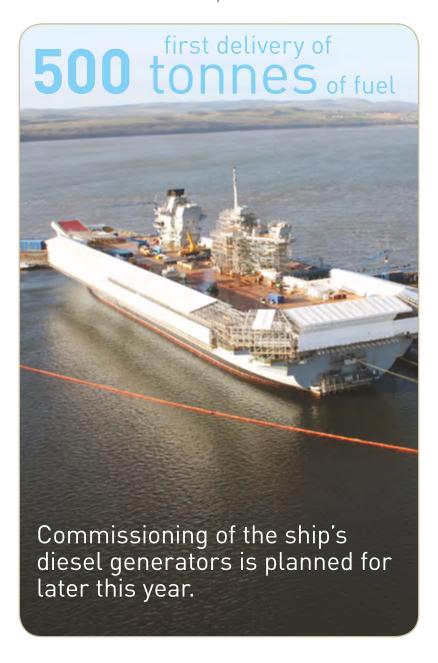
# **Delivery fuels** carrier progress

itting out of *HMS Queen Elizabeth* has taken another major step forward with the first delivery of 500 tonnes of fuel to the ship.

DE&S is responsible for providing fuel for trials and the local DE&S-led Delivery Acceptance Team (DAT), under the direction of the Client Director Capt Stephen Thompson, took the lead in Rosyth.

Jason Marshall, Head of the Marine Systems Group within the DAT, said: "This was a complex evolution to deliver 18 road tanker loads of fuel to the ship across a number of days. Working closely with our industry colleagues in the Aircraft Carrier Alliance and our fuel suppliers we have been able to complete the activity on time to support commissioning of the fuel system."

Control measures were in place to ensure the work went smoothly and safely in the tight confines of the ship's commissioning. The most noticeable safety feature is the boom which now surrounds the ship.



# 21st century mine hunting

hree new contracts will demonstrate the feasibility of a new approach to clearing sea mines, involving the exploitation of maritime autonomous systems.

The Maritime Mine Counter Measures programme placed with a Thales-led consortium, follows a commitment by DE&S and its French counterpart, DGA, to spend more than £17 million to design a new system.

This programme will deliver unmanned surface and underwater vehicles deploying advanced mine hunting sonar and mine disposal equipment. The system will be operated remotely and at range, increasing safety by keeping the RN crews well away from the minefield.

The second contract with Atlas Elektronik UK is an advanced unmanned mine sweeping system. This will demonstrate the deployment of next-generation minesweeping technology from an unmanned surface vehicle. The whole system will be deployable

from a Hunt class mine hunter and again increases safety by allowing mine sweeping operations to be conducted remotely.

The third contract to SeeByte is for an autonomy demonstration system. This will allow assessment of advanced mission planning and control software essential for efficient exploitation of unmanned systems. The contract includes three Iver 3 UUVs equipped for mine hunting operations.

The contracts are the work of DE&S' Mine Countermeasures and Hydrographic Capability team. Team Leader Alex du Pré said: "The MHC programme is built on the premise that much of the capability provided by mine countermeasures and hydrographic ships can be delivered more effectively by autonomous unmanned systems. The recent contracts will be pivotal in de-risking this technology.

"The MHC team has overcome many challenges in delivering these contracts, particularly the Anglo-French collaborative element. But we have been working on this for several years and to have finally converted our work into contracts is a big step forward in delivering this exciting programme for the Royal Navy."

Chief of Materiel Bernard Gray added: "Both the UK and France are committed to developing a prototype for the Maritime Mine Counter Measures demonstrator to test the feasibility of using remotely operated, unmanned marine vehicles and sensors to detect and dispose of this threat to our maritime capability."





The collaborative MMCM contract is with a Thales-led consortium that includes BAE Systems.

"Thales has world-class expertise in mine countermeasures, having equipped more than half of the world's in-service fleet of minehunters," said Patrice Caine, Chief Executive of Thales.

"We are proud to be part of this strategically important programme, which will provide France and the UK with key capabilities to support maritime security and the projection of amphibious forces."

French and UK contractors involved in the MMCM system include ASV for the surface vehicle, ECA Group for supply of the underwater unmanned vehicles, Saab for the ROVs and Wood and Douglas for communications.

Antoni Mazur, Managing Director of Atlas Elektronik UK said: "Winning this important Autonomous Minesweeping contract is another significant milestone for us as we continue to expand our business. We welcome working with DE&S to develop the RN minewarfare autonomous capability for the future. This demonstrates AEUKs continuing ability to develop, supply and support cutting edge technology from our MOD R&D."

DE&S and its French counterpart, DGA, to spend more than £17 million to design a new system.

"The MHC team has overcome many challenges in delivering these contracts"

"We look forward to the programme delivering efficient and streamlined training to the aircrew of the future which will continue to prepare them to meet the requirements and challenges of operating on the front line"

- Air Commodore David Bentley, Director Flying Training 22 (Training) Group

# Training to SUCCEE

The UK Military Flying Training System is approaching major milestones. desider reports on DE&S bringing radical changes to the way aircrew prepare for the front line

raining for the UK's military pilots and rear crew is going through a revolution as it moves from current training to a new service. Legacy fleets are being replaced by new, modern aircraft which better replicate those used by front line operational squadrons. Up-to-date training methods ensure students progress to operational training more efficiently - to fly and succeed on the front line.

The UK Military Flying Training System (UKMFTS) plays a key role in ensuring the UK delivers world leading flying training. The DE&S project team supports and maintains the current training system, while working in a partnership driving forward the multi-billion pound future flying training programme.

"Historically, military aircrew training had taken too long, cost too much and left too big a gap between the training and operational environments," said team leader Richard

Murray

"The system was flooded with multiple complicated contractual agreements, covering both equipment and support, making it very difficult to manage effectively.

"The key was to design a system that would identify the skills required to fly modern front line aircraft and the best way to deliver that training to student military aviators. Following consultation with industry experts, as well as the three services, a programme was initiated to deliver the optimal output for the Armed Forces."

The result was a Public-Private
Partnership with Ascent Flight Training, a
joint venture between Lockheed Martin and
Babcock International, to deliver future flying
training over 25 years from 2008 out to 2033.
It has four core training elements – Fast
Jet, Fixed Wing, Rotary Wing and Rear Crew
training. Future training will be delivered on

Hawk T Mk2 aircraft used for fast jet training.

ZK032

up to seven new aircraft types – the Hawk T Mk2, Texan T6, Embraer Phenom 100, Grob 120 TP, King Air 350 Avenger and potentially two new helicopter types. The programme will deliver simulators, ground-based training equipment, infrastructure, courseware and instructors.

"This is a busy and exciting time for the team, with a number of high value contract awards and a significant amount of interest in our business", said Mr Murray whose team is co-located in Bristol with key partners Ascent and the RAF's 22 (Training) Group. "We will be bringing in and supporting a variety of new aircraft types to deliver world class training for the Armed Forces out to 2033."

"The output quality delivered by the inservice elements of UKMFTS proves the partnership is highly effective.

Ascent remains fully committed to its role as training system partner to UK Armed Forces"

 Paul Livingston, Managing Director for Ascent

#### Happening now:

Last month there were more than 400 pilots and rear crew in training. The project team's support is broad and complex ensuring safety and airworthiness of seven aircraft – King Air B200/200GT, Avenger T Mk1, Tucano T Mk1, Hawk T Mk1 and T Mk2, and the Viking and Vigilant Gliders.

The team manages 20 contracts across 15 suppliers, provides in-service support and manages upgrade modification programmes. Support extends beyond core flying to RAF Air Cadet Flying Training, RAF Central Gliding Schools and the Red Arrows.

Parts of future training are already being delivered - with Fast Jet Phase IV and Rear Crew Stage 1 training in service. Fast Jet Phase IV at RAF Valley on Anglesey uses 28 Hawk T Mk2 aircraft, supported by the latest full mission simulators, flying training devices and desk top trainers. The system has graduated 22 ab-initio students. Rear Crew Stage 1 Royal Navy Observer training began in 2011 and has graduated 38 ab-initio students.

#### Future planning:

Major milestones are planned for in the next 18 months.

Fixed Wing: Last October, Affinity, a joint venture between Elbit Systems and Kellogg Brown and Root was chosen as preferred bidder as aircraft service provider for the Fixed Wing element. Training will take place at RAF Valley, RAF Cranwell and RAF Barkston Heath with three new aircraft: the Grob 120TP for Elementary Flying Training, the Texan T6 for Basic Flying Training and the Embraer Phenom 100 for Multi Engine Pilot Training. Contract award is expected in 2015.

Rotary Wing: Ascent is engaged with commercial bidders for the Rotary Wing element with contract award planned next year. The aircraft types are still to be decided, but will be modern helicopters with full digital cockpits.

**Rear Crew Stage 2:** This achieved Initial Gate approval this year with an anticipated contract award next year.







# Shipbuilding, Gaddafi and Bath Rugby

An MOD career of more than 30 years including high profile and sensitive maritime projects closed last month with the departure from DE&S of Director Ships, Tony Graham. He began an MOD apprenticeship in 1980, studying shipbuilding at Bath Technical College, and ended by managing major projects - Type 26 Global Combat Ship, Queen Elizabeth carriers and the new fleet tankers - at the head of a staff of more than 1,100 with an annual budget of £2 billion a year. As head of the Royal Corps of Naval Constructors, he holds a Rear Admiral rank

#### What developed your interest in the maritime world?

I grew up in the north east. When I left school the apprenticeships had dried up due to an economic downturn. My mother encouraged me to apply to the MOD and it was the long, bureaucratic process that we can all imagine. When I went to the interview they asked me about fuels that powered warships and I was quite unprepared. Thankfully, someone saw something. There were 1,600 applicants for 40 places and I scraped in.

#### During your career, who inspired you the

I've had many role models – my professor at Glasgow University, numerous naval constructors who showed me the ropes and the meaning of being professional, and many MOD leaders who exhibited strong traits that

#### The moment when you might have thought 'I've got the best job in the world'

I have a famous postcard picture of Concorde and the Red Arrows flying over the QE2. I've sailed the Atlantic in QE2, flown Concorde and flown in a Hawk - all in MOD service. There have been plenty of days when I've thought 'I've got the best job in the world' and there have been a few days when I've

#### What inspires you in and out of work?

I have always enjoyed the delivery of physical product. My office is full of pictures of projects and they'll always be cherished. I've also enjoyed the people. When I walk around DE&S there are so many people I've had the pleasure of working alongside that it feels like a real community. Outside work I enjoy seeing my two children progress in life. My son won the national university water polo championship last year with Loughborough University and was in the finals this year. My daughter is just finishing her A levels and is

off to study drama/theatre at University.

#### No mention of an aircraft carrier?

A highlight of my shipbuilding career. I'm convinced the ships will be a great success. One of the fantastic things about DE&S is that you live through these journeys where you build ships of great significance. When you see ships come alive it's a great moment. There are very few countries in the world who can successfully build aircraft carriers.

#### The last word to your team as you depart?

Thanks - an underrated word - but it will be heartfelt.

#### Feelings on departure?

Positive. I've always had a high regard for the calibre and passion of our people and am confident that they're ready to drive the organisation forward. I also feel the organisation is doing some very sensible things at the moment, such as bringing back an in-house HR capability to manage our critical assets - our people.

#### If you had your MOD time again, what would you do differently?

I'd wish I'd taken onboard all the leadership/management training I've had more of it should have stuck!

#### Relaxation?

My favourite relaxation at the moment is sleeping; my second is watching the family enjoy themselves. When I can I like to go to watch various sporting events; I have Ashes tickets and Rugby World Cup tickets this year. I'm passionate about national sport, less so about club sport, probably because I have moved around so much. At club level I would probably lean towards Bath Rugby and Newcastle United FC.

#### Best advice to a teenage Tony Graham about work/life.

In 20 years' time you'll have a mobile phone that you can carry around and stay in

contact with all your friends via social media software .... So write down everyone's name

#### If money was no object, what capability would you procure for UK Forces?

I would buy world class industrial capability - modernise our factories, their supply chain and their people so that we kept a competitive edge over others who are overtaking us in manufacturing capability and technology.

#### And finally . . .

I recall part of my childhood growing up in Libya - where we went through the sixday war and the Colonel Gaddafi revolution as part of an attached British military community. Gaddafi was my father's officer; and my father was nearly shot on the road on his return to his family one day He was the first person to recognise Gaddafi as the leader of the revolution. Needless to say he was much in demand for debriefings.



REGISTER NOW FOR EARLY BIRD DISCOUNT

Engage with the whole defence & security sector

at DSEI 2015

- 1,500 companies representing the whole supply chain, from Primes to SMEs
- 6 sector specific areas including an Air Zone
- Largest display of the latest defence & security technology
- Networking opportunities with 32,000 representatives from government, military, industry and academia
- High-level seminars delivering the latest insight into the defence & security markets from an international prospective
- Plus: 'The Future of Military Rotorcraft: 2030 and Beyond' Strategic Conference on 14 September 2015





IMAGES COURTESY OF: Supacat, AgustaWestland, Richard Seymour and THALES

SUPPORTED BY













GENERAL DYNAMICS



**ORGANISED BY** 

### DE&S PEOPLE

## Interview skills for local youth

taff at Abbey Wood have been contributing to 'at least five days a year' learning and development by using their skills to help vulnerable people in the south west improve their job prospects.

Around 20 staff signed up for the cross departmental community engagement projects run by Civil Service Local in Bristol, Bath and South Wales.

So far more than 70 civil servants from 15 Government departments have taken part. Events have included hosting mock job interviews for homeless clients and young people between 16 and 23 who have little or no experience of the world of work.

One workshop was so successful a client has carried out work experience with DE&S and has since applied for an MOD apprenticeship.

Employability workshops have also been held for female refugees in Wales and homeless people in Bath.

"There has been a fantastic response to our appeal for volunteers," said Nita Murphy, Civil Service Local's Coordinator for the South West and Wales.

"The projects are a great way for participants to enhance or refresh their interviewing skills in a different setting, alongside civil servants from other departments and give much needed support to more vulnerable members of our local communities

"We now have more than 200 civil servants on a live volunteer list and the number is growing as the word spreads."

Further employability and mock interview workshops are planned in Bournemouth, Plymouth and Wrexham as the scheme expands and the number of volunteers increases.

The scheme has expanded with similar events taking place in Yorkshire, Nottinghamshire, the West Midlands, Essex and London.

Links are also being forged with schools in Bristol and Bournemouth to hold workshops and mock interviews to help their students.

#### Feedback from clients:

"I was really impressed with the Civil Service volunteers, the workshop was led well and I enjoyed the exercises. You made work appealing! The interview was positive and encouraging. I got the imaginary job."

"It was relaxed. I suffer from anxiety, but the panel made me feel comfortable. It was very realistic. I feel quite good! Getting the feedback really helped. It was well worth doing. Great decision to do it."



#### DE&S staff taking part:

Christopher Byrne, Natalie James, Lucy Jeffries, Steve Sudlow, Rebecca Dorsett, Helen Farmer, Steven Kerr, Lee Roberts, Ilona Majewska, John Porter, Sheila Gifford, Julie Groves, David Cook, Louise Hames, Manon Holmes, Steve Miller, Nick Nelson, John Porter.

#### Case study:

Nick Nelson signed up for the project, and found himself chairing the mock interview of a 50-year old looking for a factory job.

An experienced interviewer – Nick is Business Manager for the Fast Air Support Team – reinforced the skills he uses in settling interviewees down and reassuring them in what can be a very nerve racking situation.

And it was also interesting for him in testing for jobs he doesn't normally get involved in, the equivalent of an MOD skill zone post.

"You have to recognise the circumstances of those involved and how challenging it can be for them," said Nick. "This gentleman was applying for a factory job. He had worked in that environment successfully for many years before things in his life had gone wrong.

"But he had a really strong background in the field we were talking about."

Nick, a civil servant since the late 1980s, has offered to help out at future interviews.

"It is a good way for me to meet people from other government departments," he said. "And it's also about corporate responsibility, the public service ethos of giving something back to society. We are, after all, Crown Servants, and we give back to the public. I would certainly be happy to do it again."

# Sun's out, gun's out! | MOTTO

here's nothing like the appearance of a Royal Navy Field Gun to mark the start of

Abbey Wood is again entering the Royal Navy and Royal Marines Charity Field Gun competition to be held in HMS Collingwood on 6th June.

A mix of seasoned field gunners and first-timers join the Abbey Wood cause each year. Due to the level of seniority required to hold a post in DE&S, Abbey Wood regularly competes as the crew with the highest average age in the competition. Last year lifted the Least Penalties Cup, a sign of steady heads in a cohesive crew.

A crew consists of 18 gunners who race to assemble an antique field gun and run with it, disassembling

and reassembling as the competition requires, before dragging the gun home. The competition maintains the spirit of the Royal Navy's contribution to the relief of Ladysmith.

Field Gun is the ultimate team sport and to be part of a crew is a privilege," said Abbey Wood's Field Gun officer Lt Cdr Charlie Deal. "The Abbey Wood crew is a healthy mix of all three services which brings banter and competition to the training arena as well as creating enduring friendships."

Training takes place on site Monday to Thursday from 5.30pm every week to 28th May. Spectators and potential new members are welcome; contact Lt Cdr Deal (desaps-rm-id@mod.uk).

# Geoff appeals for MOD backing

rienteer Geoff Ellis is on the lookout for more competitors from MOD civil servants following his victory in the annual fixture between the UK Police, the RAF, Army Development and the Civil Service.

The competition at Bentley Woods, near Atherstone, saw Geoff's aggressive running earn him a comfortable win by 13 minutes.

With Simon Poole the only other Civil Service orienteer the competition saw the Police run out winner with the RAF in second place.

Geoff, of the BATCIS Falcon team, also made it four British Night Orienteering Championship podium finishes in four years, although he just missed out on retaining his title. His performances though saw him continue to set the pace after four races of the 19 in the UK Orienteering League, helped by more good showings during the Easter weekend in the JK Festival in the Lake District, held in memory of Jan Kjellstrom who was influential in getting orienteering going in the UK.

# the MOD Lottery **January winners**

£10,000: Daniel McLaughlin (Coulport).

£5,000: Philip Robb (London).

£2,000: Lesley Jewell (Birmingham).

£500: Diane Campbell (Shrivenham), Sharon Kitwood (Portsmouth).

£100: Katrina Pattison (Dstl), Michael Bennett (Cardiff), Derrick Healey (Aldermaston), Evelyn Wilson (Bicester), Carl Basson (Portsmouth), Andrew Malyon (Chatham), Daniel Miles (Newport), Robert Spokes (Abbey Wood), Carol Dixon (Warminster), Helen Cheeseman (Chatham), Karis Taylor (Abbey Wood), Keith McKenna (Corsham), Louise Muldoon (Sutton Coldfield), Ian Evans (Catterick Garrison), Angela Badley (Cosford), Nicola Skelding (Chatham), Mandy Belgium (Corsham), Anil Kuber (Tidworth), Janet Tomkins (Southampton), Daniel Hallett (Abbey Wood).

#### **February winners**

£10,000: Russell Allen (Yeovilton).

£5,000: Karen Fabretti (Harrogate).

£2,000: Leonard Thompson (Sutton Coldfield).

£500: Carol Dixon (Warminster), Alan Hunt (London).

£100: Derek Arnott (Rosyth), Claire Wellman (Abbey Wood), Claire Sell (Paderborn), William Sotheron (Salford), Marian Green, (Lisburn), Michael Brown (Bielefield), Amanda Mcllfatrick (Portsmouth), Jennifer Brindley (Holywood), Edward Stephenson (Newcastle), Ina O'Smotherly (Tidworth), Amanda Bowery (UKHO), James Chapman (Beith), Lorraine Brindley (Leeming), Christopher Mansfield (London), John Wright (Moray), Sandra Trayte (Abbey Wood), David Coope (Pudsey), Darren Lindop (Brecon), Geoffrey Stobbart (Abbey Wood).

# **60 SECOND SPOTLIGHT**

#### Name?

Kevin Slade

#### Job?

I'm the Incident Notification Cell Manager in the Quality, Safety and Environmental Protection team.

#### If you were a police officer for one day what would you do with the authority?

Pull over the people not using their headlights when it's raining or gloomy, having their fog lights on when it isn't foggy or sitting at traffic lights with their foot on the brake.

#### If you were in a Rock Band, what instrument would you play?

I actually play the drums, although I'm not in a band at the moment. A Bath Chronicle reviewer in the 1970s once described me as being 'as subtle as a blacksmith'. Not sure if it was a compliment or not though.

#### What do you do when away from

Try to get out and take photos of aircraft, trains or ships. I've had photos used in books, websites, DVDs and one of an RAF Hercules used on a



'green screen' in the TV series Silent Witness. I've also had requests from people for photos of aircraft they have owned or flown in

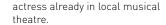
#### What are you most proud of?

My children. Harvey finished a law degree last year, and Abi will hopefully be off to university this year to study drama. She's quite an accomplished

Above: A Sea King hovers over Rockall

Below: Still trying to record that elusive hit!





#### What's the best surprise you've had in life?

I served afloat on RFA Fort Austin and when I came ashore for the last time I was expecting my dad to meet me. When the liberty boat came alongside my girlfriend Sharon (yes, we are a 'Kevin and Sharon') was there instead. I'd proposed to her a few days previously via satellite phone and seeing her on the dockside was great.

#### Where is the most unusual place you've visited?

When I was on Fort Austin we held a raffle to fly in a Sea King to Rockall, an uninhabited remote granite islet in the North Atlantic. Tickets were £1 each and I was so desperate to visit it that I bought about 75. My name didn't come out of the hat but one whose name did was on watch that evening and couldn't go, so with a bit of underhand dealing I managed to get one of the five places. Being winched down and sending some letters home was a great experience.

#### If you were holding a dinner party, who would you invite?

Alice Cooper, one of my heroes and a writer of interesting lyrics and it would be good to see behind the mind of the character he portrays on stage; Lucrezia Borgia to find out how true the image we have of her nowadays is; Catherine de' Medici, somebody else I'd like to find out the 'truth' about; and Sandra Bullock because . . ."



### Director bows out with awards ceremony



Steve Wadey receives his mementos from Mr Bryant

eapons staff who have gone the extra mile in delivering their outputs have been rewarded by outgoing Director Laurence Bryant.

The last 12 months have been notable for staff in the operating centre ensuring business milestones were met

This was certainly the case for Short Range Air Defence team's Ground Based Air Defence Phase 1 project where staff pulled together across the function and industry boundaries to ensure the contract was placed six months

Christmas. Individuals were also recognised, most notably Keith Gordon in the Defence Ordnance Safety Group whose support for new starters was

ahead of schedule - and right before

recognised by his peers.

The Centre turned the tables on

their Director by presenting him with mementoes to mark his service in the MOD. Defence Munitions Gosport apprentices showed their skills in creating a model of John Cabot's ship the Matthew, a replica of which is moored in Bristol Harbour. Mr Bryant said: "As I complete 40 years working for the MOD it was a pleasure and privilege to recognise the recent achievements of a number of Weapons' staff at a Director Weapons' Commendation event.

"My own reflection on our staff skills has long been that they are as good, if not better, than many found in the private sector. Our staff certainly have to contend with more constraints and process, but deliver despite these.

"We will need to nurture and recognise the skills and dedication of our workforce if we are to continue to deliver our outputs in the coming

A farewell meeting also took place with Steve Wadey, managing director of MBDA UK who has moved to Chief Executive of QinetiQ. Mr Wadey was presented with the crests of HMS Daring and the RAF's 9 Squadron, representing the front line forces that he has been delivering to over the last 20 years.

DE&S and MBDA are working together under a ten-year portfolio commercial arrangement delivering Complex Weapons.



Laurence Bryant is presented with a model of the Matthew by Gosport apprentices.



### HREE GO COAST TO COAST

hree DE&S staff will be taking on one of the world's toughest physical challenges next month as part of a team cycling coast to coast across the USA.

The team is being supported by the Defence Sports and Recreational Association as part of its 25th anniversary celebrations.

And it will be backing the eight riders and three support crew who set off on the 3,000-mile nine-day time trial from San Diego, California to Annapolis in Maryland.

Julian Grey and Lee Pendrey from DE&S are part of the cycling crew. "Fatigue, lack of sleep and complying with the numerous race rules will be the hard part," said Julian of Combat Air. "But racing all the way across such a big country as part of a motivated team will be an experience that's hard to beat."

Lee of SPRN added: "The size and unpredictability of the race makes it a once-in-a-lifetime adventure and a huge opportunity for a group of workplace colleagues to pull together and achieve something special."

Teams must negotiate extremes in terrain, temperature and individual comfort, and will 'relay' through more than 50 checkpoints, 24 hours a day to complete the course within the time limit.

Preparation, careful team selection, group cohesion, individual resilience and a collective sense of humour will be vital.

Stuart Kaye of Submarines is part of the support crew. He said: "The logistical challenge of this race can't be understated and it's one I'm really looking forward to. With so many things to consider and plan for, even getting to the start-line will be a huge achievement."

• For further information on DSRA or the Race Across America, visit the DSRA Intranet Page or contact Dom White at People-CivHR-DSRA2@ mod.uk



# Skiers line up for the camera as DE&S staff hit the slopes for the sixth Exercise Rotary Cluster.

he tri-service expedition to
Austria runs every year for those
in DE&S rotary wing project
teams.

The expedition, brainchild of Col Andy Allen (late REME), puts a challenging week's skiing alongside defence engagement with a Nato partner.

Skiers stayed in St Johann im Pongau, home to an Austrian communications unit, about 60km south of Salzburg, in an agreement between the MOD and the Austrian

Skiers of various abilities were put through their paces by lead instructor W01 Marv Smyth of the Lynx team along with four others from the rotary wing community including Col Allen.

Col Allen steps down from his Exercise Rotary Cluster role this year.



# DE&S is well up the QUALITY LEAGUE following the latest awards

he Chartered Quality Institute again sponsored the MOD Quality Awards, now in their fourth year.

Awards recognise individuals and teams who demonstrate a quality approach to achieving business objectives.

Each winner was presented with a 'Bristol Blue' glass paperweight and certificate to mark their success.

Air Vice-Marshal Julian Young, then the MOD's Quality Assurance Authority, said: "Through these awards it is pleasing to celebrate the success that Quality Assurance activity is having across defence sector, and the real difference committed people are making to the excellence of our outputs and enhancing our reputation."

Winners came from the services, MOD civilians and industry

#### DE&S individual winners:

Michael Cave (Business Risk QA, Apache); Mark Haskell (LE AVP, HPO Quality Officer); Ian Phillips (Tech QSEP QA Field Force East, Government Quality Assurance Officer); Mark Perry (LE OSP Project Team Quality Assurance

Mark Perry (LE OSP Project Team Quality Assurance Manager);

John Neilan (LE OSP OIP Senior Quality Manager); Lt Cdr Andrew Blackmore (Ships Maritime Combat Systems Requirements Manager - Underwater); Lisa Jones - (was ISTAR BMT Quality Manager, now left the MOD).

#### Team winners:

Ships Operating Centre; Fixed Wing Quality Improvement Team.

### **Charity News**

nventory Management Operating Centre got into the spirit of Comic Relief with a Red Nose Day Bake off.

With the theme of 'funny for money', staff were encouraged to bake something that embraced Comic Relief; be it red-nosed, paying homage to their favourite comedian or even a bake that had gone horribly wrong.

Entries from Becki Cowan, Phil Styles, Julie Penver, Diane Stacey, Pam Taylor, Sarah Meech, Victoria Bull and Lt Rebecca French saw Sarah take the prize of Star Baker.

# Donations from colleagues raised

nearly £200

A previous charity bake in February for the British Heart Foundation's 'Fight For Every Heartbeat' campaign

raised £191

# LEARNING AND DEVELOPMENT

# **Acquisition reforms**



Jonathan Slater, the Defence Authority for the Acquisition System

ajor reforms to the acquisition and support of equipment clarify DE&S' role as it moves towards match fit status in 2017.

The refreshed Acquisition System Operating Model and Handbookreleased on 1st April – capture changes that were enacted last year. DE&S' role as a bespoke trading entity will help create a more disciplined boundary with defence customers, making life more business-like for all.

#### Acquisition reform will see:

- MOD Head Office provide the strategic direction on what the military needs to be able to do, then hold the Commands to account for their output:
- The Commands, who have taken responsibility for in-year management, set out what DE&S will deliver to meet their outputs; they hold DE&S to account for delivery;

- DE&S advise on how the Commands' requirements should be met and take responsibility for delivery, in turn holding industry to account for its performance
- DE&S is held to account for performance against its corporate plan.

Reform will mean everyone will know their, and everyone else's, role in the system doing a job everyone can see is good. Those in decisionmaking roles will be held accountable for them.

'In the past the system has had to deal with an unaffordable equipment plan, micromanaged from Head Office," said Jonathan Slater, the Defence Authority for the Acquisition System. "The principles of the Defence Operating Model have now been applied to the Acquisition System in order to stop us going back to the bad old days. They are

### Sue takes over women's network role

ir Vice-Marshal Sue Gray, the RAF's senior female engineering officer and Director Combat Air at DE&S, is the new champion of the MOD Women's

Network Chair Cara McMahon said: "We're thrilled that Air Vice-Marshal Gray is championing the vital role of women within DE&S and we look forward to hearing her inspiring story.

'In the meantime, we are welcoming women from throughout the organisation to help them maximise their career potential and make the most of the opportunities available to them."

Take risks, have a vision and emphasis your strengths were messages that came out of this year's annual meeting

Outgoing champion, Director Ships Tony Graham, spoke to around 60 women from DE&S about how to plan careers, using his extensive experience in the

Mr Graham said: "You need to consider who is championing you in your networks, and think ahead two jobs asking yourself how others got there, and find out what their bosses looked for."

To join the Women's Network, email DES HRPLans-MWNSW (MULTIUSER) or call Cara McMahon on 9679 86633.

#### now live, encouraging good and constructive behaviour by all."

The newly established Acquisition System Authority supports Jonathan's Defence Authority role, setting the standards and overseeing the system, using system health to check how it is

Information and further links can be found on the Defence Intranet at http://defenceintranet.diif.r.mil. uk/Organisations/Orgs/HOCS/ Organisations/Orgs/DGTCS/Pages/ AcquisitionSystemAuthorityTeam.aspx

### Technology innovation at Abbey Wood

he impact of combat casualty care on technology procurement and the influence of defence innovation on other health sectors formed part of DE&S Technology Office's first cross-sector technology and innovation event at Abbey Wood.

From the battlefield to the bedside and beyond' was opened by Director Technical, Air Commodore Mike Quigley. Keynote speaker was Brigadier Professor Tim Hodgetts, Medical Director of Defence Medical Services who has more than 20 years' operational experience.

He outlined how changes in care, technology and innovative processes have contributed to improving casualty outcomes.

Brendan Vickers from Innovate UK delivered a presentation on the Small Business Research Initiative with examples of how this has been used in the health industry. The event was closed by Head of Technology Delivery, Heather Goldstraw.

Dr Eluned Lewis of the Technology Office said: "This first event, focused

on combat casualty care, provided real examples of technology development and transfer of innovation between defence and the civil sector. I'd encourage everyone in DE&S to come along to our next event in November 2015; which will focus on an alternative sector."

# Safety – *'compelling* case' leads the way

he author of one of the most important reports into an air accident was the special quest as more than 180 staff from across DE&S attended a one-day safety leadership event at Abbey

Sir Charles Haddon-Cave's report into the fatal loss of Nimrod XV230 over Afghanistan was described by Air Marshal Simon Bollom, DE&S Chief of Materiel (Air), who opened the conference, as a 'compelling read' for anyone involved in leadership and management of safety.

The conference theme was 'Beyond Conventional Risk Management' and considered proportionality in defence and other high hazard/high consequence

Sir Charles referred to his role in the Nimrod investigation where thousands of documents were examined which he described as 'safety case city' and reminded the audience that safety arguments should focus on identifying hazards and mitigating risks and above all else they must be living documents.



### Rowing with a Winner

ndy Hammond showed that class tells in the end by clocking the fastest time for 500 metres in an indoor rowing event at Abbey Wood.

Hammond of DE&S' maritime domain, who has held the World and British indoor 24-hour rowing records, was the fastest male during the Royal British Legion event in neighbourhood two, edging out Matt Price by two seconds at one minute 23 seconds.

Third was Jordan Beecher, former Paratrooper, member of Britain's Paralympic team and three-time gold medal winner in the recent Invictus Games with the same time as Price at one minute 25. Beecher was invited to the event to ramp up the competitive

Lt Cdr Mark Hamilton, a European Championship gold medallist for Britain, clocked one second higher for sixth place as the maritime domain dominated the 500m times

Jason Hopkinson of Land finished fastest of the 1,000m rowers in 3.12, a second in front of Sean Sarafilovic.

Eighty-seven rowers took part with Clare Richardson of Land the fastest female over 500m and Lisa Middlecote of Joint Enablers the fastest at 1,000m.

Contractors and members of DE&S' transformation partners also took part with around £450 raised for the Royal British Legion.

This event was one of three being organised to raise money for the RBL. building momentum toward Bristol Poppy Day which Abbey Wood played a huge role in 2014. Fundraisers were aiming to complete a 1,200km cycle earlier this month and 50 fun runners are doing the Bristol 10k on 31st May. If you wish to take part contact Wg Cdr Stephen Chappell.

Atlas Elektronic UK, sponsors of the Royal Navy and Royal Marine Rowing Association, provided

Any competitors that have not received a copy of the final results, contact Oliver

# LEARNING AND DEVELOPMENT

### The Brunel Club

he Abbey Wood Brunel Club. formally launched at January's Professional Engineers Forum by Air Vice-Marshal Julian Young, held its first Breakfast Briefing on 9th April - the birth date of Isambard Kingdom Brunel.

The club provides a community of professionally-registered engineers at Abbey Wood. Since launch membership has grown to 74 engineers, 26 of whom attended the

Air Vice-Marshal Young was in attendance in his new role as Director Helicopters, as was the new Director Technical Mike Quigley. The briefing was chaired by Engineering Policy

Department Head Clive Buckley.

Guest speaker was Stephen Payne, an independent consultant with PFJ-Maritime Consulting and an educational advocate for engineering careers, who has a long and illustrious career as a naval architect, having worked on the design of around 40 passenger ships.

His presentation was entitled Genesis of a Queen, the Greatest Passenger Ship in the World" and told the story of the transatlantic ocean liner RMS Queen Mary 2 from childhood inspiration through construction to maiden voyage and establishment as the flagship of the Cunard Line.

The next Brunel Club Breakfast Briefing is planned for 15th September. For further information about the Brunel Club visit:

http://defenceintranet. diif.r.mil.uk/Organisations/ Orgs/DES/Organisations/Orgs/ FuncDir/Technical/Pages/ EngineeringCommunity.aspx

or contact Rachel Dyer DES TECH-EG EngPol-Skills1a@mod.uk ABW



Queen Mary 2

# **Floating** GOOD IDEAS

he message that learning from experience is an important part of safety management was high on the agenda of an LFE event hosted by Director Ships.

Outgoing Director Tony Graham introduced presentations from Salvage and Marine Operations, Warship Support Capability and the Defence Maritime Regulator, showing the diverse portfolio of the operating

Discussions centred on providing diving conditions in austere places. the challenges of reducing fuel use in ships to meet sustainability targets and the importance of managing detail to maintain safety in complex engineering environments like warships.

Mr Graham said: "I reiterate the importance of LFE, and I have challenged the audience to think of at least one example in their current job where lessons identified could be applied and to think through how they might have managed such a situation differently with the knowledge gained."

## Focusing on Disability

E&S is serious about championing staff with disabilities - that was the conclusion of a lively debate at Abbey Wood last month.

Speakers from across the organisation – bravely speaking out in front of a large audience shared their experiences to increase awareness of where behaviours and cultures can improve.

Clive Tarver, Director ISTAR said he had been 'humbled and inspired' by the personal stories he had heard.

"I am proud to work with such a committed group of people," he said. "As 2\* Disability Champion for DE&S, I will strive to work together with the Contact-Ability forum, DE&S HR, Infrastructure and CIO teams; the DBS Reasonable Adjustments Team and Atlas to improve DE&S as a place to work for disabled staff."

The Contact-Ability debate was back by Pete Worrall, Chief of Materiel (Joint Enablers). He said: "As a DE&S Executive Board member I was not only delighted but privileged to support the debate. This is not a tick box exercise for me but a serious topic that deserves everyone's focus."

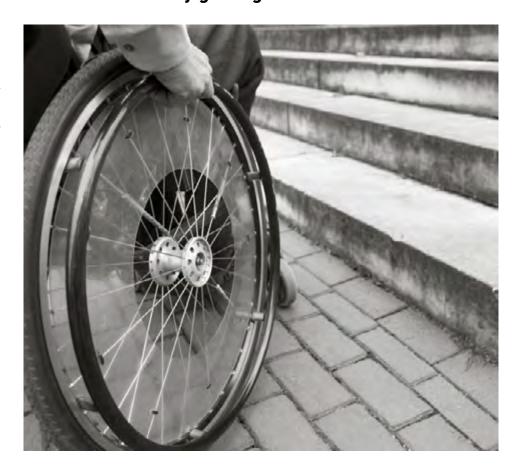
Contact-Ability will hold further events with focuses on line managers, carers of disabled people etc. They would love to here from you if you would like to get involved or have a particular question, so please email DESHR-Contact-Ability@mod.uk

Contact-Ability Multiuser Email: DESHR-Contact-Ability@mod.uk

**DE&S** Disability champion Email: DESISTAR-Directorsoffice@mod.uk

Tom Tiner, DE&S Disability Community Change Agent:

"I'm really proud to be part of such a key event and pleased to see senior leaders in the audience; glad to see disability getting the focus it deserves."



#### Staff feedback

"This has been a very informative and useful event, which has helped awareness of disabilities in all forms."

"An excellent, well organised event with strong leadership. Well done Pete Worrall and Clive Tarver hosting the event, what I believe to be demonstrating leadership and commitment to championing diversity."

"Showed that DE&S does have a real intention to understand the problem of disability, not only now but in the future"

### BAE SYSTEMS

INSPIRED WORK

# ENGINEERED WITH INSPIRATION.

With some 84,000 employees in six continents, our story is about highly skilled people who are committed to serving our customers. Our people continue to break new ground engineering some of the world's most advanced, technology-centred products, systems and services across the physical and digital world.







