

# desider

the magazine for defence equipment and support







Image supplied by Rolls-Royce shows compressor blades on one of the modules of the MT30 Gas Turbine for Type 26



www.gov.uk/government/publications/desider-2015

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#### **Printing:**



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## **FOREWORD**

By Tony Douglas, CEO

nother month has passed and there have again been a number of significant successes that are testament to the hard work of DE&S staff.

Perhaps the most outstanding was the delivery of a new £1.1 billion contract to continue the modernisation of military flying training in the UK.

Under the UK Military Flying Training System (UKMFTS) this contract will provide modern training aircraft and ground based training devices such as simulators for aircrew across the Royal Air Force, Royal Navy Fleet Air Arm and Army Air Corps until 2033.

This is widely acknowledged as one of the most complex defence procurements to date but the tireless efforts of DE&S staff has not only ensured the best deal but that military aircrew trainees will receive the training they need to deliver on the front line.

In addition to this a funding package worth more than £200 million will support further design work for the Royal Navy's next generation of nuclear submarines.

This contract will see the continuing development of the design of the boat which will be the safest and most technically advanced submarine ever built in the UK.

After four years Chief o Materiel Land Chris Deverell leaves DE&S this month to become Commander of the UK's Joint Forces Command. Chris's dedication has resulted in a huge amount of progress across the domain and he has had a huge impact around the AJAX programme in particular.

I am grateful to him for all his hard work and wish him all the best in his new role.

In addition last month saw the launch of DE&S Pride which Minister of State for the Armed Forces Penny Mordaunt hailed as a "historic moment in the life of DE&S."

It is another important step and underlines DE&S' determination to attract the best talent available from diverse backgrounds to the organisation.

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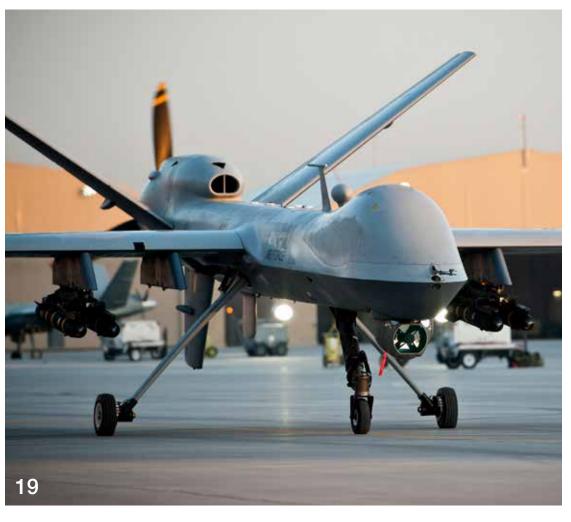






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#### Shirley Spencer, Director Human Resources, talks to Desider about her passion for HR, nearly becoming an antiques dealer and the benefits of transformation for DE&S staff.

Picture: Andrew Linnett





hroughout my career I've worked in HR. It wasn't always going to be the case, and I could very easily have become an antique dealer. I have a passion for antiques and still collect antiques from my travels around the world. However, HR has been an exciting choice, and before joining DE&S three years ago, my roles have taken me to places like Australia, Russia, America and India. At every stage, the interesting and wonderful things I have been able to get involved in have led me to my next chapter in HR.

I'm really pleased to be a part of the transformation happening in DE&S. We are implementing a new People Model and strategy which will significantly improve the way we run our organisation and the way we attract, develop, deploy and retain our

Since we became a bespoke trading entity in 2014, we've been using our new freedoms to make lots of small changes. With these freedoms we're able to directly focus on supporting our organisation and the skills and capability that DE&S staff need. For example, we've had the freedom to set up professional functions including HR, and design and approve a new competency framework just for DE&S. We are now

working on other areas such as pay and reward, and learning and development strategies that will enable us to drive performance in DE&S.

Transformation and our new freedoms mean that currently, just about everything within HR is about to change for the better. Putting in place a professional and agile HR function is a critical enabler to the change we're trying to make. The key priority for us is making sure that the new HR function meets the needs of our changing and future organisation and that we have the right systems and processes in place to support line managers in maximising the performance and development of their teams.

Nearly every question I am asked when I talk about DE&S transformation is related to pay. While pay and reward are important, it shouldn't surprise anyone to hear that pay is not the most significant change that transformation will bring to DE&S and its employees. Equally important, is the opportunity it brings for us to better develop the skills and capability of our people. In the future, there will be even more opportunities for DE&S staff to develop through their professions and through an improved offering of blended learning.

What we're trying to achieve is far ranging and complex. HR matters like pay and performance require a lot of preparation and long lead times. They typically work on annual cycles, and everything needs to be in the right place at the right time for changes to be realised.

For me, 2016 is all about capitalising on the thinking we've already done around transformation, putting some foundations along with real changes in place, and focussing on bringing in more improvements throughout 2017. So it's during this year that staff will start to really see and feel the difference of the People elements of our transformation approach.

As an organisation we're starting to see a steady march of progress as we introduce this change and move towards a high performance culture.

Our new HR function will continue to be instrumental in supporting this.

I have every confidence that DE&S transformation will grow the skills of our workforce, and make it easier for DE&S staff to do their jobs and deliver for our Armed Forces customers, as well as bringing some excitement to the organisation.





contract has been signed to build two cutting edge Zephyr 8 Unmanned Aerial Systems (UAS) in the UK for testing by the MOD.

Tasked with demonstrating and understanding these UAVs is the DE&S Technology Office based at Abbey Wood.

The Technology Office seeks to improve the delivery of military capability, through innovation and exploitation of technology and works primarily in the 'pre-concept' space assessing new technology and concepts

The £10.6 million contract with Airbus Defence and Space (ADS) was signed last month as part of a commitment to provide next-generation battlefield intelligence capabilities to the UK Armed Forces.

Heather Goldstraw, Head of the Technology Office, said "We are pleased to have passed this significant milestone. HAPS is an exciting technology that offers the opportunity for innovation in UK military capability. We are also engaging with the UK Defence Solutions Centre to identify export opportunities in support of UK prosperity".

Although a UAS, Zephyr is referred to as a High Altitude Pseudo Satellite (HAPS), reflecting the fact the aircraft flies above the troposphere

at 70,000ft - twice the altitude of commercial airliners - and well above disruptive weather systems that can ground or limit other aircraft.

The 60kg aircraft can stay airborne for 30 days, travel up to 2,000km a day, and is closer in capabilities to space-borne satellites than a conventional UAS but costs just a fraction of the price.

Powered by two electric motors during the day it has a 25 metre wingspan that is covered in solar panels and houses the highperformance batteries that keep the aircraft flying at night.

It is envisioned that HAPS could

"

HAPS is an exciting technology that offers the opportunity for innovation in UK military capability.

Heather Goldstraw



be a persistent presence over the battlefield and provide useful intelligence for far longer than previously possible.

This contract will allow the UK to conduct an Operational Concept Demonstration programme, to understand whether HAPS can fulfil a requirement for persistent surveillance capability as announced in the Strategic Defence and Security Review (SDSR) 2015.

The DE&S Technology Office will be running the four month long demonstration in 2017 to explore wider requirements, assess the platform's capability in a variety of scenarios, and support JFC as the capability customer to better understand what HAPS could, and should be used for.

Colin Paynter, MD of Airbus Defence and Space UK, said: "It's great news that we are now building two of our advanced Zephyr high altitude pseudo satellites for the MOD. It's superb British technology that can do things that no one else in the world has managed - flying for two weeks non-stop is record breaking. And I am sure we will set a new world record as soon as the first Zephyr 8 takes its first flight in 2017."

Above: Artist's impression of Zephyr 8 UAS courtesy of Airbus

For more on UAS see feature pages 19-21→





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## UK Military Flying Training System - £1.1bn contract to deliver 'world-class' tuition

project team at DE&S has played a key role in the investment of more than £1 billion to continue the modernisation of military flying training in the UK.

Under the UK Military Flying Training System (UKMFTS) a new £1.1bn contract was signed in February with Ascent Flight Training to design, deliver and manage a Fixed Wing training service until 2033.

This contract will provide modern training aircraft as well as up-to-date ground based training devices, such as simulators, for aircrew across the Royal Air Force, Royal Navy Fleet Air Arm and Army Air Corps.

Acknowledged as the one of the most complex Public Private Partnership defence procurements to date, it has taken the DE&S team many months of hard work to get to contract award.

Richard Murray, Head of the UKMFTS project team, said: "This contract is a huge achievement for the team and represents 10 months of incredibly hard work to secure the best deal for Defence in order to deliver a modern, flexible world-class flying training system that will train the next generation of UK military aircrew.

"The challenge now is to work with our partners, Ascent and 22 (Trg) Gp, to successfully deliver that future along with the wider supply chain including Lockheed Martin for the provision of ground base training equipment, Babcock for infrastructure and Affinity as the new Aircraft Service Provider."

The new system will ensure a consistently high standard of aircrew who will ultimately move onto the front line, with around 230 aircrew commencing training each year.

Under the contract Elementary Flying Training will be operational from end of 2017, Multi-Engine Pilot Training will be in place from mid-2018, and Basic Flying Training will be up and running by early 2019.

Multi-Engine students will go onto pilot



The RAF's latest fast jet trainer, the Hawk T2 during a flight over North Wales.

such aircraft as the A400M, Voyager and the new Multi-Mission Aircraft, whilst those graduating from Basic Flying Training will go onto Fast Jet Training on the Hawk TMk2 at RAF Valley before joining front-line squadrons to fly Typhoon and Lightning II.

Minister of State for Defence Procurement Philip Dunne said: "This is fantastic news for the future of our military aircrew, providing them with a modern training system which will equip them to deliver on the front line.

With our strong commitment to air power as part of the Strategic Defence and Security Review and our investment of £178 billion in equipment over the next 10 years, this contract is further proof of our commitment to invest in the UK's defence capabilities for the future, ensuring that we continue to be a world leader in military flying training."

Ascent, which is a joint venture between Lockheed Martin and Babcock International, was selected as the MOD's flying training partner in 2008 and has an overarching 25-year contract to provide the UK's Military Flying Training System.

The consortium already delivers both Fast Jet training at RAF Valley in Wales and Rear Crew training at RNAS Culdrose, in Cornwall.

As part of the £1.1 billion investment, Ascent have placed a sub-contract with Affinity, a joint venture between Elbit Systems UK and Kellogg Brown and Root Ltd (KBR), worth £500 million to provide three aircraft types as well as their maintenance and support.

Once the programme is fully operational, students will undergo Elementary Flying Training on the Grob 120TP 'Prefect' before going on to complete either Multi Engine Pilot Training on the Embraer 'Phenom' 100 or Basic Flying Training on the Beechcraft 'Texan' T-6C.

The Managing Director of Ascent, Paul Livingston, said: "The award of these contracts marks a key milestone for the Fixed Wing element of UKMFTS. Modern training aircraft selected specifically to meet the bespoke needs of the UK's Armed Forces will deliver optimised training alongside high tech simulators and classroom trainers."

The UKMFTS project team are also expecting to announce the contract award for Rotary Wing training later this



Director of Combat Air at DE&S, Air Vice-Marshal Sue Gray said: "This contract will replace legacy fleets of aircraft with new, modern platforms that better replicate the aircraft used by front line operational squadrons.

"Up-to-date training methods will also be developed to ensure that students are able to progress to operational training more efficiently and



## CoM Land leaves with a promotion to General

After five years working at the top of DE&S, Chief of Materiel (Land), Lieutenant General Sir Chris Deverell, believes that the organisation he is leaving is focused on delivery and providing what the Armed Forces customer needs.

his month General Chris leaves to take up the position of Commander, Joint Forces Command on promotion to full General.

He joined DE&S in 2011 as Director Materiel Strategy, and was appointed COM(L) in 2012. Since then he has held the responsibility for four operating centres, 4,500 military and civilian staff, and outputs that include complex weapons, logistics information systems and ground combat equipment.

"It is together, over the last four years, that we have made a lot of positive change in the way we do business and the outcomes we have delivered," he said.

"I would like to thank everyone who has been on this journey with me for their help and support."

Under General Chris' leadership, DE&S has signed the contract for the Army's next generation of armoured vehicles, AJAX, committing 25 per cent of the Army's equipment spend for the next 10 years. This is the largest armoured vehicles order for the British Army for over 30 years.

"We signed a production contract for 589 vehicles, a support contract up to 2024 and a cannon production contract for both the AJAX programme and Warrior Capability Sustainment Programme" General Chris added.

"Another significant achievement was outsourcing the logistics, commodities and services operating centre to Leidos, achieving a service commencement on 1 August 2015. It's going to deliver savings of around £500 million, give us better infrastructure and the ability to serve our customers better."

During his appointment, General Chris has steered many other improvements in the Land Domain, not just significant projects but in terms of general performance.

"We've made progress with the command acquisition support plan

(the relationship between us and our customers), improvements in inventory management, financial forecasting and business case approvals" he said.

The clear focus on delivery at DE&S has been General Chris' key driver during his appointment, and his favourite part about working here.

"I really like the fact that concrete things happen and the difference that they make to the Armed Forces. It's an attractive part of the job.

"You can see your progress as you go along, but it's also a lot more obvious if you don't deliver on time," he added.

General Chris said he would highly recommend working at DE&S, and praises in particular the organisation's delivery focus and the development opportunities available.

He says he takes with him a deep understanding of DE&S, the way DE&S do business, and a better understanding of change, industry and commerce.

These skills will benefit General Chris as Commander, Joint Forces Command from April 2016, a big customer of DE&S.

Although he joined the army as a university cadet before going to University in 1979, a military career was not the original intention for General Chris who was set to leave after paying back five years in service after graduating.

"There was always something more interesting over the horizon, and I woke up in my mid-forties thinking this is what I do," he said.

"I'm not sure I'm your archetypal military officer, although I'm not sure anyone is anymore. I've had an unusual career and an unconventional route to my next position".

After four years in post, General Chris will leave a real legacy, particularly the improved focus on customers in the Land Domain, strategy development and a contribution to transformation throughout.



Talking about his successor, Major General Paul Jaques – currently Director Land Equipment – General Chris said: "He comes with a good understanding of DE&S. I'm hoping for a very smooth handover as he's already committed to transformation, our strategy and improving performance".

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It is together, over the last four years, that we have made a lot of positive change in the way we do business and the outcomes we have delivered.

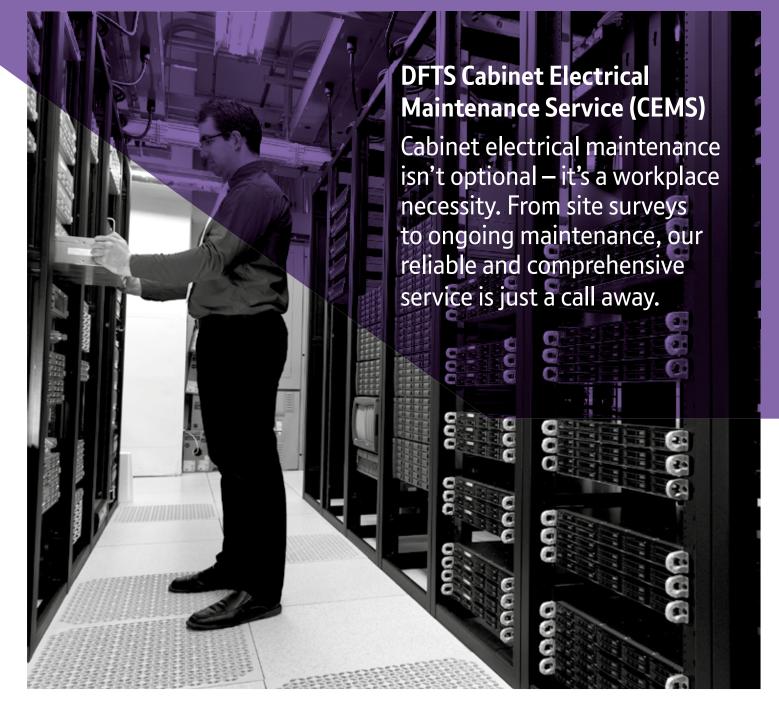
I would like to thank everyone who has been on this journey with me for their help and support

Lieutenant General Sir Chris Deverell





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## Artful's digital 'brain' completes first test firing

he Royal Navy's latest and most advanced hunter killer submarine, Artful, has test fired her first torpedo using a new UK designed and built command and control system delivered ahead of time by DE&S.

The firing tested the BAE Systems designed Common Combat System (CCS) on board, which functions as the digital 'brain' of the boat controlling its 'eyes', 'ears' and 'nervous system'. Using the torpedo test, the cutting-edge system was able to interpret sonar readings, and then attack a moving target with a practice weapon.

The CCS, completed ahead of time so it was ready for the third rather than fourth Astute submarine, uses the latest technology to collect and process huge amounts of data from sensors such as sonar, providing key information to help inform important Command decisions. The system is so advanced it can even process information fed back from the world-leading Sonar 2076, which allows the Royal Navy to detect and track the quietest of adversaries.

Developed through the Astute Build Programme, the CCS is a collaborative industry effort. Managed through a £50 million contract with BAE Systems, the CCS hosts sonar processing capability developed by Thales UK, and was also worked on by global hardware provider Dell; Poole-based systems designers Aish Technologies; and cloud computing company VMWare. Installation work is being undertaken by BAE Systems at Barrow-in-Furness and Babcock Marine at HMNB Devonport and HMNB Faslane. In total, CCS is sustaining around 146 jobs across the UK.

The next generation command and control system will be integrated onto every Astute and Vanguard-class submarine currently in service, and fitted to every new Astute class submarine coming into service in the future, ensuring consistency right across the fleet. The system will also be used on board the Royal Navy's next generation of nuclear submarines.

Minister for Defence Procurement Philip Dunne said: "This command and control system, designed as part of an innovative partnership between Defence and UK industry, will allow British submarines to adapt more quickly to changing mission requirements, making operations even safer and more efficient.

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"It is a next generation system, both highly capable and costeffective, which can be installed right across the Royal Navy's submarine fleets, thereby guaranteeing the best capability for the Royal Navy and the best value for money for the taxpayer

Philip Dunne

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"It is also yet another example of how our £178 billion investment in equipment is giving our Armed Forces the best possible kit." The capability allows the applications of several different systems, which previously would have needed their own controls, to be brought together in a single computer environment to save precious space within the submarine's hull. It also allows the Control Room to be used with greater flexibility.

Director Submarines Support at the MOD's defence procurement organisation, DE&S, RAdm Keith Beckett said: "The Common Combat System allows the Royal Navy to detect and track the quietest adversaries. It is a huge improvement in terms of resilience and flexibility and we're at the early stages of exploring the system's huge potential.

"The successful development of the system is another example of UK Defence working together with British business and enterprise to deliver world-class and battle-winning submarine capability."

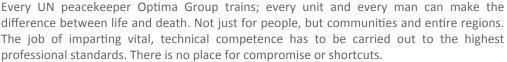
Artful is undergoing her first combat capability trials since she was handed over to the Royal Navy in mid-December 2015. These trials will be completed by July 2016, after which Artful will undergo a period of maintenance and training to prepare for operations.

Below: HMS Artful



See page 22 for report on funding boost for Successor design programme 🗵





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## The Magic of Merlin on top of The Rock

wo Merlin Mk3 Aircraft from the Commando Helicopter Force (CHF) have returned to base following a deployment to Gibraltar.

The Commando Merlin's from 846 Naval Air Squadron (NAS) departed Royal Naval Air Station (RNAS) Yeovilton and flew through Europe to The Rock of Gibraltar for a week of training and support to other forces.

Crewed by members of the Operational Conversion Flight (OCF), these were the first Merlin students to receive continental navigation training as part of their qualification on the aircraft.

Alongside essential training for OCF, 846 NAS also operated with the Gibraltar Patrol Boat Squadron where they achieved mutually beneficial winch transfer training as well as tactical formation flying.

The aircraft, 12 Aircrew and 40 Engineers, also flew in support of the Commander of British Forces (CBF) (Gibraltar), assisting with several long

Pilot, Lieutenant Commander (Lt

to The Rock has once again proven Commando Merlin's ability to travel a considerable distance from her home base of RNAS Yeovilton, work with units not commonly associated with them as well as assisting CBF.

"In all, the detachment has been a huge success."

Last year the first of seven Merlin Mk3 helicopters was delivered to Yeovilton ahead of schedule as part of the £450 million Merlin Life Sustainment Programme (MLSP).

The upgraded Merlin Mk3 feature several changes for maritime operations including the addition of steel lashing points, a powered folding main rotor head, undercarriage modifications, a fast roping frame and additional communications equipment.

It allows the helicopter, used by the Royal Navy and Royal Marines specialising in amphibious warfare, to operate in extreme climates and

The pilots are well-trained as they combine commando combat and survival skills with advanced flying skills. They operate Sea King, Merlin and Wildcat helicopters and their ability to work in terrain ranging from arctic to tropical jungle is second to

A total of 25 Merlin Mk3/3a aircraft will be converted to Merlin Mk4/4a as a replacement for the Sea King Mk4. The 25 "Phase 2" aircraft, which will be fully optimised for ship operations and include touch screen technology and automatic main rotor blade folding and tail fold systems, are being delivered between 2017 and 2022.





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## DE&S CEO visits £5.5 million turret facility

Above: Tony Douglas with Lockeed Martin staff at the Amnthill site

E&S chief executive officer Tony Douglas was briefed on the Warrior CSP and AJAX armoured vehicle programmes when he paid a visit to the Lockheed Martin UK site in Ampthill.

Mr Douglas was hosted at the Bedfordshire site by Alan Lines - Vice President and Managing Director of

Under the Warrior Capability Sustainment Programme (WCSP), Lockheed Martin UK is responsible for upgrades and enhancements extending the British Army's Warrior vehicles' service life to beyond 2040. The company has also been awarded a contract by General Dynamics UK to deliver 245 turrets for the AJAX armoured vehicle.

As part of a tour of the site, Mr Douglas also officially celebrated the completion of building work on the business's new £5.5 million manufacturing facility.

When fully kitted out, the building will form part of a production line capable of producing new turrets at a rate of up to 10 a month.

Mr Lines said: "It was an honour to welcome Tony to Ampthill and to talk to him about the work we're doing here in Bedfordshire.

"We were able to take him through our business and show him first-hand the exciting innovation and capability we have here on site.

"He met several of the company's senior leaders and took a real interest in the work we're doing now and our plans for the future.

"We're delighted he could also join us in celebrating the completion of building work on our new facility and see the commitment Lockheed Martin has to invest and expand as we make Ampthill a world-class location.'

Mr Douglas added: "I am delighted

to see such a commitment to invest

This new building will contribute hugely to the capability of this Lockheed Martin UK site.

"I wish the Ampthill business sustained safety, quality delivery and prosperity as they continue to expand and invest.'



I am delighted to see such a commitment to invest in quality

Tony Douglas DE&S CEO



## **Unmanned Air Systems**

Desider met the Unmanned Air Systems team to discover what it's like to work in such a cutting-edge area of DE&S.

elping make the world a safer place is what keeps the DE&S Unmanned Air Systems (UAS) team at Abbey Wood on their toes and at the top of their game.

The military's use of Remotely Piloted Air Systems and UAS has increased since they were first deployed in Afghanistan in 2007.

And with Prime Minister David Cameron announcing in last year's Strategic Defence and Security Review (SDSR) that the number of armed remotely-piloted aircraft will be

doubled when Protector is introduced into service at the turn of the decade to replace Reaper, the technology is here to stay.

Indeed just last month the team secured an £80 million contract with Thales UK to support the Watchkeeper Unmanned Aircraft System (UAS) in-service until 2019. The award of this Future Support Contract (FSC) supports British Army flying training and will ensure Watchkeeper equipment is ready and available to support Army operations in

coming years.

This success is reflective of a team that thrives on meeting a challenge.

One member of the team is Scott Boulton. As Black Hornet (pictured below) Project Manager he is responsible for the effective project and engineering through-life support of the project.

He said: "It is a fast paced, high growth technology sector; giving the opportunity to work on varying equipment programmes

Continued on next page >



Continued from previous page

which are involved in global reaching operations. UAST gives you the opportunity to work alongside all the armed services, as well as with other government departments you would not otherwise get to in other teams.

"It's very rewarding being fully responsible of managing the UK MOD's first and only NANO Unmanned Air System. The team trusts you from the outset to deliver, and that delivery reflects an operational capability that could help our front line Armed Forces personal operate more safely and effectively in hostile theatres globally."

His colleague Lucy Crowther works under the Safety and Airworthiness Manager for Future projects and is currently responsible for Taranis, a technology demonstrator for the UK/France Unmanned Combat Air System and PYRAMID software programme.

"I am one of the very lucky few who can

say they truly love their job, I am exposed to so much innovative work that very rarely do I have a dull day," Lucy said.

"My projects require a high amount of travel, both around the UK and abroad, but



Above: Lucy Crowther

this means that I can see the concepts really developing and how my input is influencing

"There are a lot of challenges in my role, such as working with different countries, or trying to work out how to certify aircraft that fit into no certification standards, but I really wouldn't have it any other way."

Elsewhere Sam Riley is an advanced engineering management apprentice working on Quality Assurance Management in the Unmanned Air System Team and is currently writing the quality management policy, procedure and guidance for software.

"The platforms we work with represent the cutting edge of our military's capability, to be involved with this present and the possible future was massively exciting," he said.

"The team are experienced and approachable I never encountered a situation where the team was unable to help or at least

## Current drones



#### Reaper (RPAS) Remotely Piloted Air **System**

Currently deployed in the Middle East Reaper is the only armed RPAS and is capable of carrying Air-to-ground Missiles and LASER Guided Bombs. Operated by the RAF it also provides Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR).

Wingspan - 20.1m

Length - 11m

Height - 3.8m

Gross Weight - 4772kg

Maximum Speed - Up to 250kts

Altitude - Up to 50,000ft, typical 20,000ft

Endurance - 16hrs per flight

Range - per satellite coverage



#### Watchkeeper

Operated by the Royal Artillery Watchkeeper is the UK's largest Tactical UAS and the first to fly in controlled and unsegregated UK airspace. It delivers a day/night, all weather expeditionary Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) capability. Deployed in Afghanistan and currently used by the Army for training purposes.

Wingspan - 10.8m

Length - 6.5m

Height - 2.2m

Gross Weight - ~500kg

Maximum Speed - 85kts

Altitude - 16,000ft

Endurance - ~16hrs per flight

Range - in excess of 140km



#### ScanEagle

Providing Intelligence, Surveillance and Reconnaissance (ISR) for force protection the UK's first Maritime UAS which operates from Royal Navy Ships has been involved in Humanitarian support in the Mediterranean and also helped seize drugs in the Indian Ocean.

Wingspan - 3m

Length - 1.5m

Gross Weight - 22kg

Maximum Speed - 80kts

Altitude - 10,000ft

Endurance - ~12hrs per flight

Range - 40nm

find someone to help.

"Due to the nature of the technology, regulation and requirements, on these aircraft, there is a constant challenge to be met that certainly keeps it interesting."



Above: Sam Riley



**New UAST Head Air Commodore** Simon Ellard, who joined the team in November last year, said he is looking forward to the challenges that lie ahead for the team.

"From a personal view I am absolutely delighted to join a dynamic team that is working with some of the most advanced and innovative technology in the World," he said.

"I joined the team at the time of SDSR and there are exciting times ahead of us. It is an absolute privilege to deliver equipment that makes a real difference across Defence with a team that delivers to the RAF, Navy, Army, Joint Forces Command and Strategic Programmes."

"To meet this increased challenge, we are looking to rapidly expand our team significantly in 2016/17."



#### **Desert Hawk 3**

Used on operations in OP TELIC in Iraq and OP HERRICK in Afghanistan Desert Hawk 3 is a mini UAS delivering highly flexible and responsive Intelligence, Surveillance, Target Acquisisition and Reconnaissance (ISTAR). Operated and maintained by the Royal Artillery it now forms part of the Army's core equipment programme.

Wingspan - 1.4m

Gross Weight - 4.5kg

Maximum Speed - up to 44kts

Endurance – up to 60 minutes per flight

Range - 15km



#### **Black Hornet**

A Nano UAS which delivers a lightweight, rapidly deployable ISTAR system that provides frontline soldiers with reliable realtime full motion video and high quality still images. Used in OP HERRICK in Afghanistan it is now part of the Army's core equipment programme.

Aircraft rotor span - 0.12m

Gross Weight - 0.016kg

Maximum Speed - 10m/s, 36kmph, 19kts

Endurance - up to 25mins per flight

Range - up to 1,000m

### Under development

Below:

Zephyr - High Altitude Pseudo Satellite (HAPS)



Protector - Future UK capability to replace Reaper (pictured below)



Taranis - An Unmanned Combat Air System (UCAS) Technology Demonstrator programme (TDP)



## **Successor Design** funding announcement

E&S' Chief of Materiel (Fleet) Vice Admiral Simon Lister has highlighted a funding package worth more than £200 million which will support further design work for the Royal Navy's next generation of nuclear submarines.

The funding will enable BAE Systems to develop the design of the submarine, including the layout of equipment and systems, and to develop manufacturing processes, including the production of early prototypes.

The new submarine will be one of the stealthiest submarines in the world. It will also be the safest and most technically advanced submarine ever built in the UK.

Work on the submarine's design will draw on cutting edge capabilities in innovation, design and engineering, employing around 2,500 highly-skilled people in the UK from BAE Systems, Babcock and Rolls-Royce.

Hundreds of potential suppliers, including Small and Medium Enterprises, have also been identified across the country.

Vice Admiral Simon Lister said: "We are now in the detailed design stage of the most technologically advanced nuclear submarine in the history of the Royal Navy.

developments carried out by the MOD, BAE Systems, Rolls-Royce and Babcock, this funding will allow us to continue to move forwards with the programme."

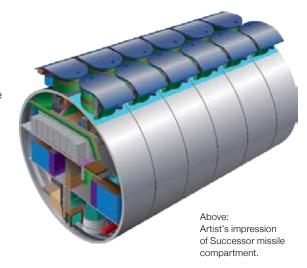
The funding, is part of the overall £3.3 billion package announced in the last parliament for the Assessment Phase of the Successor submarine programme.

Defence Secretary Michael Fallon said: "The round the clock nuclear deterrent is as crucial to Britain's national security now as it has ever been. We use it every day to deter extreme threats that cannot be countered by any other means.

"When there are 17,000 nuclear weapons in the world, we can't wish away threats we face now and those that may emerge in the 2030s, 2040s, and 2050s."

Four Vanguard submarines - which currently maintain the UK's nuclear deterrent - will be replaced from the early 2030s.

Within the next four years all the UK's submarines will be based in Scotland. This will lead to the creation of 1,400 new jobs taking the total number employed at HM Naval Base Clyde to 8,200 by 2022.



We are now in the detailed design stage of the most technologically advanced nuclear submarine in the history of the Royal Navy

Vice Admiral Simon Lister



## First crew aboard HMS PoW

welve Royal Navy personnel have become the first crew to join the UK's second aircraft carrier, HMS Prince of Wales, currently being built by the Aircraft Carrier Alliance in Rosyth.

As the first Ship's Company, the team will work alongside their Industry partners over the coming years to learn about the ship, the equipment and the vast technological advances as she progresses through her build programme, ahead of sea trials, expected in 2019.

DE&S Director of Ship Acquisition, Rear Admiral Henry Parker said: "The arrival of HMS Prince of Wales staff marks a major milestone in turning the aircraft carrier into a world-class operational warship. I wish the new staff all the best at what is an exciting and challenging time in the Queen Elizabeth class programme."

The Queen Elizabeth Class carriers will be the centrepiece of Britain's maritime capability. Each 65,000 tonne aircraft carrier will provide the armed forces with a four acre military operating base, which can be deployed worldwide.

The vessels will be versatile enough

to be used for operations ranging from supporting war efforts to providing humanitarian aid and disaster relief.

Minister for Defence Procurement Philip Dunne said: "I am delighted to see HMS Prince of Wales coming to life and welcoming her first crew on board. Both she and her sister ship, HMS Queen Elizabeth are well on schedule to enter full service as the largest and most advanced aircraft carriers ever built for the Royal Navy.

"HMS Prince of Wales will be home to a growing complement of personnel, offering a clear demonstration of how our £178 billion investment in equipment is securing a bright future for our Armed Forces.'

HMS Prince of Wales stands proudly in Rosyth along with her sister ship HMS Queen Elizabeth. Together, these will be powerful ambassadors for Britain for the next 50 years, projecting fighting power at sea and over land, protecting UK interests around the globe.

Both ships are being delivered by the Aircraft Carrier Alliance, a unique partnering relationship between BAE Systems, Thales UK, Babcock and the Ministry of Defence.

A national endeavour, at its peak the programme directly employed 10,000 people across six build yards.

Captain Simon Petitt, the Senior Naval Officer of both Queen Elizabeth Class carriers said: "It is an honour to be in charge of a small but rapidly growing team. This is day one for the men and women who will serve in HMS Prince of Wales and I wish them every success in their journey."

'Over three years ago, I had the privilege to welcome the first members of HMS Queen Elizabeth. Then only 10 in number, the Ship's Company is now 370 strong. With every day, their team spirit, ethos and knowledge of the ship becomes stronger and I expect the same sense of pride from the HMS Prince of Wales team."

**-((**-

The arrival of HMS Prince of Wales staff marks a major milestone in turning the aircraft carrier into a world-class operational warship



## First Type 26 engine passes factory acceptance test

he first building block of the Type 26 Global Combat Ship has been delivered with the successful completion of the first MT30 gas turbine acceptance test.

Minister for Defence Procurement Philip Dunne attended a ceremony at the Rolls-Royce facility in Bristol to mark the key milestone, accompanied by Head of Type 26 at DE&S Commodore Paul Methven and project team members Commander Duncan McCue, Lieutenant Commander Michael Thomson and Adrian Cudmore.

Visitors to Rolls-Royce were able to view the engine before it is integrated with its bedplate and surrounding casing for delivery to BAE Systems at the end of the year.

Minister Philip Dunne said: "This is the first piece of physical equipment for Type 26 which has been produced. The engine is an incredibly complex piece of high quality engineering and design.

"It is a living demonstration of a new way of procuring platforms which DE&S have pioneered to reduce the risk to the customer, the Royal Navy, and the Ministry of Defence.

It gives us great confidence in the delivery of the project."

The Type 26 Global Combat Ship is a 21st Century warship that will replace the Type 23 frigate as the workhorse of the Fleet.

It will support the key strategic pillars of Continuous at Sea Deterrence and Continuous Carrier Capability.

The Type 26 will have a strong antisubmarine warfare pedigree and weapons systems including vertical launch missile silos capable of deploying a range of different capabilities from Anti-Submarine, Surface and Land Attack weapons.

The ship will also have the capacity to support either the Wildcat or Merlin helicopters in a purpose-built hanger, as well as a flight deck capable of landing a Chinook helicopter with ramp down for the embarkation of troops.

The factory acceptance test, carried out at Rolls-Royce in Bristol, had to be completed before the gas turbine is delivered. The engine, which builds on over 45 million hours of operating experience and ultra-high

reliability, was put through a week of rigorous performance tests

Commodore Methven said: "This is a key milestone for the Type 26 project and shows that this project is beginning to move from paper to real equipment.

"Getting to this stage is testament to the skills and hard work of all the people involved and I look forward to more milestones being delivered through 2016."

Rolls-Royce was awarded a contract to supply MT30 gas turbines for the first three Royal Navy Type 26 Global Combat Ships. The company has also signed Design Development Agreements with BAE Systems for steering gear, stabilisers, and mission bay handling equipment.

MT30 gas turbines are also being installed in the new Queen Elizabeth Class carriers, and are also in service with the US and the South Korean Navv.

Below:

Philip Dunne, Minister for Defence Procurement, at Rolls-Royce, Bristol



Rolls-Royce employee overseeing tests on the



-((--

Getting to this stage is testament to the skills and hard work of all the people involved and I look forward to more milestones being delivered through 2016

> Paul Methven, Head of Type 26

> > "



## Jon Thompson leaves MOD for new challenge



Jon Thompson has been MOD Permanent Secretary since 2012

OD Permanent Secretary Jon Thompson is to take up the post of Her Majesty's Revenue and Customs Chief Executive and First Permanent Secretary.

Jon was appointed Permanent Secretary of the MOD in September 2012 after more than three years as the Director General of Finance.

The Permanent Secretary is the Head of the Civil Service in the department and carries responsibility for the strategy, performance, reform, organisation and the finances of the MOD.

Jon said it will be a "huge wrench" to leave the MOD, which he joined in January 2009, but that he was excited about taking on a new challenge.

Defence Secretary, Michael Fallon, and Head of the Home Civil Service, Jeremy Heywood, have paid tribute to Jon.

Mr Fallon said: "I would like to thank Jon for his huge contribution and service to the Ministry of Defence over the past seven years, three and a half years as the Permanent Secretary.

"He has played the key role in helping to sort out the department's finances and balancing its budget in addition to overseeing important organisational change and the delivery of last year's Strategic Defence and Security Review. We wish him every success at HMRC."

Mr Heywood added: "I would like to congratulate Jon on his appointment. Jon's experience of leading one of the biggest departments in government, coupled with his strong financial background, make him strongly placed to deliver HMRC's ambitious transformation plans, large-scale operations and modern customer services."

Jon said: "It will be a huge wrench to leave the MOD. It has been one of the biggest privileges of my career to have been the Permanent Secretary and to have worked alongside MOD civilian and Service colleagues to transform the way the Department works.

"I am immensely proud of all that we have achieved together. I am particularly pleased with where we ended up in the Strategic Defence and Security Review.

"The opportunity to review our strategic ambition and how we deliver that, concurrent with a Spending Review, was a tremendous opportunity. Meanwhile on the operational front it has been, and continues to be, very busy.

"It has been fantastically challenging but I have been incredibly well supported. The energy and dynamism of all staff in continuing to deliver on all our commitments during times of great change has been, and will continue to be, a source of inspiration for me as I move on to HMRC.

"I am excited to be taking up the challenge of leading the delivery of the Department that raises the revenues that pay for the nation's public services.

"I am sure that the experience I have gained at the MOD will stand me in good stead as I meet the challenges of another complex and vital part of government. I will definitely miss the people and would like to offer my personal thanks and best wishes to everyone in Defence."

## Chemical detection in partnership with the US



he Chemical Biological
Radiological Nuclear (CBRN)
Delivery Team at DE&S
has signed a three-year Project
Arrangement (PA) with the US
Department of Defence (DoD) to
share the burden on Test & Evaluation
(T&E) needs for both nations' future
Chemical Detection programmes.

Chemical detection is the ability to detect, identify and monitor chemical warfare agents (CWA) and other toxic chemicals and materials. This capability provides immediate warnings so force protection actions can be taken, as well as locate chemical hazards and support decontamination processes.

The new arrangement with the US Joint Program Executive Office (JPEO) - based at Aberdeen Proving Ground in Maryland - was agreed under the CBR Memorandum of Understanding (MOU) after joint effort between DE&S and JPEO, with assistance from Dstl Porton Down and British Defence Staff in Washington.

The PA allows both nations to collaborate on supporting the development, test and evaluation of enhanced chemical detection capabilities for the US and the UK.

DE&S and JPEO are both in the process of acquiring future chemical detection systems, but face similar complex technical challenges.

The UK's acquisition, Project BOSKER, has contributed equally with the US Next Generation Chemical Detector (NGCD) project to jointly deliver a number of T&E work packages to support eventual trials and acceptance of the new capabilities against current and emerging threats.

The PA is valued at £7 million and makes leverage of existing equipment budgets to deliver new benefits including: the reduction of T&E risks; savings on overall project schedules and costs; and the ability to exchange key information relating to the performance of technologies under test in the respective nations.

CBRN Delivery team leader, lan Matthews, said: "The CBRN Delivery Team is proud to be working in close partnership with JEPO-CBD to share the technical and financial burden to counter common threats and challenges. The signing of the BOSKER/NGCD PA, and another for Radiological Detection Systems, is a significant milestone for both nations."

Col Alfred Abramson, Deputy
Joint Program Executive Officer for
Chemical Biological Defense in the
US, added: "JPEO-CBD is delighted
to continue the enduring bilateral
relationship with DES CBRN through
the Next Generation Chemical
Detector (NGCD)/BOSKER Project
Arrangement.

"Development of these chemical detection systems highlights the capabilities within the US-UK CBRN scientific community and will enhance the future CBRN capabilities of Warfighters from our nations for years to come."

Above: Col Alfred Abramson (left) with CBRN Delivery team leader lan Matthews



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## Daz Stevenson

Daz is Deputy Head of Safety and Environmental Protection and function head of Occupational Health, Safety and Environment (OHSE). He speaks to Desider about the importance of the Environment and Safety Assurance Symposium (ESAS), progressing values, and breeding sled dogs.

## You have taken over as Function Head of OHSE, how do you see this role developing?

OHSE was identified as a function in its own right because of its significance across the whole organisation. The setting up of this function should send an important message to everyone that DE&S has a desire to promote safety for everyone and progress a positive culture as we go forward through transformation of the organisation. We already do safety and environmental management well, but there is now an opportunity to do things even better.

## As part of this drive for continuous improvement, DE&S holds its flagship Environmental and Safety Assurance Symposium (ESAS) every two years. Tell us about it.

Hosted at Abbey Wood Bristol, the Symposium is attended by over 500 people from the MOD, industry and academia over a two day period - this year it's June 22 and 23. It is pretty much the only event of its kind in the UK. It brings together Defence, Academia, Industry and the Front Line Commands (FLCs) into a single place and event where they can network, learn and share.

ESAS is about upskilling, sharing best practice and building networks. It is a chance for industry and academia to network and share the latest insights into equipment safety and environmental impact. It's also a chance for them in turn to better understand DE&S and the Frontline Commands' specific equipment needs and challenges.

## This year the symposium's theme is 'Engineering for Defence - Safely and Responsibly' so what can people expect?

Workshops and discussions will cover topics including setting evidenced based regulation, autonomous systems, cyber safety, sustainability, in-service safety management and the workings of the Coroners' court.

Defence safety is currently undergoing a period of change. Last year's formation of the Defence Safety Authority (DSA) will have a real impact across the MOD, but it is too early to tell yet what these changes might be. With this in mind, the event's theme this year is deliberately broad to capture the wide range of equipment safety and environmental issues faced across DE&S, academia and industry.

Philip Dunne, Minister of State for Defence Procurement, is a keynote speaker at the event, as are a number of DE&S and Frontline Command personnel. This senior presence demonstrates the importance that DE&S places on effective safety, and environmental management.

#### ESAS has been running for several years now and has gone from strength-tostrength. So what does the future hold?

While there are other pan-industry safety events, they do not focus on engineering equipment safety and environmental issues. There are however useful lessons to be learned from the rail, highways, civil aviation and nuclear industries. My hope is that ESAS will continue to evolve to incorporate these, and other, sectors so that we can learn from others best practices to inform the way that that DE&S would wish to operate in the future.

#### What are you most proud of during time at DE&S?

From a personal perspective I am proud of the fact that DE&S thought highly enough of me to put me back through University for my MSc and put me in positions where I can truly make a difference. When I started here in 2009 my first task was to pick up the Haddon-Cave report and work out a way that DE&S was going to change things in the way it worked. Since that point in

time I have noticed and been part of an absolute step change in the way that DE&S perceive safety, undertakes safety and delivers safety.

In addition I am very proud of the team that I work with, within Safety & Environmental Protection, not only do they put up with me, they are each experts in their own field and when they work as a team they can pretty much deliver anything and everything that's been asked of them to some quite impossible task requests. I know as I am the one that is normally asking!

#### What do you do to relax outside of work?

It might surprise some to know that I used to breed and race Alaskan Malamute sled dogs up and down the country, and across some parts of Europe. More recently, though as a sedate activity, I have taken to riding motorbikes across Europe.

At the moment I am busy building a war memorial and designing a skateboard park for my local town which is incredibly rewarding but also amazingly time consuming.

\*The flagship biennial Environmental and Safety Assurance Symposium (ESAS) at Abbey Wood will be held on June 22 and 23. An all-staff Safety Day at Abbey Wood will be held in tandem with the second day of the Symposium.

For more information on ESAS visit www. esas2016.co.uk



### CASE STUDY

## DE&S commercial recruit David Sully talks about mentoring, progression and cheap cinema tickets

#### Name:

David Sully

#### Job title:

DGM/MASS Commercial Officer

#### How long have you worked for DE&S?

15 Months

#### Why did you choose to pursue a career in DE&S?

For me, I was amazed at the level of support there was with the work life balance! With flexi time it allows you to fit work around your personal, social and family life, which for me, is why I wanted a career in the MOD. After doing some research I discovered DE&S was also very fast paced, meaning it was interesting and gives you the opportunity to progress.

#### What does your role entail?

I have been lucky to progress quite quickly and also move around the business. This has helped me gain a wide range of experience. I started as a casual E1 in the commercial capability team helping with the recruitment activities but also gained an insight into commercial activities. I applied for and was successful in gaining a permanent E1 position and very quickly then gained a Commercial Band D role through the external commercial recruitment campaign. In my current role I look after a very large partnering agreement contract with BAE.

I have to keep up supplier relations, constantly perform contract management, scrutinise new pricings, look into liquidated damages claims, make sure the engineering tasks are receipted and that they are followed through. These are only a handful of my duties. Every day is a different challenge and it always keeps me motivated.

#### What are the opportunities to develop and progress within your function?

I currently have a mentor, who meets with me on a monthly basis to offer advice and to make sure I'm getting as much from my role as possible. My mentor also supports and encourages development, so when I'm ready I know I'll have the support to prepare for other recruitment campaigns to obtain promotion.

#### What do you most enjoy about your job?

I enjoy the challenge of the job, it's also interesting. I'm actually excited to come to work. We also have days at other sites, viewing live firings. All of this combined makes it hard for the job to get boring.

#### What's your ambition?

At the moment I'm happy at band D, and I want to be the best band D commercial officer I can be. Then, once I'm ready, I think I'll aim to get as high as C1.



#### What's the greatest achievement (in your role) to date?

I put myself forward, to look in to a nine year contract that had an  $\Omega$ 8 million over spend. I took a lot of time going through contract parts, recalling information from archive and making spread sheets to track the cost. I managed to find the issues in the contract and saved the MOD/DE&S a lot of money I was very satisfied when I finally came to finishing this.

#### Why would you recommend DE&S to others as a great place to work?

If you want a great place to work that's flexible, has great benefits and gives you the chance to study, get qualifications and progress, apply here!

#### What are the social benefits of working for DE&S?

For me CSSC (the sports and leisure cliub) is a life saver. You get super cheap cinema tickets and can use the sporting facilities on site and our gym for less than £4 per month. You can also apply for a defence discount card where you will receive various discounts in hundreds of places like; Apple, Nandos and Jack Wills. I also work with great people and enjoy being part of the team.

#### WORK FOR DE&S

Welcome to the next edition of DE&S jobs in Desider. There are great opportunities available at DE&S and each month we list current and future posts. For even more opportunities visit the Civil Service Jobs Portal at www.civilservicejobs.service.gov.uk

Graduate and apprentice schemes

E&S offers a number of top class graduate and apprenticeship opportunities, providing successful applicants with "hands-on" experience in roles across a range of projects.

If you have recently left school or university and are interested in embarking on a career in defence but do not yet have the experience/skills required for our listed vacancies, DE&S offers a number of top class graduate and apprenticeship opportunities, providing successful applicants with "hands-on" experience in roles across a range of projects.

More information on the range of graduate and apprentice opportunities DE&S has to offer is available www.civilservicejobs.service.gov.uk

#### Rewards and benefits

n addition to the fantastic variety of cutting edge jobs and an excellent opportunity to develop skills through training, including working towards professional qualifications, we also provide first rate benefits for all of our employees. These include flexible working, excellent annual leave, maternity and paternity allowances as well as a very competitive pension scheme, eligibility for performance related pay, free car parking (caveats apply), a proactive employee engagement, access to Benenden Medical care and the opportunity to join many civil-service clubs such as the Sports and Social Association and Motoring Club (CSMA)

which offer numerous discounts to members.

Our headquarters are based in Abbey Wood, Bristol and, like many other sites, boasts an impressive range of facilities including a fully equipped gym, an on site nursery, a range of restaurants and coffee bistros and a hairdressers.

We understand the commitments our staff have, both inside and outside of the office. Our aim is to provide you with a place of work which allows you the flexibility you require to maintain a great work/life balance.

### **Equality and diversity**

E&S is committed to embracing diversity: it is one of our core values. Irrespective of gender, marital status, race, religion, age, disability and without reference to social background or sexual orientation, DE&S operates an inclusive environment to allow you to develop your career.

Whether uniformed or civilian, we expect the attitudes of our people to reflect our approach to diversity by:

fostering a working environment where all staff feel comfortable, welcomed and valued for their contributions

- promoting a workplace that values dignity, respect and fairness
- promoting high standards of behaviour and complying with the law by creating equality of

To demonstrate our commitment, we are members of Stonewall, Race for Opportunity, Opportunity Now, The Employers Forum on Disability, The Employers Forum on Age, and we are also affiliated

Read more about equality and diversity in MOD.

### How to apply

We are looking for innovative, talented, focused individuals to join us in being instrumental in defending Britain's interest both at home and overseas.

DE&S provides the opportunity for a truly rewarding career, working on complex, interesting and often sensitive projects of great significance and consequence, with excellent training opportunities for your continued professional development.

If you would like to view all current vacancies across DE&S and the wider civil service, please visit the Civil Service Job Portal.

In addition, for an easy, hassle free way of keeping up to date with all the latest vacancies, you can now follow us on Twitter or like our page on Facebook.











#### **CURRENT VACANCIES**

#### **Project Professionals**

Ministry of Defence Bristol, Abbey Wood Closing date: 20 Mar 2016

#### Reference number

1483574

#### Salary

£30,424

#### Grade

Higher Executive Officer / C2

#### Post type

Permanent

#### Type of role

Project

#### Hours

37 Hours

#### Nuclear Undergraduate **Engineering Apprentice**

Ministry of Defence Bristol, Abbey Wood Closing date: 20 Mar 2016

#### Reference number

1476633

#### Salary

£14,432

#### Grade

Industrial, Nuclear Undergraduate, **Engineering Apprentice** 

Post type

Fixed Term - 3-5 Years

#### Type of role

Engineering, Project Delivery, **Business Management and** Improvement

#### Hours

37 Hours

#### **Project Professionals**

Ministry of Defence Bristol, Abbey Wood

Closing date: 20 Mar 2016

#### Reference number

1483572

#### Salary

£37,071

#### Grade

Senior Executive Officer /

#### Post type

Permanent

#### Type of role

Project

#### Hours

37 Hours

#### **Engineering** Management Apprentice -Bristol 2016

Ministry of Defence Bristol, Abbey Wood

Closing date: 20 Mar 2016

#### Reference number

1475980

#### Salary

£14,432 (Year 1)

£15,445 (Year 2)

£18,484 (Year 3)

#### Grade

Industrial

#### Post type

Fixed - 3 years

#### Type of role

Engineering

#### Hours

37 Hours

## **DESG Graduate**

Ministry of Defence Bristol, Abbey Wood,

Corsham

Closing date: 31 Mar 2016

#### Reference number

1472698

#### Salary

£25,077 - £25,856

#### Grade

Graduate Engineer

#### Post type

Permanent

#### Type of role

Engineering, Information Technology, Science

#### Hours

37 Hours



#### **Finance Apprenticeship**

Ministry of Defence Bristol, Abbey Wood

Closing date: 20 Mar 2016

#### Reference number

1483567

#### Salary

£16,253 - £17,760

Administrative Assistant /

E2

#### Post type

Permanent

#### Type of role

Finance

#### Hours

37 Hours

#### FUTURE VACANCIES

Please note - This is the currently planned recruitment activity for the coming months and may be subject to change according to business needs and priorities.

#### **Procurement** Managers

Ministry of Defence

**Estimated launch:** Mid March 2016

Salary

£30,424

Grade

Higher Executive Officer C2

Post type

Permanent

Type of role

Commercial

Hours

37 Hours

#### **Engineering** Weapons (Safety)

Ministry of Defence

Estimated launch: Mid March 2016

Salary

£24,362 / £30,424

Executive Officer / Higher Executive Officer /

D / C2

Post type

Permanent

Type of role

Engineering

Hours

37 Hours

#### **Engineering Maritime**

Ministry of Defence Estimated launch: Mid April 2016

Salary

£30,424

Grade

Higher Executive Officer / C2

Post type

Permanent

Type of role

**Project** 

**Hours** 

37 Hours



#### **CAAS Cost Modellers**

Ministry of Defence Estimated launch:

Mid April 2016

Salary

£30,424

Grade

Higher Executive Officer / C2

Post type

Permanent

Type of role

Engineering

**Hours** 

37 Hours

#### **Engineering Air**

Ministry of Defence

Estimated launch: Mid April 2016

Salary

£24,362

Grade

Executive Officer / D

Post type

Permanent

Type of role

Engineering

Hours

37 Hours

#### Knowledge and Information Management

Ministry of Defence

**Estimated launch:** Early May 2016

Salary

£24,362

Grade

Executive Officer / D

Post type

Permanent

Type of role

Information Management

Hours

37 Hours



## **60 SECOND SPOTLIGHT**

#### Name?

Pat Collins

#### Joh?

Science Gateway to Director Helicopters Operating Centre, my role is to provide a conduit between the Science & Technology and acquisition communities. I provide regular briefings on a wide range of S&T topics and support the formulation of the MOD's Chief Scientific Advisor's Research Programme ensuring that the future programme reflects the needs of the Helicopters Operating Centre. I have regular interaction with our stakeholders from all four Front Line Commands. Last year I chaired a NATO conference (in Prague) on Future Rotorcraft Requirements aimed at gaining an understanding of what may be available in the 2030 timeframe.

#### Your route into DE&S?

I am on secondment into the Operating Centre from Dstl (the MOD's Defence Science and Technology Laboratory). I started my career at Westland Helicopters in the late 1970s working on Helicopter Survivability before moving to Johannesburg for a few years as a consultant on their Rooivalk Attack Helicopter.

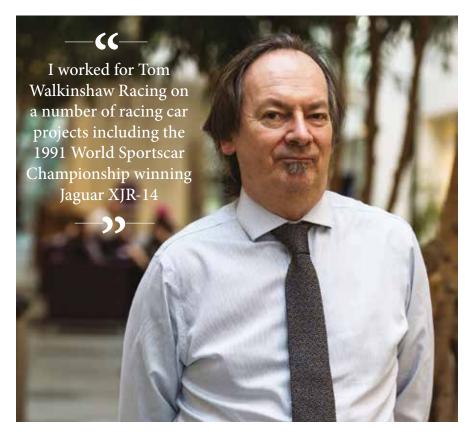
On returning to the UK I worked for Tom Walkinshaw Racing on a number of racing car projects including the 1991 World Sportscar Championship winning Jaguar XJR-14. I joined the MOD in 1994 at Farnborough and transitioned through several posts in Dstl and its predecessor organisations before moving to the Helicopters Operating Centre in 2011.

#### Your claim to fame?

I made the papers a few years ago as an expert witness at HM coroner's inquest into the loss of XV179 (C-130 Hercules shot down in Iraq). As a result we have implemented a programme of enhancements to the fuel systems of our helicopter fleet that will significantly improve their survivability on the battlefield. Seeing stuff come to fruition that I worked on over 30 years ago is very satisfying.

#### Your advice to anyone?

Grab opportunities when they arise as it is unlikely they will be repeated. Life isn't a rehearsal; you have the opportunity to change things that are not to your liking but this does entail an element of risk. Don't be prepared to put up with something you don't enjoy just because it is the easy option.



#### What do you do when you're away from work?

Polish my old sports car, a Toyota MR2 (and occasionally drive it on nice days), pursue scarce British butterflies and listen to inappropriate music for my age!

#### What are you most proud of?

The achievements of my three children, none of whom have showed the slightest interest in engineering or helicopters.

#### If you were sent to a desert island, what three things would you take with you?

An lood loaded with loud music, an infinite supply of Gin & Tonic, and an Ice maker.

#### What irritates you the most?

I travel a lot in my job and get very annoyed by the standard of driving I encounter (although I am not a saint myself!)

#### What is your favourite place in the world?

Is it too boring to say sitting in my back garden at home on a sunny afternoon with a G&T? A more exotic place could be the Barossa Valley in South Australia where the sun appears to be always shining.

#### Your secret?

I discovered as an unqualified private pilot with 10 hours solo time that attempting potentially dangerous manoeuvres can be a life changing experience!

Do you or someone you know deserve their 60 seconds in the spotlight?

Email tom.morris114@mod.uk



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### DE&S PEOPLE

## Torpedo past finds home in present

huna Lindsey, who was formerly DG Acquisition People, returned to Abbey Wood to present the DE&S Weapons Operating Centre with an item of family, social and MOD history: a group photograph taken in March 1948 of members of the Torpedoes Experimental Establishment (TEE) in Greenock.

In the mid 1930's, a Torpedo design and production facility was in Greenock and in 1943 the site was expanded to create the TEE. The TEE subsequently closed in 1959 when Torpedo research, development and design were concentrated at the newly formed Admiralty Underwater Weapons Establishment at Portland.

Included in the 1948 photograph of some 200 TEE staff members are Shuna's Uncle and Aunt, lan and Jean Taylor, who married at same year and were employed at that time in their first jobs after graduating from Glasgow University.

Shuna said: "My uncle, who passed



Above: Shuna Lindsey with members of the DE&S Weapons Operating Centre.

away this summer, gave me this photo which he had clearly treasured through many decades and asked me to find a good home for it.

"He would have been delighted to think it might find a place at Abbey Wood. I am so pleased to have found it a safe home at last."

The close-knit nature of the UK Torpedoes community continues to this day and was demonstrated when the photo was shared with Brian Lincoln, a recently retired member of the DE&S Torpedoes, Tomahawk and Harpoon Project Team (TTH), who recognised a number of the names.

### **Inspiring Women Campaign**

E&S staff attended a flagship 'career speed networking' event organised by The Inspiring Women campaign in partnership with the MOD. Bethan Coleman and Jenny Labiak were two of 25 women at the event held at the MOD headquarters in Whitehall representing a wide range of careers in the defence industry talking with 100 state school girls about their jobs and experiences. The aim of the event was to introduce young women to careers in defence and break down persistent job gender stereotypes. Bethan and Jenny helped highlight apprenticeship routes available to voung women in the defence sector. Jenny, an apprentice with DES

TECH, said: "I found the event to be a good initiative and it will hopefully inspire some young women to think of the MOD as a potential employer in the future."

Bethan, an engineering management apprentice in DES Wpns, added: "I really enjoyed the event and felt it was beneficial to chat with the young ladies that attended."

Lizzie King, Careers Advisor at Burntwood School, Wandsworth, said: "Many of our students would consider the Ministry of Defence to be very remote from their lives and so this will be an excellent way to demonstrate that all pathways are open to them if they believe in themselves, put their hand up to get involved and take the initiative."



Left: Some of the women attending the 'career speed networking' event

## Professional Engineering Forum a hit

ore than 200 staff from across DE&S attended a Professional Engineering Forum at Abbey Wood

Those attending the event, which is held twice a year, heard presentations from three guest speakers hoping to inspire and educate the next generation of engineers.

Tony Parraman works for the Bloodhound project which has developed a supersonic car in Bristol with the aim of breaking the land speed record which currently stands at 763mph.

Bloodhound, which was built over eight years at the Bristol Technical Centre at a cost of  $\mathfrak{L}13.5$  million, is designed to travel at more than 1,000mph.

Tony, head of Sponsor Liaison for the project, spoke about the Bloodhound Education Programme which engages with schoolchildren and students who are able to directly access information about the research, design, build and testing of the car.

The second speaker was lan Homer who is the Marketing Manager of the Vulcan to the Sky Trust, a charity established to maintain and operate the iconic Avro Vulcan XH558, the last delta-winged nuclear bomber in flying condition which saw active service from 1960 to 1984.

Its last flight was in October last year but it is being kept in taxiable condition, but not certified for flight, so people can still view the aircraft.

lan spoke about the work of the Trust, which provides an education programme working with schools, colleges and companies to inspire and educate new generations of engineers.

The final guest speaker was Stephen Payne OBE, an independent consultant with PFJ-Maritime Consulting Ltd and an educational advocate for engineering careers.

His presentation entitled "Genesis of a Queen, the Greatest Passenger Ship in the World" told the story of the  $\mathfrak{L}460$  million transatlantic ocean liner RMS Queen Mary 2 which he designed.

The audience heard how Stephen was inspired to build ocean liners after watching an episode of Blue Peter in 1965 as a child which featured RMS Queen

The next event is on July 29. For further information about the Professional Engineering Forum contact Rachel Dyer in the Engineering Policy Team, DES TECH-EG EngPol-Skills1a, tel 030 267 36769.





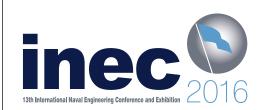
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The Maritime & Engineering College North West
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### DE&S PEOPLE

### **Exec committee awards**



embers of DE&S staff have been recognised for their achievements at the Executive Committee Bonus winner awards.

The honours, awarded quarterly, are a means of recognising exceptional achievement or meritorious service over and above that which might be expected of individuals in their daily activities.

This quarter awards were presented at Abbey Wood by DE&S CEO Tony Douglas to the following:

Richard Astley – Supply Chain Information Services Team – for outstanding dedication to progressing DE&S outputs especially Project WATERGUARD.

Paulette Cope – Operational Support Programmes Team - for exemplary efforts in delivering Main Gate approval for the Phoenix 2 project.

Paul Russell and Richard Pearce – Support Chain Engagement Team – for their role in delivering a SCOR aligned metric suite, dashboard and reporting mechanism that will enable far better DE&S efficiency measures.

Vicky Eccott – Chinook Project Team
- For inspirational leadership in leading
the Chinook Airborne Collision Avoidance
System modification to Main Gate approvals.
Warren Webster – C130J Team – For
delivering a vital operational capability
and enhancing DE&S's reputation with the

Lyn Chapman – Combat Air Business Support Team – For delivering P3M across Combat Air and wider contributions to DE&S and Air Command.

customer community.

Cat Tomms – Project Gould Team – for her role in designing, developing and delivering the Project Gould outcomes to the highest professional standards and under intense political scrutiny.

Steven Biggs – Submarine Production Team – for his outstanding role within the Submarine Production Team.

## Recognising a Finance Unsung Hero



E&S employee Hannah Frankland has won the Government's Accounting Technician of the Year Award. The prize, a glass trophy with her name engraved in it, was presented to her at the Government Finance and Internal Audit event in Birmingham.

Hannah said: "This has given me more

confidence in my abilities and has proven that I am heading in the right direction in my career. Being nominated and shortlisted is already a remarkable recognition and an achievement in its own right. It is a huge honour to have received the award.

"Everyone was thrilled that I won and that means a lot to me especially as I wouldn't have accomplished this without their support."

Her Line Manager, Adam London, and her team leader, Paul Knight, submitted Hannah's nomination to Head of Finance Martin Crabtree, who endorsed the proposal. They applied for the Unsung Hero category, which recognises finance trainees or newly qualified professionals who have performed outstandingly or have been an inspiration to others. Adam London said: "Hannah has played a key role in this team, making a significant personal contribution as well as gaining the trust and respect of business users for her knowledge and her ability to instil confidence in users. Her achievements are made more remarkable given Hannah's junior grade and the very short length of time since she joined DE&S in 2014."

The Government Finance Awards are an opportunity to recognise an individual or team for their excellent work. The rewards are spread amongst various categories, such as mentoring, emerging talent and leadership.

#### **MOD Quality Awards**



Above: Barry Trapnell is presented with his award by Air Commodore Mike Quigley

DE&S staff member Barry Trapnell was honoured at the 5th MOD Quality Awards.

The awards, held last month at Abbey Wood, recognise and reward those whose 'quality approach' has had a significant benefit to their teams and departments.

Barry was for awarded his outstanding contribution to improving the cultural acceptance of Quality within the Lynx Wildcat project team and across the wider Helicopter Operating Centre.

He was recognised for being a committed champion for Quality, and for improving both effectiveness and efficiency across many areas of the business. Barry was described as an excellent role model and praised for leading change through his personal example.

## MOTTO the MOD Lottery

**December 2015 winners** 

#### £10,000

Neil Williamson (Portsmouth)

£5,000

Maxine Riddell (High Wycombe)

£ 2,000

Helen Lloyd (Portsmouth)

£500

Fiona Flint (Faslane)

Stanley Fysh (Corsham)

£100

Stephen Dougan (Upavon)

Alan Ledbury (Abbey Wood)

Alan Smyth (Hollywood)

Deborah Orchard (Corsham)

Antony Devitt (Fareham)

Judith Ratcliffe (Beeston)

Christine Moreton (Portsmouth)

Andrew Miles (Yeovilton)

Martin Smith (Yeovilton)

Judy Carr (Abbey Wood)

Russell Houlihan (Corsham)

Christopher Pearn (Devonport)

Christopher Summers (Abbey Wood)

Simon Kroner (Feltham)

Paula Elliott (Sutton Coldfield)

Elizabeth Hardman (Coulport)

Ann Langley (Thornton-Cleveleys)

Susan Raftree (Gloucester)

Alan Jackson (London)

Martin Gabb (Abbey Wood)

## **DE&S PRIDE Event**



E&S Pride launched last month with the support of a host of speakers, an honest question and answer session, and a video message of support from Armed Forces Minster Penny Mordaunt.

Among those in attendance were organisers Matthew Evans and Hayley Barnden as well as straight allies Ian Craddock (Head of the Helicopters 2 Team), and Lee Silver (HR Diversity and Inclusion lead).



This network is about having role models and somewhere that is safe for people who work for DE&S to come to if they need us

Luke Gumbrill



#### How attitudes can change

Another to talk at the event was Bruce Kent from FFLAG (Families and Friends of Lesbians and Gays) UK, which supports parents of gay children, and the children.

He said: "I was totally homophobic for the first half of my life.

"I was in a fundamentalist Christian Church and I believed homosexuality was an abomination, something from the Devil, that it's Adam and Eve not Adam and Steve.

"I was happy in my bubble, married with five children and basically feeling pretty smug about life."

Then Bruce got it in his head his middle son was gay.

"It sent me into a spin both mentally

and emotionally and it turned out to be true," he said.

"I didn't realise he had battled with it for years. He had prayed to God to make him different and had cried himself to sleep night after night."

When his son did reveal he was gay Bruce had spent six months researching all he could about homosexuality on the internet.

"My feelings on homosexuality were deeply embedded in my brain but looked at all the arguments I could see what I had been taught was rubbish," Bruce said.

"Now I enjoy telling people who ask what my son's wife is called – "his husband is called Toby" and just watching the penny drop." The first speakers were members of the Environment Agency who were able to underline how having a strong LGBT network had hugely benefited the company, and had ensured that the best people were encouraged to apply for roles.

Luke Gumbrill of DE&S Ships then gave a moving account of coming to terms with his sexuality and coming put to family and friends.

"I was quite anxious," he said.

"I was scared about telling my friends and family. I had no idea how to deal with the thoughts and feelings I was having.

"Aged about 17 I got a girlfriend because I thought I may be able to force myself to be with a woman but it was never going to work."

It was only when he went to university that he started to meet gay people who seemed comfortable in their own skin.

"That was the first time I met people who were out and proud," Luke said.

Luke wrote a letter to his parents to inform them that he was gay because he knew they would bombard him with questions if he told then face to face.

He added: "This network is about having role models and somewhere that is safe for people who work for DE&S to come to if they need us."

To bring the launch to a close the audience watched a video message from Minister of State for the Armed Forces Penny Mordaunt who is passionately behind the network.

She said: "It's a historic moment in the life of DE&S.

"The MOD is fast winning a reputation as an employer of diversity and choice, but I know from talking to people there are still some who feel trapped in a glass closet, too worried about feeling different to make a difference and let themselves shine.

"As Min AF I will be doing everything I can to champion your cause. Spread the word to Abbey Wood, to all of the MOD, and take pride in it."

To find out more about DE&S Pride contact DESHR-Pride@mod.uk

