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Foreword

"We will emerge from this crisis more resilient and determined than ever"



By Sir Simon Bollom, CEO

We are in the midst of the biggest challenge this country has faced in decades. It is a global crisis which affects us right into our homes, where most of you will have been working for a couple of weeks now.

The first priority for all of us is to protect ourselves, our families and the rest of society by following government COVID 19 guidelines. However, the need to defend the nation does not pause and neither does our duty to continue to play our part. This will require us all to adapt and work out how to strike a balance. Many will be able to work from home, but many involved in the physical task of logistics delivery, or who have responsibilities requiring a physical presence on site for business or operational reasons cannot.

This is a rapidly changing landscape and I am proud that despite difficult professional and domestic circumstances, our people have already shown the determination, agility and ability to get on with the job and support each other.

We are now on an operational footing and accepting tasks from across government and the NHS to support the national effort. The challenge is ramping up and will require careful prioritisation of our day-to-day work.

As we continue to support defence-critical outputs, we are working hard with our military customers and industry partners to focus on some of the practical challenges we have to overcome. I am personally continuing to work closely with MOD at the most senior level to determine those priorities and how they flow down to us in terms of supporting defence needs in the short-term.

Before this pandemic arose, we enjoyed a busy month at DE&S, with visits to Abbey Wood from Chief of the Defence Staff (CDS), General Sir Nick Carter, 2nd Sea Lord (2SL) Vice

Admiral Nick Hine and Deputy Chief of the Defence Staff (DCDS), Air Marshal Richard Knighton. It was fascinating to hear their insights on the complex strategic landscape and their views on the future of how we might operate and fight effectively in the modern world.

The first Ministerial group on Equipment and Capability Cooperation (MECC) held since December 2018 took place in March and was chaired by Germany's State Secretary Benedikt Zimmer and our Minister for Defence Procurement, Jeremy Quin.

Invaluable discussions covered a host of key topics and programmes including the Integrated Review, Industrial Strategy, UK-Germany Defence Roadmap, plus a wide range of programme issues. It was my absolute pleasure to meet with the group and talk with pride about the projects we deliver and the cost-effective support we provide.

In terms of recent milestones, Sea Venom has achieved successful missile-firing trials off the South coast of France – a major step towards the introduction into service of the weapon system. I must also highlight the hard work from a number of people that has resulted in those with disabilities and injured ex-military personnel being given the chance to fly decommissioned RAF Vigilant T1 gliders.

Finally, I'd like to pay tribute to Director of Strategy and Change, Barry Burton, who retired at the end of March. Barry has been a superb servant to both the MOD and DE&S, making a tremendous contribution to Defence over many years.

I am acutely aware that this will be an anxious time for many of you. Stay safe and look after yourselves, loved ones and your community. We will emerge from this crisis more resilient and determined than ever.

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On the cover

Clockwise from top left: RAF Atlas A400M, Wildcat helicopter HMA Mk2, two RAF Benson Puma 2 helicopters and Chinook HC4 helicopter

Photos by Cpl Tim Laurence RAF, Si Ethell, Sgt Mitch Moore RAF and Amy Lupton



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DE&S is proud to procure and support the very best equipment possible for the brave men and women in the armed forces



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Chris Bushell, Chief of Materiel (Land), talks to Desider about his role, his first few months in post and his reflections on how DE&S compares to industry



It's been 10 years since I last worked at DE&S. Back then, I was an Air Commodore in the Royal Air Force (RAF) deployed as the Typhoon integrated project team leader. But, in December 2019, I returned as Chief of Materiel (Land).

Over the last decade, I have completed my final RAF tour supporting the export of Typhoon to Oman. After leaving the service I moved into industry for seven years, working at Leonardo – a company many of you will be familiar with and is predominantly responsible for helicopters and electronics.

In all honesty, I hadn't planned on returning to DE&S, but the challenge of being CoM (Land) enticed me back. It is not a role you'd naturally expect me to take, but I believe my mix of military and industry background will help me add significant value. So far, I have found learning about the Army very enjoyable and appreciate how welcoming the senior commanders have been.

During my first few weeks I have intentionally focused on looking inwards at the organisation. I have also chosen to prioritise meeting people

across my operating centres and functional areas, walking the floor plates and visiting regional sites, where almost 1,000 of my 4,000 staff are based.

Since then, I've been regularly visiting industry partners. For example, I've been to Merthyr Tydfil for Ajax, Ampthill to see Warrior and Telford with Boxer and Challenger – and will continue to do so.

From my experience, there are a lot of similarities between DE&S and industry, particularly in areas like prioritisation of resources and delivery of programmes. Of course, there are also some differences. Industry by design is more agile, it's able to move resources around quicker and can recruit new staff at a faster pace.

We're rightly moving in that direction although we tend to put the brakes on more heavily, simply because we're a public body spending taxpayer's money. But coming back into DE&S, I have seen a sharp improvement from before in the capacity and quality of our project management, project controls and commercial activity.

Looking ahead, I believe there are several ways I can use my

I believe there are several ways I can use my previous experience to influence our practices to benefit the Land domain and DE&S as a whole

previous experience to influence our practices to benefit the Land domain and DE&S as a whole.

One is bringing a more collaborative approach to our programmes. At Leonardo, I was the senior responsible officer for Team Tempest, a highly-collaborative programme between industry and RAF Air Command where each was an equal partner. It resulted in a win-win situation for all concerned and is an approach I'd like to encourage.

I also have a lot of international experience. When I look at our programmes within the domain, there are some with international elements but they're relatively minor. That's another area I'm looking to capitalise on opportunities.

Of course, my top priority will always be delivering our equipment and support programmes on time and budget, in a safe manner. It's why we're here and it's the challenge I look forward to facing most as CoM (Land).

DE&S staff proud to see world-beating equipment play key role in ongoing COVID-19 response

Pictured: DE&S are playing an essential role in supporting UK efforts to fight COVID-19 by procuring the very best kit and services (Picture by LPhoto Kyle Heller)



DE&S staff are delighted some of the platforms they have procured and continue to support are helping the armed forces in their effort to help tackle the COVID-19 virus.

Three RAF Puma helicopters will be stationed at Kinloss Barracks in Moray and will work alongside a Chinook and Wildcat helicopter based at RAF Leeming in North Yorkshire to meet any requests for assistance from NHS boards and trusts across Scotland and Northern England.

A second helicopter facility will cover the Midlands and Southern England working out of The Aviation Task Force Headquarters at RAF Benson in Oxfordshire. Chinook and Wildcat helicopters normally based at RAF Odiham and RNAS Yeovilton respectively will support the Southern areas.

Furthermore, three Royal Navy Merlin helicopters will be used as flying air ambulances across the South West in response to the coronavirus pandemic.

The Mk2 Merlins, based in Culdrose, Cornwall, will also be used to transport medical staff and deliver emergency supplies across an area stretching from the Isles of Scilly up to Bristol.

The helicopters which are usually used to track submarines

The world class equipment we procure and support will help our emergency services save lives in the national response to the COVID-19 crisis

Graham Russell, Director Helicopters at DE&S

will provide round-the-clock support to the NHS and South Western Ambulance Service. In preparation, they have been stripped out so they can carry stretchers, passengers and equipment over long distances.

These helicopter facilities have been set up to support medical transports across Scotland and the rest of the UK. The new task force will also be available for general support such as moving equipment and personnel across the wider UK.

Graham Russell, Director Helicopters at DE&S, said: "I am proud of the way in which our people have assisted our front-line forces to deploy our helicopters and specialist capabilities across the country in support of local government and the NHS. The world class equipment we procure and support will help our emergency services save lives in the national response to the COVID-19 crisis."

This Kinloss-based support followed the use of an RAF A400M transport aircraft to assist the Scottish Ambulance Service as part of the response to the COVID-19 crisis.

A400M is the RAF's newest and most advanced transport aircraft and can be configured to provide

airborne intensive care treatment for up to four stretcher-bound patients, having achieved its full aeromedical evacuation capability for high dependency and highly infectious patients in 2018

The A400M was called on short notice on March 22 to assist with a COVID-19 recovery task, air-lifting a patient from the Shetlands to Aberdeen hospital. As part of the wider Defence response to the COVID-19 crisis, A400Ms along with forces from the Joint Helicopter Command, are on stand-by to provide aviation capability in support to civil authorities.

A400M Delivery team leader, Nick Moore, said: "In addition to its unique versatility as a tactical airlifter with global reach, A400M has a comprehensive aeromedical evacuation capability. While we obviously would hope that this is called upon infrequently in normal times, the whole team is nevertheless extremely proud that the aircraft has been able to assist a member of the public while playing its role in the national effort against COVID-19."

Sea Venom missile firing trial a success

Pictured: Sea Venom anti-ship weapon achieves milestone off the South coast of France (Picture submitted by Direction générale de l'armement (DGA))



The first qualification firing trial of a new anti-ship missile has been a success.

MBDA, which is developing Sea Venom/Anti-Navire Léger (ANL) for use on the Royal Navy's AW159 Wildcat helicopters, achieved the milestone at the DGA Essais de missiles test site near Ile du Levant, off the South coast of France.

The missile was launched from a French DGA procurement agency-owned Dauphin helicopter and reached its cruise phase while skimming low to the sea.

The air crew then used images from the infrared seeker to aim the missile manually and it went on to accurately hit its target.

This latest firing builds on two previous trials which tested Sea Venom's lock on after launch (LOAL) and lock on before launch (LOBL) capabilities, as well as its low altitude flying and autonomous guidance systems.

Chris Harris, Lightweight and Medium Attack Systems (LMAS) team leader at DE&S, said: "Our team, together with their French colleagues, are working hard to ensure the Royal Navy continue to have the cutting-edge technology they need to protect our nation in an ever-changing world.

Our team, together with their French colleagues, are working hard to ensure the Royal Navy continue to have the cutting-edge technology they need to protect our nation

Chris Harris, DE&S
LMAS team leader

"This success at the third development trials represents a major milestone towards the introduction into service of the Sea Venom weapon system for the Royal Navy."

Sea Venom is a purpose-built anti-ship missile being jointly developed by the UK and France. It will be used by Wildcat and will be suitable for a wide range of platforms, as well as supporting the Queen Elizabeth Class aircraft carriers.

Replacing Sea Skua, it is being designed to safely engage hostile vessels amongst civilian ones and could be used on a range of targets from small, fast-moving craft through to larger ships.

The Sea Venom programme has seen about 200 highly-skilled jobs sustained at MBDA, based mainly in Bristol and Stevenage.

Minister for Defence Procurement, Jeremy Quin, France's délégué general pour l'armement, Joël Barre, and DE&S CEO Sir Simon Bollom co-chaired the High-Level Working Group (HLWG) in London last month.

Established by the 2010 Lancaster House Treaties, the HLWG is the most senior body responsible for steering bilateral

armaments co-operation between the UK and France.

The meeting was an opportunity to re-affirm at the highest level the importance of the bilateral relationship in Defence and the will to maintain strong co-operation in the field of UK-French military capabilities in particular.

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Unveiling of AS90 turret simulators

Members of the Training & Simulations Systems Programme (TSSP) team recently attended an open day in Larkhill, Wiltshire to celebrate the successful launch of the AS90 turret simulators.

The day marked the official unveiling of the simulators where attendees were able to view the new training platforms that will be used for army training purposes.

The AS90 is a high-fidelity motion-based trainer that simulates action of the loading system, breech mechanism and fire-control system and is used to train crew positions of commander, gunner and loader, ensuring soldiers are correctly trained and prepared for battle.

Brigadier and Army representative Mark Pullen said: "The facility is world class and a vital training acquisition for the army. It's been great to celebrate the collaborative work with G3 systems and TSSP in DE&S that has gone into producing this excellent training facility for the Army."

The two simulators were moved from Gutersloh Germany and Tidworth across to Larkhill and collectively the two turret trainers have fired almost 70,000 rounds at an operational availability of more than 95 per cent, which has saved DE&S in the region of £140 million in armament spend alone. When added to the additional savings in weapon and vehicle maintenance the financial benefit to the UK MOD is even greater.

New coolers to support UK aircraft

Large-bodied RAF aircraft will be supported by new specialised coolers as part of a multi-million pound contract.

The 25 large aircraft coolers will be used to protect the mission critical systems of E-3D Sentry, Rivet Joint (Air Seeker), Sentinel R1, Poseidon, C-17, A400M, Voyager and C-130. Due to the universal design of the coolers, it is anticipated that they will be suitable for use on future aircraft projects.

Explaining why the coolers are needed, James Wiggins, head of projects for Air Commodities at DE&S, said: "There is a regular requirement for the internal

environments of large-bodied aircraft to be conditioned with cool, dry air without running the aircraft's engines. This allows all aircraft avionic systems to be fully tested and maintenance activities to be undertaken pre-flight. Even in the cooler UK climate, aircraft avionic systems generate a certain amount of heat when operating. If this build-up of heat is not dealt with, it would eventually have a detrimental impact on the serviceability of mission-critical systems."

The new aircraft coolers will replace an older model, which has reached the end of its service life and costs more to support each

year. The replacement solution will provide greater reliability and lower annual support costs. It is more environmentally friendly, as it uses a smaller amount of refrigerant (F-Gas).

The new coolers will be deployed at RAF Waddington, RAF Wittering and on overseas operations.

Air Commodities Delivery Team, part of the Air Domain, placed the contract with Babcock on February 7. Trials of the new coolers, manufactured by JBT AeroTech, will start shortly. The equipment will then enter service at the start of 2021.



Chief of the Defence Staff visits Abbey Wood

General Sir Nick Carter visited MOD Abbey Wood, giving his perspective on the complex strategic landscape, both politically within the UK and on a more global scale.

He said: "I'm always educated when I come to DE&S. You see the reality of what is happening on the ground and you perform an indispensable function, and I thank you for all you do."

Highlighting the Integrated Review, CDS raised the fact that the UK has found itself in the dawn of an era of "great power competition, acknowledging that

this raises the question of how we protect ourselves, and emphasised the need to think carefully about how we hold adversaries, capabilities at risk rather than simply trying to protect ourselves from everything they are doing.

Sir Nick concluded that in a post-Brexit world there were many opportunities for Defence; the trick would be to ensure we have the right balance between the ends that the Government sets us, and the ways and means that are necessary to deliver those ends.



HMS Defender returns from seven month deployment

With a 270-strong crew, HMS Defender has returned home to Portsmouth after accompanying British-flagged tankers and cargo ships through troubled waters as well as making two significant drug seizures.

Instead of a six-month patrol of the Far East as originally planned, the Type 45 destroyer was diverted to the Middle East last summer to join other Royal Navy vessels accompanying British merchant shipping into and out of the Gulf, through the Strait of Hormuz.

HMS Defender supported international security missions such as Operation Sentinel, the global response to the threat to shipping in the Gulf and the Gulf of Oman, and Combined Task Force 150, which attempts to curb terrorist and smuggling activities in the Indian Ocean.

HMS Defender spent 184 days in the Gulf and her 270-strong ship's company had just a fortnight's break during their 222 days away, eating 18 tonnes of meat, 26 tonnes of potatoes and 30,000 eggs.

Normally, there would be hundreds of family and friends on the return jetty waiting for the sailors to disembark, but to help preserve good health the homecoming was cancelled.

The RAF has received the newest addition to the P-8A Poseidon fleet

Kinloss Barracks recently saw the arrival of the Royal Air Force's second P-8A Poseidon maritime patrol aircraft. The plane has been named the 'City of Elgin', reflecting the strong links the RAF has with the area.

This aircraft will join the first one, the 'Pride of Moray', which arrived in early February.

The pair will operate from Kinloss until the Poseidon force is relocated to its permanent home at nearby RAF Lossiemouth later this year, following the completion of infrastructure work at the site.

The Poseidon fleet will provide a dedicated anti-submarine and anti-surface warfare capability, carrying out extended surveillance missions at both high and low altitudes.

The jets are equipped with cutting-edge sensors that use high-resolution area mapping to find both surface and sub-surface threats and, as further capability is added and the fleet size grows, will be capable of attacking both surface and sub-surface targets.

Defence Minister Jeremy Quin impressed by Boxer production

Minister for Defence Procurement Jeremy Quin recently visited Telford-based RBSL ahead of production of the new state-of-the-art Boxer armoured vehicle.

RBSL will build, assemble, integrate and test the armoured vehicle structures at its Telford facility in the West Midlands.

The company was named as one of the vehicle manufacturers by ARTEC, the consortium awarded a £2.3 billion contract last year to deliver 500 Boxer 8x8 high mobility, network-enabled armoured vehicles.

The Minister was given a tour of the company's site and met with the workforce, including newly-recruited apprentices who have been brought in to work on the

programme.

Min DP, Mr Quin, said: "This visit illustrates yet another example of how Defence is levelling-up the UK economy through creating and sustaining skilled jobs in military vehicle manufacturing."

The programme is supported by a supply chain across Wales and Scotland and the West Midlands, alongside northern powerhouse cities, demonstrating the Government's commitment to levelling up through defence sector employment across the UK.

Initially, the Army will buy a mixture of the troop-carrying variant, ambulances, command vehicles and a variant designed to carry military equipment.





Barry Burton – reflections on his time with MOD and DE&S

Barry Burton, Director of Strategy and Change at DE&S, is retiring after 42 years with the MOD. He told Desider's Louisa Keefe about how Defence had given him a rich and varied career

What has been the highlight of your time here at DE&S?

A highlight for me would be when we merged the procurement and logistics organisations together very quickly in 2007 and created the DE&S brand. We brought together two very different cultures, two different-sized and geographically-dispersed organisations, to become a single entity with a common purpose. We recognised that there was a good reason to do what we were doing, found a way of doing it and delivered it at pace. I think it's too easy to agonise over change and try to get everything to a perfect position. The reality is, you have a better chance of success if you make a bold decision, be clear about what you are trying to achieve and get on with it. That's what we did in 2007 and again in 2014 when we became a Bespoke Trading Entity.

What has been the most challenging part of your career?

I spent six months in Baghdad in 2004 as a policy advisor. Being in an operational environment, where the warfighting had just finished and the nation building was starting, brought many challenges for me, personally. I had to cope with a very different and demanding environment, working ridiculously long hours and avoiding the rockets that were regularly landing in the green zone in Baghdad; and of course, also getting things done. For me it was a constant reminder of what we ask our armed forces to do and why the role of DE&S is so important.

What advice would you give to those facing adversity within DE&S?

I'd focus on outputs. The real unique selling proposition of DE&S is its staff's willingness and ability to get things done in support of the armed services. I'd simply say to anybody who's struggling in DE&S is to remember what we're here for - it gets you through the most difficult

days; particularly so as we grapple with COVID 19. As an organisation we are on a trajectory that will enable us to continue to better deliver the programme that we're asked to deliver and to make DE&S a great place to work.

How do you hope DE&S changes when you've gone?

I hope that we manage the challenges that we have coming towards us, whether it's a digital space environment, the integrated review or spending reviews, or pressures on resources. I hope whatever challenge we face doesn't detract from our ability to continue to focus on supporting the armed forces. It's important that we build our capacity and capability to do that crucial role and become ever more productive.

What are your next steps?

What I'm really looking forward to is not having to commute three plus hours each day, as I have for far too long, and of course spending more time with my family. In the past, I've sat on the Board of Trustees for a charity and have been the chair of governance for a secondary school, so I might do a bit more of that. I enjoy being busy but now is the time to manage the work-life balance a bit better.

What do you want to say to your colleagues as you depart DE&S?

Thank you for your exceptional efforts. Any success that anybody has in any job is always built on the work of a team and we are hugely blessed by having extremely capable and impressive people across DE&S. Please don't be downtrodden. We deliver a very complicated programme, very professionally, to a very grateful set of customers and we should never lose sight of that.

Upgraded digital sensor-to-shooter system allows allied nations to share tactical information

Pictured: The FC BISA sensor-to-shooter digital system used on the AS90 self-propelled artillery gun (Picture by Cpl Sam Jenkins)



The Artillery Systems team in Land Equipment is rolling out an updated, innovative, sensor-to-shooter digital system that is able to transfer strategic operational commands between nation forces in seconds.

The Fire Control Battlefield Information System Application (FC BISA) is a Command, Control, Communications, Computation and Intelligence system (C4I) that generates firing data for artillery and mortars. It operates on the Bowman ComBAT Infrastructure and Platform (BCIP) system and is supported by CGI IT and Business Consulting UK ltd.

The team is working with the Artillery Systems Co-operation Activities (ASCA) network – a community of allied forces – to build new software into FC BISA that will allow the British Army to share information with other forces and allow them to identify and fire at hostile targets between them.

It will be used across the

The success of this is down to a close working relationship with Artillery Systems and industry as well as working more closely with other nations

Michael Constable, project manager for FC BISA

Multiple Launch Rocket System (MLRS), the AS90 self-propelled gun, the light gun and mortars, which are weapon systems used by the infantry for close-support firing.

Michael Constable, FC BISA project manager, said: “This is a digital system which transfers information from the soldier or sensor to gather intelligence on

the whereabouts of a target to a weapon system which the Royal Artillery or infantry will use to destroy said target.

The data transfer is almost instant but there are built-in safety features which means that before any shots are fired, the information is checked and verified by a safety officer first. Safety is key throughout this process.

The introduction of the ASCA network will allow full digital fires from sensor to shooter across national digital boundaries quickly and safely with no language barrier.”

The Royal Artillery Trials & Development Unit (RATDU) is the lead user in the development of FC BISA v4 and the ASCA programme. Since re-joining the programme and becoming full members in 2018, the UK fielded an ASCA terminal for the field Army in December 2019 and are now in the process of developing the next version.

Michael added: “The success of this is down to a close working

relationship with Artillery Systems and industry as well as working more closely with other nations, all of which are taking the same steps as the UK to develop their systems.

“When developing a fire control system for the end user, as well as interoperability, it’s the exchanges in ideas and interpreting a task from different perspectives, from industry and our allies, that shapes how we move forward.”

FC BISA was first brought into service with the Royal Artillery in 2008 and was designed to be a fully networked and interoperable digital fires capability. This latest iteration of the system – version 4 – is being introduced in line with capability updates to the software which is used across the BOWMAN BCIP 5.6 system. The first tranche of updates have already been introduced to limited systems and the second and third tranches are expected to be introduced in Spring 2021 and Summer 2022 across the entire BICIP 5.6 network.

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On teamwork, leadership and astronomy

Phil Savvides is the Engineering Services team leader for the Directorate of Engineering and Safety, which is bringing together technical teams to deliver a unified service

What does your role involve?

I lead Engineering Services, part of the Engineering & Safety Directorate, which is a team of subject matter experts that helps projects understand what technical areas they need to consider, what some of the risks are and share any successful practice. My role is predominately about bringing together a disparate team of technical people to deliver a coherent service that can provide benefit and value to as many delivery teams as possible.

What about your role is exciting, rewarding or interesting?

Once someone described Defence to me as a multi-layered set of different jigsaw puzzles where all the pieces have been scrambled together but, at some point, somebody had lost the picture showing how it all fits together. The Engineering & Safety Directorate is a fascinating place to work because we are, in part, helping to bring structure and order to the Defence-wide puzzle by tackling the difficult problems that cut across organisational boundaries and that do not always have a natural customer or champion. Every day I learn something new or make new discoveries about how Defence works and fits together. This is what interests me and keeps me motivated in my role.

How important to you is teamwork?

Teamwork is the backbone of the organisation, without which there would be no prospect of us delivering effective capability for Defence. Our jobs are hard enough as it is and would be nearly impossible if people

didn't work towards common goals, collaborate together to develop realistic solutions, share knowledge and successful practice and above all learn from our mistakes.

How are you helping embed change in your area?

Big scale organisational changes are difficult to influence, but small changes are something that we can all do and can make a real difference. I try to be flexible to change, adapt and be positive. I think my approach to change is probably best summed up in one of my favourite children's books, *The Lion Inside*: "if you want things to change, you first have to change you."

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

Having been an Air Cadet for more than 12 years I almost joined the RAF but wasn't convinced about the regimentation or uncontrolled postings. I joined the engineering graduate training scheme (DESG), which enabled me to work at the forefront of technology and remain in control of my own destiny. I often wonder what would have happened if I had joined the RAF.

What do you most enjoy about your job?

I really enjoy the leadership challenge of my job, which although difficult can be extremely rewarding. I lead a number of interdependent technical teams that have deep subject matter expertise. This provides me with a challenge because I have to consciously balance my desire to understand all the detail with trust in the knowledge and skills

of the experts to work across organisational boundaries to develop viable solutions. This has not always been easy because as an engineer I am naturally curious and want to understand how everything works.

What do you enjoy doing in your spare time?

When my daughter started at her school, I was excited to learn about the observatory that had been donated by the family of an ex-pupil who had subsequently worked for NASA. Unfortunately, in the five years since its installation it had fallen into disrepair as no-one really knew how to use it. I joined the local Worcester Astronomical Society and found someone who built his own telescopes, and was only too willing to help resurrect the telescope. Since then I have been able to indulge in a little recreational star gazing and help the school enhance its educational programme.

What might surprise people about you?

My father, a Greek Cypriot, was sent to England when he was 16 to learn how to become a mechanic. He was not allowed to 1) stay in England or 2) marry an English woman. He did both, and later became a lecturer in automotive systems. If it wasn't for my father's disregard for his family's instruction it is unlikely that I would have ever pursued a career in engineering.

New system reduces the risk of friendly fire

Pictured: Mode 5 project has initiated - and in some cases already completed - successful trials on several platforms including the T23 frigate (Picture by LPhoto Alex Ceolin)



A next-generation system that identifies friendly aircraft, helicopters and ships as well as potential threats and targets is being rolled out across multiple UK platforms.

Mode 5 uses advanced cryptographic techniques and world-leading electronic technology to allow UK land, sea and air units to quickly identify friendly forces, thereby operating safely alongside NATO allies across any battlefield and significantly reducing the risk of fratricide.

The current system that is being used will cease this year and, without Mode 5 – its replacement system – the UK would be unable to deploy on coalition operations overseas.

The MOD has invested £260 million in installing the secure Identify Friend or Foe (IFF) technology to 31 types of aircraft, ship, vehicles and even radar through the Mode 5 project - that's more than 400 individual platforms covering air, land and maritime environments.

The DE&S Mode 5 team in the Air Support Operating Centre leads the contract with Leonardo MW on the design, integration

Mode 5 ensures our Servicemen and women can operate confidently alongside the UK's allies and partners

Robin Kelly, DE&S Mode 5 project manager

onto platforms and initial in-service support. The team also provides IFF technical support to DE&S platform delivery teams.

The UK's Mode 5 project covers legacy in-service platforms and has been designed to give UK units a clear and secure view of potential threats and targets, providing a powerful cyber shield against jamming and interference intended to reduce vital situational awareness. The system is used and mandated by NATO and used by several close allies, with each country responsible for making their own platforms Mode 5-enabled.

Robin Kelly, Mode 5 project manager at DE&S, said: "Mode 5 significantly reduces the risk of friendly fire and ensures our servicemen and women can operate confidently alongside the UK's allies and partners. The challenge for the Mode 5 team and its stakeholders has been to deliver this critical capability across multiple platforms whilst facing a demanding, immovable sunset date for the legacy system."

In recent months – the Mode 5 project has initiated – and in some cases already completed – successful trials on several

platforms. These include Puma, Merlin, Chinook, Type 102 radar, Watchkeeper, Type 23 frigate and mine countermeasure vessels.

Robin added: "The Mode 5 project has started to see initial successes following inaugural flight and sea trials. It's required a whole-team approach with DE&S and industry teams working hand-in-glove.

The trials enable DE&S delivery teams to declare acceptance of Mode 5 for their own platform. Each one is an important milestone as this then allows the modification to be rolled out across the whole fleet."



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MOD Glider sale set to bring joy to lives of many

Pictured: Aerobility will be able to provide 1,600 more people with flying experiences every year after buying the decommissioned aircraft from the Defence Equipment Sales Authority (Picture by Geoffrey Lee, Planefocus)



Motor gliders used to train thousands of RAF Air Cadets will get a new lease of life and bring joy to people with disabilities and injured ex-military personnel.

The Defence Equipment Sales Authority (DESA) at DE&S has sold 63 decommissioned Vigilant T1 aircraft to Aerobility, a charity which provides flying experiences to those who might otherwise never get a chance to take to the skies.

The first batch of 10 gliders will be modified and refurbished by German company GROB Aircraft SE – the original manufacturer and Design Authority – to meet civil certification standards.

The remaining aircraft will be engineered and recertified in the UK, where the charity has identified a qualified engineering partner in Southern Sailplanes, based in West Berkshire.

Hampshire-based Aerobility will initially more than double its fleet with eight Vigilants thanks to a grant from the Department for Transport (DfT), meaning they will be able to help about 2,600 people into the air every year compared to 1,000 currently.

Clive Walker, head of DESA, said: "I am very pleased to see the

Some of our most successful pilots learnt to fly in a glider and I'm encouraged to see the work of charities like Aerobility offering similar experiences to people who may otherwise miss out

Grant Shapps,
Transport Secretary

RAF Vigilant T1 gliders move on to a new lease of life, in particular supporting the excellent work of Aerobility in creating flying experiences and opportunities for those who might otherwise never get the chance to fly."

Transport Secretary Grant Shapps said: "General aviation is the engine room of the entire aviation sector, so it's vital that people from all backgrounds can access it.

"Some of our most successful pilots learnt to fly in a glider and I'm encouraged to see the work of charities like Aerobility offering similar experiences to people who may otherwise miss out."

Glider modifications will include new engines, propellers and refurbished cockpits, and the charity hopes the first glider will be ready to fly in the summer of 2021.

Aircraft that aren't used for flights will be refurbished and sold to generate revenue for the charity, pay for the ongoing costs of their operational fleet and help them branch out into other parts of the British Isles.

Aerobility's CEO Mike Miller-Smith said: "Acquiring these aircraft will help us transform the lives of an even greater number

of disabled people by giving them the unrivalled sense of freedom through the magic of flight. We are extremely grateful to the Ministry of Defence, Department for Transport and our various partners for supporting us in this ambitious project.

"Not only will it help us build capacity for our future operations, it will enable us to expand the charity to support more disabled people and to do so at additional locations around the UK."

The sale will create four full-time engineering jobs, one project management role and one administration position at the charity. They will also need a full-time co-ordinator and a part-time flying instructor, with all positions being filled by candidates with a disability where possible.



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A new home for careers at DE&S

Multi-million pound contract awarded to secure life-saving weapon locating radar systems

Pictured: A Mobile Artillery Monitoring Battlefield Asset Radar in Al Amarah, Iraq being used by K Battery 5 Regt Royal Artillery (Picture by Graeme Main, Crown Copyright)

DE&S have awarded a £46 million contract to extend the British Army's use of its Mobile Artillery Monitoring Battlefield Asset (MAMBA) weapon-locating radar systems.

The contract secures the continued use of the life-saving critical operational counter-fire capability that has been in service since 2003, supporting operations in both Iraq and Afghanistan.

The contract, awarded to SAAB by the Artillery Systems team at

DE&S, will see the company work with the Royal Artillery's 5th regiment based in Catterick, to ensure the capability remains in service until 2026.

Team leader Colonel Jeremy Sharpe, said: "Providing the best possible equipment to our troops is what we do best, and I am delighted that we have now secured the future of MAMBA for the next six years."

The MAMBA system works by giving advanced warning signals

to troops on the front line by detecting incoming hostile fire. It is a highly-mobile weapon locating system, used for tasks including counter-battery missions and fire control, tactically deployed close to the forward line of troops.

Within the battlefield sectors or other areas of interest, MAMBA rapidly detects and tracks artillery projectiles and calculates points of origin and points of impact.

Based on the calculations produced by MAMBA, priorities

Providing the best possible equipment to our troops is what we do best, and I am delighted that we have now secured the future of MAMBA for the next six years

Colonel Jeremy Sharpe,
team leader



are made and directions are provided for effective counter-battery fire. In fire control mode, MAMBA will track the projectiles of own fire and extrapolate the points of impact. In sense and warn mode, extrapolation of points of impact of incoming fire will trigger a timely warning to its own troops.

Deliveries of the MAMBA mid-life extension will take place between 2022 and 2023, with the support contract covering 2020 to 2026.

SAAB will carry out the work in Gothenburg, Sweden, with support also taking place at 5th Regiment Royal Artillery's Barracks in Catterick, UK.

Jeremy Quin, Minister for Defence Procurement, said: "MAMBA has long proven itself as a battle-winning capability, protecting civilians and troops on operations for many years. Our troops in Catterick will work alongside our counterparts at SAAB to ensure this life-saving piece of equipment remains in service for the next six years."

Work is already underway to explore which capability will replace MAMBA when it goes out of service. Currently, the Army is considering SERPENS – a next generation weapon locating system with a digitally-networked suite of sensor systems that detect hostile mortars, artillery and rockets. This is still in the early stages of its concept phase and subject to further research and development.

Royal Navy's autonomous minesweeper system receives praise for success during cold-weather trials

The SWEEP system recently underwent a two-week period of cold weather sea trials in Nova Scotia (Pictures submitted by MHC team)



The SWEEP minesweeper system –designed to defeat the threat of underwater sea mines and safely clear sea lanes – has recently proven its capabilities during two weeks of cold-weather sea trials.

Developed by Atlas Electronic (AEUK) as part of a £13 million contract, the autonomous vessel can pull three coil auxiliary boats behind it, with each emitting magnetic, electric and acoustic signals that can detonate a variety of mines.

SWEEP is a complimentary system used to deal with mines that cannot be dealt with using traditional mine-hunting tactics and, having already proven to be capable of defeating the threat of modern digital mines in normal weather conditions, cold-weather trials were recently conducted to ensure its capability.

Barry Miller, MHC team leader, said: "Minesweeping has a long history of use as part of a mixed mine countermeasures capability, complementing mine hunting in difficult environments. The UK is currently trialling a 'toolbox' of autonomous mine hunting and minesweeping modules hosted on

We are a step closer to delivering a truly transformational capability to the Royal Navy

Barry Miller, MHC team leader



unmanned surface vehicles. This successful trial of an innovative and autonomous minesweeping capability in extreme weathers means we are a step closer to delivering a truly transformational capability to the Royal Navy."

These latest trials were used to test the system's cold-weather performance and help to inform the UK's future unmanned mine-sweeping capability. The system was tested against a number of performance requirements, for example magnetic, acoustic and electrical influence generation, how well it cleared mines in sub-zero temperatures, whether the autonomous system could successfully avoid other vessels and the overall system performance in colder conditions that could be experienced for military operations.

The trials, led by the Ministry of Defence and conducted by the Royal Navy, took place at the Bedford Basin, Nova Scotia in Canada, with logistic support provided by the Canadian Forces Maritime Warfare Centre.

Miguel Rial, MHC trials manager, said: "I have no doubt the valuable information

obtained from these cold-weather Trials in Canada will be a key contributor to the manufacture of a robust and reliable operational minesweeping system in the near future, reinstating a minesweeping capability into the Royal Navy."

Operated remotely or in the portable command and control cabin, the mine countermeasures and Hydrographic Capability Combined Influence Minesweeping system is the Royal Navy's first autonomous unmanned surface vessel demonstrator that significantly reduces the risk to crew members in pressured and time-constrained operations, and proved its ability to operate successfully in cold conditions during the recent trials.



Clockwise from top left: A Mastiff vehicle on patrol, Bruce's x-ray shows the extensive surgery needed to save his foot, Bruce chats with Prince Harry about the Invictus Games, Major Bruce Ekman, Boxer, a casualty evacuation takes place (Pictures submitted / WO 2 Steve Hughes (RLC Video Production Team))

“I could see the gunner was on fire from the explosion that had engulfed the vehicle”

On July 11, 2011 Major Bruce Ekman’s life was turned upside down by a roadside bomb. He spoke with Desider editor Tom Morris about why the traumatic experience drove him to be part of the Boxer Mechanised Infantry Vehicle delivery team at DE&S

Major Bruce Ekman has understandably vivid memories of the moment the 23-tonne Mastiff in which he was travelling was rocked by a huge explosion in Afghanistan.

On that fateful day Bruce’s team, attached to 42 Commando Royal Marines, were as per usual restocking five 150-troop strong patrol bases located in one of Helmand Province’s green zones.

The British Army patrol base’s presence was critical, not only to thwart the enforced growing of poppies for heroin to fund the Taliban, but also to give farmers the opportunity to grow wheat and cotton from which they could earn a living.

After agreeing to do an unscheduled stop, the Mastiff Armoured Personnel Carrier in which Bruce and his unit were travelling detonated an improvised explosive device (IED).

“The vehicle went dark with smoke and dust and I could see the gunner was on fire from the explosion that had engulfed the vehicle,” said Bruce.

“Once the vehicle came to rest my first thought was I’d lost all my teeth because all I could taste was blood and fragments. Thankfully, it was dust and grit.

“The blast had ripped both rear axles off the vehicle. The four of us, who were in the rear of the Mastiff, all had shattered feet from the blast and I had to use my morphine syringe on my Second in Command, who was in agony with a suspected broken back.”

Incredibly, despite being trapped, immobile and with Taliban bullets ping-ponging against their armoured vehicle, all six on board the Mastiff survived.

Bruce was flown back to the UK where his badly damaged left foot was successfully rescued against all odds – thanks in large part to the excellent surgery that had been performed by the army surgeons in Afghanistan.

Remarkably, with a momentum brace – a device allowing him to restrain himself to run – in 2017, Bruce went on to win gold in the 1,500m at the Prince Harry-inspired Invictus Games, of which he had also become an ambassador.

“Throughout my recovery I lost count of the times it was commented on how the Mastiff vehicle had saved the lives of myself and my colleagues,” he said.

“It was for this reason I applied to join the Mechanised Infantry Vehicle delivery team at DE&S in the hope of assisting and supporting the procurement of the Army’s next Infantry Carrying Vehicle (ICV) known as ‘Boxer.’”

The £2.8 billion Boxer programme will provide more than 500 state-of-the-art armoured network-enabled fighting vehicles to the British Army that can deploy rapidly over long distances and varied terrains.

Bruce said: “I am delighted that this vehicle will offer the very highest levels of protection, mobility and agility to the British Army.

“All of the UK variants will have generic vehicle architecture for the commander, driver and gunner as well as a larger engine offering increased load capacity and speeds of over 60 miles per hour.”

Modular by design, the Boxer’s vehicle base can be rapidly reconfigured to fill different roles on the battlefield: from carrying troops across vast distances to treating severely injured service personnel on the journey to hospital. The Army will be receiving a mixture of the troop-carrying variant, ambulances, command and specialist vehicles. The first of the production vehicles are due to come into service in 2023.

“On a personal note, I am delighted to see that all the lessons learned from the Urgent Operational Requirement (UOR) Protective Mobility platforms in Iraq and Afghanistan have been incorporated and improved upon in the new Mechanised Infantry Vehicle programme,” said Bruce.

“The British Boxer will offer unrivalled levels of protection to its crew with enhanced protection features such as a mine-blast protection, four-point safety harnesses, a vehicle emergency lighting system and an onboard local situational awareness system.

“My experiences drove me to desperately want to be part of this team. The dedication, professionalism and determination to work with industry to make sure we get the very best and very safest vehicle possible for those serving in the British Army, has been outstanding.

“It is a programme that I am immensely proud to be involved in.”

CEO Commendations

DE&S former winners on winning their awards and where they are now



DE&S Policy Secretariat team

In recognition of their continued support and consistent delivery of excellent standards in all aspects of Policy Secretariat business

Why were you nominated for this award?

The award recognised the team's role in delivering consistently excellent performance and high standards of work in all aspects of Policy Secretariat business, role-modelling the very best in behaviours, team endeavour and personal commitment. This success reflected a collective, team-based approach, supported by many other people across the business, ensuring that the CEO and senior staff can effectively represent key DE&S business issues and that Ministers are able to effectively discharge their responsibilities and accountability to Parliament.

This is the highest accolade you can achieve within DE&S, how did it feel?

The team strives to deliver factually accurate advice, on time and right first time, to support decision-making and Ministerial accountability, and if we are doing our job well, the work of the Policy Secretariat team goes largely unseen to many across the organisation. This is a measure of success, but at the same time it was great to see the team's efforts gain formal recognition from the CEO through this award and, in doing so, promote wider awareness of what we do and why it's important, alongside our core business of equipping and supporting our armed forces.

What are your memories of the awards ceremony?

There was a lot of positive energy at the event. It showcased some great examples of what

DE&S delivers and it was really eye opening to see the range of work undertaken across DE&S for which success was being celebrated at the awards. There is clearly a lot of pride in what we deliver and some very supportive speeches from some of our key customers, reflecting on how much that delivery matters to them in terms of delivering wider defence capability.

What would you say to other teams and individuals hoping to be awarded a CEO Commendation?

There is a lot of good work going on across DE&S at both a team and individual level and it's a really positive boost for success to be recognised in this way. I would encourage all to consider what they have delivered, no matter how small that might seem, and put forward nominations. Practicalities mean that not

everyone is able to attend the awards ceremony, so it's really important to ensure that success is shared and celebrated by all, so consider a team lunch or some other collective activity to include everyone.

How have you built on your success?

By maintaining our excellent record for delivery and seeking to further promote wider awareness of what we do. There is a lot of interest in Parliamentary and Ministerial work and people appear keen to come and work in the team, and wider policy profession, so we must be doing something right!

60 second spotlight

"I was an extra in a Bond movie"

Alan 'Saggy' Sagrott

(everyone calls me and knows me as Saggy - a nickname from my RAF days)

Job:

Typhoon release to service manager based at RAF Marham.

Your route into DE&S?

After 23 years in the RAF, I joined the Tornado integrated project team at Wyton in 2000 when it was the Defence Logistics Organisation. But five years of commuting daily from near Marham took its toll, so I left to work for BAE Systems at Marham for the next 13 years in the off-aircraft component environment. When the Tornado ended its life in early 2019, and having been associated with Tornado for almost 35 years, I re-joined DE&S on the Typhoon platform.

Your claim to fame?

Apart from appearing on The Chase in October 2019, I have been an extra in a TV film starring Lenny Henry called The Man (1999), in a TV series starring Stephen Fry (filmed in and around my home town of Swaffham around 2007/8) called Kingdom and in the Bond film The World Is Not Enough starring Pierce Brosnan (filmed in 1999 with some scenes filmed at RAF Halton officer's mess - as was the Lenny Henry film). You are paid in cash and you get to drink and eat as much as you want during the day's filming. I have also met a famous British baker whom I was told I look a bit like when I have facial hair.

Your advice to anyone?

Be truthful and honest. If you make a mistake own up and inform your superiors. It ensures resolution and installs a culture of trust within a team of being open and candid. Also, enjoy life to the full, you never know what's around the corner.

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

Since the age of 11 I have played hockey and still do to a fashion. I was introduced to it at school by my PE teacher and went on to represent my county at schoolboy level. When I joined the RAF aged 17, I went on to represent the RAF at all levels, stations, groups, commands, U21s, seniors and veterans. I play for my local club and have done since 1984, and last season I was fortunate enough to represent Norfolk over-60s. I am also an avid fan and shareholder of Gillingham FC as well as swinging golf clubs to varying degrees of success at my local course.

What are you most proud of?

My family and their support, but particularly being at my son's university graduation and, years later, his RAF officer's graduation at Cranwell. Hopefully, my daughter will also go to university so I can attend her graduation.

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

Family photos so I could be reminded of them, Neil Diamond music (some will find this sad) and an endless supply of merlot.

What irritates you the most?

Lateness. Probably due to my military career. I think it is rude that people are late for meetings or agreed start times unless for valid reasons.

What is your favourite place in the world?

I have travelled all around the world whilst in the RAF for work and played hockey in countries including Australia, New Zealand, Canada, Singapore, various states of the USA, South Africa, Turkey and many more. But I have been on family holidays to Tenerife and really enjoy the times there. It's great just to relax by the pool and enjoy quality family time.



What would surprise people about you?

That I have played hockey with the DE&S CEO during our RAF careers on many occasions, and in various locations.

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

Email
Louisa.Keefe101@mod.gov.uk

NHS food donation, International Women's Day and a labour of love



A team of DE&S, RAF and BAE engineers from RAF Coningsby completed a labour of love by refurbishing, transporting and rebuilding a classic Cold War jet fighter.

The dedicated team undertook the task to transform the former F3 aircraft from 29 Squadron in their own time because of their love for all things aeronautical.

The lengthy endeavour started in January 2019 when a team of five personnel, led by DE&S' Dave Blissett, carried out anti-corrosion activities, removed unnecessary weight, made repairs, restored the exterior lighting

and established lifting points for a new static role.

In March, the aircraft was transported by road to North Weald, where the airframe was freshly painted in the iconic red and white colours of 56 Squadron.

The aircraft, which ended its service days as a gate guardian at RAF Boulmer, had been purchased by Vanguard Self Storage.

Painting complete, the airframe was moved to Bristol and stored in readiness for it to be hung in the reception of their new storage facility in the Redfield area of the city.

Like many recent social events, the annual Land HQ Army dinner was postponed this year due to COVID-19. The annual dinner is usually an opportunity to bring together the entire Army cohort from across the Abbey Wood site, and when it was confirmed the dinner wouldn't go ahead, Land HQ were determined to make sure the food wouldn't go to waste.

Major Josh Tester and Major Ed Petrie explored various options to distribute the meals, eventually getting in touch with the South Western Ambulance Service Foundation Trust where the first responder crews and call centre staff were happy to receive the gifted food.

The Aramark staff at DE&S kindly supplied food containers which were used to transport roughly 75 meals including fishcakes and fries, and chicken Dijon and mashed potatoes to the ambulance responders site in Filton.

Thanks to the initiative of our colleagues in Land HQ, a number of deserved people were able to enjoy the donated food.



More than 200 delegates attended the MOD Women's Network annual conference at Abbey Wood to celebrate International Women's Day and hear a range of perspectives from inspiring speakers.

Vice Admiral Chris Gardner, Chief of Materiel (Ships), opened the conference and urged the audience to be proactive in providing input into how DE&S can continue to improve gender equality and to make personal pledges to bring about change.

He delivered a powerful message, challenging the underrepresentation of women in DE&S, notably in engineering and across more senior grades and said: "It's key that we develop the right interventions to bring about the necessary change."

DE&S Chair Mark Russell shared how he had witnessed the effectiveness of diverse organisations and Katherine Bennet OBE, UK senior vice president of Airbus, recited anecdotes from her career, encouraging the audience to participate in the 2020 International Women's Day theme 'Each for Equal' by advocating for each other.

Professor Christine Bamford, founder and CEO of Women's Coin, and Keela Shackell-Smith MBE, Diversity & Inclusion manager at the Cabinet Office, also delivered impactful sessions on raising your profile and building confidence. The conference also delivered two workshops where the audience were given tips on successful applications, interviewing and how to best tackle inappropriate behaviours.

The successful event was closed by Min Rodriguez, head of Diversity and Inclusion at DE&S, who shared plans to pilot new recruiting practices in the organisation.

Winter sports and women in STEM

DE&S has always punched above its weight when it comes to the participation in the Royal Electrical and Mechanical Engineers (REME) Winter Sports programme.

Indeed, the success of the 18/19 season meant that the pressure was on to continue to offer adventurous training to as many DE&S eligible personnel as possible and turn that participation into success at the season-ending championships.

With alpine skiing and snowboarding taking place on the Stubai Glacier in Austria, Nordic training taking place in Sjusjoen, Norway, and the Corps Championships in the beautiful Tyrol valley, Austria, the DE&S team worked to the mandate of participation first,

success second. Staff sergeant Scott Paterson (Operational Infrastructure), Gary Hooson (International guns missiles and rockets) and Iain Campbell's (Artillery System) excellent organisation provided opportunities for 40 REME personnel at DE&S to challenge and develop themselves.

The DE&S team with Director Land Equipment, Major General Darren Crook, Chairman of the Army Winter Sports Association had a season of unprecedented success with the trophy haul including Minor Unit Winners for both Alpine and Nordic skiing.

Those interested in Winter sports contact DE&S REME focal point Major David Melia.



Dartmoor Zoo in Devon is an unlikely place to find a Women in Science, Technology, Engineering and Maths (STEM) careers event.

However, recently Women in STEM Plymouth (WISP) hosted just such an occasion which was aimed at encouraging young people into STEM-related careers.

The WISP event was attended by more than 30 local companies and organisations, including a team from DE&S who were able to tell young people about the exciting opportunities that our organisation's apprenticeships offer.

DE&S apprentices Ellie Ewing and Melissa Inglis, along with their apprentice scheme manager, Julie Catterall, attended the event to promote the many options DE&S has to offer. With a desire to recruit more women into engineering, one

apprenticeship that was focussed particularly on was advanced engineering management.

Ellie said: "It was great to talk to younger people and to share our knowledge and love for the apprenticeship."

Melissa added: "I wanted to share my passion of engineering with a younger generation and was pleasantly surprised by how many girls around the age of 13/14 were keen to join the industry."

Both Devonport apprentices embraced the opportunity to influence and engage with the next generation of engineers, whilst gaining and displaying valuable DE&S success profile behaviours at this high-profile event.

MOTTO

the MOD Lottery November winners

£10,000	Lorna Thompson, Bristol
£2,500	Scott Barclay, Helensburgh
£1,000	Cliona Willis, Portsmouth
£500	Emma Carter, Bristol
£250	Daniel Williams, Bristol
£100	Nigel Spragg, Bordon
	Tony Treadaway, London
	John Taylor, Portsmouth
	Bernadette McCluskie, Dunblane
	David Hughes, Telford
	Mary Day, Crawley
	Cheryl Reid, Corsham
	Martin Jeffrey, Preston
	Amanda Fleming, Lincoln
	Lee Vout, Bristol
	Jordan Wilson, Helensburgh
	Jonny, McClelland, Holywood
	Colin Young, High Wycombe
	Adrian Phillips, Corsham
	Stuart Redford, Plymouth
	Michael Foreman, Cyprus
	Catherine Searle, UKHO
	Neil Campbell, Beith
	Wayne Emanuel, Lincoln
	Sandra Harrison, Huntingdon



Case Study

James Downing, engineer within DE&S, gives his insight into some of the benefits of working for the organisation

Name:

James Downing

Job title:

Level 1 Engineer - Mechanised Infantry Vehicle (MIV)

How long have you worked for DE&S?

Three years as an apprentice, nine months as a Level 1.

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

I joined DE&S to develop an exciting and professional career in engineering. By completing the DE&S engineering apprenticeship scheme, I have had the opportunity to work with international industry partners and contribute to the design and manufacture of cutting-edge technologies.

What does your role entail?

Currently, planning the demo phase and managing the design of MIV. I am responsible for areas such as electronic counter measures, electro-magnetic compatibility, and power management. I am also responsible for managing the International Traffic in Arms Regulations (ITAR) controlled equipment on the platform.

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

The engineering function gives opportunities to develop and learn, and to focus on specific areas of expertise if you so wish. My role in MIV is focused on electrical systems, not by chance, but because when I joined the team this is the area of the platform

that I wanted to take ownership of. Hopefully the function will promote me into a Level 2 role as my experience grows.

What do you most enjoy about your job?

I enjoy the opportunity to improve the prospects of the UK armed forces in terms of their capability, by thinking not just in terms of what the army needs now, but what will be needed in the future. MIV is future proofed with an extensive electronic architecture to allow for platform and sub-system upgrades as the digital age develops. Future proofing the MIV vehicle is something I am very proud of, because it allows MIV to contribute effectively to UK Defence now, and in the future.

What's your ambition?

Short term, I'd like to continue working in the MIV team, and hopefully promote into a Level 2 role. MIV will play a pivotal role in Army's STRIKE brigade, and I'm looking forward to being involved in the vehicle trials starting next year. Long term, I'd like to promote through the grades and continue to further my education.

What's your greatest achievement to date?

When the contract was awarded for MIV which was an immense achievement. I contributed to this by delivering the Boxer Electro-Magnetic Compatibility trials. I managed multi-national industry partners and UK MOD Subject Matter Experts to plan, conduct and conclude the trials which drove risk out of the MIV programme and built greater confidence in the Boxer vehicle.

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

DE&S gives the opportunity to develop a prosperous career but maintain a healthy work-life balance. Training courses are available and funded in abundance, and the opportunity to move between projects as part of the function matrix management is exciting. DE&S is a great place to work, and to learn.

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

DE&S offers a great pension, flexible working, membership to discount schemes, membership to Civil Service Sports Club (CSSC) and perks both on and off site. I'd recommend the CSSC as it gives access to the on-site gym, and access to sports events up and down the country.



SIX GREAT REASONS TO WORK FOR DE&S



Bonuses & Recognition



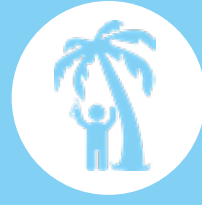
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