

DESIDER

AN INSIDE LOOK INTO LIFE AT DEFENCE EQUIPMENT & SUPPORT



WILDCAT SUPPORTS

Carrier Strike Group

GLOBAL COLLABORATION

DE&S' key role

DE&S GEARS UP FOR DSEI

First hybrid event

In this issue



4
**SENIOR
LEADER
COMMENT**

6
**DE&S
INTERNATIONAL
RELATIONS
GROUP**

10
DE&S @ DSEI

12
CHALLENGER 2



14
**DE&S SUPPORTS
WILDCAT
ON CSG21**

16
**TYPHOON
TECHNOLOGY
UPGRADE**



18
**SUSTAINABLE
SMOKE**

20
**50 YEARS OF
PUMA**

Foreword

BY SIR SIMON BOLLON



The pace of change in an increasingly challenging global environment has a significant impact on how the UK Government projects influence and protects its national interests. There are a variety of evolving threats for which we must be prepared, and different environments and domains in which we must be prepared to act. From counter-terrorism and counter-insurgency to maritime security, cyber warfare and capacity-building in fragile states.

This evolving global context, coupled with new international relationships and the need to deliver more with finite resources, requires us to innovate and revisit how we achieve our goals. To maintain our global standing, we will need to use our assets more efficiently and effectively, especially in Defence.

The Integrated Review set the course for a modernised, threat-focused and sustainable Defence and our security is increasingly reliant on effective international relationships. The UK has allies and dependents all over the world, and DE&S plays an essential part in maintaining those relationships; with collaboration central to strengthening these bonds. DE&S, through

our collaborative programme and international relationships, will be doing our piece to realise new opportunities for cooperation. We will leverage our relationships with industry to turn strategic needs and future priorities into programmes. Collaborative acquisition with allies – where our needs align – can help us achieve more affordable, interoperable and technologically-advanced capabilities. This is vital to the evolution of defence as we increasingly focus on multi-domain integration and innovative defence procurement.

By increasing international industrial collaboration and driving innovative commercial arrangements, DE&S remain at the forefront of delivering state-of-the-art joint programmes with NATO partners and other allies.

Take the Carrier Strike Group (CSG) as an example. CSG 21 is operating globally with warfighting capability in collaboration with more than 20 partner nations. Our combined effort with Navy Command and industry has ensured that the UK can operate confidently on the global stage – reassuring our allies and presenting a powerful deterrent.

Key to DE&S' success is without doubt the dedication and professionalism of its people. We rely on our team to forge strong relationships with our allies and trading partners around the globe, to deliver exceptional equipment and support to the UK's service men and women.

Our achievements are shared with our partners both in industry and internationally. COVID-19 and the associated challenges have strengthened our relationships with many of our suppliers and we will build on this further to plan for the future. We will continue to work in collaboration at increasing pace to help deliver one of the most integrated, digital and agile armed forces in the world.

SENIOR LEADER COMMENT

Laura Farhall, DE&S Head of International Relations Group

Speaks to Desider about how DE&S is vital to global collaboration in defence

I joined DE&S as Head of International Relations Group (IRG) late last year. It was a role I was delighted to take up. And one which allows me to draw upon my experience from a range of roles in DE&S, international policy and strategy, trade, and capability development. I have a fantastic team around me – colleagues both within DE&S and wider MOD – who feel passionately about delivering our international priorities. Including our CEO Sir Simon Bollom, in his role as National Armaments Director.

Becoming Head of IRG during COVID-19 has been a challenge, as it has been for all of us working in the international sphere. It is testament to the efforts and dedication of DE&S that we have been able to continue to deliver so much globally within the limitations set on us by the pandemic.

2021 has been an exciting time for Defence. The Integrated Review, Defence Command Plan, and Defence and Security Industrial Strategy were all published this spring. Clear in each of those publications is the increasing emphasis on international collaboration, the export agenda, and Global Britain. DE&S is critical to the success of these ambitions. We are working to ensure that we deliver against these priorities which we outlined in our DE&S Strategy 2025 published this Spring. The strategy recognises that collaborating with our allies helps us to achieve more affordable, interoperable and technologically advanced capabilities. This involves a range of activity from delivering complex collaborative programmes to providing international delivery expertise. As well as championing a focus on delivering export success at every stage of acquisition.

It's clear to see where DE&S contributes to the UK's international agenda. Take the Carrier Strike Group for example, made up of cutting-edge platforms that DE&S are key to delivering.



This includes equipment where we've worked hand in hand with international partners, such as the F35 strike capability where we work with the US and European partners. We can also see successful collaboration elsewhere in the maritime domain, including our export of Type 26 to Australia and Canada. Our success is clear where we can see a collective order book of 32 ships for Type 26.

Working internationally will continue to be core activity. Whether that is through working with our European partners on collaborative programmes such as Typhoon, exporting capability like this to international partners, or collaborative work through key international delivery organisations. For example, our work with OCCAR to deliver the Boxer capability

is international by design and offers us the opportunity to operate closely with our allies in the field, while providing 60% by contract value direct to the UK. Working multilaterally as well as bilaterally will remain a key priority for DE&S.

With evolution comes the need to continue to grow our skills and expertise in how we manage international acquisition and capability. Underpinning this is our commitment to implement a DE&S international collaboration centre of excellence. Not only will this capitalise on the existing talent and capability we already have but will help us to create clearer career paths to continue to grow and retain this in line with our international ambitions. This is an exciting time for us all, and I look forward to driving forward this work in the coming months.

Over 100 years invested in leading UK technology.

Leonardo has over 100 years of history at the leading edge of advanced design and manufacturing in the UK.

7,100 highly-skilled employees and a vast network of suppliers and partners design and develop industry-leading aircraft, electronics, space, defence and security systems for UK and export customers, worldwide.

Inspired by the vision, curiosity and creativity of the great master inventor - Leonardo is designing the technology of tomorrow.

uk.leonardocompany.com

Helicopters | Aeronautics | Electronics, Defence & Security Systems | Space



FEATURE

Dan Summers, Assistant Head of NATO & EU in the DE&S International Relations Group, speaks to Desider about the work DE&S does on an international stage.

This directly contributes to the UK prosperity agenda by securing UK jobs while simultaneously building on and increasing our defence relationships with partners across the globe.



As the saying goes, if a diplomat says 'yes' they mean 'maybe'. If they say 'maybe' they mean 'no'. And if they say 'no' they're not a diplomat. True? Maybe. Welcome to the weird and wonderful world of the DE&S International Relations Group – or IRG for short.

We are a small but highly efficient team sited within the Strategy and Corporate Operations domain who, as it says on the tin, deal with all things 'international' within DE&S. What does that mean in practice? This team covers a huge amount of ground but first and foremost IRG supports DE&S CEO, Sir Simon Bollom, in his role as the UK's National Armaments Director. Whether that be in bilateral conversations with his American, French or Australian equivalents or in larger scale, multilateral settings such as NATO's Conference of National Armament Directors. This high profile, exciting work progresses international capability development programmes with our global partners. It also influences the future strategic direction of institutions like NATO on some of the most pressing issues of the modern day like cyber and artificial intelligence.

Of course, none of this work can be done in isolation and IRG work extremely closely with our MOD Head Office colleagues in Security, Policy & Operations and Financial and Military Capability. This is to ensure the work we are doing is aligned with departmental priorities and that the DE&S voice is represented in Whitehall conversations. DE&S has great links with UK industry who play a vital role in international capability programmes. We work alongside industry to make sure their views are at the forefront of policy development in these areas.

If I had a pound for every time I have heard the B-word or "Indo-Pacific tilt" over the last year or so I would be a shoo-in for early retirement. I joke, but both of these areas are examples where IRG is deeply involved in work progressing some of the most important issues and priorities of the moment. We have to be ready to respond to support significant strategic changes. For example, through our own international engagements we are working with our European friends and wider allies on the need to make the EU's European Defence Fund align with NATO's priorities. And to support work on the Indo-Pacific tilt, our team was recently involved in work leading up to the Prime Minister's virtual summit with India earlier this year. We even have our own dedicated team at the British Embassy in Paris, led by a DE&S Defence Equipment Attaché, who focus on deepening our defence and industrial ties with France.

Our own export controls and Memorandum of Understanding (MoU) teams are here to provide DE&S project teams with advice and expert assistance. Recently our negotiation experts concluded a series of virtual MoU negotiations with Australia for Type 26. This reinforced the UK and Australia's commitment to working together on delivering this important high-profile national programme and maximises mutual opportunities. I can't talk about providing services to project teams without mentioning the fantastic work the team does managing the UK's relationship with and role within OCCAR - Organisation for Joint Armament Cooperation. The team provides advice to Ministers and DE&S teams with acquisition programmes in OCCAR – such as A400M, Maritime Mine Countermeasures and Boxer – on how to navigate the complexities of an international procurement organisation.

The final destination on this whistle-stop tour comes in the form of exports and the work IRG is doing to support the MOD and wider government work on Government-to-Government export opportunities. This is where I must also highlight the leading role the Defence Equipment Sales Authority - another 'international' focussed part of DE&S – is playing in this space. This work is evolving at lightning pace and is a fantastic example of a combined DE&S effort to look at how we can best support UK industry in delivering successful export campaigns. This directly contributes to the UK prosperity agenda by securing UK jobs while simultaneously building on and increasing our defence relationships with partners across the globe.

All in all, not a bad effort for a team of less than 30 people. Would I want to work anywhere else? Well with the saying referenced at the start of this article fresh in my mind I shall answer directly: absolutely not.

FEATURE

Nick Toogood, MOD Director, Industrial Strategy & Exports discusses how defence should respond to trends shaping the defence industry alongside our allies.

There's probably never been a time when working in international defence markets and collaborating with international partners has been easy, but it's fair to say that recent trends have been challenging.

Even before the pandemic demonstrated the risks to some global supply chains, countries that previously had been happy to receive Defence export packages were seeking more involvement. This was in the development or production of those sales with inward investment and technology transfer – in effect risking creating new competitors.

At the same time in the last decade the UK itself was going somewhat in the other direction – having bought significant programmes more or less off-the-shelf as imports. This gave access to the top end of global technology and at lower upfront cost, and delivering equipment then urgently needed on operations. But maintaining that approach would have put at risk the technological and industrial capability needed in the UK to and get a seat at the table on collaborative programmes on a fair basis.

The Integrated Review, the 'Defence in a Competitive Age' publication and the Defence & Security Industrial Strategy, underpinned by the financial settlement announced last November, have set out much of the framework to responding to this.

Additional investment of £24-billion over the next four years, including at least £6.6-billion on research and development, now gives industry a credible basis on which to assess our own demand and co-invest in developing the technology that will be needed by our armed forces and our allies.

Industrial considerations, including what we need to maintain onshore and how we can ensure our military capabilities are adaptable – which often means, more exportable, as they can be tuned to fit other nations' specific requirements better – are already being assessed much earlier and consistently.

We're boosting our international network specifically to support more engagement on international collaboration opportunities, for instance within NATO. We're working closely with industry to improve our market intelligence, and with other government departments to provide more joined up, more attractive offers to other countries.

There's a lot going on, and simply keeping in the loop with all of it is a challenge in itself. But we've an opportunity now to really make a step change in how we deliver the systems our armed forces need, demonstrate long-term value for money, and build the UK's industrial and technological base for the future.

「We've an opportunity now to really make a step change in how we deliver the systems our armed forces need, demonstrate long-term value for money, and build the UK's industrial and technological base for the future.」

834 kilometers above Earth
1150 GMT

 **Raytheon
Technologies**

**Made
for
this
moment.**

Knowing that global challenges require local expertise, Raytheon Technologies has invested £1 billion in 4,000 suppliers over the last year alone throughout England, Scotland, Wales and Northern Ireland.

This is the moment when we work together to connect our world and look beyond its boundaries.

RTX.com

COLLINS AEROSPACE | PRATT & WHITNEY | RAYTHEON UK

FEATURE

DE&S gearing up for DSEI


DE&S is gearing up for the largest defence and security exhibition in the world.

After its usual two-year absence, DSEI is back at the ExCeL arena in London from September 14-17, showcasing the latest equipment and technologies and offering the business a great opportunity to liaise with industry and military colleagues and counterparts.

This year, organisers Clarion are staging a 'hybrid' event with online and remote features complementing live stands and exhibitors. And DE&S will be more involved than ever before when it comes to public speaking and engagements.

On Thursday, September 16, CEO Sir Simon Bollom will deliver a keynote speech including subjects such as the DE&S 2025 strategy, multi-domain integration and DE&S' investment in its people and diversity.

Speaking from the Keynote Studio, he will also discuss lessons learned from programmes that have not always run smoothly and DE&S' ongoing efforts to reduce carbon emissions and promote sustainability.

Sir Simon said: "DSEI is hugely important to DE&S and the defence industry as it connects governments, national armed forces, industry thought leaders and the entire defence and security supply chain on a global scale.

"We're very happy to support this trade event again this year and look forward to seeing our partners and allies, both virtually and in person."

Sir Simon will also be sitting on two public discussion panels offering his views on subjects including integrating with industry and Women in Defence, the latter of which will be co-chaired by DE&S commercial improvement director, Morag Stuart.

Additional DE&S panellists throughout the week are Deputy CEO Adrian Baguley, Space team leader Marcus Bruton, Director General Ships Chris Gardner, Combat Air Strategy Team Head Chris White-Horne, Director General Commercial Andrew Forzani, and soldier, training and special projects team leader, Nick Taylor.

It promises to be an exciting and interesting week for members of the Future Capability Group who will be holding an invite-only briefing for UK suppliers on various subjects including the new Centres of Expertise they are driving and the emerging acquisitions they are involved in.

The Defence Equipment Sales Authority (DESA) will once again be hosting a physical exhibition stand at DSEI. They will also be advertising the latest military disposals for sale to clients around the globe.

DESA Head Clive Walker said: "DSEI is an important event for the UK Defence industry and provides the Defence Equipment Sales Authority (DESA) with a fantastic opportunity to meet with our customers and promote the equipment that we have for sale. Although due to COVID-19 precautions we will have reduced numbers on our stand, for those attending, please feel free to drop by and see us in the Land Zone at H4-540."

DSEI is also an opportunity for DE&S to make a number of news announcements on the latest contract awards and upgrades as it responds to the needs of the front-line commands the business supports and equips.



The future
Designed and
Delivered®



We bring together the best and brightest to deliver technology and solutions that help our customers accomplish their most critical missions and objectives. In doing so, we strive to create a better, safer and more sustainable world.



Visit us at
booth # 32

www.kbr.com

NEWS

Challenger 2 prepares for upgrades

The British Army's Challenger 2 fleet is due to receive an overhaul as part of its standard in-service maintenance schedule. This will be followed by a series of automotive upgrades under a 'Heavy Armour Automotive Improvement Programme' which will ensure that the British Army's Challenger 2 vehicles remain highly effective and capable until Challenger 3 enters service.

The Heavy Armour Automotive Improvement Programme is being led by DE&S, with engineering work completed by Rheinmetall BAE Systems Land (RBSL) and integration work by Babcock.

Under the programme, a number of automotive upgrades will be made to existing in-service Challenger 2 tanks to increase their mobility and stability, both of which are critical to providing the foundation for the new turret and systems that will upgrade the vehicle to a Challenger 3. The upgrades will also ensure the tanks remain mobile and agile in the battlespace.

Once upgraded, the vehicles will be delivered to RBSL who will deliver the Challenger 3 programme under the £800-million contract secured by DE&S. They will use the modified vehicles as the trial and demonstration platforms.

Brigadier Anna-Lee Reilly, Head of the DE&S Vehicle Support Team, said: "This is an exciting moment for Defence. We've been committed to keeping the Challenger 2 tanks in service over the past 23 years and we're looking forward to using our expertise to manage the necessary upgrades to pave the way for the Challenger 3."

As part of the base overhaul process, each Challenger 2 will be stripped to bare hulls and subjected to ultrasonic inspection, weld repair and repainting. Every component is removed and inspected for serviceability to ensure that the vehicle is as close to new as possible when it is rebuilt.

The upgrades will then introduce new components to the rebuild process to improve its suspension, engine and transmission.

To reduce waste and increase overall in-service platform availability, components that are replaced by the upgrade pack are checked for serviceability, repaired where necessary, and returned to the supply chain to help the residual fleet of Challenger 2 tanks supported until 2025.

We're looking forward to using our expertise to manage the necessary upgrades to pave the way for the Challenger 3.

Challenger 2 pictured pre-modification.

CLOUDERA

THE ENTERPRISE DATA PLATFORM COMPANY

- Enterprise-class security, lineage and governance
- Data streaming
- Multi-function data analytics
- Machine learning
- Production model operations
- On premise, public cloud or hybrid
- Open source
- No silos, no lock in ever

To find out more, visit cloudera.com/solutions/public-sector

or contact **Steve O'Brien**,
Client Director UK Defence & Intelligence
at sobrien@cloudera.com



FEATURE

DE&S proud to support Wildcat



Photo by Jack Eckersley

For Steven Howlett and DE&S' Wildcat delivery team, the Royal Navy's Carrier Strike Group setting sail on its first operational deployment sparked immense pride.

But the trials and embodiment engineering manager and his colleagues knew that, in many ways, their work was only just beginning.

Since that momentous day in May, they have been focused on ensuring the fleet of helicopters continue to be supported effectively to ensure they are in the best possible condition as HMS Queen Elizabeth and, in future, HMS Prince of Wales lead flotilla's around the globe.

Speaking from Leonardo Helicopters' Yeovil site, where DE&S' Wildcat delivery team is based, Steve said: "To see CSG21 leave Portsmouth was an incredibly proud day for me and, no doubt, for the entire DE&S and industry partner group.

"It was great to see the equipment on the smaller ships – especially Wildcat – supporting the larger ship, Queen Elizabeth, with Merlin and F-35 and all its other wares. It was an incredibly special day for everyone, and for the country as well."

For more than three years, Steve has been working on trials, development and latterly production of the future air-surface guided

weapon (FASGW) system for Wildcats. For CSG21, the helicopter maritime attack (HMA) variant has been equipped with Martlet, developed by Leonardo and Thales.

"For CSG21 it doesn't stop there," Steve added: "The team that I'm part of – the Wildcat delivery team – and industry that support us with our partners, have a contract to support it through-life.

"So, while it's deployed, absolutely we've got to ensure we've got the components and the spares if anything was to go wrong, to get them out to the user and the customer in quick time, to keep them serviceable and to keep them on track with their operational commitments."

Steve believes working closely with industry every day is essential in delivering for the Navy as effectively as possible.

"We're co-located in Yeovil with Leonardo Helicopters," he added. "That DE&S is here, on-site, with the team, to deliver Wildcat and Merlin for major projects such as CSG21... without that partnership we would have never achieved what we've achieved in the last few years."

The CSG task group set sail on a seven-month deployment and will visit 40 nations including India, Japan and Singapore in a deployment covering 26,000 nautical miles.

HMS Queen Elizabeth has been joined by destroyers HMS Diamond and HMS Defender; frigates HMS Richmond and HMS Kent; an Astute-class submarine and Royal Fleet Auxiliary support ships RFA Fort Victoria and RFA Tidespring.

More than 30 aircraft also embarked across the task group including F-35B Lightning II jets, Merlin and Wildcat helicopters.

In recent weeks, F-35s and warships unleashed their firepower during live-firing exercises with US allies during the Indo-Pacific leg of the deployment.

"A message to the guys and girls on board is: enjoy it," Steve added. "There's been a lot of hard work to get you the equipment and there's been a lot of hard work with you guys to actually get there and get on board, what with the current global situation with COVID-19.

"But please enjoy it and we really look forward to hearing how it goes and the feedback on the equipment that we've provided you. It's just been a real privilege to be part of the whole project."



Leidos is proud to support our customers as they deliver **Information Advantage for Defence**

We look forward to seeing you at DSEI!

BOOTH H8-440, US PAVILION

NEWS



Major investment in Typhoon enhancements

The RAF's Typhoon jets will undergo a range of important upgrades after £430-million of through-life funding was secured by the DE&S Typhoon delivery team for the UK's contribution to a four-nation project.

The Typhoon Phase 3 Enhancements Part C (P3EC) project aims to deliver enhancements that will provide Typhoon with an operational advantage over adversaries. It will enable Typhoon to comply with new Civil Aviation regulations on operating in controlled airspace from 2025 and will integrate the latest standard of radar software onto the aircraft, including E-Scan radar capability. It is also a critical part of the plan for the Qatari Emiri Air Force to bring its Typhoon fleet into service, supporting a UK commitment to Qatar for Typhoon export.

At the end of July 2021, the DE&S Typhoon delivery team secured an approval of around £430-million for the UK elements of development, manufacture and embodiment of P3EC. This allowed NETMA (the international NATO Eurofighter and Tornado Management Agency) to place a contract with Eurofighter GmbH on behalf of the Eurofighter Typhoon Partner Nations (UK, Germany, Italy and Spain). As part of P3EC, BAE Systems has been awarded an initial £135-million of work to drive forward this next phase of capability enhancements.

Air Commodore Martin Lowe, DE&S Typhoon delivery team head, said: "Contracting for Typhoon is a complex process involving multiple stakeholders, so I am delighted that the Typhoon delivery team has been able to get P3EC over the line. The team's tireless work on this project, supported brilliantly by UK MOD staff in NETMA, means the next phase of upgrades can be realised, helping Typhoon become even more advanced as a multi-role combat aircraft."

As well as being the largest component of the RAF's Combat Air Force, the Typhoon supports broader European security and defence objectives and is highly successful in the export market. It underpins a number of strategically important international relationships for the UK and is in operational service with seven nations – Germany, Italy, Spain, the UK, Austria, Oman and Saudi Arabia – with production orders underway for Germany, Kuwait and Qatar and further export campaigns being pursued.

The team's tireless work on this project, supported brilliantly by UK MOD staff in NETMA, means the next phase of upgrades can be realised.



LIVE & ONLINE
5 OCTOBER 2021

FARNBOROUGH INTERNATIONAL

EXHIBITION & CONFERENCE CENTRE

FREE to attend for MOD and public sector personnel

The UK's Leading Defence Procurement and Supply Chain Event

Confirmed Speakers Include



Jeremy Quin MP
Minister of State for Defence Procurement



Anita Friend
Head of MOD's Defence and Security Accelerator (DASA)



Helen Sawford
Head of Commercial Strategic Supplier Management, Ministry of Defence



MOTIVATIONAL SPEAKER
Ollie Ollerton
Former UK Special Forces & Directing Staff SAS: Who Dares Wins

CPD Certified Procurement Skills Training

LIVE Keynote Arena

100+ Exhibition Stands

Knowledge Transfer Zones:

- Technology & Innovation
- Infrastructure & Estates
- Equipment & Supplies
- Export & Business Growth
- Supply Chain Engagement
- Skills Enablement

Book your complimentary MOD ticket today

www.dprte.co.uk

EVENT PARTNERS



NEWS

News in Brief

DE&S Defence standardisation team recognised in BSI awards

In support of COVID-19, many MOD personnel were seconded to take up roles in other areas of government to support logistics and procurement of ventilators and personal protective equipment (PPE).

In the early days of the pandemic, one DE&S worker spotted an opportunity to make it easier for these essential workers to access the Civilian/International Standards they needed to make sure the equipment being bought met quality requirements.

Alan Anderson, DE&S UK Defence Standardization (DStan) team, developed the 'British Standards Institute (BSI) COVID-19 Standards Collection' – a dedicated online site where MOD users could access grouped standards more easily for example hygiene, PPE and ventilator standards. This simple but effective solution made a real difference to people at the forefront of the nation's pandemic response.

Ian Larter, from the DE&S COVID-19 Response Team said: "Being able to access the necessary standards has enabled the teams to identify where the product offered did not meet UK/EU standards. If we did not have access to these standards, we would not have been able to carry out the necessary level of diligence."

The project was awarded the Special 2020 BSI Standard User Award, with UK DStan being singled out for providing a platform that saved valuable time for people doing critical work within the UK's COVID-19 response.

DE&S investigate sustainable future for Red Arrows

As part of the MOD's commitment to a more sustainable defence, DE&S is exploring the market and asking potential suppliers for environmentally friendly and innovative solution to their famous coloured dye used by the Red Arrows. Currently, the dye is mixed with a solvent injected into the hot exhaust of each jet produces the display team's famous red, white and blue smoke trails. This exploratory green project is in an early concept phase and welcomes environmentally friendly solutions that are currently under development or available.

Officially known as the Royal Air Force Aerobatic Team, the Red Arrows showcase the excellence of the RAF and represent the United Kingdom both at home and overseas.

The Red Arrows recently flew in formation with the RAF Poseidon P-8A aircraft over Scotland. This flypast was the first time the aircraft flew together and marked the Red Arrow's arrival at the Moray station where DE&S delivered the £100-million Poseidon strategic facility.

UK Space Command officially launched

A special ceremony held at RAF High Wycombe recently marked the official opening of UK Space Command.

The stand-up of Space Command is a crucial step to ensure UK interests are protected in space and builds on the commitments outlined in the Defence Command Paper, to invest an additional £1.4-billion on space over the next 10 years. The ability to operate in Space is further enhanced by an increase in Defence funding of £24-billion over the next four years, as announced by the Prime Minister last year.

In response, DE&S has established its own Space delivery team to effectively support Space Command as a key delivery agent. DE&S' role is to provide a dedicated, single interface for the delivery of space capabilities.

Commander of UK Space Command Air Vice Marshal Paul Godfrey said: "The space domain is vital, not just in enabling military operations across the world, but in the day to day lives of everyone across the nation. With our new headquarters officially open, UK Space Command is now on the path to lead UK space operations to protect UK and allied interests in space."

Virtual Reality trials for student pilots

The MOD and Ascent Flight Training are currently undertaking virtual reality trials at RAF Valley as part of the ongoing development of innovative solutions for fast jet training.

DE&S is working in partnership with the wider MOD and Ascent, and with industry partners Lockheed Martin and CAE UK, to trial this innovative initiative.

The programme looks at ways to improve current training, increase the capacity of training courses, and enable more students to be fast-tracked to the front line.

The trials are using new Virtual Reality (VR) technologies. This includes upgrading some of the existing Lockheed Martin Flying Training Devices, as well as CAE's Sprint VR trainer modelled on the T-6 Texan aircraft. By using enhanced ground-based simulated flight experiences, it is expected that students will be able to gain skills faster and undertake training that cannot be easily replicated in the air, such as formation flying and combat exercises.

Commodore Mark Langrill, DE&S UK Military Flying Training System (UKMFTS) head, said: "This is a new direction for the UKMFTS service provision, utilising technological innovation to give students an enhanced experience as they progress through their flying training. While focusing on the Basic Flying Training pipeline for innovation experimentation, the trials will give valuable data that could be considered across the whole flying training service in the future."

Ascent Managing Director, Tim James, said: "I am so excited by this transformation project, a truly collaborative example of what we jointly can achieve by working in partnership with the RAF and D&ES teams, both at RAF Valley and wider. We aim to transform fast jet training and reduce the time it takes for our students to reach the front line and defend the nation."

Further examples of innovative technology being trialled include 360 video capture and playback through VR headsets, and mixed reality. Additionally, the programme will evaluate the potential for virtual instructor-student performance monitoring.

The results of the trials will be available in the second half of the year and then independently validated through academic peer review, with the outcome driving the design of future course design for the UKMFTS programme.



DE&S teams nominated for excellence in procurement awards

The Chartered Institute of Procurement and Supply (CIPS) Excellence in Procurement Awards showcase and celebrate the best work and teams in the procurement profession.

This year DE&S has seen both the Future Maritime Support Programme (FMSP) and the P-8A Poseidon delivery team shortlisted for an award, competing against the likes of Coca-Cola and Heineken.

The FMSP has been nominated for both the 'Public Procurement Project of the Year' and the 'Best Procurement Transformation of the Year' categories. The FMSP programme is critical in enabling the Royal Navy to fulfil its pivotal role in defence. Introducing new entrants via competition reducing current cost to the taxpayer by £150-million, with Single Source arrangements on track to deliver a further £500-million of financial benefits.

The P-8A Poseidon delivery team is also nominated for the Public Procurement Project of the Year for their role in providing the RAF with four aircraft, training devices, the construction of a state-of-the-art 'strategic facility' and a major new support and training service, at the cutting edge of 21st Century technology.

Emma Scott, Representation Manager at CIPS, said "Our judges look for inspirational, innovative and engaging submissions and the shortlist is even more impressive each year with nominees from across government, including DE&S and the MOD, and other well-known brands such as Shell and Nationwide Building Society."



FEATURE

Celebrating 50 years of Puma

DE&S and the Puma delivery team at Abbey Wood and RAF Benson are very proud to be part of the team supporting this iconic aircraft.

On 29 January 1971, the first Royal Air Force Puma helicopters were delivered into service.

The Puma Helicopter Mk2 is a medium support helicopter and is used in a variety of combat roles, including the tactical movement of troops, weapons, ammunition and stores on the battlefield.

As well as being used for the extraction of casualties and in response to medical emergencies on the front line, Puma has also been deployed during non-combatant evacuations, and humanitarian and disaster relief operations.

The DE&S Puma delivery team has provided through-life support to the RAF Puma programme including the delivery of modifications to counter specific in-theatre threats and easing human factors issues. The support DE&S delivered has planned and responsive Puma operations to take place and has ensured the maintenance of the aircraft as it continues to provide support to ground troops on the battlefield and to civil and emergency services responding to disasters and emergencies.

Over the last five decades, the Puma has flown on combat and humanitarian operations around the world including Northern Ireland, Bosnia, Kosovo, Iraq, Afghanistan, Mozambique and the Caribbean. The helicopters have also supported Defence in the UK including helicopter lift capability to flood relief efforts and the COVID-19 pandemic.

DE&S Puma delivery team leader, Group Captain Mark Staveley, said: "The Puma has made an outstanding contribution to Defence over the past five decades. Versatile and rapidly deployable, the Puma has successfully supported numerous military operations and humanitarian relief missions in demanding environments across the globe. DE&S and the Puma delivery team at Abbey Wood and RAF Benson are very proud to be part of the team supporting this iconic aircraft."

To commemorate 50 years of service, Puma HC Mk2 XW224 has been given a unique new paint scheme, similar to that which the first Puma HC Mk 1 aircraft were painted when they were delivered in 1971. Notable differences include the striking tail fin emblazoned with the union jack flag and the standard Royal Air Force logo on the cabin door has been replaced with the bespoke Puma 50 logo.

The Puma Force is at readiness for global commitments which DE&S continue to support.



FEATURE

FEATURE

PEOPLE

Amy Price

Job title

Export Controls Manager in the DE&S International Relations Group

What does your role involve?

The IRG's Export Controls team provides policy, specialist expertise and advice to Delivery Teams across MOD to support and ensure compliance with international export controls regimes. In short, we ensure that agreements and authorisations are put in place to enable MOD, our armed forces and our contractors access to foreign origin military capabilities. I work with stakeholders including industry partners and foreign government representatives, briefing, advising and negotiating to ensure that the right paperwork is in place for MOD to access and share military capabilities or information with a domestic and international stakeholder network. I also work to improve the strategic export controls landscape through collaboration and negotiation with international stakeholders to implement updates, amendments or clarifications to regulations, supporting MOD business and improving international relationships.

What do you most enjoy about your job?

Working in the international defence space is fascinating. Every day is different, every day is absolutely a school day and the direct value that I can add to the bigger MOD picture is very rewarding. It's exciting to actively support the MOD's continued ability to collaborate, partner and compete in the international defence arena. Consequently, this adds value at political, programmatic and operational levels in support of the armed forces and UK defence capabilities.

What is your greatest accomplishment (in your role) to date?

Successfully contributing to the resolution of a highly impactful issue which ensured critical military training could go ahead to schedule. I engaged with senior and international stakeholders to provide complex export controls guidance in a tight time frame while having been in this role for just three weeks! I came from a commercial role with limited international, export controls or policy specific experience. I was very much thrown in the deep end, but by resisting the urge to panic, using the expertise of the team around me and thorough research, I didn't sink. I managed to swim!

What keeps you energised about working at DE&S?

Diversity and development are real priorities in DE&S and it's inspiring to be one cog in the big DE&S wheel which delivers such vital outputs for our armed forces and UK Defence capabilities.

Who or what has shaped who you are?

My parents, by giving me every bit of support and every opportunity that they possibly could. Also, a childhood spent riding, learning about, looking after and falling off ponies! This instilled resilience, determination, a drive to do my best, self-awareness and an understanding of the importance of the team around you.

What do you enjoy doing in your spare time?

I still ride horses and train regularly for para dressage. I also enjoy going out with friends, long walks with my Jack Russell terrier, Lotty, and sitting down with a good book!

What might surprise people about you?

I once fell out of a plane and count my lucky stars that I survived with only minor injuries. In reality, I willingly – if slightly terrified – jumped out of a plane doing an incredible skydive at 14,000ft over Fijian islands and twisted my ankle on landing. See, not quite the disaster that you had immediately assumed. It's one of the best things I've ever done, in fact!

What's the best advice you've ever been given?

Never assume that you've understood correctly – clarification and context is key!



Want to receive Desider direct to your inbox?
Email: louisa.keefe101@mod.gov.uk

Editor:

Louisa Keefe
07971 013054
louisa.keefe101@mod.gov.uk

Contributors:

Daniel Evans, Lowri Jones, Tom Morris,
Paul McLennan, Hannah Swingle,
Matt Price and Danielle Starling

Design and Photography:

Katherine Williams, Hannah Bone,
Jack Eckersley, Geraint Vaughan,
Charlie Perham and Andrew Linnett

Distribution Manager:

Dick Naughton
0117 9134342
dick.Naughton501@mod.gov.uk

Advertising Manager:

Edwin Rodrigues
07482 571535
edwin.rodrigues@noahsarkmedia.co.uk



@DefenceES



@DefenceES



Defence Equipment & Support



defence_equipment_support



DE&S



Desider

www.gov.uk/government/publications/desider-2021

cde.co.uk

cde

Printing

desider is distributed free to DE&S employees and the equipment capability organisations. Copies may be sent to readers outside MOD, including in the defence industries and is published on the world wide web via GOV.UK and www.des.mod.uk. While the editor takes care to ensure all material produced is accurate, no liability can be accepted for errors or omissions. Views expressed in *desider*, and products and services advertised, are not necessarily endorsed by DE&S or the MOD. All editorial submissions must be cleared by the relevant MOD authorities.

This magazine is printed on Novatech Matt FS 115gsm which is Forest Stewardship Council certified material from well-managed forests and elemental chlorine free.



© Crown Copyright



THE UK'S FIRST **HIGH ASSURANCE** CLOUD PLATFORM

Our Tier 2 cloud platform offers connectivity to classified networks and is capable of hosting Above OFFICIAL workloads. Move mission-critical applications to the cloud with UKCloudX.

Talk to us about your secure cloud needs at DSEI - Stand H2-263

