

DESIDER

AN INSIDE LOOK INTO LIFE AT DEFENCE EQUIPMENT & SUPPORT



RAPID INNOVATION FOR A CHANGING WORLD

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START Talking



The more I get stuck into my role at DE&S, the more interesting and fascinating I find it really is. The scale of the work that DE&S undertakes is truly vast and complex, and I continue to be highly impressed by all that our people achieve, together with the wider defence team and our industry partners.

It's fair to say that the past few months haven't been the most stable in British history and there will be a new direction and challenges set with Rishi Sunak being appointed as Prime Minister. This winter will continue to be a critical time for UK Defence, when our country is already facing a series of difficulties in the economy, and in responding to the ongoing situation in Ukraine. However, our overarching mission remains the same: to deter adversaries, and equip our Armed Forces with the edge to protect our nation.

One of the things that has become really clear to me is that Defence needs to act as one entity and a 'One Team' mindset will be vital to our success. This is about everyone working together to achieve Defence's goals and better protect the United Kingdom, its territories and our allies. All of our actions and decisions need to be directed at ensuring we maximise our deterrent effect. The collaboration a One Defence Mindset brings will really enhance our agility and capability. We therefore need to integrate Defence-wide and step away from operating in separate stove-piped workstreams, collaborating across boundaries and disciplines to work towards a common goal. Multi-domain integration is something that plays into this and will allow us to better operate across sea, land, air, space and cyberspace in this era of constant competition.

The last few years have shown that we can be resilient and work together, but we need to do more. Our supply chain network has withstood widespread disruption and we've demonstrated our ability to deliver capability, both extremely rapidly and effectively. But we need to be a much more integrated and coherent organisation that shares and works together in an agile and adaptive way. This will be a challenging journey, but we cannot afford to stand still.

An example of where we've taken action and seen success with this approach in DE&S is through our Future Capabilities Group (FCG). FCG works with groups across DE&S and throughout the Defence sector, collaborating with innovation hubs to explore and develop new technology and novel ways of working. James Gavin talks more about this agile approach to working and delivering value at speed on page 6.

When focusing on pace and agility, you don't need to look further than our response to the war in Ukraine to see what we can achieve when we work as One Defence. Since February, every part of the Defence team has worked together; assessing the quickly-evolving situation, procuring at pace, equipping the Ukrainian armed forces and training their personnel.

Elsewhere, we've also played a role in supporting the response to the terrible flooding in Pakistan. DE&S teams have contributed to the sourcing and delivery of boats, outboard motors and a number of Lightweight Field Generators to provide emergency power at pace. More on this on page 8.

This is just another example of how Defence has worked together and across wider government, and proven its ability to respond to urgent requirements. Further on in this edition Kevin Craven, CEO of ADS, shares how he believes the Defence industry needs to respond to evolving challenges.

It's crucial that we continue to build pace and agility into our systems and technologies, to boost our Defence capability and ensure we maintain our battle-winning edge. These 'agile by default' approaches reduce the risks of longer-term procurement decisions and foster innovation in their use of technology and commercial acquisition methods. We need a great deal more of this. But I've seen much progress already and I'm confident that together, we will succeed.

SENIOR LEADER COMMENT

James Gavin

James Gavin, Head of the DE&S Future Capability Group, shares his lessons and thoughts on how DE&S can deliver value at speed for clients by applying agile approaches and principles.

The purpose of the Future Capability Group (FCG) is to explore, develop and deliver new technologies, and to find innovative solutions that will make the UK Armed Forces as effective as possible.

Most FCG programmes operate under the mantra 'agile by default'. This means our work iteratively explores and improves capabilities, understanding their value, growing their use and developing their reach.

It has never been more important for DE&S to have the skills and structures in place that ensure our front-line commands are fully prepared to fight and to win. This needs to be done at a speed that keeps pace with the fast-changing context we work in. This is where agile values and principles offers a lot of promise.

More agile working has proven the most beneficial way for FCG to work with our clients in the Armed Forces, blending a governance system based on enabling and assuring benefits and outcomes, with agile values and principles.

In the old model, over-detailed project requirements did not allow for iterative development or – more importantly – the refocusing of resources to new areas that could bring greater value. It was hard for clients to stop legacy projects and quickly refocus their energies to new areas. FCG is now working with them to uncover better benefits and outcomes. Agile projects can 'fail fast', and then have funding and resources rapidly refocused in more promising directions. Teams can now be tasked to develop better capabilities, more iteratively.

Modern innovation is all about networking and collaboration – sharing ideas and best practice, with each team playing their part to reach an overall outcome. We see fostering a collaborative narrative across MoD innovation areas as a key opportunity, particularly when FCG and front-line command innovation teams can each play their roles to best effect.

The Heavy Lift Challenge project, for example, is exploring the use of drones to lift heavy weights ranging from 50 to 150kg, with a long-term goal of lifting 300kg. This would replace the use of some helicopters, freeing them up for other missions. Around 90% of ship-to-ship flights in the Royal Navy are carrying loads of under 100kg, so being able to task drones with this work would also be a substantial cost saving. FCG are developing this alongside



the Royal Navy Office of the Chief Technology Officer and 700X Naval Air Squadron, and a myriad of key stakeholders, such as the Military Aviation Authority, to inform decision making and help progress the capability into operational use.

By being 'agile by default', FCG has become a more efficient and effective team, with a clearer identity and stronger mission message. We are delivering better outcomes, with fewer resources, at a faster pace. FCG has stronger relationships with key clients, who are jointly embracing agile governance and a focus on benefits and outcomes. FCG's engagement with the wider Defence ecosystem is more collaborative, and a campaign to raise awareness of our work among industry partners means that FCG acquisition competitions are more widely known to supply chain bidders.

By blending past best practice with new ways of thinking and working, by being agile by default, FCG is better able to deliver 'Speed to Value'.



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SENIOR LEADER COMMENT

PEOPLE

Defence industry ready to respond to new challenges

Kevin Craven, Chief Executive of ADS – the UK trade organisation representing the aerospace, defence, security and space sectors – speaks to Desider about maximising defence outputs.

A lot has happened since I last had the opportunity to contribute to Desider a year ago, most significantly the need for the UK's defence industry to respond to the crisis in Ukraine.

The UK has stood out internationally for its commitment to supporting Ukraine and its people, and our strategic capabilities in defence and security are supporting that effort. The £2.3 billion of military assistance the UK has provided is testament to the strength of UK innovation and leadership in defence and security. Our members have consistently shown their ability to respond to the government's requirements.

We have the strategic national assets of our industrial and manufacturing base, and our world-class, highly skilled workforce, alongside a strong and resilient supply chain that can meet demands and deal with issues. Of course, there are lessons for industry as for the MoD, and we will adapt and move forward.

The crisis has put into greater focus the importance of Defence in guaranteeing our security and that of our allies, and our democratic values. Greater investment in defensive capability is a logical and rational response to evolving global threats. UK society now accepts that investment is not only necessary but critical to defending our freedoms.

We have seen good progress over the past year in implementing the Defence and Security Industrial Strategy (DSIS), as well as the rollout of new domain strategies covering areas including shipbuilding, land and defence space. DSIS sent out a positive signal and a fresh approach to help UK-based companies of all sizes access opportunities and deliver the innovative capabilities needed by our military and security services.

To maximise the ability of the UK industry, successful long-term execution of the DSIS, and the focussed strategies that have followed it, is essential. Accelerating delivery by reforming procurement regulations and establishing a new government-to-government commercial export mechanism would be welcome additional steps. Turning DSIS into an underpinning philosophy of maximising outputs for defence – through genuine collaboration at all stages of the value chain – would be ground-breaking.

The worsening global security picture has underlined the urgency of this work and the need to create a truly sustainable and resilient defence and security industrial base. Delivering on the full promise of the



DSIS will boost industry confidence and investment at this challenging time.

I'm delighted to welcome Andy Start to his role as DE&S CEO. ADS is looking forward to working closely with him and helping the DE&S team connect with our diverse membership across the UK.

The Defence Equipment Support Plan published in 2022 set out the UK's plans to meet the needs of the Armed Forces through some of the most advanced and complex programmes of their type in the world, and to support UK capability and prosperity. While demands on the public purse in the coming years are – and should be – the subject of great focus and debate, the Equipment Plan must be given sustained funding and must deliver advanced new capabilities. This will provide investors with continued confidence and ensure the effective implementation of the DSIS.

The UK's defence industry will face many challenges, and opportunities, in the coming years. We know about skills and labour shortages, energy prices rises and disruptions to supply chains, but there will be more issues to deal with. Our members will ensure they are as competitive, innovative and productive as possible, and I am confident in our industry's ability to respond to whatever hurdles 2023 brings.



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NEWS

DE&S steps up to support Pakistan flood response

DE&S personnel have once again demonstrated their ability to react with pace and agility in a crisis. When torrential monsoon rains triggered some of the worst flooding in Pakistan's history, DE&S moved quickly to support the emergency response.

The severe flooding that besieged the country left more than 1,500 people dead and impacted a further 33 million. A third of the country is under water, hundreds of thousands of homes have been damaged or destroyed, whole villages have been washed away, and, according to UNICEF, almost 10 million children are at increased risk of waterborne diseases, drowning and malnutrition.

In the aftermath of the flash floods, the Pakistani government put out a multinational call for direct support.

DE&S staff from the Land and Ships domains quickly assess the availability of UK military bridging, small boats and power generators, and water supply

capabilities. Alongside inputs from the Foreign Commonwealth and Development Office, the Permanent Joint Headquarters, the RAF and Home Command, this information helped the Defence Secretary make swift decisions as to how the UK could best support Pakistanis caught up in the disaster.

Within three days, DE&S had identified eight boats with outboard motors and 10 portable power generators that could support the disaster relief operations. These were delivered to Pakistan by the RAF on board an Atlas A400M.

Shelley Fowell, the Future Power Senior Operations Manager in the Fires, Infrastructure and Manoeuvre Support Portfolio team, was in charge of sourcing and delivering the power generators.

She said: "It was challenging but hugely rewarding to be part of the relief efforts. In three days, my team was able to deliver these life-saving generators to Brize Norton for onward delivery to Pakistan.

I'm really proud of our efforts and that we were able to help those in need through an incredibly difficult time."

The heavy lift aircraft flew from RAF Brize Norton and landed at the Pakistan Nur Khan Air Force Base, where the military aid package was received by Pakistan's ground crews.

This was provided in addition to the UK government's further commitment to flood relief in the country.

DE&S CEO Andy Start said: "DE&S staff have again demonstrated their remarkable ability to work with the pace and agility required to deliver humanitarian aid where it was desperately needed. They should be incredibly proud of the role they have played."

The UK is continuing to provide assistance through international organisations working with victims of the disaster, including the World Bank and the UN.



SKYRAL

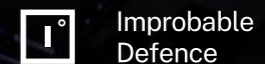
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NEWS

DE&S takes ownership of first world-class Protector aircraft on behalf of Ministry of Defence



Air Vice-Marshal Simon Ellard, Director of DE&S Combat Air, has taken ownership of the first Protector aircraft on behalf of the Ministry of Defence (MoD).

The handover from General Atomics Aeronautical Systems took place at their Desert Horizon flight operations facility in El Mirage, California. This followed the successful conclusion of the Acceptance Test Procedure performed by both the MoD and General Atomics.

Ownership of the aircraft has transferred to the MoD and Protector will now fly with a UK Military tail number, under a UK Military Permit to Fly.

Protector will replace the Reaper aircraft and will be deployed in wide-ranging intelligence, surveillance, targeting and reconnaissance (ISTAR) operations. Its ability to fly without pause for up to 40 hours offers the RAF vastly improved armed-ISTAR capability. The Protector aircraft will be able to operate in all classes of airspace. Compared to Reaper, it has an increased take-off weight and an extended range wing that provides increased range and endurance. It will also be available, if requested, to support UK civilian agencies with

search and rescue or disaster response missions.

Air Vice-Marshal Ellard said: "It is a great pleasure to accept the first Protector aircraft off-contract on behalf of the MoD. While this aircraft will remain in the US, it will be used to train RAF personnel with UK equipment and will be placed on the UK Military Register.

"We now look forward to the first delivery of this highly capable aircraft to RAF Waddington in 2023."

The Acceptance Test Procedure included inspections and tests on the aircraft's hardware.

Air Commodore Alex Hicks, DE&S Senior Responsible Owner in the RAF programme, said: "The acceptance of the first Protector aircraft is a significant and exciting milestone in the delivery of this world-class capability to the Royal Air Force. The aircraft will be used to train RAF technicians in how to maintain Protector, before the first aircraft arrives in the UK next year."

To achieve full operational clearance, Protector is being assessed against stringent NATO and UK safety certification standards, meaning it could operate in civilian airspace. It is expected that Protector will achieve certification in 2024.



FEATURE

DE&S proudly recognised at Women in Defence Awards

DE&S' Mo Bingham will be a finalist in this year's prestigious Women in Defence Awards.

Working as a supply chain manager at DE&S, Mo has been named as a finalist in the Unsung Heroines category for her work to raise awareness of the menopause across the MoD from a wellbeing and business perspective.

Mo chairs the MoD menopause network, which she set up in 2019 and which now has over 1,400 members. She said: "The ethos has always been that 'no-one is alone, menopause is not an illness, so let's normalise conversation'. I would have been content if I had helped just one person going through a life-changing, often lonely, phase, but our network continues to go from strength to strength. I feel very honoured to have been nominated and to be a finalist is awesome."

Two of Mo's colleagues were also nominated in the Most Collaborative category, Gail Thorne and Bethania Ciocca.

Gail Thorne works as Assistant Head of Commercial in the Defence Ordnance Safety Group (DOSG). She has been recognised for her innovative and creative approach, which has enabled some of the most forward-thinking science and engineering projects, and for her work setting up commercial frameworks for research and development that have saved millions of pounds in taxpayers money.

Gail said: "I was very surprised, but delighted, to find out that I had been nominated. In my role I have established a commercial research and development framework that enables the MoD to find rapid solutions and alternative sources of supply for a variety of energetic and ballistic materials mainly used in rocket science."

Bethania Ciocca, DE&S Digital Head of Applications and Artificial Intelligence, was nominated for her work driving changes to Logistic and Support Information Systems. She devised and implemented key structural and procedural changes, created efficiencies, and streamlined processes quickly.



Bethania said: "I feel extremely humbled to have been shortlisted and to be in contention with other amazing women in Defence. I have been surrounded by phenomenal individuals that made this nomination possible, so I say thank you to my team, industry and my colleagues in our financial and commercial teams. Thank you, Dream Team!"

Jo Osburn-Hughes, DE&S Diversity and Inclusion Co-Champion and Gender Champion, said: "At DE&S we have many talented women working to deliver for our Armed Forces, and in such a variety of roles from engineering, project

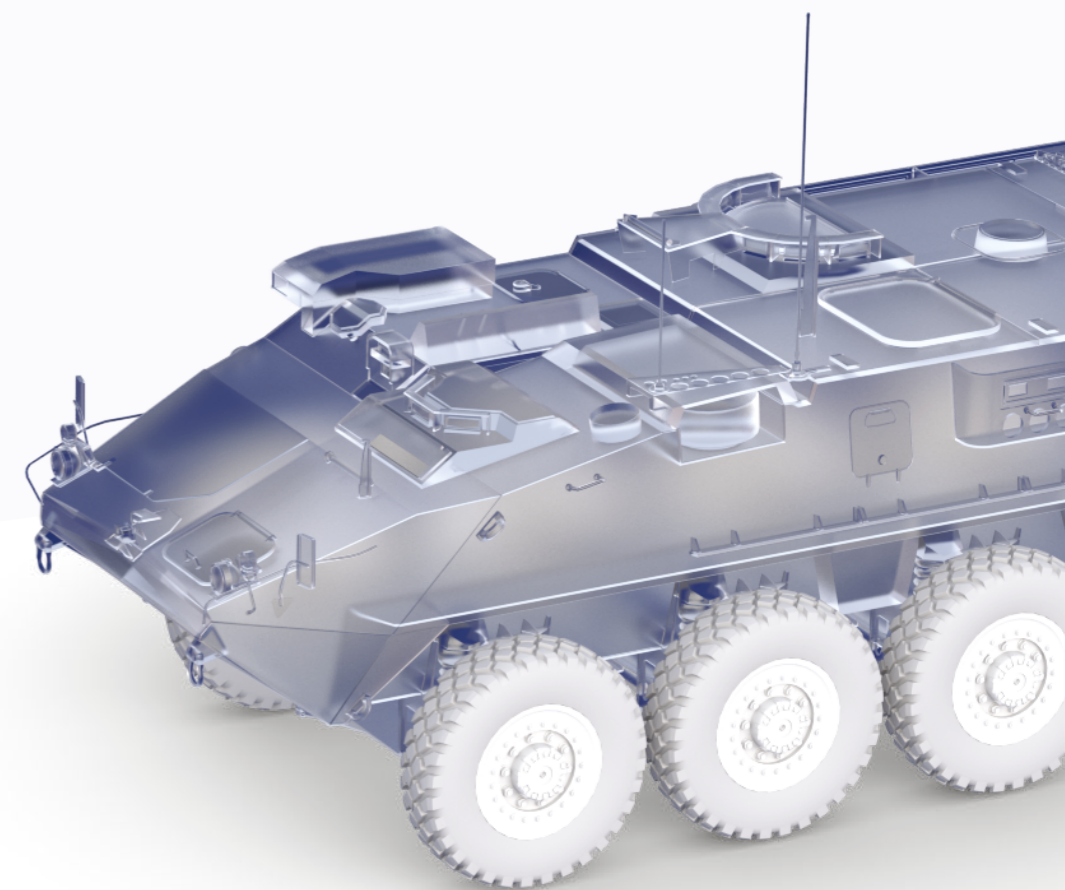
management and logistics, to finance, human resources and many more.

"As a signatory of the Women in Defence Charter, we are committed to ensuring we attract and retain a diverse workforce and we are proud of the commitments DE&S has made in areas such as flexible working policies, an active staff network and a supportive mentoring scheme. At DE&S we want everyone to feel able to bring their skills and experiences to work, and that their contribution is recognised. So it is fantastic to see Mo, Beth and Gail's efforts acknowledged."

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Essential mooring maintenance on remote Atlantic island

A specialist team from DE&S Salvage and Marine Operations (SALMO) and the Marine Salvage Unit recently travelled to Ascension Island to conduct annual maintenance on moorings that secure a vital floating fuel pipeline and RAF small boat moorings.

SALMO is the MoD authority for specialist moorings. It undertakes mooring maintenance for the Defence Infrastructure Organisation, based in Ascension – arguably the most remote location that SALMO regularly operates in. Maintenance includes the security of a mile-long floating fuel pipeline located in Clarence Bay, which is subject to the swell generated by storms in the South Atlantic Ocean. The pipeline delivers fuel to the island, so maintaining it is an essential part of ensuring the operational capability of both the RAF and US Air Force who operate from there.

This was the first visit to Ascension Island for SALMO's South Atlantic Islands Engineering Manager Steve Pointon. Steve had only recently returned to the UK from the Falkland Islands where he had overseen the maintenance of a tanker fuelling facility. Swapping sub-zero conditions and penguins for tropical parrot fish and mosquitos was a real culture shock.

Steve said: "It's been a steep learning curve joining the SALMO team and taking on this new role, but the opportunity to travel to these remote locations, working with such a great team and knowing that we are keeping essential services operational makes it all worthwhile."

The island endures a constant South Atlantic swell and is surrounded by rough volcanic seabed. This causes chain and mooring components to wear out quickly, often requiring entire sections of chain to be replaced each year. During this year's maintenance, 170 metres of chain were replaced, as well as a damaged mooring buoy and two one-tonne clump weights, which secure the buoys to the seabed.

Mooring maintenance is conducted onboard a work barge supplied by the Ascension Island government.

Each mooring, made up of a buoy, chain and either a clump weight or anchor, is brought on to the deck of the barge to be inspected. The team assess their condition and wear, and any worn-down parts are replaced. Once refurbished, the mooring is then reinstalled. Using a hand-held GPS device, the team correctly place the anchor or clump weight, with the mooring attached, back on the seabed.

Ascension's shark population has boomed recently and Galapagos Sharks, which can grow to 11 feet, are a common sight. Shark attacks in 2017 resulted in a MoD no swim policy and extra caution is taken not to fall overboard from the barge. For this reason, the final inspection of the re-laid moorings is now done using an underwater camera on an extendable pole.

After everything was repaired and replaced, the SALMO team flew a drone over the area to make sure each piece had been placed in the right position, free from any reefs or existing moorings. The drone's aerial photography gave an excellent view of the moorings that was provided in a formal report, along with precise GPS coordinates, confirming the positioning of the moorings and that floating hose assembly was correct.

With the maintenance work successfully completed, the team conducted an inventory of remaining spares and equipment necessary for the following year's work. Re-supplying equipment to this remote island requires thorough preparation and planning is essential to the success of future trips.

The Ascension Island moorings are now certified for the next 12 months, and Steve can begin scheduling and mobilising the team for next year's trip.

The Ascension Island maintenance is a unique task in a challenging working environment where teamwork and adaptability are essential. It is a real privilege to visit Ascension Island and the team are already looking forward to next year's visit, and to overcoming the challenges and surprises that will undoubtedly arise.

FEATURE



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DE&S becoming programme

The Becoming Programme is exciting new initiative to help and support women on their journey to develop their identity as a leader. As part of DE&S' commitment to 'Growth through learning' and 'Focusing on equality, diversity, inclusion & wellbeing,' Becoming is for women who have the potential to progress into more senior positions. Designed and delivered by the DE&S Leadership, Skills & Growth team in partnership with external specialists Half the Sky, the programme aims to accelerate and advance women's careers and help achieve better female representation in leadership roles.

Two further cohorts were launched in September and October following groups One and Two successfully completing the programme. Each group spends about four months completing independent reflective tasks, workshops and coaching circles, both online and in-person. Participants also hear from inspirational keynote speakers. Past speakers have included international rugby star Maggie Alphonsi MBE, Kanye King CBE, founder of the Music of Black Origin (MOBO) Awards and British mountaineer and motivational speaker, Bonita Norris.

Jo Osburn-Hughes, DE&S Gender Champion, said: "It was a privilege to be

able to join the final presentation and graduation of the excellent Becoming programme for Cohort One and Two. The energy and positivity of the participants was just palpable, and I could feel the sense of achievement from the individuals who met, networked, explored ideas, developed innovative approaches and most of all were open to explore their approach to leadership."

Unlike traditional leadership schemes, Becoming focuses on supporting the individual to:

- Develop into their identity as a leader and a woman
- Navigate their career journey with authenticity
- Discover their own compass and the impact that they want to have in the world
- Prepare to take new roles and stretch assignments
- Face the inevitable challenges that accompany women's experiences in the workplace
- Find support and mentorship from within as well as from others
- Help others on their journey and share their learning - one ripple at a time

Speaking about the Becoming programme, Director HR, Jill Hatcher, said: "I had the privilege to spend some time with those who have completed the Becoming programme. One of the key elements of the programme was about navigating their career journey with authenticity; and finding support and mentorship from within as well as from others. It's made me reflect on the impact having a mentor and being a mentor has had on me and my career. Seeking advice from them has helped me develop my confidence, given me feedback on development areas and helped me make the right career choices. To this day, I still value the advice that I receive from mentors and have been learning from reverse mentoring too."

Rebecca Heywood, DE&S Becoming Programme manager, said: "Delivering the Becoming programme has been wonderful - watching these fantastic women go from strength to strength has been a real privilege, and I'm looking forward to seeing what they do next."



£34 million upgrade to Royal Navy weapon systems

Over the next five years, Royal Navy ships will undergo £34 million of technical upgrades to their Magazine Torpedo Launch Systems and their threat counter-measure capabilities. These upgrades will ensure that the Royal Navy's Type 23 Frigates, Type 45 Destroyers and Royal Fleet auxiliary tankers can continue to counter the threat of hostile anti-ship missiles.

The contract was placed by the ZDE&S Maritime Equipment and Warfare team, and was awarded to Systems Engineering & Assessment (SEA), a company based in Devon. The work will sustain 150 UK jobs across Barnstaple, Beckington and Bristol in south-west England.

The Royal Navy's Deputy Director Ships, Commodore Paul Pitcher, said: "This timely upgrade package for key elements of our anti-submarine and electronic warfare capabilities will help maintain the Royal Navy's fighting edge and extend the operating lives of the

warships in which these capabilities are integrated. The Royal Navy is proud to be supporting the UK's defence enterprise and is looking forward to strengthening our partnership with SEA."

Type 23 frigates carry out a wide variety of operations, including securing the UK's vital maritime trade routes east of the Suez Canal and safeguarding British interests in the South Atlantic. They will have upgrades to Seagnat, a system which safeguards the vessel by firing a variety of decoys to defeat incoming missiles. The upgrades will ensure that critical systems on the frigates continue to operate reliably, and that upgrades can be seamlessly adopted and installed.

Some ships will also undergo a further technical upgrade to their Magazine Torpedo Launch Systems, a close-range, quick-reaction anti-submarine weapon system that launches torpedoes from tubes mounted in the vessel's magazine.

The contract will also upgrade Seagnat

systems over the next five years on Type 45 Destroyers and Royal Fleet auxiliary tankers, which provide fuel, food, fresh water, ammunition and other supplies to Royal Navy vessels around the world.

As well as the immediate work, the contract secures five years of further support for the systems on board the vessels and improved provision for spare parts.

According to the Managing Director at SEA: "This major contract, SEA's largest to date, demonstrates the systems knowledge and maritime domain expertise within our UK-based team, and builds on our long-standing partnership with the Royal Navy."

DE&S' Director Ships Support, Rear Admiral Jim Higham, said: "I'm incredibly proud of our team, which has worked so hard to fulfil this contract, ensuring Type 23 frigates have the battle-winning capability they need to perform their critical role in the Royal Navy fleet, now and in the future."

NEWS

News in Brief

Training enhanced by virtual simulation



A new virtual simulation training system, called Defence Virtual Simulation 2 (DVS2), has been showcased at a capability demonstration and technical briefing for the DE&S Training Simulation System Portfolio and wider Soldier Training and Special Projects (STSP) teams. The demonstration gave the teams a deeper understanding of how this system can be integrated into training modules and simulation systems across Defence.

The DVS2 virtual simulation technology will give the Armed Forces an opportunity to train in multiple environments and work through a range of military operations, such as piloting fast jets, parachuting into warzones and first aid training. It allows personnel to train anywhere in the world, across multiple terrains and with a range of equipment, while providing support to them as well as to other governmental departments or integrators supporting MoD contracts.

Guided by military subject matter experts, the software is the result of almost two

decades of iterative development, and is the most easy-to-use and capable tactical training simulation available.

Bohemia Interactive Simulations, who developed DVS2, visited DE&S to provide the technical demonstrations. They briefed the teams on how military platforms and equipment are modelled with a high degree of accuracy across their simulation system; how armour, survivability, penetration and damage states are developed and replicated within the software; and how they utilise subject matter experts to support this effort.

DE&S Director Land Equipment, Major General Darren Crook said: "This training opportunity was invaluable. It broadened the team's understanding and knowledge of the system, and provided the wider STSP engineers with an understanding of the capability it can deliver. It demonstrated how usable DVS2 is and the versatility of the system that is available across Defence.

Black History Month: David Olusoga speaks with DE&S

To mark Black History Month, DE&S hosted an online session with award-winning British-Nigerian historian, broadcaster, author and filmmaker David Olusoga OBE.

The theme for Black History Month 2022 was 'Time for Change: Action not Words'. This was chosen to encourage DE&S teams to continue growing their conversations around race and to generate authentic allies.

Speaking about the theme, David explained that, to him action not words, means keeping Black History Month going, ensuring that Black History is ingrained in our learning, and making sure that DE&S personnel continuously challenge themselves to make a better society for everyone.

From black sailors during the Battle of Trafalgar to the diverse trenches of the First World War, David spoke with DE&S about historical amnesia. He shared that structural racism exists deep within the fabric of our society and in our subconscious, and the

importance of teaching Black History with actions, not words.

David said: "Race is structural because it was constructed. It has authors. It has architects. It has seeped into the soil of our culture and is present today."

David's session was part of an ongoing series of guest speakers providing DE&S teams with a different perspective on race to improve their understanding of each other's backgrounds. The DE&S Race and Culture Network will continue to drive meaningful change by championing racial and cultural equality and inclusivity across the organisation so all colleagues can perform to the best of their ability. As an organisation, DE&S is deeply committed to diversity and inclusion, recognising that it is what makes everyone stronger and helps people overcome the challenges they face. Whatever their characteristics and background, every person's opinion not only matters, it can make all the difference in helping DE&S achieve its mission.



DE&S Apprentice wins prestigious Institution of Engineering and Technology Award



Jared Newnham, an Aerospace Engineering Degree Apprentice at DE&S, has won the Engineering and Technology Apprentice Award at the annual Institution of Engineering and Technology (IET) Achievement Awards.

The IET Awards recognise individuals who have made exceptional contributions to the advancement of engineering, technology and science – whether in research, development or leadership.

Jared is a third-year Aerospace Engineering Degree Apprentice and was nominated for demonstrating outstanding initiative by developing a new regulatory-compliant procedure, which he created alongside industry partners.

Speaking after the awards ceremony, Jared said: "I can't believe that I've been chosen as the IET's Apprentice winner for 2022. There are so many apprentices doing great things across engineering so to be given this award makes me really proud.

"I joined DE&S after finishing college. I was attracted to the apprenticeship as it offered the unique opportunity to gain qualifications in engineering while completing multiple industry placements – meaning you finish with a degree and work experience.

"For anyone thinking about taking up a career in STEM, I would definitely recommend an apprenticeship at DE&S. My placement has led to so many incredible opportunities, which I will look back on fondly and which will hopefully lead to a long and enjoyable career."

IET President Professor Bob Cryan said: "This is a fantastic achievement for Jared who has been making great waves in the world of engineering despite being so early on in his career. It is inspiring to see that Jared is using his passion for STEM to help teach others about the opportunities available to them, increasing awareness amongst members of his local community."

Memorial trees planted in tribute to Her late Majesty Queen Elizabeth II

Ahead of this year's national period of Remembrance, staff from across DE&S sites are gathering to pay tribute to Her late Majesty the Queen.

Memorial trees are being planted at DE&S sites across country, with the first being planted at DE&S' headquarters at Abbey Wood in Bristol, as part of the Queen's Green Canopy initiative. This initiative aims to plant over a million trees in Her late Majesty's name across the country.

Major Jo Marples, who works at the Freight Allocation Centre at Abbey Wood, said: "With Her late Majesty's passing, I noticed that the Queen's Green Canopy initiative had been extended by His Majesty The King and, as I find the green space at Abbey Wood such a great place for reflection, I thought it would be a wonderful way for us to mark the

memory of the late Queen. The fact that it has been picked up across all DE&S sites is fantastic."

The Engineering, Design, Development and Prototyping team at DE&S' Defence Munitions Kineton site have manufactured and engraved specially designed memorial plaques to accompany the trees.

Darren Coleborn, the lead engineer on the team creating the memorial plaques, said: "Each member of the team came with their own input on the design and finished product. As part of a mixed civilian and military site, the death of the Queen hit us all hard. So many of us had sworn allegiance to her on joining up and wear medals bearing her likeness. So, it was important that we could do our bit to mark her memory and, with the tools of our trade, use our engineering skills to her justice."



NEWS

Project Crenic: Life-saving protection for UK military

UK Armed Forces will receive crucial protection against improvised explosive devices (IEDs) under a £45 million contract with British industry partners.

Under Project Crenic, DE&S has agreed a five-year £45 million systems integration contract with Team Protect, a group of UK businesses. Together, Project Crenic will develop new ways to protect soldiers, vehicles and military bases targeted by remote-controlled IEDs.

The project will ensure that the UK keeps pace with fast-evolving road-side bombs by sourcing emerging technology and seeking innovative ideas from outside the traditional Defence industries. The first stage of the project will deliver replacement vehicle and soldier-carried systems to active operations.

According to Major General Robin Anderton-Brown, Director Capability Strategic Command: "Crenic is a key project led by Strategic Command. Incorporating cutting-edge technology and adopting an agile acquisition approach, Crenic will deliver a world-leading capability to protect our forces deployed on global operations."

Project Crenic will share information across traditional military barriers, making it the first such enterprise to directly support multi-domain integration. By collecting information once and giving teams throughout UK Defence the opportunity to use it many times over, it will greatly increase efficiencies. In the future, multi-domain activities will include supporting electronic warfare and providing counter-measures to combat drones.

Crenic will also establish a cutting-edge 'integration laboratory' to support the development of the project. The laboratory will provide further solutions, and promote innovation and experimentation as the new capability evolves.

Steve Westwood, DE&S' Force Protection Electronic Countermeasures team leader, said: "It's clearer than ever before that collaboration between



the military and industry is key to identifying innovative solutions that can support and protect our UK Armed Forces against ever-evolving threats."

To allow for wider industry participation, Crenic will follow the Defence Cyber and Electromagnetic Activities Architecture. This means new technology and capabilities are built with open standards that allow Defence to use the solutions in future projects and encourage greater collaboration with the UK's partners and allies.

Team Protect consists of PA Consulting, Leonardo, Leidos Innovations UK and Marshall Land Systems. The contract with this group will sustained at least 50 jobs around the country. The project aims to create further jobs through contracts with small and medium-sized enterprises.

Peter Lovell, Global Head of Defence and Security at PA Consulting, said: "We are delighted that Team Protect has been

selected to be the system integrator for Crenic. The team has deep and extensive experience across vital capabilities... We will deliver this programme and keep UK forces safer by leveraging our relative strengths, using ingenuity to help deliver a positive human future."

First deliveries of the new equipment are due to take place in 2026, with a view to incrementally deploying equipment and evolving its protective capability to meet the needs of the Army, Royal Marines and RAF land forces long into the future.

Andy Start, DE&S CEO, said: "While our armed forces are prepared to face extraordinary risks to keep our nation protected, it is essential we provide them with the best possible tools to carry out their roles as safely and effectively as possible. It's crucial that we stay one step ahead of the enemy so we can counter any advancements in hostile threats and do all we can to keep our people safe."



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PEOPLE

Major Rachel Gibbs

Name:

Major Rachel Gibbs

Job title:

Land Equipment Operating Centre (LEOC) Headquarters Plans Team

What does your role involve?

I manage a variety of different workstreams for LEOC Headquarters. Most recently, I was part of the core planning team for DVD. DVD is a biennial exhibition held at Millbrook, Bedfordshire that gives DE&S delivery teams, Army HQ staff, industry partners and other Defence community users of land equipment, an opportunity for focused engagement to collaboratively develop ideas and generate greater understanding of technologies, capabilities and requirements. I assisted with the planning of the event, liaising with both industry partners and MoD agencies, and ensuring smooth running of the event. I also support our Operations team, which supports military operations worldwide.

What do you most enjoy about your job?

I'm lucky that I work with a good team and, for me, it's the people who make the job so enjoyable.

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

In the past, I was deployed to Somalia to help bring stability to their country by training local armed forces. Since joining LEOC, I've enjoyed being able to continue to support global operations, while also equipping and supporting the British Army. It feels like we're making a real difference.

What keeps you energised about working at DE&S?

Feeling like we are making a difference through supporting both operational and humanitarian deployments.

Who or what has shaped who you are?

My overseas deployments remind me why I do this job. They have all involved training other nations' armed forces, specifically in military logistics, to aid them in becoming more effective military forces.

What do you enjoy doing in your spare time?

Rock climbing, mountain biking and trail running.

What might surprise people about you?

I won the Inter-Services Climbing Championships last month, which was held in Preston and involved competing against the best climbers in the Army, Navy and RAF. I also ran a 100km ultra-marathon in July along the Ridgeway, starting at the Oxfordshire/Buckinghamshire border and finishing in Wiltshire at Avebury Stone Circle.

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

Hard work pays off.



Rachel in Baidoa, Somalia handing over a vehicle to Head Logistics, 8X, following their completion of a military logistics training package

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