


desider

the magazine for defence equipment and support



**DE&S join American colleagues for F-35B
fast jet trials on-board USS Wasp**



**THE VALUE OF
KNOWING
THAT TODAY'S
SOLUTION
MAY BE
NOTHING LIKE
YESTERDAY'S.**

In modern security, agile thinking

leads to a versatile defence.

At Northrop Grumman, we're delivering

cutting-edge technology that is as

affordable as it is adaptable. Partnering

with the United Kingdom's best suppliers

allows us to tailor our solutions to fit each

customer's needs on time and within budget.

That's why we're a global leader in Unmanned

Systems, Cyber, C4ISR, and Logistics.

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

www.northropgrumman.com/europe

cover image



F-35B on the flight deck of USS Wasp.

desider

www.gov.uk/government/publications/desider

Editor:

Tim Foreman - 9352 30637 or 0117 9130637
tim.foreman774@mod.uk

Distribution Manager:

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

Advertising:

Richard Stillman – Ten Alps Media, 1 New Oxford Street, High Holborn, London SC1A 1NU
Tel: +44 (0)20 7657 1837
Fax: +44 (0)20 7379 7155
richard.stillman@tenalps.com

Printing:



WILLIAMS LEA
corporate information solutions

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

© Crown Copyright

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



FOREWORD

by Sir Bernard Gray, Chief of Defence Materiel

A recurring theme running through this edition of *Desider* is the commitment and dedication of DE&S staff to their work.

Chief Executive of the Civil Service, John Manzoni, praised the work and commitment of DE&S staff during his recent visit to DE&S Abbey Wood.

In this edition, Chris Dell, Head of our Voyager programme, comments on the motivation of the teams he has worked with in DE&S over the years, who thrive on seeing the direct impact their work has on the Armed Forces; and Oliver Stanley, a project manager in the Force Protection Team, when asked what he is most proud of, answered it was his team and the support they provide to this country's military.

These viewpoints, from the top of the shop to those working at the point of delivery, indicate a common strand: staff at DE&S are highly motivated and inspired by the work they do to support others.

This is evident by the progress made recently on some of our key programmes, including Crowsnest, Offshore Patrol Vessels and Type 23 support, all highlighted in this edition.

On a personal note, I am deeply honoured to have received a Knighthood in the Queen's Birthday honours list. I would like to put on record that this recognition is built on the foundations of all the support I have received from DE&S staff since I joined in 2011 and is a tribute to all we have achieved together to drive down costs, manage our projects and programmes better and deliver for our Armed Forces customers.

Without the dedicated efforts of you all, DE&S would not have been able to deliver these results and would not be on a journey towards positive transformation, so I would like to extend my continued thanks to everyone for the contribution you have all made, working with me to improve the way we do things in DE&S over the last few years and in the months to come.

SENIOR LEADERS COMMENT

06 COM(Land) reflects on recent successes

NEWS

08 Historic agreement with Front Line Commands

First-ever plans outlining the responsibilities of and relationship between DE&S and FLCs are jointly signed.

10 Ampthill a world class location

Work starts on a new £5.5million Warrior and Scout facility to manufacture turrets for armoured vehicles.

13 DE&S takes further steps on its Freedom to Change

CDM maps out DE&S transformation changes and thanks staff as the organisation aims to be the best in the world at delivering defence acquisition.

14 Typhoon gets a Battle of Britain makeover

RAF unveils Typhoon fighter jet with WWII paint scheme to commemorate 75th anniversary of the Battle of Britain.

16 F-35B fast jet testing on USS Wasp

The stealth fighter is put through its paces under the watchful eyes of DE&S staff in the latest stage of the programme's development.

18 T23 programme success

Type 23 support programme reaches two important milestones as a new life extension programme gets underway.



FEATURES

21 DSEI 2015 preview

100 days out from the largest integrated defence and security exhibition in the world, a look at what to expect.

28 John Manzoni's first townhall

The recently appointed Chief Executive of the Civil Service tells DE&S staff "people" are top of his priority list.

30 VIRTUS

Final design trials for the new personal protection system take place on Salisbury Plain as the equipment heads into full production.

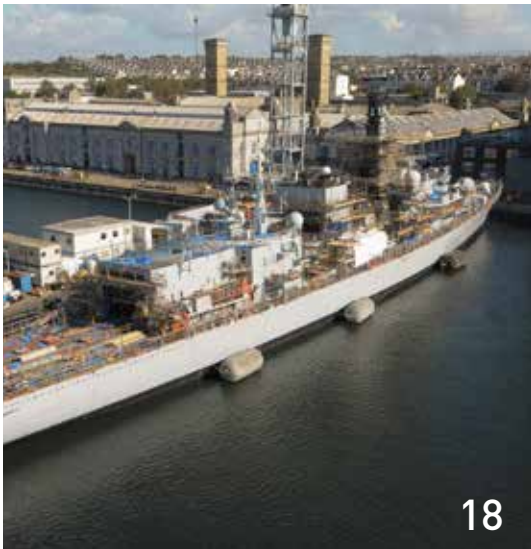
32 OPV and Mars Tanker

Steel is cut on the second of the Royal Navy's three OPVs while there are further significant achievements in the Military Afloat Reach and Sustainability (MARS) Tanker build.

36 Helicopter success

A critical milestone in providing the eyes and ears for the future Queen Elizabeth Class carriers is reached, as helicopter training also gets a further boost.





18

REGULARS

34 **First Person**

Chris Dell, Strategic Transport and Air To Air Refuelling project team leader, speaks to Desider about PFIs, seizing the day and his love of golf.

40 **DE&S People**

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

46 **Learning and development**

Information professionals and successful project managers lead the way in this month's round up of learning and development in DE&S.



30

JULY 2015

InsiderGuide

LIEUTENANT GENERAL SIR CHRIS DEVERELL, Chief of Materiel (Land), reflects on the recent successes within the Land Domain and encourages staff to engage with transformation and to seize the opportunities offered by it.

DE&S has had its critics in the past but our workforce has done a remarkable job in the last few years in very difficult circumstances. We are now in a completely different place, with a credit.

We have made really significant improvements to our performance in the Land Domain. Over the last three years, we have delivered over 90% of our major projects on or ahead of schedule, and signed 70 major contracts, with a total value of over £14 billion. In Financial Year 12/13 we only got approval for six major project Initial or Main Gate Business Cases, whereas the figure for last year was 46. In addition, we have reduced our inventory by 33% (over £5 billion), and increased disposals by 20%. And our financial forecasting has become very accurate.

Major highlights over the last year include securing the production contract with General Dynamics UK to deliver 589 SCOUT Specialist Vehicles to the Army, worth £3.5 billion, and the signature of the 13 year Logistic Commodities and Services (Transformation) contract with Leidos, worth over £6.5 billion. We have also played a major part in the exemplary redeployment of vast amounts of materiel to the UK from Afghanistan, within budget and to time.

All this performance improvement would not have been possible without the hard work of all staff within the Domain.

Looking ahead, I see my responsibility as ensuring that we are meeting the requirements of our customers whilst transforming the business. These are demanding tasks for us all. To aid us, the Land Domain Executive is producing a Strategy that will complement the DE&S transformation programme. Our aim is to be our customers' first choice for procurement and support. Our goals include emulating a commercial relationship with our customers, building a valued brand, transforming our operational efficiency, and making and managing the best deals with our suppliers.

One of our immediate priorities is successfully transitioning storage, distribution and commodity procurement to our LCS(T) Delivery Partner, Leidos. Amongst other things, this will entail the TUPE of 1200 or so staff on Service Commencement Date, which is currently planned for 1 August 2015. The long term benefit of this programme will be a 21st century service to the customer,



Picture: David Tucker

at much lower cost. The contract will generate savings of some £500 million over its life. LCS(T) should also offer opportunities to those staff who are transferring to Leidos and its partners. To manage these changes we have formed a new Operating Centre in the Land Domain – the Logistic Delivery Operating Centre. This will contain the Commissioning and Managing Organisation for the LCS(T) contract, those parts of the LCS OC which are out of scope for LCS(T) (such as the British Forces Post Office and the Disposal Services Authority), as well as Defence Support Chain Operations and

Movement.

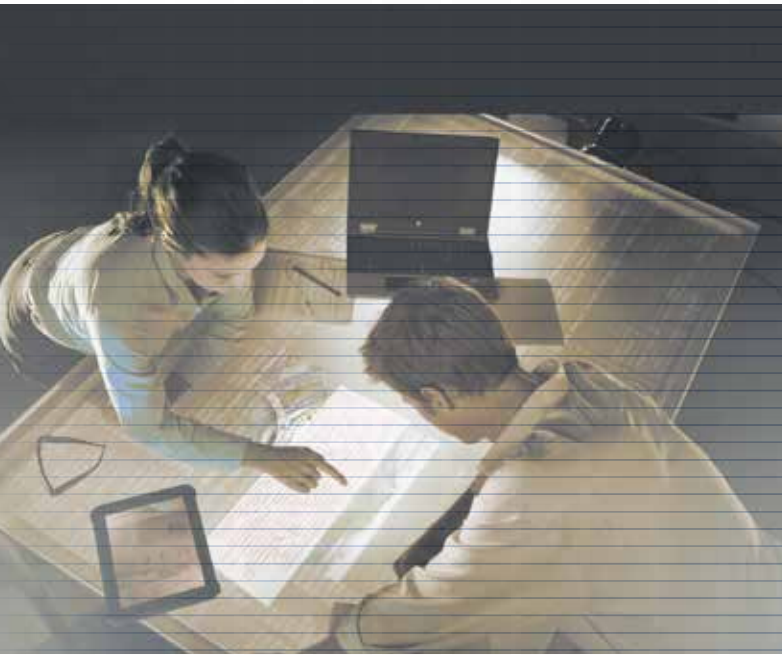
As far as the wider DE&S transformation is concerned, I urge staff to insist on being engaged by it, so that they can help shape the plan. I believe that if we get this right everyone will want to work in DE&S! But getting it right will take all of us, not just those in the Materiel Strategy Team or the Managed Service Providers. It has been a long time coming, but the hour is now at hand. Significant changes are due to be rolled out over the coming months in every aspect of our business. We mustn't drop the ball on our day job, but we must seize this opportunity.

BAE SYSTEMS

INPIRED ORK

ENGINEERED WITH INSPIRATION.

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



Historic signing of 1st ever Command Acquisition and Support Plans for 2015-16

Sir Bernard Gray, Chief of Defence Materiel (CDM), Chief of the Air Staff, Chief of the General Staff and Commander Joint Force Command jointly signed the first-ever Command Acquisition and Support Plans for 2015-16 (CASP 15).

CASPs are a subset of the Command Plans produced by each Front Line Command (FLC). They outline what the FLCs will provide to defence and what support DE&S will provide to the FLCs to enable them to meet their requirements.

The CASP functions as a type of contract, clearly identifying the obligations of both sides. They include the money, people and equipment being provided to DE&S by the FLCs, and the equipment, support, training and publications DE&S provides to the FLCs.

The detailed metrics contained within them also enable a Holding-to-Account process to operate in both directions. The aim being to encourage joint problem solving as well as a mechanism to quickly

focus on any issues that arise.

Sir Bernard said: "Since becoming a bespoke trading entity, CASPs are yet another key step in the development of the Materiel Strategy. They offer a more tailored, professional approach to the way we work with the Front Line Commands and the way they work with us.

"Such transparency will enable DE&S to meet their requirements more accurately and help us deliver them in the most cost-effective and efficient way possible."

The CASPs represent the latest iteration of activity that began with Soft Contract 13, and represent a significant improvement in terms of understanding exactly what DE&S needs to deliver to the FLCs to enable their ultimate success.

There are separate CASPs for each of DE&S's customers including the Front Line Commands and Strategic Programmes. Each CASP contains a number of annexes that lay out in detail the next two years of each equipment or service support

requirement with the following eight years in less detail.

Jonathan Slater, Defence Authority for the Acquisition System, said: "I am immensely pleased that CASP 15 has been signed. This is a real step change in the way that Defence manages its output.

"They provide DE&S and the Frontline Commands, including Strategic Programmes, with the necessary levers to deliver what the Armed forces need in a manner that is best for Defence."

This financial year will also see the development of the Information Service Plans that will build on the experiences learned through CASPs and cover the agreed Information and Communications Technology (ICT) programme of work between Information Systems and Services (ISS) and its customers.

This development represents the constant improvement of the Acquisition System and the new robust control framework.



(From l-r) CGS – General Sir Nick Carter, CDM – Sir Bernard Gray, CAS – ACM Sir Andrew Pulford and Commander JFC – General Sir Richard Barrons



Capability Demonstrated

ROTARY WING UNMANNED AIR SYSTEM (RWUAS) CAPABILITY CONCEPT DEMONSTRATOR (CCD)

Demonstration flight trials successfully delivered using the AgustaWestland SW-4 Solo, optionally piloted helicopter at Llanbedr Airfield to inform future Tactical Maritime UAS decision making.

LEADING THE FUTURE

agustawestland.com



fi

 **AgustaWestland**
A Finmeccanica Company

Defence and Security Equipment International (DSEI)

All four UK service chiefs have confirmed their attendance at DSEI. Admiral Sir George Zambellas, First Sea Lord and Chief of the Naval Staff of the Royal Navy; General Sir Nicholas Carter, Chief of the General Staff; Air Chief Marshal Sir Andrew Pulford, Chief of the Air Staff; and General Sir Richard Barrons, Commander Joint Forces Command, will all deliver keynote speeches on days that are themed for their individual Services.

DSEI is the largest integrated defence and security exhibition in the world, focusing on key sectors such as air, land, naval and security. Hosted at ExCeL, London 15-18 September, DSEI continues to serve as the premier meeting place for the world's military communities.

Providing a hub of knowledge sharing in key operational and technical areas, themed seminars will address the challenges, developments and future of the sector's evolving landscape. These include: Air, Naval, Land, Security and Special Forces, Medical Innovation, Unmanned and Global Partnerships.

For more information please turn to the DSEI preview on page 20.

Complimentary return coach transport will be arranged by Clarion Events and will depart from MOD Abbey Wood to DSEI on each day of the event. You are advised to book your seat in advance. Further details will be provided via the MOD Abbey Wood intranet. Please note that all visitors to DSEI will need to be registered in advance and in receipt of an entry badge before boarding coaches.

new £5.5 million Warrior and Scout facility

Amphill a world-class location

Work has begun on a new multi-million pound facility to manufacture turrets for the British Army's armoured vehicles.

The new £5.5 million facility, which is almost an acre in size, will form part of the production line at Lockheed Martin that will manufacture new turrets for the Warrior armoured vehicles and the Scout SV.

Work on the new building, which is where the vehicle turrets will be kitted out and assembled before being integrated onto the vehicle platforms, is due to be completed in early 2016.

Amphill is the largest of Lockheed Martin's 21 sites in the UK and the 900 employees based there are involved in a range of programmes.

This new manufacturing facility is part of £23 million worth of investment that has been made on the site over the last ten years to expand and upgrade the infrastructure as the business has grown.

Head of the DE&S Armoured Vehicles Programme, Major General Robert Talbot-Rice, said:

"Both Warrior and Scout are high priority programmes which will contribute to a well equipped and supported British Army, so it is good news to see money invested by industry in facilities that will build some of the critical components for these vehicles. Lockheed Martin's investment increases our confidence in their capability and in their determination to deliver on time."

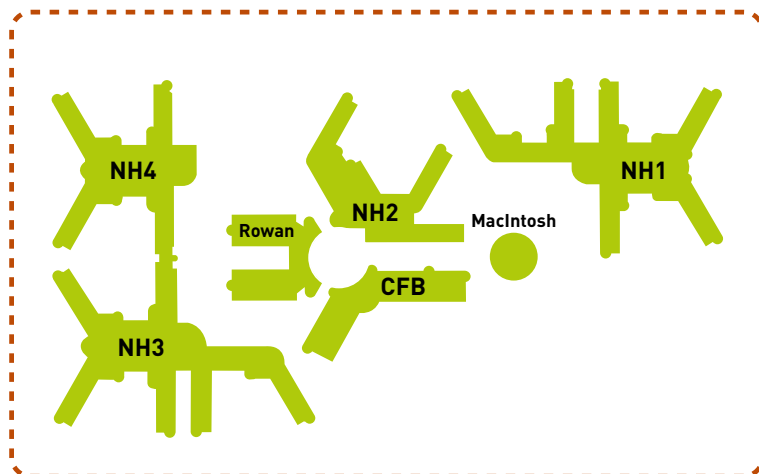
NEWS IN BRIEF

£20

million,
DE&S
Defence Air
Commodities
Team
contract
awarded

Spares contract award

Selex ES has been awarded a contract worth in excess of £20M by DE&S's Defence Air Commodities Team to provide a spares availability service covering 15 air platform types stationed at over 45 operating bases. Data analysis software and real-time inventory management processes provide a computer modeling system that will predict precisely when and where spares will be needed ensuring they are readily available whilst at the same time minimising stock levels.



IMOC becomes SEOC

A foundation for improved support

On the 1st August the Inventory Management OC (IMOC) will become the Support Enablers Operating Centre (SEOC). This new title reflects SEOC's primary role in providing a range of enabling processes, services and Log IS solutions that improve the effectiveness of the Defence Support Chain. SEOC will remain responsible for the Inventory Management Transformation programme and will be the corporate home of the Integrated Logistics function.

The SEOC consists of five Business Units; Support Chain Processes (SCP) who design the processes and provide support enabling services; such as National Codification services and Support Chain modelling; Support Chain Information Services (SCIS) who deliver the integrated Logistics IS programme; Support Chain Professional Development who provide the functional leadership to the Integrated Logistics function; Support Chain Finance (SCFin), who provide the pan-DE&S financial leadership, measurement, control and scrutiny and Support Chain Engagement (SCE) who work with customers, other OCs and Industry to deliver support improvements.



50 delegates
from around
the world visit
disposals event

Overseas Officials attend UK Military Equipment Exhibition

Senior officials from 36 countries across six continents visited RAF Northolt to view surplus maritime, land and air equipment available to buy now and in the near future.

The exhibition and briefing event took place at Headquarters British Forces Post Office (HQ BFPO) and airside at RAF Northolt, and was attended by more than 50 delegates from around the world.

The event was coordinated by the Disposal Services Authority (DSA), which disposes of defence equipment that is surplus to requirement on behalf of the MOD. This includes anything from large equipments such as warships, tanks and aircraft to smaller assets such as clothing and textiles, military spares, scrap metal and office/IT equipment.

The day provided a unique opportunity for delegates from across the globe to gain a greater understanding of how they could engage with the DSA, and to view equipment currently being marketed on a Government-to-Government basis, as well as commercially.

Brigadier Steve Watkin, Head of Transition, DSA and BFPO, said:

"This first DSA Exhibition and Briefing Event was a real success and played on the strengths of DSA, its contractors, the project teams, and the operators of the equipment on display.

It already looks likely to have developed a great deal of sales interest, and as with all of our sales, our aim will be to ensure the best possible return for the taxpayer is achieved."

Virtual Bridge service

A newly upgraded technical information service has been launched to help personnel from Babcock, the UK MOD and wider defence support community involved in providing safe and capable warships and submarines to meet the UK's defence requirements. Drawing on the knowledge and experience of Babcock design personnel, the 'Virtual Bridge' service will provide a design and technical information support capability, enabling project teams to work efficiently together using the same tools and processes in real time across multiple locations.

While some Royal Navy (RN) warships are already using an earlier version of Virtual Bridge to host design data and support configuration management, other warships and submarines currently use a range of different systems and associated processes to manage technical information for different requirements and across different platforms. Babcock's new, upgraded Virtual Bridge service (developed to be more flexible and host a greater variety of information) will enable a number of these to be replaced and projects to be managed with a single technical information toolset. This will simplify processes and aid consistency, and will also enable the number of different systems to be reduced, helping to lower training and other costs.

The service has been rolled out to over 400 users already to provide support to the amphibious Landing Platform Docks (LPDs), Landing Platform Helicopter (LPH) and their landing craft and T23 Frigates, HMS SCOTT and Hunt class Mine Counter Measures vessels.

The service has been **400**
rolled out to over
users already

£19million RAF Radar Warning contract

Puma Radar contract

Selex has won a £19M contract to provide an ongoing radar warning system for the RAF's fleet of 24 Puma helicopters helping future proof the platform's protection capabilities.

The SG200-D Radar Warning Receiver detects and identifies emitters in high density and complex radar environments. The contract also includes additional sets for spares and training and several sets of 'A-kit' equipment – the antennas and cockpit control equipment needed to quickly install the full system as a helicopter switches over from training to operational environments.

Panasonic recommends Windows.

Panasonic i



REACH NEW HEIGHTS IN SPECIALIST MOBILE END USER DEVICES

When you're tasked with procuring hardware, software and security solutions via Lots 1 and 3 of the new pan Government framework including the MoD (RM1054), you need suppliers that are 100% proven.

You need Centerprise and Panasonic.

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

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

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

Call +44 (0)1256 378 004

Email mod@centerprise.co.uk

TOUGHPAD

Intel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and other countries. Image: © garryridsdale.com



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



DE&S takes further steps on its Freedom to Change

Sir Bernard Gray, Chief of Defence Materiel, gave staff an update on the DE&S transformation journey at a Townhall on 8th June. Sir Bernard told staff about the key themes – People Model, Balanced Matrix and Process and Control Framework -under which the DE&S transformation would be delivered. He also outlined some of the early implementation activities which are already being delivered under a 90-day work plan.

CDM started the event by paying tribute to staff for their hard work and, once again, highlighted that the National Audit Office had confirmed the organisation's best-ever performance, with 99% of projects completed, a reduction in project costs by £397 million and the best time performance since 2001.

However, he also said that there was more to do for DE&S to become 'best in class' and the main thrust of the event quickly turned to the three themes that the DE&S Transformation Programme will focus on: the 'people model', 'balanced matrix' and the 'process and control framework'.

Speaking of the people model, CDM explained: "We need to invest in our people. It is clear that we need a new recruitment process that helps us attract and retain good people, a performance management approach that helps staff develop their careers and a reward strategy that incentivises people to do well."

He added: "We need a balanced matrix structure, which will put the right person in the right job. In this structure local managers will be responsible for supporting staff in the work they do, but the functional manager will help guide staff careers."

"We also need better tools to help us keep control of equipment and support programmes and we will be introducing a more standardised approach to managing projects and programme information."

Now that plans to start the transformation have been proposed, CDM highlighted that information will be shared

with staff and that there will be opportunities to feedback.

CDM said "Today is the start of the communications process of talking to everybody about what the detail of what the transformation will mean. There is no monopoly on wisdom. We will be holding forums over the course of the next few months to discuss all of the changes with staff."

CDM highlighted that there will likely be challenges along the way, especially because DE&S staff must guarantee meeting

customers' needs as change takes place, but that the organisation will be stronger for it.

He said: "It will be quite a difficult thing to do all of this and it will be hard work because we still have to remain focussed on the day job whilst doing it. But I think the long-term benefit to the organisation and the people who work within it will be very significant."

"We want to be the best in the world at delivering defence acquisition and the DE&S transformation will help us achieve this."





Typhoon gets a Battle of Britain makeover

Taking to the skies in World War II camouflage, a state-of-the-art Typhoon jet cut a commemorative picture as it marked the 75th anniversary of the Battle of Britain.

Flying alongside the iconic Hurricane, the two fighter aircraft took off from RAF Coningsby, in Lincolnshire, in an acknowledgment of the bravery and sacrifice of the aircrew who

took part in the battle against the German Luftwaffe.

The Typhoon was painted with the 249 Squadron identification number of the only Fighter Command pilot awarded a Victoria Cross during the battle.

While fighter jet technology has made huge leaps forward, the synchro-flight was a reminder that the task of securing the skies remains for those serving in the

RAF.

Group Captain Jez Attridge, Station Commander at RAF Coningsby, said: "This fully operational Typhoon will be a dynamic reminder of the link between the modern RAF and The Few that defended our nation 75 years ago. Today that mission endures with Typhoons on Quick Reaction Alert, every minute of every day."

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



Be where you're needed with enhanced Video TeleConferencing



You can't be in two places at once. But enhanced Video TeleConferencing (eVTC) lets you meet in a secure face-to-face environment with colleagues in the defence community, quickly and easily.

Travel less to save time and money.
Get more done with eVTC.

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



F-35B fast jet trials

DE&S staff joined members of US Marine Corps (USMC) on-board USS Wasp off the east coast of the United States for the latest F-35B fast jet operational tests.

Sir Bernard Gray, DE&S Chief of Defence Materiel (CDM) and Air Marshal Simon Bollom, Chief of Materiel (Air) (COM (A)), went on the amphibious assault ship to meet the embedded UK team working on the programme and see the stealth fighter being put through its paces in the latest stage of the programme's development.

During the day's observation visit, CDM and COM (A) were able to witness three successful short carrier take-offs by F35B aircraft and three vertical landings.

Trials completed during the tests included successful aircraft take-off and landing exercise and simulated air combat/air defence missions over sea. The aim was to assess the integration between ship and jet, to explore the effectiveness of the jet during flight operations, the operability of the communications systems and to harmonise maintenance support and logistical supply.

Evidence and experience gained from this event will help provide

vital information to inform future F-35B deployments. The USMC are working towards Initial Operating Capability (IOC) this summer.

Sir Bernard said: "As the programme continues to successfully develop it was very encouraging to observe, and hear from all those involved, how well testing was going thus far, as well as observing the energy, enthusiasm and dedication shared by all those involved in the programme.

"UK personnel are an integral part of the programme as one of the key Partner Nations."

The Short Take Off and Vertical Landing (STOVL) aircraft will give the RAF and Royal Navy a multi-role combat aircraft able to operate from a number of locations including the Queen Elizabeth Class Aircraft Carriers. They feature the latest stealth capabilities alongside intelligence, surveillance, target acquisition and reconnaissance (ISTAR) technology.

Air Marshal Bollom said: "The

trials provided valuable inputs and observations for the programme, not least proof of the excellent collaborative work between the UK and the USMC. Evidence and experience gained will help provide the basis for future UK deployments of what will be a genuinely transformational aircraft."

In February this year, the No 17 (Reserve) Squadron UK's first F-35B Lightning II Squadron, consisting of pilots and engineers from the RAF and Royal Navy, came together at Edwards Air Force base in California. They are responsible for the operational test and evaluation of the UK's Lightning II aircraft.

Last month the first trials were completed on the release of an inert 500lb Paveway IV Precision Guided Bomb from an internal weapons bay. Paveway IV is a state of the art precision guided bomb equipped with the latest Global Positioning Guidance technology.

These tests are an important step in weapons integration, allowing pilots to understand how they affect the way the aircraft performs and handles.

Below: CDM and COM(A) on-board USS Wasp





When you've got less than a second.
And no second chance.

The surface-to-air threat to rotary-wing aircraft continues to escalate, putting the lives of aircrew at risk as never before. Our advanced defensive aids systems help redress the balance by giving helicopter crews an integrated and fully automated self-protection capability that dramatically increases survivability. Scalable to suit the requirements of every helicopter platform, they combine multi-spectral threat warning sensors, advanced control system logic and optimised countermeasures deployment to counter incoming threats without the need for crew intervention.

Selex ES. The power of one.

Defence and Security.

www.selex-es.com

follow us or:



Selex ES

A Finmeccanica Company



Above: *HMS Argyll* in dry dock at the Royal Dockyard, Devonport

T23 programme progress

The Type 23 support programme has reached two important milestones as *HMS Argyll* arrives at the Devonport Royal Dockyard to take part in a new life extension programme and *HMS Monmouth* recently left the same site to commence sea trials following a successful docking period.

The docking period on *HMS Argyll* at Devonport Royal Dockyard marks the official start of the Type 23 life extension programme.

The ship will be the first to undergo the Life Extension (LIFEX) Upkeep for Type 23 frigates – an extensive programme of capability update and upgrade developed and co-ordinated through the Surface Ship Support Alliance (the MOD, Babcock and BAE Systems).

Led by Babcock, the LIFEX programme brings together major changes to equipment and systems, encompassing the Capability Sustainment Programme (CSP) and the opportunity to address equipment

obsolescence, as well as extending the life of the hull and superstructure to operate well beyond its original design life. The programme will help to de-risk the future transition into service of the Type 26 Global Combat Ship.

Among the major upgrades and updates under the CSP, *HMS Argyll* will be the first of class to receive the Future Local Area Air Defence System (FLAADS), or Sea Ceptor, replacing Sea Wolf as the primary weapon system. In a further first, *Argyll* will see a significant change to the chilled water system with the introduction of a ring main.

Type 23 frigate *HMS Monmouth* left Devonport Royal Dockyard in mid-June to commence sea trials following a successful docking period undertaken by Babcock involving a programme of upgrades and deep maintenance.

HMS Monmouth now has improved sustainability and fighting capability as a result of a number of upgrades and improvements including Radar 966 replacement with Artisan 3D

Medium Range Radar 997, Vertical Launch SeaWolf midlife update, the installation of Automatic Small Calibre Guns, galley updates, installation of a chloropac system that reduces marine growth in the pipe system, and modifications to high pressure air systems to allow safer isolation of distinct sections.

Following several weeks of sea trials *HMS Monmouth* is due to return to the fleet in September, marking completion of the upkeep programme.

Captain Jeremy Bailey, head of the Type 23 support programme at DE&S, said:

“We have seen excellent progress on Type 23 support, and the start of the life extension programme with *HMS Argyll* is a big step forward, taking onboard lessons identified in the recent delivery of upkeeps on *HMS Sutherland* and *HMS Monmouth*.

“We know that there is still more to do however, and are looking forward to ensuring that the Type 23 class continues to operate well into the next decade for the Royal Navy.”

Abbott Risk Consulting Ltd



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

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

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

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

ARC is committed to equal opportunities to all

THE SUNDAY TIMES

BEST SMALL
COMPANIES
TO WORK FOR
2015



AIR + LAND + NAVAL + SECURITY + MEDICAL + UNMANNED

DSEI

15 - 18 September 2015

The World Leading
Defence & Security Event

ExCeL, London www.DSEI.co.uk

Register now to attend key briefings from:



Admiral Sir George Zambellas
KCB DSC ADC DL FRAeS



General Sir Richard Barrons
KCB CBE ADC Gen



General Sir Nicholas Carter
KCB CBE DSO ADC Gen



**Air Chief Marshal Sir Andrew
Pulford** KCB CBE ADC

**REGISTER
NOW
FOR EARLY
BIRD DISCOUNT**

Register NOW on:
www.DSEI.co.uk/book

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

Plus, attend the DSEI 2015 Strategic Conferences:



**The First Sea Lord/RUSI International
Sea Power Conference**
14 September 2015, ExCeL London



**The Future of Military Rotorcraft:
2030 and Beyond**
14 September 2015, ExCeL London



Trauma Innovation Conference
14 September 2015, ExCeL London



Ebola Learning Exploitation
15 September 2015, ExCeL London

Supported by



Defence & Security
Organisation



Platinum



Headline Sponsors

GENERAL DYNAMICS

Gold

NORTHROP GRUMMAN

Organised by



DSEI Previews

100
DAYS
OUT

DSEI
15 - 18 September 2015
The World Leading
Defence & Security Event
ExCeL, London www.DSEI.co.uk

DEFENCE AND SECURITY EQUIPMENT INTERNATIONAL (DSEI) is the largest integrated defence and security exhibition in the world, focusing on key sectors such as air, land, naval and security. Hosted at ExCeL London every two years, DSEI continues to be recognised internationally as the market leading exhibition for land, sea and air applications of defence and security products, technology and services.

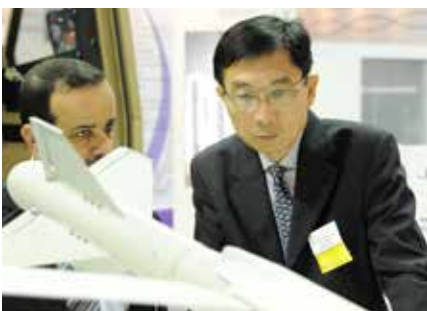
Organised by Clarion Events, DSEI 2015 is expected to attract more than 32,000 visitors, including 150 programmed delegations from over 60 countries, and over 2,800 global VIPs. Breaking all previous records, the event is set to showcase more than 1,500 exhibitors from over 50 countries. It is the must-attend event of 2015 with more exhibitors, zones and demonstration content than ever before.

All four UK MOD Service Chiefs of Staff are attending and will give keynote speeches in the exhibition floor theatres: Admiral Sir George Zambellas, First Sea Lord and Chief of the Naval Staff of the Royal Navy; General Sir Nicholas Carter, Chief of the General Staff, British Army; Air Chief Marshal Sir Andrew Pulford, Chief of the Air Staff, Royal Air Force and General Sir Richard Barrons, Commander Joint Forces Command, will speak on days that are themed for their individual Services.

In addition to the Service Chiefs and reflecting the increased level of content for 2015, DSEI will host around 300 seminar sessions and keynotes across seven theatres and four strategic conferences facilitating knowledge sharing and networking around key topics and technical areas. DSEI's seminars will address the challenges, developments and future of the Defence & Security sector's ever-changing landscape providing the global platform of choice for key government figures and influential policy makers within the sector. The seven theatres are: Air, Naval, Land, Security and Special Forces, Medical Innovation, Unmanned and Global Partnerships.

International breadth

To date over 40 international pavilions have a presence at DSEI 2015, which will provide exclusive opportunities to build partnerships with international business suppliers and visitors.



New countries attending for the first time include Malaysia, Latvia, and Lithuania. Nations returning to this year's edition include: Australia, Brazil, Chile, France, Germany, Holland, India, Israel, Italy and Switzerland. A number of pavilions are expanding for 2015 such as the UK, US, Turkey, Japan and South Korea.

Senior military from around the world will be in attendance. DSEI will feature a strong international speaker line up including: Admiral Carlos Ortega, Mexican Navy; Admiral Nguyễn Văn Hiến, Commander Vietnam People's Navy; Lt Gen Alexander Schnitger, Commander, Royal Netherlands Air Force; Rear-Admiral Bernard Blejean French Navy –ALRI; and Rear Admiral Tony Dalton, Head Helicopters, Unmanned Aerial Systems and Guided Weapons Division (HUG-D), Australian Defence Organisation.

Themed Zones

At DSEI 2015, six themed zones will make it easier for visitors to meet exhibiting companies and view their associated products, either on their stand, in a static display or in a realistic demonstration scenario. Focus areas include, but are not limited to: Air Zone; Land Zone; Medical Innovation Zone; Naval Zone, to include waterborne demonstrations; Security & Special Forces Zone; and the Unmanned Zone.

Each zone will have a dedicated theatre area where visitors can attend free educational sessions that are designed to showcase the latest technologies. Visitors to the exhibition can listen to panel and individual discussions on a wide range of subjects including: best practices and innovations within the medical field; future maritime mine warfare and anti-piracy; synergies and lessons learned between defence and the civilian arena reflecting the increased co-operation and partnership between large security companies and defence primes.



Strategic Conferences

Reflecting the increased level of content for 2015, DSEI will stage four new high-level conferences focused on the future strategy of maritime defence, rotorcraft technology, front line medical services, and lessons learnt from the recent Ebola epidemic. The DSEI Strategic Conferences, which will take place at ExCeL on Monday 14 September and Tuesday 15 September, will provide opportunities for top industry professionals, academics and members of the military to discuss and debate these important topics. As is customary for Clarion Events, attendance will be complimentary for members of the military and accredited media.

Admiral Zambellas will be giving the keynote address at 'The First Sea Lord/RUSI International Sea Power Conference', which will provide an excellent conceptual component to the already strong maritime element of DSEI 2015. Recognising the unique opportunity for international engagement ahead of DSEI, the conference will provide a platform for exploring thinking from across the globe on the strategic responsibilities fulfilled by navies in the contemporary and future maritime environment.

Brigadier Tim Hodgetts CBE, Medical Director at Defence Medical Services (DMS) will be the keynote speaker of the 'Trauma Innovation' strategic conference. Trauma Innovation will showcase cutting edge trauma developments. Designed in partnership with DMS, the agenda has three themes: Legacy of Conflict; Future Conflict; and Conflict Research.

The 'Future of Military Rotorcraft: 2030



and Beyond' conference will examine the drive to develop military rotorcraft beyond their current traditionally limited operational capabilities. It will involve an in-depth discussion of the US' Future Vertical Lift (FVL) Programme. The United States' Department of Defence is developing their next generation of vertical lift utility and attack rotorcraft that will offer, at a minimum, significantly increased speed and range. Major General Richard Felton, Commander, Joint Helicopter Command, will provide the keynote speech here.

Air Marshal Paul Evans, Surgeon General of Defence Medical Services (DMS) will chair the 'Ebola Learning Exploitation' strategic conference which will be staged during the first day of DSEI, Tuesday 15 September. It will review the DSMS role in the UK response to the 2014-15 Ebola outbreak in West Africa, particularly Sierra Leone. Dr Jennifer Cole, Senior Research Fellow, Resilience & Emergency Management, Royal United Services Institute (RUSI) will give the keynote speech

Impressive air showcase

The air component at this year's event will address the frontline operational requirements and support functions available to the aerospace sector. A range of static displays are expected to include a Sea King helicopter, Merlin, Wildcat, and Eurofighter Typhoon multi-role combat aircraft, among others.

The Air Zone has grown notably in the last few years and 2015 will showcase an impressive variety of exhibiting aerospace companies. Leading aerospace primes including Airbus Defence & Space, Bell Helicopters, Saab AB, Lockheed Martin, Boeing and Northrop Grumman will all be present, in addition to a host of global supply chain providers, such as: Aero Tec Laboratories, Copper and Optic Terminations, Helmet Integrated Systems, IA Technology, Linwave, Lyra, Metis



Aerospace, Mototok International GmbH and PPG Aerospace.

Building on its participation at DSEI 2013, the Royal Air Force has demonstrated full support of this year's event. Air Vice-Marshal Malcolm Brecht, Chief of Staff Air Capability, said: "DSEI 2015 enables us to highlight themes that will influence future UK air capability, and we will continue to pursue the excellent opportunity that DSEI 2015 provides to engage in high-level industry briefings and bilaterals".

Largest land focus

DSEI 2015 will see the largest Land Zone to date which is evolving to provide even more suppliers, content and diversity. There will be more than 70 dedicated stands, and more exhibitors offering land capabilities outside the Zone. A sample of land providers include leading players in the global industry, ranging from prime contractors to niche specialist suppliers such as BAE Systems, General Dynamics, Jankel Armouring, JCB Government & Defence, Land Rover, Patria Oyj, Rheinmetall and Supacat.

The vehicle display area is being

expanded this year following its success in 2013. Iveco are planning to bring three vehicles. Supacat are expanding their presence and are launching a new product range at the show. First time exhibitors, Isotrex Manufacturing FZE, and CS – Force Company are also launching new products. The latter are to unveil three models of a new fast patrol vehicle, a lightweight, versatile, high performance platform with all terrain capability. CS – Force Company will be showcasing the three prototype vehicles on its stand at DSEI: Talos – a 2/3 seat patrol vehicle; Balaur - a 4/5 seat extended version available in various production options with higher payload areas; and Hexing – a 2 seat vehicle for extreme areas where wading deep water is required and areas of extreme mud or similar environments.

Mark Parry, Director, CS – Force Company said: "I see DSEI 2015 as being the perfect show and the ideal opportunity for us to unveil our initial line up of vehicles to the Defence and Security community."

A 'Future Soldier Systems Showcase' in the static display area is being launched for the 2015 edition of DSEI. Another important development, the showcase will provide an additional platform for exhibitors to display land focused capabilities, discuss new technologies, trends in combat clothing, tactical requirements for national soldier systems and other key issues.

The British Army is again planning to deliver a strong presence at DSEI 2015. Lt Gen Mark Poffley, Commander Force Development and Capability said, "Recent events have highlighted the need for an integrated and persistent security response across a wide spectrum of operations. The British Army is reconfiguring to meet the challenges of the contemporary security environment. An important part of this adjustment is establishing a close relationship with its industrial partners, seeking out innovative and relevant solutions as part of the DGP and exploiting mutually beneficial agendas to defeat those who threaten our security."





FUTURETECH

Kärcher Group

Visit us at DSEi

The World Leading
Defence & Security Event
15. - 18. September 2015
ExCeL, Exhibition Center
London, United Kingdom

German Pavillion Booth No. S6-428

More infos:
www.kaercher-Futuretech.com

ENGINEERED TO ENSURE YOUR BEST PERFORMANCE.

Cage Based Modular Decontamination System



Isode

Software for High Grade Messaging

Isode Ltd has been supplying reliable, secure messaging server software to the armed forces of the UK, NATO and Allied nations for over 10 years.

Our Interoperability gateway software includes support for ACP127 (including broadcast and ship to shore), ACP145, SMTP and STANAG 440.

For more information on how Isode products can enhance your high grade messaging systems.

www.isode.com

info@isode.com
+44 (0)20 8783 0203
twitter: @Isode_Ltd



Expanded maritime displays and demos

A popular highlight of DSEI is its line-up of international warships and the event's organisers are working closely with various nations to provide more variety and higher numbers of visiting vessels this September. To date DSEI has secured six ships which will include (subject to operational requirements): a frigate, minehunter and offshore patrol vessel from the Royal Navy, a K130 class corvette from the German Navy, a brand new offshore patrol vessel from the Belgian Ready Duty Ship Programme, and the Indian Navy is planning to send a frigate which is part of an Indian squadron visiting Europe. This will be the first time an Indian Navy ship has come to London.

This year's event will also stage its most extensive waterborne demonstration programme and in depth scenarios, encompassing current and future threats to maritime security and naval warfare. There will be around a dozen vessels undertaking demonstrations, with two performances per day.

Security

Security is another growth area: this year the Security Zone will be bigger than in 2013 and will include a cyber security zone. A record number of first time exhibitors will be showcasing their capabilities covering a broad spectrum of security and counter terrorism disciplines. A vital area given the domestic dangers the UK police now have to deal with daily; DSEI 2015 will provide a window towards mitigating the most prevalent security threats faced by services across the UK and around the world.

The Zone will operate in conjunction with the Cyber Security Pavilion to host a series of eminent speakers from leading security organisations, alongside a broad mix of exhibitors which already include; 3D Laser Mapping, Abloy UK, Analysed Images Ltd, Beijing V-great International Trade Co., Ltd, Covert Hides, Defence Vision Systems, Digital RF, Extradordinary Editions Ltd, International Armored Group, Lyon Equipment Ltd, PROCentrum Equipment BV and Respirex International.

Unmanned Systems

Following the award winning success of the inaugural Unmanned Zone, a series of stakeholders, including the Association for Unmanned Vehicle Systems International (AUVSI), have continued their support for 2015.

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

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

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

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



Medical

The introduction of highly focussed combat training courses, combined with an increase in medical combat innovation over recent years has led to a significant decrease in the number of preventable deaths occurring in modern conflict. These important developments, which continue to take place in military healthcare, will be highlighted within an expanded Medical Innovation Zone at DSEI 2015, reflecting the rising requirements of medical personnel within the armed forces.

The Medical Innovation Zone will feature products and technologies with applications in humanitarian as well as military domains. The latest equipment from a diverse range of new exhibitors such as Exmed, Cellox, Laerdal, Military Medical Personnel, Philips Healthcare, Prometheus Medical and Ryoze will be on show. The zone will host more demonstrations and seminars than previous years and has full support from the Defence Medical Services (DMS) and Joint Forces Command (JFC).

A highly topical medical issue, exploiting the learnings from the Ebola outbreak, will be the subject of a high level Strategic Conference to be held in ExCeL London on Day 1 of DSEI – Tuesday 15 September. A Trauma Innovation conference will be held in partnership with DMS the day before.

“With increased content, more keynotes, new strategic conferences and enhanced waterborne and medical demonstrations, DSEI is the must-attend event in 2015. Offering the opportunity to meet, network and engage with more exhibitors from primes to SMEs, VIP delegations, colleagues and visitors than ever before, it will be a unique meeting point for the defence, aerospace, maritime, security, unmanned and medical industries. DSEI will once again be a platform to research, procure, understand new products and services, plus meet and do business with the whole supply chain.” said DSEI Event Director, Duncan Reid.

For more information please visit www.DSEI.co.uk

The 2015 edition will feature an improved and streamlined registration and entrance process, with a 10% discount for uniformed military in the North Hall catering areas, and improved access from the East.

DSEI will be held at ExCeL London from 15-18 September 2015. www.DSEI.co.uk

Registration is now open on www.DSEI.co.uk/signup. Industry and Academia can book at a discounted rate until 30 June 2015. Military and Public Sector personnel can attend for free.

DEPLOYABLE DATA CENTRES FOR ALL OPERATIONAL ENVIRONMENTS.



Workspace Technology provides modular designs to match any physical or technical requirements, delivering the most comprehensive range of Mobile and Modular Data Centre pods available.

Our experienced ex UK military personnel ensure the delivery of fully compliant modular, energy efficient, data centre design and build solutions.

For more information call us on **0121 354 4894** or visit us at **www.workspace-technology.com**.



DSEI

**DIVERSE, HIGH PERFORMANCE
MOBILE AND MODULAR DATA
CENTRE SOLUTIONS**

Stand S9 243 on
15 18 September 2015
ExCel, London.

Creating an effective
workspace environment



Delivering Excellence Through Innovation & Technology



1915 – 2015: 100 YEARS OF DEFENCE ENGINEERING

From the design and development of the Mark V tank engine to the complete vehicle design, development and manufacture of the Foxhound.

- Engines
- Driveline and transmission systems
- Hybrid and electric systems
- Vehicle systems

www.ricardo.com/defence



Tel: (UK) +44 (0)1926 319319 (US) +1 734 397 6666 Email: defence@ricardo.com

2015's Medical Innovation Zone

Defence and Security Equipment International (DSEI) 2015's Medical Innovation Zone is set to have greater presence than ever at the exhibition, to be held at ExCeL London from 15-18 September. The zone will host more demonstrations and seminars than previous years and has full support from the Defence Medical Services (DMS) and Joint Forces Command (JFC) as well as numerous exhibitors, including Phillips and Blatchford Medical.

Military medicine is one of the most important investments for all militaries and has been at the forefront of medical innovation throughout history. The First World War introduced much modern medicine to the world, with the Thomas splint finding its first use during the war, plastic surgery being carried out for the first time in 1917 on a soldier requiring facial reconstruction and blood transfusions successfully being conducted on the battlefields of France by the Allies in the same year. The Second World War saw the first effective use of penicillin to control infection and the Korean War saw the introduction of helicopters as ambulances.

Such significant improvements and innovations to medicine have led to a considerable increase in the number of survivors, and today, this continues. Recent military campaigns have been associated with a revolution in combat casualty care treatment and outcomes from critical injury. Indeed, the outcome has been demonstrated to incrementally improve even despite a progressive increase in the documented severity of injury. This 'revolution' has been a combination of innovation in concepts, organisation of the military trauma system, and advances in technology.

These themes are embedded in the Medical Innovation Zone at DSEI. This zone aims to support greater innovation through bringing medical industry and services together, and further advances in technology by providing a shop window for the latest equipment in the medical domain. Hosted at ExCeL London every two years, DSEI continues to serve as the premier meeting place for global defence and security communities. Organised by Clarion Events, DSEI 2015 is expected to attract more than 32,000 visitors, including 150 programmed delegations from over 60 countries, and over 2,800 global VIPs. Breaking all previous records, the event is set to showcase more than 1,500 exhibitors from over 50 countries.

Running alongside the Medical Innovation Zone, will be two medical conferences as part of DSEI's new Strategic Conferences programme, with a Trauma Innovation conference held in partnership with DMS on 14 September, and a conference on the 15 September on Ebola Learning Exploitation, with an introduction from the Surgeon General of DMS, to review DMS's response

to the 2014 outbreak in West Africa. These two conferences will set the scene for the Medical Innovation Zone through the week, with trauma innovation playing a significant role as new developments and research in casualty care are shown in the demonstrations during the main exhibition, along with capability demonstrations for managing personal safety while treating the critically ill within an Ebola virus treatment unit.

The themes of the presentations run also through the exhibition. The extensive exhibition demonstrates the latest advances in patient care from the point of injury or illness through the entire treatment pathway to rehabilitation. In the zone there will be thematic areas that will illustrate this pathway through the different stages of patient care for onlookers to experience:

Battlefield Advanced Trauma Life Support (BATLS) - The appropriate response in the 'platinum' 10 minutes following a trauma event has been shown to dramatically improve/increase survivability. Instructors from the Defence College of Healthcare Education and Training (DCHET) will demonstrate how military medics are trained to provide the care in the most demanding of circumstances.

Medical Emergency Response Team (MERT) - Significant medical advances were made in the provision of pre-hospital emergency care during the Afghanistan era. MERT provide a consultant led emergency medicine response for seriously injured patients, during transit of the patient to a field hospital. The MERT stand will demonstrate how they have developed into a world class emergency medicine response to injured personnel on operations, by projecting SMEs forward to the point of wounding.

High Altitude Military Medicine Research Stand - Mountainous terrain provides sanctuary for hostile forces, particularly terrorist organisations. Many military operations require the rapid deployment of troops to these mountainous regions. However, rapid ascent of un-acclimatized troops to high (>1200m) mountainous environments causes debilitating effects on fighting capabilities

(physical and cognitive work performance) and force health status (altitude sickness). The high altitude stand will showcase current research in this area.

There will also be a wider range of demonstrations, from resuscitation presentations coordinated by an Emergency Medicine consultant to surgical simulations, with the use of a synthetic torso used by DMS surgeons during training. Furthermore DSEI will host around 300 seminar sessions and keynotes across seven theatres including medical seminars that will add yet more educational content to an already extensive offering.

Advances in technology will be on display as well, with portable, lightweight DR Go Digital Radiography equipment set up on display, and modern military scientists compact cases. This year there will be even more of a focus on psychological illness, with a display highlighting 100 years of military psychological treatment, a decade of military mental health research and innovative mental health care support. As mental health is increasingly openly discussed, this section of the Medical Innovation Zone will interest many.

The Medical Innovation Zone will provide a forum for networking, debating and challenging international medical leaders, and is an opportunity to see some of the latest advances in medical innovation live in demonstration as well as insights into the future breakthrough advances in military medical care.

For more information please visit www.DSEI.co.uk

The 2015 edition will feature an improved and streamlined registration and entrance process, with a 10% discount for uniformed military in the North Hall catering areas, and improved access from the East.

DSEI will be held at ExCeL London from 15-18 September 2015. www.DSEI.co.uk

Registration is now open on www.DSEI.co.uk/signup. Industry and Academia can book at a discounted rate until 30 June 2015. Military and Public Sector personnel can attend for free.



T&E begins here



All images © MOD Crown Copyright

QinetiQ and the MOD working together to provide **Test, Evaluation and Training Support Services**

www.LTPA.co.uk

Civil Service chief praises the work of all civil servants across government



In his first DE&S Town Hall, John Manzoni, the recently appointed Chief Executive of the Civil Service, praised the work of all civil servants, shared his top priorities for the public sector and congratulated DE&S for leading the way on 'functional alignment', a model he would like to implement for all civil servants going forward.

"We have an incredibly committed and dedicated workforce," said John.

"People become civil servants because they want to do something for the good of others; this is something we need to hold on to and build on."

John was appointed Chief Executive six months ago into what was a completely new role and direction for the Civil Service and since then has been shaping his thoughts on what and how the Civil Service needs to transform to enable it to work smarter, especially given the continuing pressure to reduce costs.

Top of his priority list is 'People'. John aims to increase the level of importance placed on the development of individual skills and experience and wants to help foster a culture of professionalism and specialisation of roles. He would like to see all new recruits into the Civil Service having a dedicated career path as well as creating a range of opportunities for the on-going development of existing staff. "This change in approach will take time to achieve but by building a solid foundation, real transformation can start to happen," he explained.

John congratulated DE&S on leading the way in aligning staff skill sets to wider functional management to deliver more effective and smarter ways of working and intends to adopt this model across the Civil Service by shaping a

culture of joint government working with aligned strong functional roles such as Commercial, HR and Technological.

Performance Management is another area John will be focusing on over the coming months. He shared his desire to simplify how we measure performance across government highlighting that existing technology is not conducive to effective working. We need to be able to share information and resources across departments and improving the technology whilst challenging, is a crucial piece of the jigsaw puzzle in delivering improvements.

The final priority on John's list is 'Leadership'. In concluding his presentation, he shared his interesting perception of how leadership is viewed and his vision for the future stating "we are here to serve the government of the day and need to look upwards but that doesn't mean we can't be proactive and show leadership ourselves. I want to empower civil servants, create an environment for staff to be leaders, to be able to shape their own destiny and career and to feel confident to make decisions and effect change for the better. Without empowered civil servants, any changes would be meaningless."



John Manzoni is shown Soldier Systems Technology (see pages 30-31 on VIRTUS)



PEOPLE WHO KNOW HOW
**TO HELP YOU
SECURE
OPERATIONAL
ADVANTAGE**

Through their technical expertise, know-how and rigorous independent thinking, our engineers and scientists are uniquely placed to help customers meet challenges that define the modern world. Our prized possession is trust.

We inspire confidence by working in partnership with our customers to ensure that they meet their goals, first time, every time.



VIRTUS

DE&S Survivability team in Soldier Training and Special Programmes (STSP) have been out on Salisbury Plain for the final design trials for VIRTUS, the new personal protection and load carriage system for the British armed forces.

The new equipment is scalable meaning the level of protection can be adjusted to meet the threat level. It is also integrated which will improve the wearers ability to perform the full range of military tasks.

The complete system is comprised of a scalable body armour vest and chassis system, helmet and face protection, including ballistic glasses, ballistic goggles and a visor, as well as load carriage which includes a 90L Bergan, 40L daysack and Commanders 40L daysack.

The Preliminary Design Review assessments follow a three-year rigorous development programme, including a large number of military trials which involved a range of development teams and trials troops from a wide range of units. The system will now go into full production with delivery expected in the autumn.



Pictures: Andrew Linnett

Fallon cuts steel on 2nd

DE&S Director of Ship Acquisition Rear Admiral Henry Parker joined Michael Fallon, the Secretary of State for Defence, for the steel cut of the second of three new Royal Navy offshore patrol vessels (OPVs) at a ceremony in Glasgow.

The vessels will be used by the Royal Navy to undertake various tasks in support of UK interests at home and abroad. They are currently being built at BAE Systems' shipyards in a £348 million contract.

The second OPV, *HMS Medway*, is the eleventh ship to bear the name

in the Royal Navy with the first being commissioned in 1694. The tenth *Medway* was the former tank landing craft LCT 1109, launched in Alloa in April 1944.

The first OPV *HMS Forth*, whose first steel was cut by Sir Bernard Gray, Chief of Defence Materiel, in October 2014 is progressing to schedule. The third will be called *HMS Trent* with first steel set to be cut later this year.

At the event at BAES' Govan facility on the banks of the River Clyde, RAdm Parker said: "Together with her sister vessels *Forth* and *Trent*, these modern

patrol ships will offer the Royal Navy flexibility to operate in a variety of roles to ensure the protection and integrity of the territorial and economic waters of the United Kingdom and its overseas interests."

The 90-metre OPV builds on the proven capability of the existing River Class Patrol Vessels. Engineers at BAE Systems have modified the design, ensuring it meets the requirements of the Royal Navy.

The vessels include a modified flight deck capable of operating the latest Merlin helicopters, can carry increased stores and have additional accommodation both of which increase flexibility, for example for disaster relief operations. The ship will be armed with a 30mm cannon, travelling at speeds up to 24 knots with a range in excess of 5,000 nautical miles.

Mr Fallon, who started the computer-guided plasma cutter to cut the first piece of steel, said: "*HMS Medway* will prove herself on the high seas, countering terrorism, combating piracy, stopping smugglers while defending UK waters.

"This ship will be able to head off trouble over the horizon and keep Great Britain and our people safe."

Building the OPVs on the Clyde is not

Steel is cut on the second of the Royal Navy's three OPVs

They will undertake various tasks in support of UK interests at home and abroad

Commitment to shipbuilding in **Scotland**

HMS MEDWAY; an historic name, with the first ship commissioned in 1694

A Royal Navy ship for the United Kingdom

Width: 13 metres

length: 90.5 metres

24 KNOTS
Maximum speed

The ship will be armed with a **30mm CANNON**

800 JOBS
will be sustained on the Clyde with the £348 contract

RANGE 5,500
nautical miles



OPV

only sustaining important shipbuilding skills between completion of the Queen Elizabeth Carriers and start of the Type 26 Global Combat Ship build, but is also testing new and more effective ways of working. Investments in new technologies and improved infrastructure will play a key role in transforming the design and build of complex warships.

This includes schedule based working, a new logistics partnership with Wincanton, visualisation technology and electronic procurement capability.

Initial assembly of the first hull sections for *Forth* is expected to start in the next month. This will involve the joining of two of the lower aft hull sections which will form part of the ship's keel. Further hull sections will progressively be joined together over the course of the year.

MARS Tanker

ANOTHER TWO SIGNIFICANT

MILESTONES have been achieved in the Military Afloat Reach and Sustainability (MARS) Tanker build. On 8th June at DSME's shipyard in Okpo, South Korea, the Keel was laid of *RFA Tiderace*, the second of four TIDE Class Tankers, followed shortly by the steel cut of *RFA Tidesurge*, the third of Class.

The MARS Tankers will maintain the Royal Navy's dedicated bulk fuel Replenishment At Sea capabilities, supporting individual warships and will be seamlessly integrated as part of Task Groups, including Carrier Strike and Littoral Manoeuvre operations, and as part of Future Force 2020. In addition the vessels provide a flexible capability to undertake a wide range of maritime operations, such as constabulary and humanitarian relief,

and provide support to NATO and coalition allies. The first tanker, *RFA Tidespring*, is expected to enter in to service Summer 2016 with all Tankers in service in 2018.

Defence Equipment and Support (DE&S) Head of Commercially Supported Shipping, David Farmer said;

“These events are significant achievements for the project and future Maritime capability in the round, especially when you consider that just a few hours after DSME cut-steel on *RFA Tidesurge* here in South Korea, steel was also cut on the second of the new batch of OPVs back in the UK.

Three of the four MARS Tankers are now in build, with the fourth getting underway later this year. Achieving this barely three years after contract award is a real testament to the efforts of all involved, especially the DE&S team in the UK and South Korea.

I look forward to seeing the first of Class, *Tidespring*, arrive in the UK this winter for Customisation & Capability Trials”

The Customisation will include the fit of sensitive/classified equipments that were excluded from the main build contract such as self defensive weapons, ballistic protection and communications systems, and support to Capability Assessment Trials and provision of In Service Support once accepted into operational service through to 2018.



Above: Defence secretary Michael Fallon cuts steel for *HMS Medway*



RFA Tidespring



Mr Voyager on PFIs, seizing the day and golf

Chris Dell leads the Strategic Transport and Air To Air Refuelling Project Team which has had responsibility for the support and delivery of VC10 (the Queen of the Skies) and Voyager. With the retirement of VC10 the much smaller team of 36 is responsible for the Type and Continued Airworthiness of the platform, the management of service delivery and exploitation of the Voyager PFI contract which has an overall value of £10.5bn for a service until 2035.

A brief outline of your career.

I suppose my later career has three pillars: International, PFI Contracting and Project leadership roles. On the international front I was lucky enough to have two tours in Germany in commercial roles on Tornado and I also led the Meteor international project office commercial team. On a more strategic level I worked on military commitments in the near and far east a period that encompassed the first Gulf war. I worked on the MOD's first PFI's for training and simulation in what is now FSaST. I also had responsibility for running the Attack Helicopter training solution and of course Voyager. I had early experience of leasing when in Procurement Policy trying to lease aircraft to the French (we never quite pulled off the deal). When in DPP I was also deeply involved with the negotiations of the GEC takeover of Plessey; a fascinating insight into government decision making. I have had two project leadership roles firstly as Attack Helicopter Deputy Team Leader and since 2009 STAAR Team Leader. Both challenging and immensely rewarding jobs.

What has inspired you in your career?

The people I have worked with both in the MOD and the private sector. I have always been struck by the commitment and drive of people in Defence and have learnt from so many dedicated and skilled individuals who are motivated by, the uniqueness of what we do to support the armed forces.

You've worked on one of the largest Air programmes, what has that been like?

This programme is fascinating stemming from the contract structure but also along with VC10 what we have collectively delivered. The air sector has gone through considerable change recently to keep the Voyager commercial solution in line with the changes has been shall we say interesting. I have

enjoyed every minute of it although at times it has been very, tough for me and the team.

How have you kept your team motivated?

In some respects I don't have to do much. Since Voyager has been in service it has been involved in two operations and before then VC10 performed magnificently in the Libyan crisis in 2011. The team can see its direct effect on international events – what better motivation could you need? I also try to ensure that we keep the Brize Norton and Abbey Wood teams close and for the Abbey Wood teams to be able to get to Brize to see the aircraft and the superb facilities that have been built there to support the aircraft.

What advice would you give someone starting their career in DE&S?

Take every opportunity that comes your way and you will end up doing

things and going places most people in the private sector could only dream of.

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

Two things: Delivering Voyager to Performance Time and Cost; without question but also seeing the people I have mentored and coached over the years finding success in MOD.

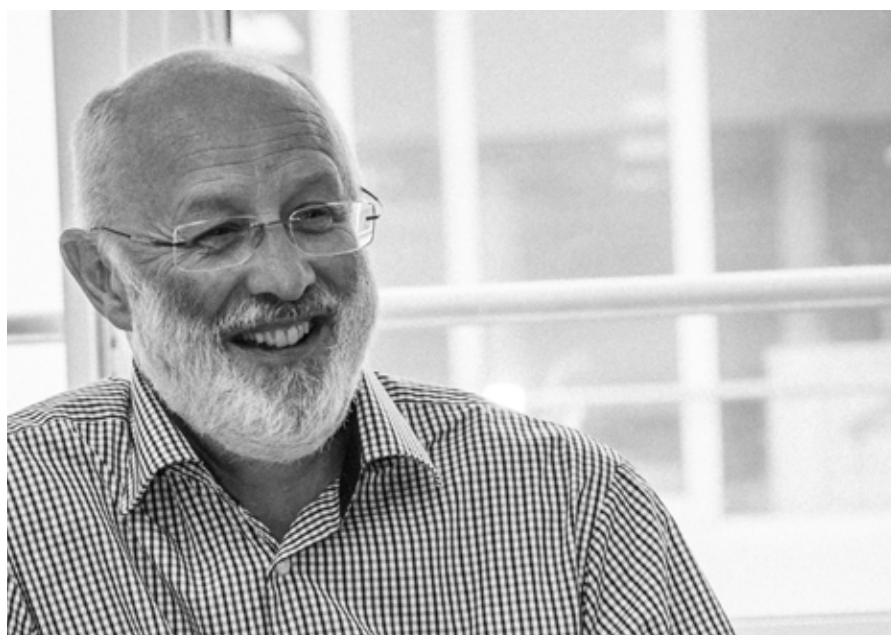
Relaxation out of work?

I'm learning to play golf it can only get better!

Something we don't know about you?

Until recently I coached a junior football team although my sport is rugby (come on you Bath!).

See page 47 on Voyager Masterclass



Pictures: Andrew Linnett

Crowsnest

A “critical” milestone in the programme to deliver a new helicopter-based surveillance system for the future Queen Elizabeth Class carriers and the wider Royal Navy Fleet has been reached after Thales was selected as the preferred bidder to provide the radar and mission system at the heart of the Crowsnest capability.

The Thales solution for Crowsnest is planned to be integrated onto the Merlin Mk2 helicopter to act as the Royal Navy’s ‘eyes and ears’ giving long range air, maritime and land detection.

Two years after approval was given for the assessment phase, the DE&S team working on Crowsnest said there was a sense of “pride and excitement” as they now look ahead to Main Gate approvals in 2016.

“A lot of work has gone in to getting us to this point, which was a critical milestone for us”, Crowsnest programme manager Andrew Wood said.

Working alongside Lockheed Martin UK, as the prime contractor under a £27 million contract, the assessment phase for Crowsnest started in earnest in September 2013 when the competition criteria were published.

Over the last two years, DE&S has had “considerable” input in the down-selection including continuous evaluation of the bidders, design reviews, flight trials and a Capability and Performance Assessment (CPA).

“The CPA involved both competitors building a synthetic environment which simulates the mission systems,” Andrew said.

“Test scenarios were used to confirm it all worked – which it did for both competitors. After this there was an assessment made up of two blind scenarios, so we had two operators fighting the mission system as if it were a real war, and they scored points for how well they could ‘see’ the targets that were

out there.”

Final bids from the two competitors, Thales and Lockheed Martin Mission System, were submitted to the team in January with Thales announced as the preferred bidder in May.

If successful going through Main Gate, the primary role for Crowsnest will be force protection of maritime task groups, in particular the new Queen Elizabeth Class aircraft carriers, improving warning times from just seconds to minutes when compared to ship based radars.

“As targets are getting stealthier, you need better performance to give you the same warning times and obviously the Customer always wants better performance,” Andrew said.

“From altitude you can see over the horizon so you have advanced warning of incoming threats, which you can vector fighters on to deal with, or if you have sea-skimming missiles coming across the horizon you can cue the Type 45 to know where it is coming from and when.”

Director Helicopters, Air Vice-Marshal

Julian Young, added:

“In this key capability for UK Defence, we have accelerated our programme delivery strategy to sustain the capability seamlessly through our Merlin Mk2 helicopters as the Sea King Mk7 fleet retires from service in 2018, and we are confident that the programme will be delivered as planned.”



New world-class training Sims for RAF and Royal Navy

Defence Equipment and Support (DE&S) has signed two contracts worth a total of £80 million to provide new world class synthetic training equipment for the Royal Air Force and Royal Navy.

A £51 million contract with Lockheed Martin UK will support Chinook Mk 6 training and a £29 million contract has been awarded to AgustaWestland to provide Merlin Mk 4/4a aircrew Synthetic Training Devices. The simulators will be housed at military bases in Somerset and Hampshire with the two contracts providing around 130 jobs.

The equipment will give a realistic representation of the operating environments the crews will fly in and will enable them to practice manoeuvres and procedures safely and repeatedly to enhance their learning.

Air Vice Marshal Julian Young, Director Helicopters at DE&S, said:

“Simulation is a solution that, when blended with live flying events, provides the optimum individual and team-level training.

“Although it can never replace live training fully, being able to create a wide variety of training scenarios and operating settings can provide a more challenging, safer and controllable environment to help our forces practice in a way that is essential to effective mission preparation.”

The Chinook Mk 6 synthetic training service will be housed in a purpose built facility at RAF Odiham in Hampshire and will include two flight deck device simulators, a rear crew training device and a suite of computer based training facilities. The Merlin Synthetic Training Devices will be delivered from 2017 and installed in existing buildings at the aircraft Main Operating Base at RNAS Yeovilton

The contract with Lockheed Martin UK includes two years for the design and production of the equipment and the training facility, with a follow on ten year training service support package.

AgustaWestland has selected simulator specialist CAE to supply two Flight Training Devices, a Flight Navigation Procedures Trainer and a Rear Crew Trainer, which will be delivered from 2017 and installed in existing buildings.

Dr Iain Summers, Merlin Programme Manager, added: “The budget for training equipment was challenging so I am very pleased that the Royal Navy is getting everything DE&S hoped to deliver, including some new capabilities it has not had before.”

Lockheed Martin - as the Design Organisation for the Merlin Mk2 helicopter will now integrate the Thales mission system into its overall Crowsnest bid to DE&S, which will form the proposal taken to Main Gate approval in 2016.



Chinook cockpit upgrade fully operational

The Capability Director at Joint Helicopter Command (JHC) formally declared achievement of the Full Operating Capability (FOC) for the Chinook Project JULIUS cockpit upgrade, some six months in advance of its planned date and within budget.

Project JULIUS modifies the Mk2/Mk3 Chinook helicopters to Mk4/5 configurations by installing integrated “glass cockpit” displays and associated systems, addressing safety risks associated with legacy aircraft configurations. Since commencement of the project at the end of 2008, the industry team, led by Boeing and supported by major sub-contractors Thales, Vector Aerospace, General Electric, Martin Baker, QinetiQ and

AgustaWestland, has combined with the Chinook PT to ensure project success.

Gp Capt Ross Richards, Chinook Team Leader said: “Achieving FOC across the Chinook Mk4 Fleet service has required a Herculean effort but it was worth it - system performance has been a significant enabler for the Chinook Fleet in both Theatre and Contingent Operations.”

First flight of a JULIUS aircraft was achieved in December 2010 with Initial Operating Capability declared on 15th June 2012, a key milestone to provide support to Op OLYMPIC in London. The upgraded aircraft then also went on to operate in Afghanistan.

The joint MOD/Industry team improved delivery timescales to the

front line and progressively reduced the production time from 156 days to 108 days, delivering 33 converted aircraft into the operational fleet to date. Project JULIUS achieved Full Operating Capability on the 22 April 2015.

Throughout the project lifecycle the Joint DE&S/Industry team have employed an extremely proactive approach that has focused on delivering the improved capability to the service user in the most effective manner, supporting conversion of the squadrons to this new aircraft standard and ensuring safe and successful deployment on Operations.

“A culture of continuous improvement and inclusiveness across the team has seen aircraft deliveries being accelerated. This fantastic achievement is testament to the professionalism of everyone involved in the JULIUS Programme.”

Mark Geoghegan, Chinook Future Project Leader



When the gloves are off you need the right people in your corner.



Not everyone abides by the Marquis of Queensbury Rules. In fact some tactics employed by the opposition are more than below the belt. That's when you need the best people in your corner. The ones that can advise because of their experience and professionalism.

Optima Group is a leading, global provider of C-IED and Search capabilities. We deliver bespoke, threat specific consultancy, trials and training services to governments, development agencies and multinational corporations.

We specialise in developing capabilities that meet the threat, environment and user requirements. Our personnel are ex-military specialists with

unrivalled operational, training and capability development knowledge and experience supporting clients including the UK MoD and UN. A wholly independent UK company, Optima Group safeguards lives, organisations and reputations by designing and delivering solutions that meet the specific needs of our customers. IEDs are a contemporary threat affecting millions globally. It is for this reason that organisations trust us to train their personnel in order to keep them, and others, safe.

Proud supporters of



OPTIMA GROUP

Every threat is individual. So is our response.

www.optimagroup.co



DESIGN A HEAVY-LIFT AIRSHIP!
£5000 PRIZE MONEY

Can you generate ideas for the design and operation of a Heavy-Lift Airship?
The Schools Aerospace Challenge is the annual Team Design Exercise for 16 to 18 year olds.
This year we're tasking young thinkers with concepts for humanitarian support.

Join us for the Challenge at Cranfield University this summer:

- Learn about aircraft and aircraft engines
- Practice free fall parachuting in a wind tunnel
- Get airborne in the Jetstream Flying Classroom
- ...plus much more

To find out how you can take part go to www.aerospacechallenge.org



Follow @aerochallenge on Twitter

Find us on Facebook for information and inspiration



Airship artwork created by Kirt-Thomson Visual R&D Consultancy

MOTTO
the MOD Lottery
April winners

£10,000:
James Hargreaves (Plymouth)

£5,000:
Wayne Berriman (RAF Wyton).

£2,000:
Claire Sell (Paderborn).

£500:
Liam Grimshaw (Glasgow),
Carl Hussell (Kinnegar).

£100:
Stephen O'Leary (Thirsk),
Michelle McKie (HMNB Clyde),
Roy Coleman (Middle Wallop),
Thomas Graham (HMNB Clyde),
John Neilan (Abbey Wood),
Victoria Heath (RAF Cranwell),
Suzanne Devine (Abbey Wood),
Frederick Humphries (Litchfield),
Sarah Dray (York),
Catherine McLaughlin (Abbey Wood),
Malcolm Wroth (Feltham),
Daniel Harriss (RAF Digby),
Jennifer Johnson (Abbey Wood),
Alexander Wells (Abbey Wood),
Steven Atkinson (RAF Wyton),
Mary Woollard (RAF Wyton),
Teresa Lodge (Corsham),
Brian Magee (Belfast),
Mark Ovenden (Ashford),
Karen Attwood (Abbey Wood)

Abbey Wood Families Days 2015

10 & 31 July & 7 August



Bring your family along!

Visit stands showcasing equipment that supports our Armed Forces. There will also be displays, BBQs, ice creams, face painting and military bands.

Book via the Abbey Wood homepage or Carillion Amey website

60 SECOND SPOTLIGHT

Name?

Oliver Stanley

Job?

Project Manager in the Force Protection Delivery Team at Abbey Wood. I manage Project Observer, delivering enhanced perimeter surveillance and threat detection to HMNB Clyde in Faslane. My job involves frequent travel to Scotland which I enjoy - I've spent just over three months there since taking up my post last year!

Your route into DE&S?

Before becoming a Project Manager, I started out my career in Supply Chain in Donnington; I spent two years working for an agency contracted to the Materiel Accounting cell before officially joining DE&S as a Supply Chain Assistant in SPSCM, and later as a Supply Chain Analyst for Force Protection. After five years in Donnington, I made the leap to Abbey Wood on promotion to work as a Repair Manager in the Force Protection Supply Chain team. Last year, I was temporarily promoted into Project Management working as an Equipment Support Manager, and then finally into my current role. My experience has been diverse and has given me a wider understanding of how the business operates.

What are you most proud of?

I know it seems cliché, but I am hugely proud of my team in Force Protection and the support we



Above: Oliver at the top of Ben Lomond above Loch Lomond.

provide to our country's military. I know that the equipment we provide saves lives and is incredibly important to the men on the ground. I'm also very proud of the success of the project I'm currently managing; it has been challenging at times, but it's good to know that what I do in my job matters and is worthwhile.

What do you do when you are away from work?

When I am away from work, which sadly seems less common these days, I tend to spend the majority of my time rock climbing all around the country or practising Yoga, as well as spending time with my girlfriend - I like to get out and experience as much of the world as I possibly can.

Who do you admire, and why?

I have a huge amount of admiration and respect for the individuals in the medical profession, both those serving in the military and in the NHS. It's a hard job, and I know I could not do it.

If you could have any super power what would it be and why?

The ability to control time, as I never seem to have enough of it.

What irritates you the most?

I'm not easily irritated, but injuries from my sporting hobbies make me miserable. I unfortunately had a climbing accident last year and was very frustrated not to be able to get back out climbing as quickly as I wanted to, owing to the long recovery time from my injuries. I don't like to waste time.

Who would you invite to your dinner party?

Steve McClure, one of the world's top rock climbers, so that I could grill him on his climbing skills and experiences and ask for some training tips. I'd also invite Naudi Aguilar, trainer and founder of Functional Patterns, for an in depth discussion on his ideas about the human body and physical training. My final invite would be Sherlock Holmes for a game of charades, and of course, my lovely girlfriend.

Tell us a secret....

I cannot tell a lie... I'm terrible at it!



TAKING ON THE THREE PEAKS CHALLENGE

On Saturday 27th June 2015, a small team from SHORAD in the Weapons OC are undertaking The Three Peaks Challenge in aid of The Royal British Legion.

The Three Peaks Challenge entails climbing the highest mountains in England (Scafell Pike), Scotland (Ben Nevis) and Wales (Snowdon) within 24 hours, and is no mean feat. The team hope to raise money for The Royal British Legion by completing this challenge, and have set a fundraising target of one thousand pounds.

The idea came about from a discussion between colleagues David Wainwright and John Hayter; it then grew from there until a team of eight had been assembled. The SHORAD Shoguns team are comprised of current and veteran military personnel, and those who work in support of the military cause. The climbing team consists of David Wainwright, Adrian Birch, John Hayter, Bret Lafrance, WO1 Stephen Catterall and Ermias Kedebe, and will be supported by the logistics team of Andy Saxton and Adam Buxton.

Ermias Kedebe, one of the team, said "The team has called itself The SHORAD Shoguns, mainly because we are all in the Short Range Air Defence team of the

WOC, and also because I am not very inventive!"

The team has chosen The Royal British Legion as their charity because they help the whole Armed Forces community through welfare, comradeship and representation, as well as being the Nation's custodian of Remembrance. They help serving members of the Armed Forces, ex-Service men and women (veterans), their families and dependents all year round.

The SHORAD Shoguns are being supported by The Royal British Legion through social media, and will also be wearing t-shirts provided by the charity with their new 'LIVE ON' branding. The aim of this new campaign is to highlight their 'commitments to the fallen and the future of the living', which is a concept the SHORAD team fully support.

"Currently we have achieved 25% of our target on our JustGiving page any support to our challenge and the Royal British Legion is most appreciated."

If you would like to sponsor the team, you can do so by visiting: <https://www.justgiving.com/SHORAD-SHOGUNS>

Nominations open for Minister (Defence Procurement) Acquisition Awards

Do you know a team that has made an exceptional contribution to Defence Acquisition over the past year?

Minister(Defence Procurement), Philip Dunne, sponsors the annual Acquisition Awards and would like to invite nominations for this year's awards. The scheme aims to give recognition to teams that have made exceptional contributions to Defence Acquisition. It is open to personnel from across the whole of the MOD who work in, or in support of, Defence Acquisition.

The awards take into account:

- successful delivery,
- difficulty of objectives,
- contribution to defence capability
- value for defence, including value for money, saving lives, time reduction, simplifying process, introducing new policy, increasing efficiency, and long term effectiveness,
- innovative working
- as well as contributing to best practice within the acquisition community across MOD.

There are likely to be specific categories of award including one for excellence in: Innovation, Capability Development, In Service Support, Infrastructure, and Acquisition Enablers.

Teams can be nominated by line management, their peers, and other stakeholders. All nominations must be endorsed at Two Star level or above.

The Minister will present this year's awards on Wednesday, 16 December 2015, in MOD Main Building Main Conference Room with a reception in the Memorial Courtyard. Each team will receive an A3 size, framed certificate, signed by Minister(DP). One team will be selected to receive the special award in recognition of their outstanding achievement, and this will be announced at the ceremony on the day.

Applications should be made via DIN 2015DIN04-127. Further information can be obtained from Alyson Rees, DES IP, Tel: (9)612 86865 or 020 721 86865, or email: DES-IP-Group (or DESDGComrc1-IP-Group@mod.uk).

The closing date for nominations is 11 August 2015.



DSRA Ladies Hockey Team Taste Success Abroad

Defence Sport & Recreation Association (DSRA) Ladies Hockey team – many of them from Abbey Wood – enjoyed success at their first overseas competition in Gibraltar this April. Their competition in the 7-a-side tournament included the Navy Ladies and teams from both Spain and Gibraltar.

Looking professional in a new kit, sponsored by BMT Hi-Q Sigma, DSRA Ladies got off to a winning start overcoming the Navy 2-1 in an evenly matched battle. A healthy rivalry was on show but a DSRA penalty that Vikki Sage calmly converted was the difference between the teams.

The local sides proved to be strong, physical opponents. DSRA were not to be deterred, with a high work rate from midfielders Helena Patton and Gemma Winsley and consistently strong play in defence from Nicci Foster-Kenyon and 'Player of the Team' Sophie Field. The ladies finished the first day undefeated and in second place.

The second day saw a rematch against a determined Navy side. DSRA conceded early on but Beth Webster fought tirelessly winning countless challenges. With the score at 2-2, Hannah Phillips impressed spectators with a double dive to deflect home the winner and dashing the Navy's hopes by making it 3-2.

The heat took its toll on DSRA and they lost their last group match taking them into the 3rd v 4th place playoff, narrowly missing out on the final.

In the fight for 3rd place, the youthful enthusiasm of the opposition was matched by the experience of DSRA and at full time it was 2-2. An exciting penalty shoot-out ensued with Theresa Ellis making some important saves but the scores remained drawn. Under the leadership of their captain, Danielle



Team line-Up.
(left to right)

Vikki Sage, Hannah Phillips, Beth Webster, Nicci Foster-Kenyon, Danielle Spencer
Sophie Field, Helena Patton, Gemma Winsley
Theresa Ellis

Spencer, and coach, Hamish Wyper, the team stayed calm under pressure and won the sudden death penalties to win their deserved 3rd place.

After such a successful debut Gibraltar tournament, the intention is to make it an annual event.

Equestrian Aspirations Take Centre Stage

Rachel Buckle has taken some time out from her role in the Collaborative Effectiveness team and as MOD secretariat and communications lead to focus on her passion for horses.

She took a large gamble in October last year, buying a young failed racehorse with the aim of re-training him to compete in the sport of eventing.

Buzz and Rachel achieved a huge milestone in May – competing at Badminton Horse Trials in the '4 year old Young Event Horse' championships. This identifies potential eventing superstars of the future and is fantastic experience for young horses as there is no atmosphere quite like the spectacle of Badminton.

In testing weather conditions Buzz performed consistently well during the competition finishing a few marks off the top 10. In the company of professional riders amateur rider Rachel and her ex-race horse held their own.

Upon reflection of their performance Rachel said "Riding at Badminton is every riders dream and the experience and confidence it has given me and Buzz is invaluable. He is turning out to be a very talented horse and I am enjoying every minute training and competing him. It takes a lot of dedication, especially when you do it alongside a busy day job, but I love every minute!".

Right: Rachel Buckle jumps on Buzz



BMT Hi-Q Sigma to Support Society Golf Champs

The JSU Corsham Golf Society (JSUCGS) Championships will take place at Cumberwell Park Golf Club in Wiltshire on 1 July 15. BMT Hi-Q Sigma has kindly agreed to continue their relationship with JSUCGS in supporting the Premier Event in the Society's Calendar.

The 36-hole Championships will be contested by over 40 golfers. There will be Scratch, Net and Stableford competitions during the day, with the Champion Golfer being presented the BMT Hi-Q Sigma Trophy at the evenings Gala Dinner.

A leading management consultancy, BMT Hi-Q Sigma offer expertise in defence, energy, government and transportation sectors. Commenting on the continuing partnership between the two organisations, Dean Taylor said "BMT Hi-Q Sigma is part of BMT Group. We are BMT's management consultancy company offering a broad range of programme management and enterprise architecture services. Our primary market is defence and we have worked directly for different teams across the Ministry of Defence and also for their Prime Contractors. As a Bath-based company, investment and engagement with the local community is integral to our ethos and we are proud to be supporting the Corsham Golf Society Championship."



Sqn Ldr Mike Brydon, Officer in Command of JSUCGS, accepts the BMT Hi-Q Sigma Trophy from Dean Taylor, Sales Director

shows from left to right, Bella (the horse) Gill White, communications area manager Ron Ford, Kate Bennet of Riding for the Disabled and manager Mick Hanlon



£750 Raised for Charity

Royal Navy and civilian staff from Faslane's communications centre have been raising funds for two charities close to their hearts.

A cheque for £750 have been presented to the Garelock Riding for the Disabled Association, where youngsters with physical or learning difficulties can enjoy riding on horses and ponies.

Another £750 has gone to the Countryview

Children's Respite Centre which cares for children with learning difficulties to give parents a well-deserved break.

Both facilities are used by Strachan, eight-year-old son of Gillian White, a member of commcen staff.

Led by Gillian, staff raised the £1,500 through raffles and sale of locally-produced cakes and biscuits.



Defence Academy
of the United Kingdom

Cranfield
UNIVERSITY

Defence Simulation and Modelling

MSc | PgDip | PgCert

The Defence Academy and Cranfield University are pleased to confirm MOD funding for the Defence Simulation and Modelling (DSM) MSc programme starting September 2015.

The programme has been identified by the MilCap Board as providing suitably qualified and experienced personnel (SQEP) to co-ordinate simulation efforts across defence.

The Defence Simulation and Modelling MSc programme provides comprehensive defence specific coverage of the domain and subsequent application of Modelling and Simulation across defence training and education, acquisition, analysis and experimentation. It provides an in-depth

understanding of the main principles of the hardware and software, including the underlying technologies and architectures used in creating a synthetic battlespace to support defence activities.

The programme can be studied full time (1 year) or part-time (up to 5 years) using a blended mix of residential and distance e-Learning, classroom, seminar and hands-on practical sessions. The programme is modular in nature enabling students to select the course of study most appropriate to their particular requirements and interests.

A limited number of FREE MOD places are available.

Programme modules include:

- Foundations of Modelling and Simulation
- Networked and Distributed Simulation
- Computer Graphics
- Discrete and Continuous Simulation
- Intelligent Systems
- Statistical Analysis and Trials
- War Gaming and Combat Modelling
- Weapon Systems Performance Assessment
- Networked and Distributed Simulation Exercise
- Advanced Self Study Modules

For further information:

Jonathan Searle, Head of Modelling and Simulation, Centre for Simulation and Analytics
Tel: +44 (0) 1793 785 852 | Mil: 96161 5852 | E: jsearle.cu@da.mod.uk | j.r.searle@cranfield.ac.uk
<http://www.cranfield.ac.uk/cds/postgraduatestudy>



Defence Academy
of the United Kingdom

Cranfield
UNIVERSITY

2015 Symposia at Shrivenham

14-16 July	Close Combat Symposium
09 Sept	RUSI/Cranfield Defence Acquisition Conference 2015
10 Sept	Information Capability Management Symposium
17-18 Sept	Forensic Science in Defence and Security
29-30 Sept	Ordnance, Munitions and Explosives Symposium
20-21 Oct	Defence in Cyber
27 Oct	Robotics in Defence
28 Oct	Automotive Racing Technology
10-11 Nov	XVIIIth International CBRN Symposium
17-18 Nov	Countering Terrorism and Violent Extremism
25-26 Nov	Defence and Security Doctoral Symposium
08-09 Dec	Electronic Warfare



To register on a symposium or find out more about Symposia at Shrivenham:

Email: info@symposiaatshrivenham.com
Tel: +44 (0)1793 785846

www.symposiaatshrivenham.com

Follow us on Twitter @SympatShriv

© Crown Copyright image from www.defenceimages.co.uk

LEARNING AND DEVELOPMENT



Assessing The Cyber Risk Within Projects



DES TECH & CIO - Air Cdre Mike Quigley

“Advances in information technology and digital communications are revolutionising the way we live and work. Indeed, almost every aspect of our daily life depends on technology. Cyberspace has delivered many opportunities and benefits, and is fundamental to the business of DE&S”

“However, with such prolific use of technology comes risk and potential threats, through the loss or compromise of our information, which would impact significantly on the success of our business, and therefore to military capability and defence as a whole. This risk must become a conscious part of our daily working practices, but we can minimize it by ensuring we adopt appropriate behaviour to safeguard our data and our information”

DES TECH & CIO - Air Cdre Mike Quigley

Cyber attacks are already classed as one of four **Tier 1** risks to the UK in the 2010 National Security Strategy and they will only continue to increase in frequency and sophistication. The scale of the challenge – not least the cross-border, transnational nature of the threat - means that **Government cannot act alone** and that the most effective solutions will come from Government and industry working together. To this end Government and industry together are driving measures to improve our collective awareness of, and response to, cyber incidents through the Defence Cyber Protection Partnership (DCPP). Amongst other things, this will involve changes which will affect how Cyber risk is assessed and how we gain assurance that appropriate mitigations are in place. These changes will apply to all MOD projects (not just the Cyber/ICT ones) and some projects will need to implement these changes before the end of 2015.

The DES CIO Cyber team have been leading on promoting awareness during this designated ‘Year Of Cyber’ during which various monthly themes have been cascaded across DE&S to all staff as Cyber grows in importance in

both business and personal areas. The ‘Year of Cyber’ is an initiative to reach all MOD personnel. It has the following objectives to:

- Raise cyber awareness across Defence.
- Promote understanding of cyber as a domain and environment.
- Establish the credibility of the Joint and single Service Defence Cyber Units.
- Support the new digital ways of working, by informing staff how to remain safe and manage cyber-risk while taking advantage of digital tools and technology.
- Promote cyber careers in Defence to retain talent in military and civilian staff.
- Promote cyber skills in Defence to grow talent in military and civilian staff.

A series of awareness presentations will be held in Abbey Wood throughout August, organised in junction with DCPP and industry partners, to help embed Cyber Activity within projects using the Cyber Security Model (CSM) and focussed on the needs of Project & Risk Managers. The Cyber for Project Managers awareness sessions are bookable via e-solutions for the dates below:

Date	Time Booked	Subject	Venue
03/08/2015	10.00 – 12.00 13.30 – 15.30	Cyber For Proj Managers	SI Suites, Abbey Wood, Bristol
04/08/2015	10.00 – 12.00 13.30 – 15.30	Cyber For Proj Managers	SI Suites, Abbey Wood, Bristol
10/08/2015	10.00 – 12.00 13.30 – 15.30	Cyber For Proj Managers	SI Suites, Abbey Wood, Bristol
11/08/2015	10.00 – 12.00 13.30 – 15.30	Cyber For Proj Managers	SI Suites, Abbey Wood, Bristol
12/08/2015	10.00 – 12.00 13.30 – 15.30	Cyber For Proj Managers	SI Suites, Abbey Wood, Bristol

For more information contact Ian Martin, DES CIO-Compl-1 or Stephen Porteous ISS DSAS-CyberInd-1

Learning at Work Week DE&S staff get the learning bug

The DE&S Learning and Talent Team held its first Learning at Work Week recently and feedback from staff who took the opportunity to attend the range of activities on offer has been very positive.

Chief of Materiel (Fleet), Vice Admiral Simon Lister opened the week's events talking about his own learning experiences including learning Russian. He shared his belief in life long learning and bringing back what you have learnt into the organisation. He said: "learning is a mindset and those that have that mindset will go on to do well in both their work and personal lives."

Wendy Edwards, Hd Learning and Talent, whose team were responsible for organising events added: "our organisation is at the start of a long-term transformation process and the theme of this year's Learning at Work campaign, 'Shaping the Future,' provided us with an opportunity to highlight the importance of learning to the future of the organisation; raise awareness of existing learning opportunities that are available; help our people to think about their development in a variety of ways; and assess the appetite for future learning.

Activities focused on four key themes: Learning about me, learning to learn, learning to change and learning to lead. There were daily 'marketplace' stalls with contributors from within DE&S as well as external professional bodies encouraging staff to think about their own personal development. We also held a series of more structured sessions as well as a range of forums to enable people to share and learn from the experience of others.

Learning at
Work Week



18 - 24 May



Picture: Andrew Linnett

VOYAGER MASTERCLASS

Chief of Materiel Air, Air Marshal Simon Bollom opened May's masterclass by highlighting that delivering Voyager seemed an impossible task due to restrictions of finance and resources. The team took an unique approach by using a private finance initiative to bring the plane into service.

With a value of £10.5 billion, it is the UK's largest Defence Private Finance Initiative project (PFI).

The Voyager PFI contract was signed in March 2008, taking only eight months to finalise. The service contract covers the design and conversion of 14 Air to Air Refuelling Aircraft that can also deliver Protected Passenger Air Transport and Aero Medical evacuation capability. It has off loaded over 10 million litres to UK and Coalition aircraft since being in service since 2012.

The masterclass saw a joint presentation by Chris Dell, Team

Leader for Voyager and Phill Blundell, Chief Executive of Airtanker Ltd, demonstrating what makes the programme unique - the close working relationship with Airtanker. Many of the team, both DE&S and Industry have been on the team for over ten years and are still working on the project due to their enthusiasm. Chris Dell, said: 'What was critical for the programme was the shared common goal that has got us to where we are today.'

What has made it a success:

- Shared objectives and drive to achieve the programme
- Strong working relationship with industry
- Not rushing a decision
- Continuity and expertise of the team were crucial
- Long term structure of programme - allows planning for people and resources to deliver capability.

VIRTUS, the new personal protection and load carriage system for the British armed forces. See pages 30-31

