

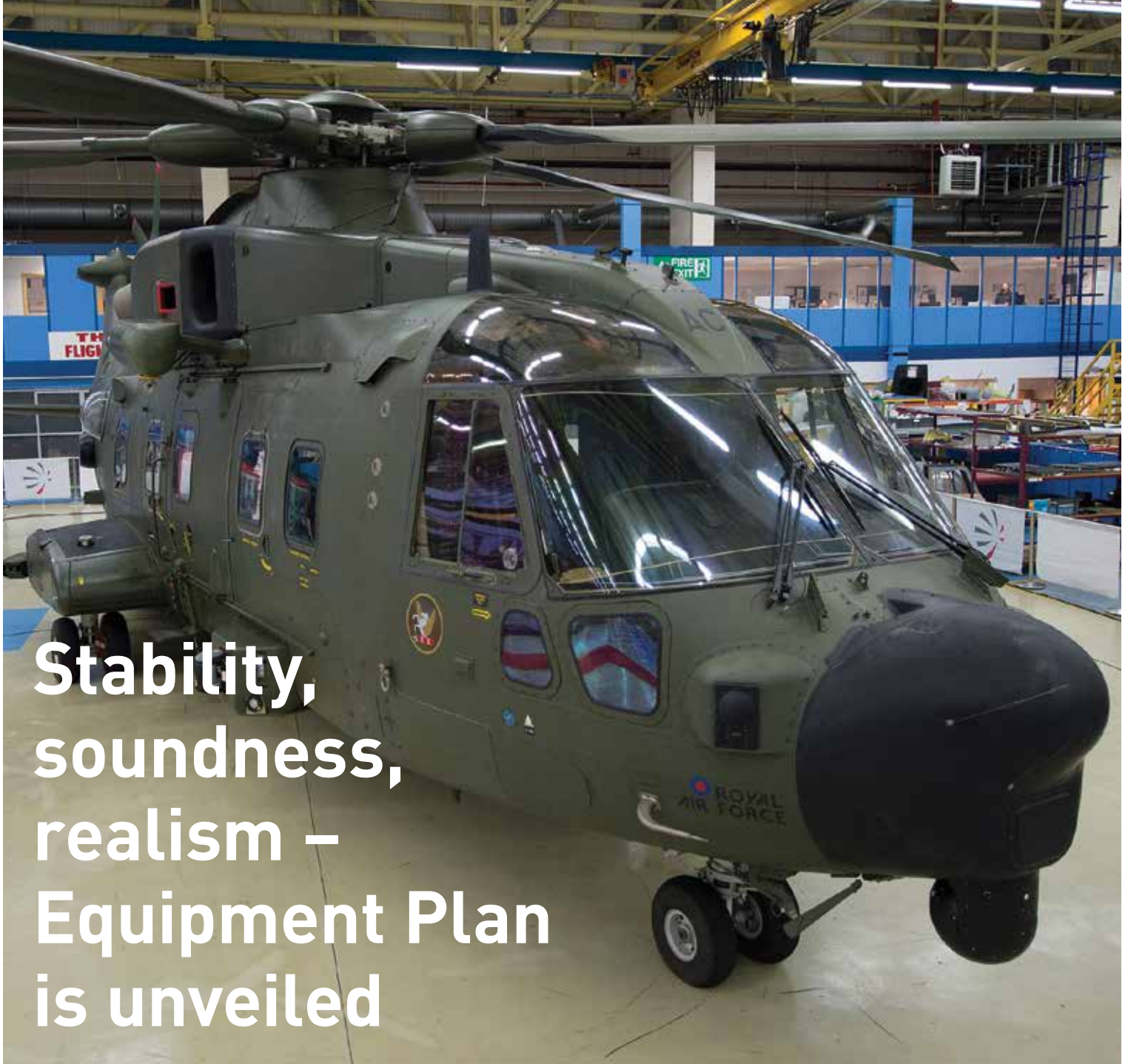
# desider

March 2014 Issue 70

the magazine for defence equipment and support



Ministry of Defence



**Stability,  
soundness,  
realism –  
Equipment Plan  
is unveiled**

Latest on the future make-up of DE&S [See inside](#)



French connection



Wargames with the US



Choir hits the right notes



Warrior on track



Man and beast in harmony



## Husky heads for home

AN RAF C-17 aircraft is pictured at Camp Bastion, Afghanistan as the redeployment of equipment from theatre continues. Pictured is a Husky being marshalled onto the waiting aircraft.

## FEATURES

### 23 Days of thunder

Taranis, a joint MOD and industry unmanned air vehicle project, has surpassed all expectations during its first flight trials

### 26 An investment in the future

As the economy returns to growth, two contracts for maintenance and upgrade of helicopters will reinforce the UK's engineering and manufacturing base

### 28 Duncan joins the battle – on land

The Americans have been working with the Royal Navy and proving the effectiveness of the latest synthetic training at *HMS Collingwood*

### 30 French connection

The UK and France have strengthened defence co-operation between the two countries with a wide-ranging agreement

### 32 Forward thinking

Stability, soundness and realism underpin the second annual Equipment Plan, published last month



Picture: Andrew Linnett

## cover image

The Merlin Capability Sustainment Programme figures in the second annual Equipment Plan. A multi-million pound contract with AgustaWestland has been signed to keep the aircraft in the forefront of UK military aviation.

MARCH 2014

# desider

[www.gov.uk/government/publications/desider](http://www.gov.uk/government/publications/desider)

### Assistant Head, Corporate Comms:

Ralph Dunn - 9352 30257 or 0117 9130257  
DESSec-CorpComms-AsstHd@mod.uk

### Editor:

Steve Moore - 9352 30537 or 0117 9130537  
stephen.moore544@mod.uk

### Distribution Manager:

Dick Naughton - 9352 34342 or 0117 9134342  
dessec-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:



*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 Cocoon 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.



## NEWS

- 6 Providers to take a key role in DE&S**  
Managed Service Providers will play a key role in turning DE&S into a 'match fit' organisation and will be coming on contract later this year
- 8 DVD – the perfect showcase**  
A showcase of equipment and technology will underpin DE&S' annual land equipment event at Millbrook, Bedfordshire in June
- 9 Crowsnest set for Merlin**  
The new helicopter-borne early warning system for the *Queen Elizabeth* aircraft carriers will be in service 18 months early
- 10 Warrior on track to deliver**  
The Warrior Capability Sustainment Programme has passed its late milestone – the Preliminary Design Review
- 12 Puma through latest life extension phase**  
Eurocopter and DE&S are celebrating transfer of the final Puma Mk2 aircraft to be modified under the Puma Life Extension Programme
- 15 Long Range Radar's three-year support**  
Support for the Type 45 destroyers' Long Range Radar system has now been guaranteed until December 2016
- 17 Possible nuclear waste sites unveiled**  
Five nuclear facilities across the UK have been identified as potential sites to store waste from decommissioned Royal Navy nuclear submarines
- 20 The challenges of change**  
The new man in charge of maritime equipment at DE&S says he is privileged to be in charge at a time of significant change in his domain

# insiderguide

# Bernard Gray

Chief of Defence Materiel

**‘The updated Equipment Plan should remind us that we work for the very long term’**



We are drawing closer to the launch of the new DE&S that we have been planning since the Secretary of State’s announcement on 10th December last year.

I hope that you will draw encouragement from the fact that the process of changing DE&S will shortly move from something that we have been talking about, to something that we are doing.

Last month, the Permanent Secretary Jon Thompson and I explained our plans at an evidence session to the House of Commons Defence Committee. MPs were very keen to know about progress we are making in DE&S as we head toward the launch of the new entity. They also asked about structural changes, such as the transfers, next month, of the three naval bases to Navy Command and Information Systems and Services to the Joint Forces Command.

The DE&S Bespoke Central Government Trading Entity that will be launched next month will be a unique solution to the specific needs of DE&S and I am confident the changes we plan to introduce, will ensure the organisation continues to build on the improvements recorded in the latest National Audit Office Major Projects Report, published on 13th February.

With the exception of the Aircraft Carrier programme – which faced a set of unique challenges that we helped successfully to resolve – this report found no significant

cost increases and minimal delays.

This welcome change is largely down to your work, firstly in helping to establish an affordable equipment programme and secondly in working hard to deliver equipment to the front line on time and to cost.

Last month also saw publication of the NAO’s assessment of the MOD’s last Equipment Plan (EP) and publication by MOD of this year’s updated EP.

The updated EP lays out costed plans involving expenditure of £164 billion on equipment and support over the next decade – the vast majority of which will be managed by DE&S. This document should remind us all that we work for the very long-term, and give you confidence in the continued longevity and importance of the role of DE&S for the future.

There has also been some significant news about progress on DE&S projects, including the announcement by the Secretary of State that we awarded contracts, valued at about £760 million, to AgustaWestland on two helicopter programmes and the announcement by Minister (DEST) that the initial flight of the Taranis test vehicle had been a success.

Finally a joint UK/French communiqué laid out plans for collaboration and joint working with our French partners across a range of projects, including mine countermeasures and a new air-to-surface missile.

**DE&S becomes a Bespoke Central Government Trading Entity next month. Director Materiel Strategy Barry Burton explains what will be different and what will stay the same**

## Vital work behind the scenes

**I**t’s important to clarify that DE&S will retain its current name and branding saving us time and expense which is better devoted elsewhere.

In fact, it is likely that on the first day many things will feel the same to all of us. We will be using the same offices, we will have the same car parking facilities and be booking the same desks.

But behind the scenes lots will be different, laying the foundations for later changes to the organisation; the journey will have begun for all of us.

To set up the bespoke entity we will agree a Framework Document with Cabinet Office and the Treasury to define the function, strategic objectives, governance arrangements, policy framework, and other controls/operating parameters for DE&S.

DE&S will be an arms length body within the public sector but with genuine freedoms around how it recruits, rewards, retains and manages staff.

We will also inject the crucial private support we need through the Managed Service Providers.

There will be a number of changes to the governance structures of DE&S on day one – an Owner’s Council will be established, chaired by Ministers, to monitor and evaluate the performance of DE&S on behalf of the MOD.

DE&S will have a new board makeup, led by a Non-Executive Chair, with a group of other Non-Executive Directors, together with an executive team led by the Chief of Defence Materiel as the Chief Executive Officer.

DE&S will be accountable to Parliament through the Chief Executive Officer as an additional accounting officer for our operating costs. Funding will be via MOD Estimates and in due course through charging MOD customers for work.

We will publish our own plans and annual reports and accounts which will be consolidated within those of the MOD.

DE&S will remain a part of the MOD and will be audited as part of the MOD for those purposes by Defence Internal Audit and

## The role of Managed Service Providers in the future DE&S: page 6

# Work goes on the scenes



Director Materiel Strategy Barry Burton outlines future plans during a get-together of DE&S' Materiel Strategy team at Abbey Wood

### Three stages to DE&S' future

#### Three key phases to deliver the new organisation:

Phase 1 – up to the start of next month: setting up the Trading Entity, and starting the procurement process for the Managed Service Providers to obtain the private sector skills we need.

Phase 2 – from April 2014-April 2015: Transition – using the freedoms we have been given to change the organisation for the better and to give us the tools we need to get the job done differently.

Phase 3 – April 2015-April 2017: Transforming DE&S, making it “match fit” to face the future, which may mean market testing for a GoCo competition at a later date.

the National Audit Office. The Chief of Defence Materiel will appear before the Public Accounts Committee on the Equipment Plan, as now, alongside the Permanent Under-Secretary as the Principal Accounting Officer.

We will have a Corporate Plan, which will set out the strategic objectives for DE&S for the next

three years. The Chief of Defence Materiel and Permanent Under-Secretary will agree that in the first instance, together with the non-Executive Chair once in post – but there will be an opportunity to refresh it on an annual basis if necessary.

The non-executive Chair will be recruited after a fair and open process.

## Service Providers join the agenda

AREAS WHERE staff will see changes in DE&S – such as hard charging and the support of Managed Service Providers – were discussed at the latest Open Forum at Abbey Wood.

Director Materiel Strategy Barry Burton explained the features of a bespoke trading entity and the timelines for implementation.

Staff feedback on Materiel Strategy

events is welcome as involvement is key to success. Read and comment on the Mat Strat blog, keep updated with the intranet site. Any ideas, queries, comments or feedback, get in touch via the Multiuser email account: DESCMDM-MatStrat-Team@mod.uk

□ The role of Managed Service Providers: page 6

The new organisation will go through a transition process over the coming financial year in preparation to undertake the planned transformation from April 2015; in practice we expect to be able to begin some of the transformation activity before that.

## NEWSREEL

### Redeployment is on-going

DEFENCE Secretary Philip Hammond has told the House of Commons that by the end of January, the MOD had redeployed 1,694 vehicles and other major equipment from Afghanistan, along with 2,374 20-foot equivalent containers of matériel, and destroyed or disposed of some equipment in theatre, ensuring that nothing of military value would fall into the hands of the enemy. He said: “I can assure the House from my personal experience that this obligation is taken very seriously. The military are not taking any chances.”

### Sensors support

LOCKHEED Martin has received a \$60 million sustainment and support contract from AgustaWestland for the Modernised Target Acquisition Designation Sight/Pilot Night Vision Sensor system on the UK's Apache AH Mk-1 aircraft. The contract includes in-country repairs, spares and technical services, as well as integrated logistics, engineering and depot repair support. The effort is part of the overall support for the UK Apache fleet provided to DE&S by AgustaWestland.

□ Apache support: page 26

### New CGS

LT GEN Sir Nicholas Carter will be the next Chief of the General Staff to succeed General Sir Peter Wall. He will be promoted to General and take up his new appointment in September.

# Providers will take a key role in 'match fit' DE&S

MANAGED SERVICE Providers (MSPs) – which will play a key role in turning DE&S into a 'match fit' organisation – are planned to be coming on contract later this year.

In addition to their role working alongside DE&S as strategic support and assistance to transform the business, the MSPs will also support delivery of the current equipment and support programmes to time, cost and performance – noting that they will be here to help DE&S, not do it for DE&S.

While their work will touch on every aspect of the business, they will be focused in three principal areas which are being referred to as three work packages (see separate panel, right).

Their key roles will be to support delivery of the current programme; improve project management, financial and commercial management, structures, expertise, tools, processes and working practices; and create a skills baseline for DE&S as a basis to achieve best-in-class performance across the business.

They will support development of the existing workforce through formal and informal routes so that they are able to deliver the required DE&S products and services and import skills to fill critical shortfalls in key functions until such time as the in-house capability and capacity is satisfactorily addressed.

Director Materiel Strategy Barry Burton explained that the Project Delivery package would improve procurement of new military equipment, commodities and services, supporting in-service equipment through-life or managing global logistic operations.

This will include a comprehensive project control system informed by Earned Value Management data and analysis where appropriate – a focus not only on 'doing things right' but on 'doing the right thing'.

"This package is

likely to be let first and will shape the approach for later work packages," he said.

"The aim is that DE&S is acknowledged as being 'best in class' because of the outputs it delivers and the support of our customers."

The Finance/Management Information/Information Technology package will improve quality of management information, particularly in project baselines and ongoing

shared with suppliers, customers and business partners."

The Human Resources package will support an effective HR approach to achieve the transformation DE&S intends.

This will include designing and implementing a new HR strategy and establishing an HR function to improve performance across the DE&S workforce in executing high performance programmes.



Director Future DE&S Model Paul Blakiston leads a Materiel Strategy discussion at Abbey Wood

Earned Value Management monitoring, through an improved financial control system, said Mr Burton.

It will also be responsible for design, roll-out and implementation of management information systems as well as for providing training for use in the new systems.

Mr Burton added: "It will improve project management IT tools in line with the requirements of the Project Delivery workpackage.

"The outcome will be an organisation in which information is trusted and

It will also cover designing a new workforce model and a bespoke pay and grading system in response to the requirements of the Project Delivery package.

Mr Burton said: "The outcome will be that DE&S is a self-confident entity that is able to attract high performing individuals, is valued by its members and is able to retain the best of them in support of its outputs.

"The Materiel Strategy team is considering how best to bring the MSPs into the business before Invitations To Tender are released."

## Work packages to be awarded

- **Workpackage 1, Project Delivery:** This will improve project delivery across DE&S in support of the Equipment Procurement Plan, Equipment Support Plan and logistic supply;

- **Workpackage 2, Finance/MI/IT:** In addition to supporting the Bespoke Trading Entity establishing the financial processes it requires, this workpackage will establish an MI/IT governance and architecture within DE&S and thus improve the quality of management information, particularly project baselines, generated and used within the business;

- **Workpackage 3, HR:** This will establish business-relevant HR function and deliver HR transformation so that the new organisation is able to manage and reward its workforce more effectively.

**'The outcome will be that DE&S is a self-confident entity that is able to attract high performing individuals, is valued by its members and is able to retain the best of them in support of its outputs' – Director Materiel Strategy Barry Burton**

# AN INSPIRED GENERATION.

As an engineering and manufacturing company we're reliant on recruiting and retaining the most committed employees to maintain our talent pipeline. That's why we invest over £80M a year in skills and education programmes – from training 900 apprentices to working with more than 250 schools across the UK on engineering projects.



## NEWSREEL

## MOD to back D-Day events

THE MOD will support commemorations to mark the 70th anniversary of the Normandy Landings in France, taking place 5th-6th June. All three services will provide logistic and ceremonial support and will assist veterans of the campaign. Work is being led by a specialist logistics unit, Force Troops Command, and 3rd (UK) Division of the Army, the division that led the assault on Sword Beach 70 years ago. Major commemorations will include ceremonies on 5th June to mark the liberation of Ranville by the British 13th Parachute Battalion, the first village to be liberated on D-Day. On 6th June, a UK-France Service of Remembrance will take place at Bayeux Cathedral, followed by a special event at the Bayeux Commonwealth Cemetery.

## Reaper future

REAPER, the air system remotely piloted by RAF pilots and operating in Afghanistan, is to be retained for contingent purposes following the end of operations, Philip Dunne, Minister for Defence Equipment, Support and Technology has said. No final decisions have been taken on basing options.

## Capability day

MINISTER for Defence Equipment, Support and Technology Philip Dunne joined First Sea Lord Admiral Sir George Zambellas at a joint dstl and industry maritime capability day at Navy Command Headquarters, Whale Island, in January.

## Shell contract opens up a new view on the battlefield

A DE&S project team has awarded a £13.5 million contract for the production of new illuminating shells for use by the Army's and Royal Marines' 105mm light guns.

The projectiles, which eject a powerful flare that descends on a parachute to illuminate the battlefield at night or in poor visibility, will be fired using existing propelling charge systems.

The shell has been modified to provide an improved parachute that slows the rate of descent by approximately 50 per cent, thus providing more illumination and requiring less stock to achieve the same effect.

This has been achieved without detriment to the illumination time, range and fire control solution, enabling it to be used in exactly the same manner as the existing shell. This has additional benefits

as training techniques can remain the same and a costly change to the fire control solution has been avoided.

The contract, awarded by the Defence General Munitions project team, part of the Weapons Operating Centre, covers delivery of around 3,000 shells per year for the next three years with an option to extend the contract for a further two years.

"We're very pleased that as a result of a lot of hard work we have achieved contract award on this important programme," said a team spokesman.

"These shells are a vital piece of equipment for our forces and will replace the stocks consumed on operations in Afghanistan and in training."

The contract was awarded to BAE Systems Bofors AB.

Millbrook 25-26 June 2014



Making a splash: Husky goes through its paces at DVD2013

A SHOWCASE of equipment and technology which may enable the Army of 2020 will be the theme and backdrop to this year's DVD event.

The focus will fall on how DE&S can improve future support.

This is the second year that DVD - at Millbrook on 25th and 26th June - will be jointly run by Army Headquarters and DE&S Land Equipment, recognising the new capability role taken on by the Army as part of Defence Transformation.

DVD will bring together the military, industry and the acquisition community for informal discussions, engagement with users, demonstrations and live displays.

The focus of these discussions will be on innovative and efficient solutions for support, upkeep and development of capable land equipment for contingent operations.

**Are you involved in the UK land equipment industry and want to attend DVD2014?**  
Register now at [www.theevent.co.uk](http://www.theevent.co.uk)

Maj Gen Paul Jaques, Director Land Equipment at DE&S, said: "DVD2014 will be a great opportunity to showcase current equipment and vehicles, future technology and systems

that could provide more cost effective support for the forces."

DVD2014 will be attended by military stakeholders, who will provide their valuable opinion on a wide range of equipment used on recent operations in Afghanistan.

Brig Mark Gaunt, Director Equipment at Army Headquarters, added: "We continue to work closely with our civilian and industry partners to deliver the very best equipment to our soldiers."

"This annual event attracts a wide audience and is a terrific opportunity for attendees to see what the Army of the future might look like on cessation of combat operations in Afghanistan."





Merlin helicopters operating on *HMS Queen Elizabeth* in a computer generated image. The aircraft will be fitted with Crowsnest high power radar

# Carriers' Merlins to take on Crowsnest wizardry

THE NEW helicopter-borne early warning system for the *Queen Elizabeth* class aircraft carriers will be in service 18 months early.

Following the renegotiation of the carriers' contract to deliver savings for taxpayers, the Defence Secretary has accelerated the Crowsnest Airborne Surveillance and Control programme to ensure it is operational by 2019.

Crowsnest uses high power radar to provide long-range air, maritime and land tracking capabilities and will be an integral part of future carrier operations.

The Crowsnest system will be fitted to the Royal Navy's

fleet of upgraded Merlin Mk2 helicopters.

The decision to bring forward Crowsnest has been made as part of the annual review of the MOD's ten-year Equipment Plan.

The plan, worth £160 billion, includes unallocated funding to support equipment requirements that may arise as threats emerge or priorities change.

The shorter delivery time for Crowsnest will lead to a significant reduction in costs as specialist industry personnel will be required for a shorter period of time. It is expected to save around £22 million.

Defence Secretary Philip

Hammond said: "Crowsnest will provide vital surveillance and intelligence to protect the *Queen Elizabeth* class aircraft carriers. The introduction of Crowsnest 18 months early will ensure *HMS Queen Elizabeth* has the full range of capabilities when it enters service.

"This announcement is a good example of improved financial management in the MOD allowing us to respond to new requirements as they arise."

Lockheed Martin UK, which designs Merlin, has been awarded a £24 million contract to run a competition to design, develop and demonstrate Crowsnest.

## Sir Peter to chair carrier alliance

SIR PETER Gershon has been appointed Non-Executive Chairman of the Aircraft Carrier Alliance.

Sir Peter, Chairman of Tate & Lyle and National Grid, will oversee the management Board and progress in delivering the two *Queen Elizabeth* class aircraft carriers, *HMS Queen Elizabeth* and *HMS Prince of Wales*.

Defence Secretary Philip Hammond said: "Now that we have renegotiated the contract between the MOD and industry to ensure proper alignment of interests, it is important this vast project is managed efficiently and governed effectively to ensure the delivery of carrier strike from 2020.

"Sir Peter's appointment will help to increase the coherence and co-ordination between MOD and industry as the programme reaches key milestones ahead of entering service with the Royal Navy."

The Alliance between industry and the MOD was founded to transform the way in which large scale projects are produced. It comprises Babcock, Thales UK, BAE Systems and the MOD.

Sir Peter has broad business experience gained in large and complex international organisations and has held various leadership roles in the UK private and public sector.

## Thales to support anti-submarine sensor

THALES WILL support the Sonar 2050 anti-submarine sensor used on the Royal Navy's Type 23 frigate fleet for the next five years.

Sonar 2050 is a medium-range bow sonar, pictured right, currently fitted to the frigates and is the Royal Navy's primary hull-mounted anti-submarine warfare sensor. It also provides the ship with passive detection capabilities at lower frequencies.

Thales will provide physical support for operational defect rectifications, a worldwide 24/7 helpdesk, dry dock and afloat support, and test equipment and handling.



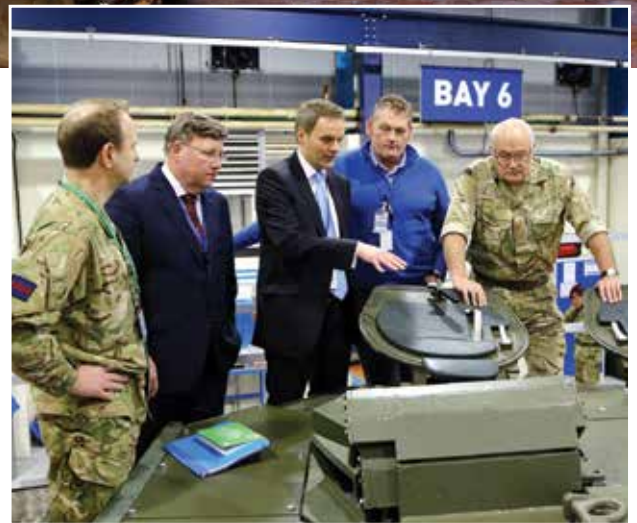
# Warrior on track to deliver



**Upgrade passes latest hurdle**

Above: Warrior will have class-leading capability for many years to come

Right: Chief of the General Staff, General Sir Peter Wall, far right, on a visit to Lockheed Martin at Amptill on 30th January. Brigadier Robert Talbot Rice, head of the Armoured Vehicles Programme at DE&S, is on the left



THE WARRIOR Capability Sustainment Programme is on track to deliver, having passed its latest milestone – the Preliminary Design Review.

The programme is progressing towards the build of a prototype vehicle fitted with the CTAi 40mm cannon.

The plan is to achieve its first live fire trial this spring, leading to its Critical Design Review next year.

Passing the latest milestone was a result of months of co-operation between DE&S' Armoured Vehicles Programmes and Lockheed Martin UK. The company is carrying out much of the work at Amptill

in Bedfordshire. The programme is supporting up to 600 UK jobs, with 90 per cent of the work taking place in this country.

Alan Lines, Lockheed Martin UK's Amptill vice president and managing director said: "We have completed another significant stage in our mission to deliver the future armoured core of the British Army.

"This latest success reflects the dedication, commitment and resilience shown by every member of the programme team."

The 40mm cannon is common to Scout and Warrior vehicles and will be shared with the French. It is expected to achieve UK and French safety qualification along with two natures of ammunition by early summer.

This weapon system will give the UK a class-leading capability that allows the vehicles to continue to have wide utility and battlewinning firepower for many years to come. Qualification will be the culmination of five years' successful Anglo-French co-operation.

Leading suppliers on the Warrior Programme include Ultra Electronics, Defence Support Group, SCISYS, Rheinmetall Defence, Curtiss Wright, Thales UK, Moog, Meggitt, Jenoptik ESW and Elbit Systems Kinetics.

**The Warrior Capability Sustainment Programme will upgrade the current Warrior Infantry Fighting Vehicle beyond 2040 to meet the current and future requirements of the British Army. The programme is scheduled to deliver 381 upgraded Warriors.**

## Typhoon support in £100m extension



A Typhoon takes off during Red Flag exercises on Nevada last month

TYPHOON AVAILABILITY and in-service support to the RAF has been guaranteed to the end of the year in a contract extension with BAE Systems.

Under the Typhoon Availability Service contract, air and groundcrew are trained, the aircraft is serviced and maintained, technical support is provided while spares, repairs and logistics are managed.

The £100 million extension supports the aircraft at bases in Coningsby, Leuchars and the Falkland Islands

Peter Davidson, Availability Operations Manager for DE&S' Fast

Air Support Team, said: "I'm delighted we've signed this extension to the Typhoon Availability Service. This enables us to jointly embed the best practice and lessons learned from the first five years of the TAS contract and deliver lasting benefit to the RAF front line, DE&S and BAE Systems."

His thoughts were echoed by Nigel Davey, BAES' Director for the Military Air Support business who said: "We have worked hard in partnership with the MOD and the RAF to develop a service that ensures the RAF is able to meet operational requirements and is also cost effective for the UK taxpayer."

# Training for Operational Success

Our Training Academies have been delivering rotary wing aircrew and engineering training for over 50 years.

The 2013 Numbers:

- 5 Rotary Wing Academies
- 7 Full Flight Simulators, 6 Flight Training Devices, 4 Maintenance Training Simulators, 40 classrooms
- 8000 trainees: 4000 pilots, 4000 technicians
- 28,000 synthetic flying hours
- 500 maintenance courses
- 90 pilot instructors, 120 maintenance instructors

Everything we do, we do with passion.

**LEADING THE FUTURE**

[agustawestland.com](http://agustawestland.com)



**AgustaWestland**

A Finmeccanica Company

## NEWSREEL

## Training contract

QINETIQ, partnered by Cranfield University, NSC and XPI Simulation, has been awarded a £3.6 million contract from the Defence Science and Technology Laboratory to demonstrate developments in gaming, mobile devices and other commercially-available technologies. The commercial-off-the-shelf and emerging technologies evaluation and exploitation programme aims to enhance cost-effectiveness of the training and simulation received by Britain's Armed Forces.

## Work starts at Lyneham

HERCULES, a joint venture between Kier Group and Balfour Beatty, has begun a £121 million contract with the Defence Infrastructure Organisation to transform the former RAF Lyneham into a new Armed Forces training facility. Work includes single living accommodation and training facilities for trainees and staff from the Army, Royal Navy and RAF. There will also be a museum for the Royal Electrical and Mechanical Engineers.

## Ramp verdict

ADDITION of a 'ski ramp' will have a negligible effect on the radar cross-section of the Queen Elizabeth class carriers, Minister for Defence Equipment, Support and Technology Philip Dunne has told MPs.

## Submarine rescue vehicle passes tough hull tests

QINETIQ HAS carried out a fatigue and fracture mechanics assessment of the submarine rescue vehicle, part of the Nato Submarine Rescue System.

This system is a multi-national project involving DE&S which offers a rescue capability primarily for the partner nations of France, Norway and the UK and to Nato and allied nations.

QinetiQ's review evaluated welded joints of the pressure hull against design standards, and assessed the likelihood of failure by fatigue.

The assessment showed the vehicle would only require visual inspections, rather than complex pressure testing, which would have taken it out of service for six months.

"QinetiQ carried out an excellent series of studies applying their expert knowledge in metal fatigue," said Ben Duke, the system's DE&S technical manager. "The report was reviewed by Lloyds Register and the UK MOD Naval Authority who have endorsed its conclusions."

# Puma is smoothly through latest life extension phase

AFTER MORE than four years of intense effort, Eurocopter and DE&S' Puma 2 Gazelle team have celebrated transfer of the final Puma Mk2 aircraft to be modified in Marignane, France back to the UK.

This marks the end of the core development phase of the Puma Life Extension Programme contract awarded to Eurocopter UK in 2009.

Addressing Eurocopter management and workforce Ian Craddock, Head Helicopters 2, said: "This is a significant milestone and all who have contributed should be extremely proud."

He added that further development work and aircraft modification was still needed to achieve Initial Operating Capability early next year.

Gp Capt Owen Barnes, Puma Mk2 and Gazelle leader, said: "This is an important milestone which has resulted from the strong relationship that has been developed between the project team and Eurocopter.

"However, it is but one of a number of significant steps



Milestone: Ian Craddock addresses Eurocopter management and workers

Left: Wing Cdr Hamish Cormack of 230 Squadron



Joint Helicopter Command and our industrial partners Eurocopter (UK) and QinetiQ, remain totally focused on the

on the road to IOC. The team, alongside the Puma Force Commander,

considerable work still to be done."

All 24 aircraft have been inducted into the Life Extension Programme; two-thirds have been modified to Puma HC Mk2 configuration.

The Mk2 achieved its initial Release to Service last August, allowing it to be used by the RAF Puma Force for crew training and tasking with the Army.

The capability and capacity of the Puma Mk2 will be expanded incrementally over the coming months to introduce additional role equipment, theatre entry standard modifications and an expanded performance envelope that will ensure the effective contribution of Puma to contingent operations.

## 'Puma – even greater utility than before'

WG CDR Hamish Cormack of the Puma Force, commanding officer of the RAF's 230 Squadron, said: "When you marry the Puma Mk2's significantly enhanced capability to its rapid deployability, two Pumas flown in by C-17 can be operational within four hours of arriving anywhere in the world, then you have a package which is ideally

suited for future operations.

"2014 will be an exceptionally busy year for the Puma Force with a full training programme as we receive the staged capability drops, and our intention is to ensure that the British Army, and our other users, are left in no doubt that the Puma is back and with even greater utility than before."

Secure communications  
you can depend on



You don't think about  
wiring until you realise  
your data relies on it

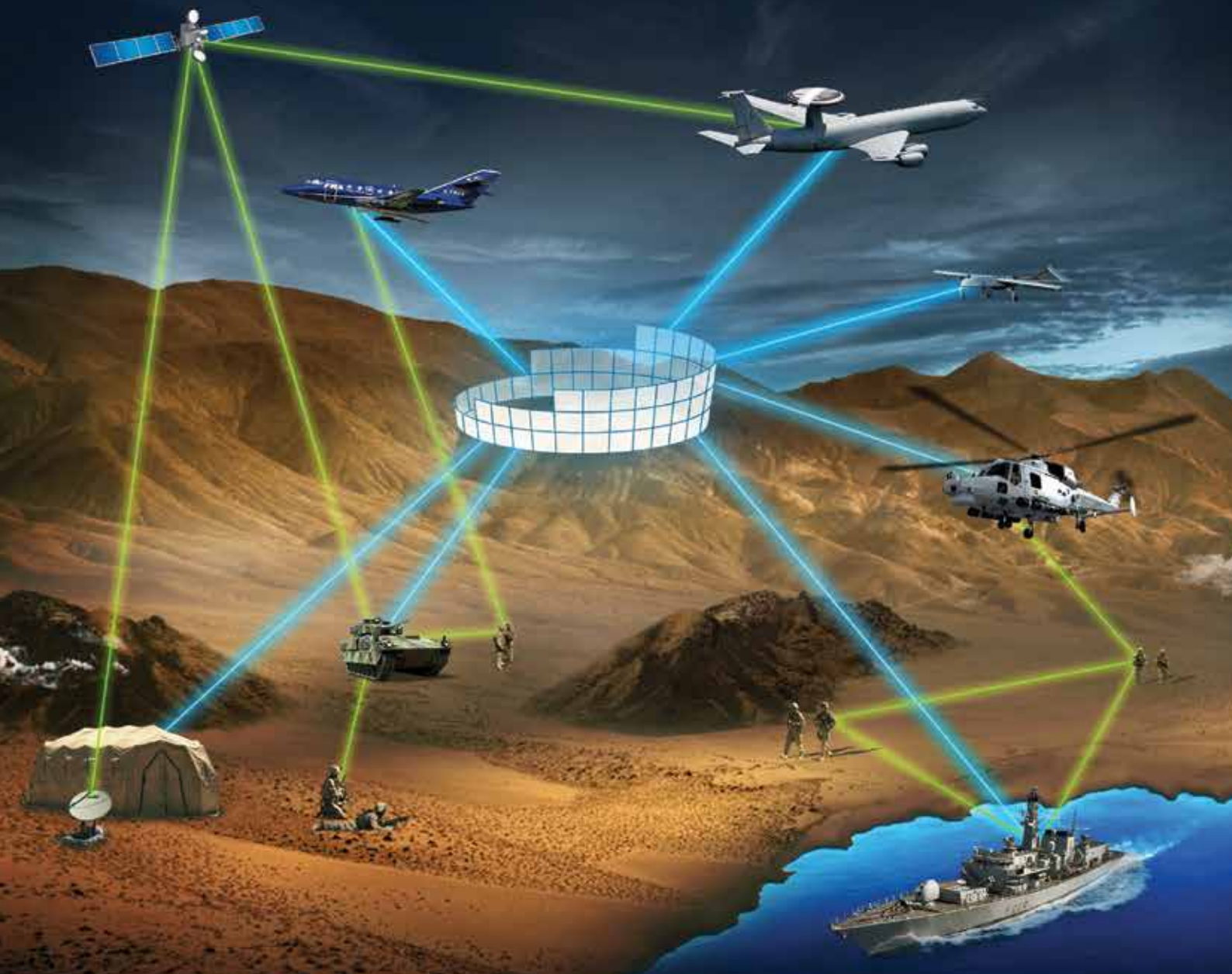
Protect your data with  
Managed Site Wiring from BT

Find out what we can do for you:  
0800 389 2272 option 8  
[dfts.comms@bt.com](mailto:dfts.comms@bt.com)  
[www.dfts.r.mil.uk](http://www.dfts.r.mil.uk)  
[bt.com/defence](http://bt.com/defence)



# MAXIMUM FLEXIBILITY AT THE EDGE: ANY PLATFORM, ANY MISSION, ANY NETWORK

Simultaneous Two-Channel Air/Ground Interoperability  
Link 16 • VHF • UHF • SATCOM • SRW • VMF • ANW2



Small Tactical Terminal (STT)

- » Available Now for UK, US, and International Deliveries
- » Selected for Link 16 on the Apache AH-64E, UK Falcon, UAS Ground Control Stations, and AU JP2089

Edge operators gain real-time combat communications and interoperability to whichever networks suit the mission, with the two-channel, software-defined Small Tactical Terminal from ViaSat and Harris. The low-SWaP STT enables helicopters, ground vehicles, and other platforms to switch waveforms and network connections on the fly, merging disparate networks and delivering situational awareness to edge operators as the mission unfolds.

**HARRIS**

[harris.com/stt](http://harris.com/stt)

**ViaSat**

[viasat.com/stt](http://viasat.com/stt)  
[stt.international@viasat.com](mailto:stt.international@viasat.com)

# Long range radar given three-year support

## Type 45 system chosen to defend new aircraft carriers

SUPPORT FOR the Type 45 destroyers' Long Range Radar (LRR) System has been guaranteed to December 2016.

The system, produced by BAE Systems and Thales Netherlands, can automatically track up to 1,000 targets at around 250 miles and is one of the two radars that make up the Sea Viper Weapon System used on the Type 45s.

It is also capable of detecting stealthy targets making it a formidable defensive capability chosen for the *Queen Elizabeth* aircraft carriers.

The contract (Follow-on LRR In-Service Support) offers a technical helpdesk, waterfront engineering, core team support, materiel audits and a repairs facility, along with corrective and preventative maintenance.

Additionally, advice and assistance is available for ships on overseas deployment, including weekends.

All seven LRR systems in service are included in the contract which is managed by the Maritime and Air Weapon Systems team in the Weapons Operating Centre.

Six are fitted to the *Daring* class destroyers, with a seventh at the Maritime Support and Integration Centre on Portsmouth Hill, overlooking Portsmouth.

The contract is part of overall support for the radar, which was initially a tri-national procurement with the French and Italian navies.

While Design Authority activities, such as core-design modifications, are still managed with the French and Italians, the UK has taken an independent approach to the day-to-day support of the system to increase efficiency, reduce costs and to provide value for money to the UK taxpayer, while maximising operational availability to the Royal Navy.

The contract will directly sustain eleven UK jobs in industry.



Capability: Long Range Radar pictured on a Type 45 destroyer

## Lifesaving deal signed

DE&S HAS awarded a four-year contract for continuing supply, service and repair of commercial liferafts and marine evacuation systems.

The contract, let by Maritime Platform Systems, has gone to UK independent safety supplier Ocean Safety.

Direct support will be given to the Royal Navy's current flagship *HMS Bulwark* and to the fleet of Type 45 destroyers based in Portsmouth.

Ongoing support will be primarily given at Ocean

Safety's Southampton branch but their branches in Plymouth, Greenock and Aberdeen will also offer additional support.

Richard Besse, Ocean Safety's Operations Director said: "Being awarded this contract is a fantastic achievement for us and a testament to the overall level of service that we provide on a national scale.

"We look forward to continuing the support and developing the great working relationship that we already have with the MOD."

## MOD gives financial boost to festivities

CITIES, COMMUNITIES and local organisations are being asked to show support for servicemen and women by hosting an Armed Forces Day event this summer, with MOD funding available.

Celebrations this year will be on Saturday 28th June, when a major national event will be held in Stirling, Scotland.

Last year more than 340 events took place in all parts of the UK, including tea parties, concerts, civil war military re-enactments and live and static demonstrations.

To find out more about applications and funding – grants are available up to £10,000 – visit [www.armedforcesday.org.uk](http://www.armedforcesday.org.uk)

## NEWSREEL

### Defence priorities

DEFENCE Secretary Philip Hammond has outlined his priorities to MPs, the first of which was the success of operations in Afghanistan. He added: "Beyond that, my priorities are the MOD's transformation programme, which is due to be completed in March; building confidence in the Future Force 2020 model; developing the reserve forces; reinforcing the Armed Forces covenant; maintaining budgets in balance; and reforming the defence procurement organisation."

### Ark parts

THE cost of buying parts from the former carrier *Ark Royal* for refitting *HMS Illustrious* is about £18,500 for an electrical switchboard, Minister for Defence Equipment, Support and Technology Philip Dunne has told Parliament. "Obtaining the switchboard rather than using other procurement options resulted in savings of approximately £57,000 and meant the part could be replaced months before it otherwise would have been," he said.

### MOD savings

DEFENCE Minister Anna Soubry has estimated to Parliament that, by 2021-22, cumulative savings of around £23 billion will have been made as a result of reductions in service and civilian personnel, and greater efficiency in the conduct of non-front line activities.

## NEWSREEL

## Seniors make progress

ARMED Forces Minister Mark Francois told a House of Commons defence debate the most tangible evidence of the progress women had made in getting to the most senior ranks of the Armed Forces was the appointment last year of Air Vice-Marshal Elaine West and Air Vice-Marshal Sue Gray as the first female two-star officers in the RAF. He said: "Air Vice-Marshal Gray will be responsible for the procurement of future combat equipment, including fighter aircraft. I am sure the whole House will wish to offer both of them congratulations and the best of luck in their new appointments."

## Germany exit

PROGRESS on the return of British Forces from Germany is on target to deliver the 2010 review commitment to draw down half of personnel based there by next year, and the remainder by 2020, Armed Forces Minister Mark Francois has said. Around 6,000 personal and families have returned so far.

## In the field

INITIAL Operating Capability has been declared on tranche 1 of Field Deployable Geospatial Intelligence to provide mapping, digital geographic information and imagery to UK Forces. Ian Smith of DE&S' IMAgE team, said: "This is a vital project that provides the MOD with improved and enhanced tactical capabilities."



New environment: A Royal Navy Merlin, above – RAF Merlins are being converted to operate in the maritime environment

# Testing will help Merlin take on new roles

A CONTRACT for test and evaluation to support the Merlin Life Sustainment Programme has gone to QinetiQ.

The arrangement, worth £16 million over five years, will form part of the conversion by AgustaWestland of 25 Mk3/3A RAF helicopters to maritime operations for the Royal Navy.

DE&S' Merlin team will get independent technical and safety advice, as well as testing and support to the certification of the Interim and Full Operating Capability.

Royal Navy Captain Ed Tritschler, Merlin team leader, said: "The life sustainment programme introduces a range of new equipment and capabilities to the Merlin. QinetiQ's involvement is key

to us understanding the risks associated with its continued safe operation in a number of new operational environments.

"This contract continues our long-term relationship with QinetiQ supporting our requirements for independent advice on the Merlin."

The contract will be delivered using the Long Term Partnership Agreement, a 25-year, £5.6 billion contract between the MOD and QinetiQ.

The Merlin team will benefit from the facilities and expertise, including military test pilots and flight test engineers available at Boscombe Down under the terms of the agreement.

As part of the contract QinetiQ will provide recommendations for Release to

Service to ensure that the aircraft can be operated safely in its broad operational environment, including operation from Royal Navy ships.

Gaz Borland, Managing Director for Air Division at QinetiQ, said: "We are very pleased to have been awarded this contract which illustrates the value we can bring to DE&S as independent advisors and ensures that the skills and expertise gained on the Merlin aircraft over the last 20 years are sustained.

"This enables us to continue to provide world-class expertise in test and evaluation and specialists who have deep knowledge of the aircraft and its capabilities."

■ Merlin transformation: page 26

## Warning system contract placed

DE&S' AIR Platform Systems project team, part of Director Air Support, has placed a \$28 million contract with BAE Systems, Information and Electronic Systems Integration, for procuring the next generation common missile warning system.

It will be used across all three services and on a wide range of aircraft including Chinook, Apache and Merlin Mk2.

Programme manager Paul Moorhouse said: "Awarding this contract was the

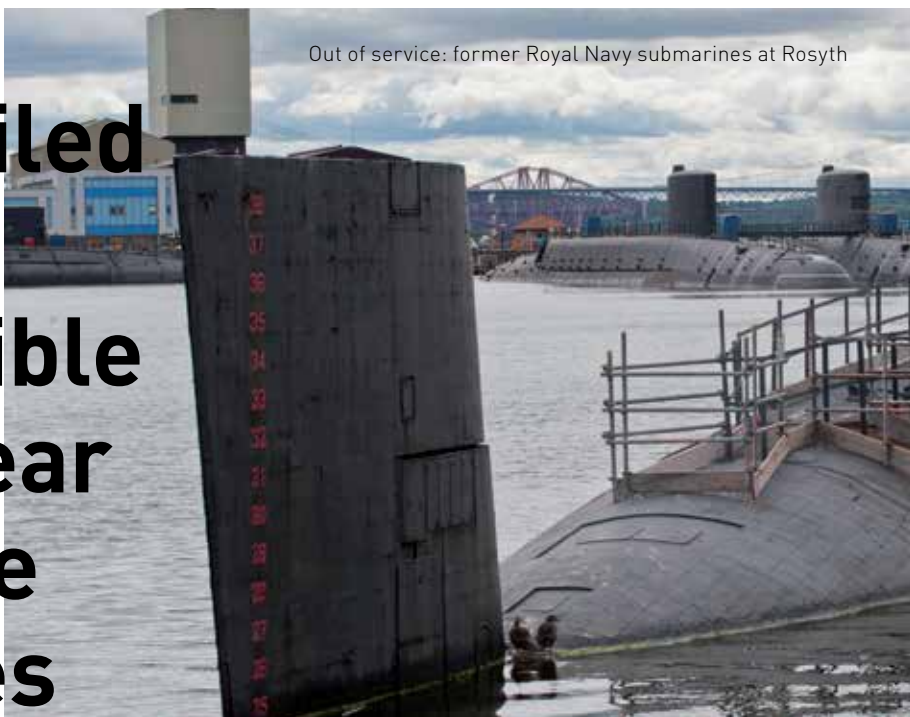
result of a great deal of hard work by the team. It forms part of the work the Platform Protection branch does to equip UK MOD aircraft with the best available air survivability systems against the kind of threats our crews might encounter.

"All front line aircraft already carry missile warning systems, but this contract takes advantage of the latest defensive technologies and represents the MOD's commitment to ensuring that our Forces are afforded the best possible protection while carrying out their duties."



# Sites unveiled as possible nuclear waste stores

Out of service: former Royal Navy submarines at Rosyth



FIVE NUCLEAR facilities across the UK have been identified as potential sites to store waste from nuclear-powered submarines that have left naval service, as part of the MOD's Submarine Dismantling Project.

The sites, which are either owned by the MOD, the Nuclear Decommissioning Authority or industry, already hold radioactive materials and have been identified as possible locations to store reactor components from the disused submarines.

The MOD has 18 former Royal Naval nuclear submarines stored afloat in Devonport and Rosyth but the submarines can only be completely dismantled once the reactor components, which are categorised as radioactive waste, have been safely removed.

## Submarine dismantling project moves on to its next stage

Nine submarines that are still in service will also be dismantled under the Project when they reach the end of their service lives. The initial dismantling process will support up to 60 skilled jobs.

Following an assessment of all the UK's nuclear sites, five sites were considered suitable and have been placed on a provisional shortlist.

Public consultation on the

possible sites will take place this year and no decisions will be made until this process is completed.

Whichever site is selected will be used as an interim storage site for the reactor components until after 2040, when the UK's Geological Disposal Facility is planned to come into operation.

Minister for Defence Equipment Support and Technology, Philip Dunne, said: "This is another step towards a safe and sustainable solution for disposal of radioactive waste from our submarine fleet.

"All the potential sites have a proven track record in handling radioactive material in a safe and secure way. We are committed to an open and transparent process and over the next year we will be working closely with local communities near to the potential sites as part of the consultation before a final decision is made."

It was announced last March that the first dismantling of a submarine will be at Rosyth dockyard, with future dismantling taking place at both Devonport and Rosyth dockyards.

The 27 submarines covered by the Project are 18 that have left naval service (one *Dreadnought* class, five *Valiant* and *Courageous* class, four *Resolution* class, six *Swiftsure* class and two *Trafalgar* class) and nine in-service submarines (five *Trafalgar* class and four *Vanguard* class).

## Potential sites

Site	Owner	Site Licensee
Aldermaston (Berkshire)	MOD	AWE plc
Burghfield (Berkshire)	MOD	AWE plc
Chapelcross (Dumfriesshire)	NDA	Magnox
Sellafield (Cumbria)	NDA	Sellafield Ltd
Capenhurst (Cheshire)	Capenhurst	Capenhurst

## Military keeps up the flood work

MILITARY PERSONNEL will remain available to help local authorities in flood relief work. Key tasks will include emergency response such as use of search-and-rescue helicopters and specialist vehicles; flood defence work such as engineering and sandbagging; and recovery of flood-damaged furnishings from homes. More than 200 personnel will also help assess existing flood defences across the country.

## NEWSREEL

### Making ships more efficient

THE Defence Science and Technology Laboratory is to provide £2 million funding for innovative ideas to reduce emissions and improve efficiency of marine vessels. This competition, entitled 'Vessel Efficiency II: better systems at sea', builds on the success of a competition last year. The funding is expected to encourage transfer of innovation from civil to defence applications and vice versa. Competition information and how to apply: [www.innovateuk.org](http://www.innovateuk.org)

### Increase blocked

DEFENCE Minister Dr Andrew Murrison has told MPs the UK had blocked any increase in the European Defence Agency's budget for the fourth consecutive year. He said it would be perverse to squeeze defence budgets at home while acquiescing to increases in Brussels. As a result of the UK's action, the agency has been forced to prioritise its work plan to focus on delivery of key European capability shortfalls.

### Food chain

A Defence Support Group contract worth £7 million has gone to TVS Supply Chain Solutions to provide spares and support to the Operational Field Catering System. The system is used by the Armed Forces to provide meals for up to 100 deployed personnel who have limited access to permanent catering.

Pictures: David Tucker



# Untapped skills and capacity

**DE&S helped launch a new initiative last month. Minister for Defence Equipment, Support and Technology, Philip Dunne, explains his support for a new plan to help rehabilitate offenders – named Project Claustum**

**P**roject Claustum is a joint initiative between the MOD and the Ministry of Justice and will contribute towards government efforts to rehabilitate offenders.

The initiative investigates potential efficiencies such as cost savings and simplified contracting methods by placing carefully chosen repair, overhaul and manufacture work into prisons.

My colleagues in the Ministry of Justice and I know that too many prisoners pass their time in prison in a state of enforced idleness, often with too little constructive activity. We want prisons in England and Wales to become places of meaningful work and training, to help offenders develop the skills they need to gain employment after release and turn away from crime.

I explained to DE&S project and programme managers at a joint

presentation with the Ministry of Justice last month, the MOD will not outsource any work which displaces jobs in the community or undermines fair competition for winning MOD contracts.

The DE&S Operational Infrastructure Programme (OIP), within Land Equipment is piloting this project. I encourage everyone involved in defence procurement to open their minds and think about the possibilities this initiative provides. There are significant benefits to be gained: benefits for DE&S, for us as taxpayers; and of course for prisoners who will gain vital skills that may prevent future reoffending. It's a win-win situation.

This approach is long overdue and absolutely necessary at a time when we are looking to become more efficient in the way we support the Armed

Forces. We intend to realise savings through utilising what are, in effect, untapped skills and capacity in our prisons, and we expect to benefit from simplified

procurement processes, while helping the Ministry of Justice meet its goals of reducing re-offending.

We have agreed to trial a limited number of products including post pallets, tool bags, storage crates and maintenance of hydraulic jacks. You may think in the scheme of things these items are small, but for Operational Infrastructure, these are the oil in the defence engine; things that if they weren't there, you would soon notice.

Early indications suggest this project has the potential to deliver significant savings for the MOD and potentially reduce re-offending by enabling prisoners to learn new skills and gain meaningful future employment. As always, what's important for us is that we get the right products for the Armed Forces and the value for money we are looking for. I'd encourage other DE&S teams to think about products they procure that may be appropriate for this initiative.'

Far left: Mr Dunne and Brigadier Peter Rafferty, head of OIP, take a look at some of the work offenders will be doing

Left: Mr Dunne discusses the way forward with Director Land Equipment Major General Paul Jaques and Chief Executive of partner organisation One3one Solutions Sarah McKnight



Busy days: *HMS Scott* is pictured in Devonport while, below, *HMS Monmouth* moves smoothly towards the beginning of her 15-month docking



## Monmouth heralds busy time at Devonport

DEVONPORT HAS embarked on its busiest period of warship maintenance for years as work begins on *HMS Monmouth*.

The Type 23 frigate has become the fourth surface vessel to begin a refit or support docking period to join *HMS Ocean*, *Sutherland* and *Scott*.

It is believed to be the first time in around 20 years that the dockyard has been home to four ships. Babcock is also busy with submarine maintenance and upgrades in Devonport.

*Monmouth* docked down on 31st January at the start of a 15-month refit which will involve upgrades and improvements to improve the frigate's sustainability and fighting capability.



These include Radar 996 replacement with Artisan 3D Medium Range Radar 997, Vertical Launch Seawolf midlife update, galley updates, installation of a chloropac system that reduces marine growth in the pipe system, the installation of automatic small calibre guns, and modifications to high pressure air systems to allow safer isolation of distinct parts.

The ship is scheduled to leave Devonport early next year for sea trials, returning to the Fleet in mid-2015.

Meanwhile *HMS Scott* has reached the

halfway point in her most extensive refit.

The oceanographic survey ship started her most extensive multi million pound refit in 17 years last November.

The refit will include a revamp of all accommodation, an overhaul of the engines and essential work to upgrade the vital sonar equipment *HMS Scott* uses to scan the deep ocean seabed.

# LTPA

T&E begins here

## Have you met some of your Test and Evaluation team?

To get the best out of Test, Evaluation and Training, you need suitably qualified and experienced people, combined with access to the right facilities.

Since 2003, cost effective Test, Evaluation and Training Support Services have been delivered to the MOD through the Long Term Partnering Agreement (LTPA). This brings together experts in the test and evaluation of systems, weapons and components to meet your requirements, from concept to disposal. Tailored live and simulated training is also available.

Visit [www.LTPA.co.uk](http://www.LTPA.co.uk) to find out more.

Senior Engineer, ETPS,  
MOD Boscombe Down

Capability Manager,  
MOD Aberporth

Capability Manager,  
MOD Shoeburyness

Telemetry Engineer,  
MOD Aberporth



0800 015 0594 [www.LTPA.co.uk](http://www.LTPA.co.uk)

[www.LTPA.co.uk](http://www.LTPA.co.uk) is a QinetiQ registered domain name.

**QinetiQ**

## NEWSREEL

## DE&amp;S vehicle UOR delivery

MORE than 2,500 vehicles have been delivered to Land Headquarters as Urgent Operational Requirements since 2006, according to the latest figures issued to Parliament. This includes 30 Cougar, 502 Jackal, 76 Coyote, 450 Mastiff, 171 Ridgback, 125 Wolfhound, 338 Husky, 115 Warthog, 78 Springer, 27 Ultra-lightweight Tractor (Protected), 25 Lightweight Tractor (Protected), 25 Mediumweight Tractor (Protected), 24 Self Loading Dump Truck (Protected), 513 Quadbikes and Trailers, 56 Enhanced Palletised Loading Systems, 17 High Mobility Earth Excavators, 19 Buffalo, 24 Bushmaster, 14 Citizen and 18 Teller.

## Libya support

UK involvement in Libya is now led by a Defence Advisory Team in Tripoli of 24 people which supports the UK/Libya relationship and provides advice through advisors embedded in the Libyan MOD, navy, air force, land forces and border security force, according to a written Parliamentary answer. There is also a senior disarmament advisor working with the Government of Libya, the UN and international partners. The team also provides for short term training teams to support programmes, including strategic communication, developing explosive ordnance disposal schools, supporting creation of joint operational planning staff and naval training. The UK also has a Defence Section in the British embassy, Tripoli with a Defence Attaché.



Back in the open: *HMS Pembroke* emerges from the sheds at Rosyth after a Support Period (Docking)

## Pembroke emerges from Rosyth

SANDOWN CLASS minehunter *HMS Pembroke* has left Babcock's Rosyth dockyard for sea trials, following a successful maintenance time in dock.

Babcock leads the *Sandown* Class Output Management team, as part of the Surface Ship Support Alliance.

The comprehensive support period has involved substantial maintenance, plus upgrades and improvements.

The Defence Information Infrastructure has been installed to enable information sharing across the defence network, while other upgrades have included a new fire detection system extending coverage to additional areas, and galley improvements including replacement of equipment with modern alternatives.

# The challenges of change

DE&S' CHIEF of Materiel (Fleet) domain is facing significant change over the next few years as major equipment programmes develop and the three Naval Bases transfer to Navy Command – a challenge relished by the new man in charge.

Chief of Materiel (Fleet) Vice Admiral Simon Lister, said: "It's a challenging job because of the scope, because of the connection with the customer and the nature of the issues. At the top of the shop these can be problematic and difficult but that's what makes the job enjoyable and very interesting. I'm actually really stimulated by what I find and I'm very privileged to be in charge of it."

On the issues facing the domain he said: "Maritime is going through an intense period of recapitalisation. In the nuclear weapons field, we are getting the Atomic Weapons Establishment at Aldermaston to invest capital on the nuclear weapons facility. This is in relation to the Nuclear Weapons Capability Sustainment programme which is our contribution to Continuous At Sea Deterrence.

"On the submarine side, getting the *Astute*-Successor transition running well will be a very tough job for Director Submarines, Rear Admiral Mike Wareham.

"On the Ships side, now that agreement has been reached, getting the Carrier programme on track to deliver flying trials capability for 2017-18, is yet another tough and important proposition."

A big change will be the

## I'm stimulated by what I find and privileged to be in charge, says new Chief of Materiel (Fleet)

transfer of the bases to Navy Command next month.

"Our assessment is that the engineering is DE&S business and we will continue to contract for that on that basis," he said. "The interface is better drawn between DE&S and Navy Command with the Navy Command owning the bases because it brings some really challenging personnel and force generation issues under their more direct control."

Chief of Defence Materiel Bernard Gray said: "I am

delighted to welcome Simon to the DE&S Board.

"He brings with him a wealth of knowledge and experience of the maritime area and I'm looking forward to working with him in delivering the organisational changes for a future improved DE&S."

Among Admiral Lister's varied career postings were a tour with the Foreign Office as Assistant Naval Attaché in Moscow during the collapse of communism, and a spell as Naval Base Commander at Devonport.

Life at the sharp end: Vice-Admiral Simon Lister, far right, seen during his time as DE&S Director Submarines, with John Hudson, Managing Director of BAE Systems Maritime - Submarines, at the unveiling of *Artful* last year



Proud to support  
MoD as a  
trusted partner

Post Sortie Database™  
Efficiency up there  
results from  
efficiency down here

As created for Pilots by Pilots,  
the Post Sortie Database:

- ✓ Real-time pilot feedback
- ✓ Simple systems based assessment
- ✓ Improved fleet utilisation  
and availability

Delivering critical tools and agile solutions for the MoD business space

Supplier to  
Government Procurement  
Service

 **tlmNEXUS**  
Making the complex simple

Call | +44 (0)845 677 4480

Web | [www.tlmnexus.com](http://www.tlmnexus.com)

Email | [enquiries@tlmnexus.com](mailto:enquiries@tlmnexus.com)

# 'Struck by the quality of our people'

MAJOR GENERAL Paul Jaques is the new Director Land Equipment at DE&S responsible for equipping and supporting all land equipment capability.

"Moving to DE&S and taking on the role of Director Land Equipment, I am stimulated by the challenge and the change of environment," he said.

"I am immediately struck by the quality of the people within the Land Equipment Operating Centre; they have real pride in delivering what the customer needs.

"The land environment has worked exceptionally hard to support operations over recent years; I have witnessed this first hand in my previous role as Director General Logistics, Support and Equipment.

"As for priorities for the Operating Centre – in no particular order – to continue supporting operations and the re-deployment; delivery of the equipment programmes in the next few years that will underpin transition, especially bringing Urgent Operational Requirements into the core programme and providing equipment to soldiers, both Reservist and Regular, and finally, progressing the Scout programme and the Warrior Capability Sustainment Programme."

Maj-Gen Jaques added: "The future will see significant change in DE&S

## New Director Land Equipment sees much pride in delivering to the customer

as it moves to a trading entity. The key challenge is leading our people through this change while continuously improving the way we do business. I believe



success will look like an organisation that is trusted to deliver equipment and services of the best value for money to the customer."

In appointing Major General Jaques, Chief of Materiel (Land), Lt General Chris Deverell, said: "Paul brings a wealth of experience in operations and acquisition to his post as Director Land Equipment, as well as a valuable perspective gained from his last appointment at Army HQ."

Major General Jaques was commissioned into the Royal Electrical Mechanical Engineers in 1983.

His operational experience encompasses the first Gulf War, tours to the Former Yugoslavia, and in Iraq in 2007 in command of 101 Logistic Brigade.

He has also had range of different staff appointments including Head of Capability Expeditionary Logistics and Support, Deputy Chief of Staff 3(UK) Division, Director of Equipment Capability (Combat Service Support) and Military Assistant to the Master General of the Ordnance.

More recently he held the post of Director General Logistics, Support and Equipment within Army Headquarters.

Left: Major General Paul Jaques, Director Land Equipment at DE&S

## Learning from the past, looking to the future



The Environmental Safety Assurance Symposium (ESAS) is the MOD's flagship symposium focusing on Equipment Safety and Environmental Management.

ESAS14 will be held at Abbey Wood in Bristol on 7th and 8th May 2014.

The Symposium will explore the theme of **'Learning from the past, looking to the future'** and will consider how the MOD and Industry learning cultures will support the continuous improvement and development of Acquisition Safety and Environmental Management as UK Defence transforms to provide flexible, agile and capable forces in a more affordable way.

To register as a delegate or to exhibit at this event, please visit:  
[www.esas2014.co.uk](http://www.esas2014.co.uk)

For further information:  
[enquiries@esas2014.co.uk](mailto:enquiries@esas2014.co.uk)

HOSTED BY:



IN PARTNERSHIP WITH:

**ATKINS**

# Days of thunder

Report: Clare Trenholm

## The Taranis unmanned combat air demonstrator – a joint MOD and industry project – has surpassed all expectations during its first flight trials

**T**he world was handed a glimpse into the future of unmanned air technology when it was announced last month that Taranis had taken its maiden flight on 10th August last year.

The aircraft – named after the Celtic God of Thunder – has been designed to demonstrate the UK's ability to create an unmanned air system (UAS) which, under the control of a pilot, would be capable of undertaking sustained surveillance, marking targets, gathering intelligence, deterring adversaries and carrying out strikes in hostile territory. To protect the security of the

remaining trials, the test flight itself was not announced straight away. A number of flights took place last year, of up to one hour in duration and at a variety of altitudes and speeds. As part of the announcement last month, the MOD revealed that the demonstrator aircraft made a perfect take-off, rotation, 'climb-out' and landing on its 15-minute first flight. BAE Systems test pilot Bob Fraser, a retired wing commander, was commanding the team of ten who were involved.

The findings from the aircraft's flights prove that the UK has developed

a significant lead in understanding unmanned aircraft which could strike with precision over a long range while remaining undetected.

Minister for Defence Equipment, Support and Technology, Philip Dunne, said: "Taranis is providing vital insights that will help shape future capabilities for our Armed Forces in coming decades. Its advanced technology is testament to the UK's world-leading engineering skills that keep Britain at the cutting-edge of defence."

■ continued on page 25



### Timeline

The Taranis technical demonstrator was formally unveiled in July 2010, but only a very limited number of scientists and engineers have ever been given full access to the top secret aircraft.

Initial 'power-up' or ground testing began later in 2010 at BAE Systems' military aircraft factory in Warton, Lancashire, followed by a comprehensive and highly-detailed programme of pre-first-flight milestones.

These included unmanned pilot training, radar cross-section measurements, ground station system integration and, last April, trials taxiing on the runway at Warton.

The aircraft and its ground station were then shipped from Warton to the test range before being reassembled and undergoing systems and diagnostics checks. Taranis then made a number of high speed taxiing tests in July before its maiden flight last August.



### A sense of pride, a sense of achievement

Wg Cdr (Ret) Bob Fraser was in the RAF for 24 years including being Station Commander in Gibraltar. He now works for BAE Systems providing aircraft and piloting advice for large aircraft and UAV projects like Taranis.

He said: "I was the commander of the mission crew team of ten involved in the first Taranis flight. Half of the team are subject matter experts and half are pilots flying Taranis, plus there is a chief engineer and range safety officer. It's not exactly exciting flying, but there is a sense of pride, a sense of achievement when the mission goes exactly as rehearsed. It's a privilege for us to be flying Taranis and it's very easy to be the front man for the team bearing in mind the team has so many specialists and people who put together the aircraft."



□ continued from page 23

Air Vice Marshal Sue Gray headed the UAS team before taking up her new role as Director Combat Air. A media event last month marked her third day in her new job, and she tackled some challenging questions from journalists.

Air Vice Marshal Gray said: "The aircraft can only fly a pre-programmed mission; it does not make up its own missions. The aircraft has the ability to fly a pre-programmed mission autonomously, but that is not the way the aircraft will be operated. There will always be a 'man in the loop' to ensure mission success.

"An Unmanned Combat Air System will not be combat ready until 2030, so the basing of the pilots and details

like that are some time away. However, this demonstrator is one step towards proving that the technology exists to progress with Combat UAS."

In a speech to media, Nigel Whitehead, Group Managing Director of BAE Systems' Programmes and Support Operating Group added: "I regard the achievements of Taranis to-date as comparable to those of the Experimental Aircraft Programme which my company launched in the late 1980s. It was the first thing I worked on as a newly-qualified engineer. This was an important step towards Eurofighter Typhoon and I sincerely hope that this programme will be equally influential.

"I firmly believe that technology

demonstration of this type, coupled to Government initiatives such as the Defence Growth Partnership, are vital ingredients not just for the creation of new products but also for the long-term prosperity of the UK's military air sector."

The technological advances made through Taranis will also help MOD and the Royal Air Force make decisions on the future mix of manned and unmanned fast jet aircraft and how they will operate together in a safe and effective manner for the UK's defences.



Philip Dunne



### Key Facts

- Taranis is about the size of a BAE Systems Hawk – approx 12 metres in length with a wingspan of 10 metres.
- Over one million hours have been involved in building the technology demonstrator.
- The programme has cost £185 million and was funded jointly by MOD and UK industry.
- BAE Systems has teamed up with Rolls-Royce, the Systems division of GE Aviation (formerly Smiths Aerospace) and QinetiQ to work alongside UK MOD military staff and scientists to develop and fly Taranis





# An investment in the future

As the economy returns to growth, two contracts for future maintenance and upgrading of helicopters reinforces the UK's engineering and manufacturing base. Hannah Swingler reports

A £760 million investment in Merlins and Apaches, announced by the Defence Secretary Philip Hammond last month, will secure more than 1,000 jobs in UK industry.

The deal, with Somerset based helicopter company AgustaWestland, includes a £430 million contract to provide maintenance and support for the Army's Apache attack helicopter with an additional £330 million to upgrade the RAF's Merlin Mk3/3a helicopters for use by the Royal Navy's Commando Helicopter Force.

The 25 upgraded Merlin helicopters will replace the Sea King Mk4 helicopters, which go out of service in 2016. The work will involve fitting new glass cockpits and avionics, a folding main rotorhead and tail, and improved undercarriage. The Merlins will be used to transport Royal

Marines, vital supplies and cargo from sea to land.

The Apache contract will provide operational support for the helicopters for the next five years, ensuring they are able to play a key role post-Afghanistan.

Speaking at the AgustaWestland facility in Yeovil, Mr Hammond said: "These are two very important contracts that deliver critical capabilities to the Armed Forces. Not only do these contracts provide for the sustainment of the Apache platform and the upgrading and conversion of the Merlin, but they also demonstrate how the working relationship between the Armed Forces and industry can drive down cost and improve efficiency for the benefit of the taxpayer and those who use the platforms."

"This investment will help secure

British jobs, providing security to thousands of workers and their families. The UK defence industry makes an important contribution to the economy, generating revenue of over £22 billion each year, and its highly skilled workforce plays a crucial part in growing our economy."

During his visit to the site Mr Hammond met young apprentices working on both programmes and spoke of his hopes for the future of UK engineering and manufacturing jobs.

He added: "As the UK economy returns to growth I want to see reinforcement of the UK's engineering and manufacturing base supported by the huge investment that the MOD is making in apprenticeships, in technical skills and in education across the country, making the UK an attractive place for companies such as Finmeccanica (AgustaWestland's parent company) to direct investment in the future."

The work of DE&S' Apache and Merlin teams was praised by Commodore Andy Lison, Head Helicopters 1.

"Working closely with industry, the Apache team has worked tirelessly to ensure that the UK's Attack Helicopter capability is sustained for a further five years. The Merlin team has agreed an essential upgrade programme that will sustain the proven medium lift capability well into the next decade; the aircraft will provide an essential replacement for the Sea King Mk4 and vital capability for the Commando Helicopter Force. Both teams should be rightfully proud of their achievements."

Air Commodore Simon Moss – Head





Helicopters 3 – added his congratulations: “I commend the Apache team and industry colleagues for their hard in work in securing this highly-competitive second pricing period of the Integrated Operational Support contract. It has involved the careful balance of meeting the requirement and reducing risk while securing the best value for money to the UK taxpayer. By working with industry colleagues we have agreed an extension of a support solution that will enable us to build on the success of Apache IOS to date. This contract will continue to ensure that Apache support is delivered to the best possible standard both at home and abroad where its mission winning capability remains critical.”

Expert work will be carried out by AgustaWestland at its sites in Yeovil, Suffolk and Hampshire, sustaining hundreds of jobs within the company. More will be protected in the supply chain at GE Aviation in Cheltenham, General Dynamics in East Sussex, Selex ES in Luton and APPH Aviation Services in Cheshire.

Work on the Merlin design and manufacture contract will start immediately with seven interim Phase 1 aircraft delivered to the Royal Navy in 2015 and 2016 and all 25 Phase 2 standard aircraft delivered between 2017 and 2020.

The seven Phase 1 aircraft will provide the Royal Navy with an interim capability between the withdrawal of the Sea King Mk4 in 2016 and the

Initial Operating Capability of the full configured aircraft in mid-2018.

The Apache contract will continue to provide support and maintenance to 31st March 2019 with AgustaWestland supported by partners Boeing, Lockheed Martin, Longbow International and Selex ES.

At Wattisham airfield, the Apache fleet is fast approaching 150,000 flying hours milestone and recently more than 40 per cent of annual flying hours have been performed on operations in Afghanistan.



# Duncan joins the battle

The Americans have been in town, working with the Royal Navy and proving the effectiveness of the latest synthetic training. Lt Cdr Mike Dineen of the Maritime Warfare School reports

**H**MS Duncan, the Royal Navy's latest warship, has taken part in a week-long transatlantic exercise with some of the United States' biggest naval assets – without casting off from port.

Personnel from the Type 45 destroyer's operations room manned a simulator at *HMS Collingwood* in Hampshire, connected to simulators in the US and Germany. The exercise with the *USS George W Bush* battle group and German naval units provided valuable pre-deployment training for the US and allowed Maritime Battle Staff to rehearse their role before deploying to the Middle East.

Fleet Synthetic Training (Joint) is a key part of the training package for every US Carrier Battle Group before deployment. It is a fully synthetic exercise that links different national simulation systems together to enable fully joint and integrated training to be conducted.

*Duncan's* staff were using warfare simulators in the Maritime Composite Training System (MCTS) which began training operators more than two years ago.

As the Royal Navy's first participation in FST-J for some time, the January

event attracted significant interest and Rear Admiral Ben Key, Flag Officer Sea Training, hosted a VIP day on 23rd January, which saw a number of senior officers from across the Royal Navy, RAF, Army and Joint Forces Command visit MCTS to see how modern simulated training is conducted in the 21st century.

The successful FST-J is expected to be the first of many, with Royal Navy participation in these pre-deployment exercises planned to become a regular event. It will allow Royal Naval warfare teams to operate with their US and Nato counterparts in a realistic environment, without any ships having to go to sea.

Such training is invaluable for all participants and is also set to become a key part of the pre-deployment training for Royal Navy ships deploying with US and Nato units. MCTS plays a key role in this and participation in FST-J built on previous training events linked with RAF AWACS and Typhoon simulators. This international exercise was both the final requirement for the system to achieve Full Operating Capability and the realisation of the original concept for versatile maritime training.

MCTS provides core warfare training to all levels of Royal Navy personnel.

At the same time, it takes advantage of advances in computing technology to provide all aspects of synthetic training – individual and team training – along with interoperability with Army, RAF and international simulators and thus provide full combined and joint simulated training capability.

MCTS simulators are extremely versatile, with the system able to simulate any of the command systems the Royal Navy uses in surface ships today, together with their associated displays, sensors and weapons, while the ability to swiftly reconfigure the hardware set up enables MCTS to adopt any Operations Room layout.

The system effectively simulates every ship type the Royal Navy has but, with upgrades due to be incorporated this summer, MCTS will be able to provide realistic training for the *Queen Elizabeth* class carriers and the Type 26 Global Combat Ship, before either vessel is in service. In total, the system provides more than 160 different specific configurations for different operator roles, supporting 84 training courses for personnel of all ranks and rates.

Simulators are also in Devonport, which enables Plymouth-based ships and



# e – on land

personnel to conduct simulation training without the need to travel to Portsmouth. The two simulator sites are connected through a secure link, which enables the simulators to interact in the same scenario in real time and thus a Type 45 in Portsmouth can interact with a Type 23 in Devonport, with a common synthetic environment, despite the two simulators being 170 miles apart.

MCTS has achieved its base level capability and is now running in 'steady state', providing individual career training and training for ship's warfare teams. The capacity of the system is still being explored, new equipment fits and closer links with MWC are being pursued.

Simulation training in MCTS has now been formally included as part of the ship regeneration programmes and sea training packages. Interoperability, already successfully proved, offers the opportunity to connect with national and Nato partners and provide greater fidelity in more challenging and realistic joint exercises than ever before, without the associated costs of using real ships. The intent is to conduct bi-annual FST-J exercises as well as continuing to explore every opportunity to interact with the Army, the RAF and allies. MCTS will be

the backbone of Royal Navy training for the foreseeable future and the capacity and flexibility of the system will ensure it can provide cutting edge and effective warfare training for the Royal Navy for a long time to come.



Above and below: MCTS at HMS Collingwood. Top: the real thing in a ship's control room



# The UK French connection

The UK and France have strengthened defence co-operation. *desider* reports on a wide-ranging defence agreement

**D**E&S will be working with its French counterparts and the two countries' industries will be closer together as part of the strengthening of defence co-operation between the UK and France following a summit at RAF Brize Norton.

A communiqué signed by Prime Minister David Cameron and French President Francois Hollande sets out plans for closer ties between the countries.

Building on the Lancaster House treaty signed in 2010, the agreements further the security and prosperity of the two nations through commitments to jointly invest in the procurement of defence equipment, the joint training of Armed Forces and the continued development of the Anglo-French Combined Joint Expeditionary Force.

Both countries have signed:

- a statement of intent for a future combat air system, which would launch a two-year, £120 million joint feasibility phase that will see British and French industries working together;

- technical arrangements for an exchange programme to provide RAF pilots and engineers with experience of operating the A400M ahead of the delivery of the UK's first aircraft later this year; and for French pilots to gain flying experience on the RAF's A330 Voyager aircraft;

- a memorandum of understanding

confirming joint orders for a future helicopter-launched, anti-surface guided weapon for both countries' navies.

Agreements have also been reached that will see:

- a £10 million contract for development of underwater vehicles capable of finding and neutralising seabed mines;

- investment in the Atomic Weapons Establishment at Aldermaston, Berkshire, to allow collaboration on and safe testing of UK and French stockpiles and greater sharing of technical and scientific data to further joint research;

- further co-operation between both armies in the areas of equipment capability and interoperability.

Both countries also agreed to build on international peacekeeping missions carried out by their respective forces in Libya, Mali and the Central African Republic.

Defence Secretary Philip Hammond and his French counterpart, Jean-Yves Le Drian, agreed to continue development of a Combined Joint Expeditionary Force capable of carrying out co-ordinated expeditionary military operations.

The two nations also agreed joint efforts to tackle security issues in north and west Africa, in particular terrorism, as well as drug and arms trafficking to achieve long term stability in the regions.

Mr Hammond said: "Britain and

France are natural partners for defence co-operation. We have made substantial progress since the Lancaster House treaty was signed in 2010 and today we have committed ourselves to go further still.

"The agreements we have reached at this summit will improve the interoperability of our forces, enhance our joint equipment procurement and build on our capacity to support security and stability in places such as Libya, Mali and the Central African Republic."

Industry has welcomed the two nations' initiative. BAE Systems has completed a study with Dassault Aviation for both governments, known as the Future Combat Air System programme preparation phase.

BAES Chief Executive Ian King said: "Given the strong research and development investment and progress in technology that has already been made, continuing work in unmanned air systems will also ensure we maintain the core knowledge and key skills necessary to make a long term contribution to both our national economies."

Rolls-Royce will continue work with Snecma to explore propulsion systems as part of the Future Combat Air Systems preparation. Studies have focused on developing engine technologies that will be required to power the FSAS demonstrator and generate significant electrical power for the aircraft systems and sensors.



# ction

Bob Stoddart of Rolls-Royce said: "We welcome the support of the Governments of the UK and France in this programme at a time where budgets are challenged. Continuing this programme will enable us to further develop and retain critical defence propulsion system technologies that will sustain leading edge operational capability in the UK and France."



Defence Secretary Philip Hammond and French Defence Minister Jean-Yves Le Drian at RAF Brize Norton

Synchronisation: an RAF Typhoon and a French Air Force Mirage 2000N practice formation flying skills during Exercise Capable Eagle last October



# Forward thinking

Stability, soundness and realism underpin the second annual Equipment Plan, published last month. *desider* dissects the detail

£164 billion

The MOD has published its second annual Equipment Plan, described by Defence Secretary Philip Hammond in his introduction as a demonstration of the stability, soundness and realism that has underpinned the Government's management of the defence budget

He said: "The report sets out our plans to spend around £164 billion over the next ten years on new equipment, data systems and equipment support costs, including once again a healthy provision of £4.7 billion for contingency, as well as unallocated funding of £8.4 billion.

"Taken together, this demonstrates the stability, soundness and realism that underpins our management of the budget. This year, for the first time in many years, there has been no requirement for us to make short term cuts that undermine our long term plans, simply in order to live within our means."

This was, he said, a huge testament to the Government's work in getting to grips with an unaffordable equipment plan. "An example of the robustness of our approach is that we had already made provision within our budget in anticipation of the increased costs of the Carrier programme set out in this year's Major Projects Report," he added.

Key points from this year include:

- the most significant change is the transfer of responsibility for managing the bulk of the Equipment Budget from Head Office to the four Front Line Commands;
- the data summarised in the report is as at the end of the department's Annual Budget Cycle 2013 and covers the period from Financial Year 2013/14 to 2022/23;
- the amount MOD expects to spend, year-on-year, on equipment has not changed significantly;
- the underspend in financial year 2012/13 against the planned Equipment Budget was around £1.2 billion;
- an assessment of the likely spending over the next three years suggested it would be lower than budgeted, an opportunity to allocate £700 million in financial year 2013/14, £300 million in 2014/15 and £200 million in 2015/16 to other projects and programmes, to maximise delivery;

- as a direct result of the action the MOD took in Planning Round 2012 to place the whole defence programme on a stable and affordable footing, for the first time in many years the MOD has not had to make significant reductions in the scope of the Core Equipment Plan to maintain affordability.

The Equipment Plan gives an approximate breakdown of spending covering about £79 billion on buying and supporting new equipment and about £72 billion on supporting existing equipment, with contingency and unallocated headroom totalling around £13 billion. In addition, within individual projects, total risk contingency amounted to about £11 billion.

The MOD had added into the plan capability enhancements needed for contingent operations, as well as beginning the work of bringing UOR equipment into the Core programme, costing around £1.4 billion over the next four years.

The stability of MOD's costings, unused contingency provision and reassessment of the rate of spend indicated meant the costs could be accommodated within budget.

MOD Capability Audits identified that a significant shift in balance of investment in favour of joint enabling capabilities offered the most effective outcome for defence. As a consequence, it was decided that at least half of the £1.4 billion early years' additional investment should be allocated to Joint Forces Command.

## Combat Air

The MOD plans to spend around £18.8 billion in the Combat Air sector over the next ten years, in comparison to £18.5 billion at the end of the previous planning cycle.

This sector covers fast jets, Unmanned Air Systems and military flying training, including procurement of training aircraft. This includes:

- continuing investment in Typhoon capability including integration of a suite of weapons capabilities to enhance its utility in the ground attack role;
- investment in the Joint Strike Fighter programme, a critical element of UK plans to deliver a high-end power projection capability for decades;
- continuing investment in Unmanned Air Systems.

Since last year, the MOD has:

- received the first two test and evaluation aircraft of the STOVL variant Joint Strike Fighter;
- established a fourth front-line Typhoon squadron;
- using additional funds freed up in-year, purchased additional targeting pods to increase the capability of fast jets;
- Invested in improved protection systems for the Tornado GR4.





## Air Support

The MOD plans to spend around £13.4 billion in the Air Support sector over the next ten years, in comparison to £13.6 billion at the end of the previous planning cycle.

This sector covers all large aircraft, including transport, air-to-air refuelling and large ISTAR platforms. This investment includes:

- the A400M future generation air transport aircraft;
- the Voyager transport and air-to-air refuelling aircraft programme,;
- new Airseeker aircraft to provide a state-of-the-art airborne signals intelligence collection capability.

### Since last year the MOD has:

- accepted delivery of an eighth C-17 into RAF service;
- made good progress building up core military capability of the Voyager;
- taken delivery of the first Rivet Joint aircraft, which is planned to enter service as part of the Airseeker capability in 2014;
- accepted into service two BAE 146QC transport aircraft, procured under UOR.



## Helicopters

The MOD plans to spend around £11.2 billion on helicopter capability over the next ten years, in comparison to a revised figure of £10.8 billion for last year's plan, once the removal of the cost of the future search-and-rescue service has been reflected in the previous figure.

Plans in this area include:

- over the longer term, rationalising to four helicopter fleets, Chinook, Merlin, Apache and Wildcat, which will be sustained until at least 2040;

- progressing the Merlin Life Sustainment and ship-optimisation programmes, for which additional funding has been allocated over the next four years.

### Since last year:

- the first Wildcat helicopters were released to service with the Army in April 2012;
- the modified Merlin Mk2 helicopter was released to service and the Royal Navy started initial training in January 2013;
- Project Julius has introduced to service a new integrated cockpit and avionics mission system on the Chinook helicopter.

## ISS

The MOD plans to spend around £15.8 billion on Information Systems and Services over the next decade. This is broadly unchanged from last year's figure.

This sector covers all expenditure on procurement of data and voice communications, secure and insecure, and the development and upkeep of all of our supporting network infrastructure.

### Since last year:

- the next upgrade to the Bowman, Common Battlefield Application Toolset, Infrastructure and Platform Battlefield Information System Application (BCIP) 5.5 has been developed and integrated within cost and on time;
- the first two increments of the BAE Systems-supplied Falcon communications system were accepted into service by the Army and RAF.



## ISTAR

The MOD plans to spend £4.9 billion on Intelligence Surveillance, Target Acquisition and Reconnaissance (ISTAR) over the next decade, compared to £4.4 billion last year.

This sector includes spend on CBRN detection and countermeasures and a range of other specialised equipment.

During the last financial year the Cutlass large explosive ordnance disposal remote control vehicle was accepted into service by the British Army.

ISTAR's future profile is dominated by the Project Marshall programme for the provision of terminal air traffic management.

■ continued on page 34



## EQUIPMENT PLAN – NATIONAL AUDIT OFFICE

THE NATIONAL Audit Office's review of the MOD's Equipment Plan 2012, published last month, concluded that the MOD's work to address the affordability gap and create more certainty around its equipment budget appeared to have had a positive effect on its ability to maintain an affordable plan.

However, Amyas Morse, head of the National Audit Office, said: "Most significantly the department has not subjected the half of its equipment budget related to support to the same degree of scrutiny as its procurement costs. Nor can it be certain that the impact of a £1.2 billion underspend on equipment and support in 2012-13 will not cause some increased cost and delay further down the line."

Defence Secretary Philip Hammond said in response to the NAO Report: "I am delighted that their report recognises the progress that we have made since last year, as well as pointing out where we must continue to improve and refine our processes in the future. We will work with the NAO over the coming years to increase the level of confidence that Parliament and the taxpayer can have in the robustness and affordability of the Defence Equipment Plan."

The MOD has adopted an accelerated programme strategy for the Crownstest capability, re-allocating funding from later years.

Across ISTAR the main effort continues to be delivery of low value, strategically important capability to specialist users. Last year's significant achievements were:

- the successful transition of the Joint Air Reconnaissance Intelligence Centre and other strategic and operational intelligence capabilities into a new facility – the Defence Geospatial Intelligence Fusion Centre at RAF Wyton;
- Procurement and fielding of more than 1,000 vehicle-borne electronic countermeasure suites and associated platform installation as part of the Trust UOR;
- achievement of the in-service date on Shepherd, which delivers defence electronic warfare capability.



## Land Equipment

The MOD plans to spend around £13.1 billion on land equipment over the next decade, compared to £12.3 billion last year.

The Armoured Vehicles Pipeline plans are largely unchanged from last year and inflationary cost pressures have been accommodated. The major investments include:

- the Warrior Capability Sustainment Programme, delivering capability enhancements and an extended service life;
- the Challenger 2 Life Extension Programme;
- the Scout Specialist Vehicle and Utility Vehicle programmes, which will replace a range of tracked armoured vehicles reaching the end of their viable lifespan.



In addition to this investment, the MOD has allocated funds to bring equipment, purchased as an Urgent Operational Requirement for Afghanistan into the core programme. These include Jackal, Coyote, Husky, Mastiff, Ridgback and Wolfhound wheeled vehicles, and the Warthog tracked vehicle, as well as a wide range of other equipment. These will be sustained for future operations in other theatres.

### During the past year:

- the success of the Foxhound vehicles in Afghanistan saw DE&S award a contract for the supply of an additional 100 Foxhounds;
- a contract to provide the Armed Forces with more than 25,000 new Glock 17 pistols to replace the Browning was awarded;
- Terrier, the Army's medium weight armoured tractor, entered service in April 2013. The £386 million contract is for 60 vehicles.

## Ships

The MOD plans to spend around £17.4 billion on surface ships over the next ten years – unchanged from last year, covering:

- completion of the two *Queen Elizabeth* class aircraft carriers which, together with the Lightning II aircraft, will deliver a high-end power projection capability for decades to come;
- continuing delivery of Type 45 destroyers, with *HMS Dragon* and *HMS Defender*, the fourth and fifth Type 45 Destroyers, entering service with the Royal Navy, after successfully completing sea trials;
- design and development of the Type 26 Global Combat Ship, which will replace the Type 23 frigate;
- signature of a £600 million contract for maintenance and repair of 17 different sonar and electronic warfare systems fitted across the Fleet, for the next ten years;
- four new *Tide* class tankers, to provide modern ships for the Royal Fleet Auxiliary from 2016. The contract for all four vessels was placed in 2012 and the first will enter service in 2016.

### During the past year:

- the final piece of the external structure for the Royal Navy's future carrier *HMS Queen Elizabeth* was put in place and her ski ramp completed;
- the long-term maintenance of the Royal Fleet Auxiliary Flotilla of naval support ships was secured for another five years with contract extensions worth £349 million.



## Submarines

The MOD plans to spend around £38 billion over the next decade, in comparison to around £36 billion last year. This reflects the generally increasing trend of the spend profile as the planned production costs of the Successor deterrent system reach their peak. In addition to the Successor deterrent, this element of the plan includes the continued build of the *Astute* class and the support costs for all in-service submarines and the strategic weapon system.

During the past year, a £1.2 billion contract was placed to build *Audacious*, the fourth submarine in the *Astute* class. The MOD also committed another £1.5 billion to the remaining three submarines in the class, enabling early build work on the fifth submarine to begin and long lead items to be ordered for the sixth and seventh.

## Weapons

Over the next ten years, the MOD plans to spend £11.6 billion on the Weapons Programme – essentially unchanged from the previous year.

The MOD continues to manage the majority of procurement of more sophisticated weapons through the Complex Weapons Pipeline arrangement. This is a wide ranging agreement with our industry partners, worth around £7 billion over the decade, through which a range of complex weapons systems will be procured. Weapons families include the Common Anti-Air Modular Missile, which evolved from the Advanced Short Range Air-to-Air Missile and has been developed for the Future Local Area Air Defence System for the Maritime and Land environments. A contract was placed last year for manufacture of the Maritime variant, known as Sea Ceptor, which will enter service on Type 23 frigates in 2016. This arrangement will also deliver a new Future Air-to-Surface Guided Weapon, to equip the new Wildcat helicopters.



## Foxhound in the wars

FOXHOUND GETS a reminder of how life might be in Kabul as troops of 1st Battalion, The Coldstream Guards prepare for their latest deployment to the Afghan capital.


Nearly 300 soldiers of the Windsor-based unit, first and foremost a modern infantry battalion, will be providing security in Kabul using the highly-regarded Foxhound as Operation Herrick draws to a close.

As the Kabul Support Unit, the Coldstream Guards will be responsible for protecting mentors to the Afghan National Army Officer Academy and Defence University, as well as supporting the administration and protection of International Security Assistance Force and UK Government organisations operating in Kabul.

Below: Sgt Josh Richardson



Institute of  
Marine Engineering,  
Science & Technology  
**IMarEST**

**inec**  2014  
12th International Naval Engineering Conference and Exhibition

**Innovative solutions  
to global trends**

Tuesday 20 – Thursday 22 May 2014  
Marine Establishment Amsterdam, the Netherlands

#### Conference themes:

- Effects of Trends on Defence
- Green Ship
- IPMS
- Ship Design
- Ship Systems
- Submarines
- Waste Heat Recovery
- Materials
- Human Factors
- UXV
- Simulation
- Signatures
- Gas Turbines
- Electrical Systems
- Maintenance

#### INEC at a glance:

- Over 300 expert participants
- Over 75 peer-reviewed technical papers
- The Sir Donald Gosling Award
- 15 plus focussed exhibition stands
- International attendance from over 15 nations
- Excellent networking opportunities and social programme

#### MAJOR SPONSOR

 **BMT Defence Services**  
"Where will our knowledge take you?"

#### ASSOCIATE SPONSORS

  
babcock  
trusted to deliver™

**DAMEN**

**Imtech**

**QinetiQ**

**THALES**

This conference  
is eligible for **CPD**  
Continuing Professional Development

OFFICIAL IMarEST  
PUBLICATIONS

**MER** macTime  
ELECTRONICS

“INEC continues to be the leading conference for the naval engineering community with a range of topics to appeal to a wide range of people, industries and nationalities”

*delegate from INEC 2012*

For further information visit: [www.imarest.org/inec](http://www.imarest.org/inec)

Call: +44 (0)20 7382 2702

Email: [conferences@imarest.org](mailto:conferences@imarest.org)

## NEWSREEL

## Signing up

CAE (UK) and Intelligence Management Support Services are the latest companies to sign up to Niteworks. CAE provides training products while IMSL is an intelligence and data specialist. Niteworks is the partnership between the MOD and industry helping the MOD to make more informed decisions.

## Early release

CLOSE to 2,000 people from DE&S took voluntary redundancy under two tranches in 2012, Defence Minister Philip Dunne has told MPs. "A total of seven individuals have been rehired into DE&S who subsequently applied either for lower grade posts or who have upskilled in the meantime," he said.

## Bid partners

THE Bloodhound Project – the supersonic car being built in Bristol with the aim of breaking the land speed record – has announced a new partnership with lubricant company Castrol. The company will provide high performance lubricants, brake and hydraulic fluids for Bloodhound. The land speed record has been broken 21 times with Castrol as a partner, from Sir Malcolm Campbell's first record attempt in 1924.

## Navy safety

A Navy Safety Centre has been approved for Navy Command Headquarters in Portsmouth. It will achieve full operating capability by the end of the year.



Prepared for the off: a Tornado GR4 pictured in Afghanistan

### F-35: the RAF makes ready

THE F-35 Lightning II jet is heading for the RAF's Dambusters after the squadron completed its final sorties over Afghanistan in their Tornado GR4 aircraft.

No 617 Squadron, formed in 1943 for night raids on dams near Germany's industrial heartland, was flying missions in support of coalition troops as part of its final operational tour.

During the tour the Dambusters flew 188 missions, clocking up more than 1,500 flying hours supported by 11,352 engineering hours.

The squadron is due to disband this month to re-form as the RAF's first Lightning II squadron in 2018.

## KPMG to support MOD's growing cost analysis

DE&S HAS awarded KPMG a three-year £75 million contract to provide a range of technical and financial support for the MOD's Cost Assurance and Analysis Service (CAAS).

The service is facing a growing demand for the independent cost management advice it provides across the MOD due to the demands of the Defence Transformation programme.

The contract is to enable further improvements in CAAS' products and services and address potential CAAS resource shortfalls which could have an impact on MOD's need for strengthened financial advice to enable equipment acquisition decisions.

KPMG will provide support across five separate areas of CAAS' work, including enhancing service delivery using industry standard practice, enabling the introduction of the new Single Source Pricing Regulations, and additional support to MOD when in-house



Support: Tim Sheldon

resources cannot need the need.

CAAS is led by Dr Tim Sheldon with more than 400 staff, many based at Abbey Wood, but with some working at other MOD sites or industry locations across the UK, including London, Barrow-in-Furness, Manchester and Rosyth.

Dr Sheldon, who reports

directly to DE&S Director General Resources Michael Bradley, said: "CAAS provides independent cost assurance and analysis for MOD equipment and support programmes. This is a hugely demanding and complex task and is one that is growing – hence the need for this level of professional support.

"Recent successes that CAAS has registered include helping to balance the MOD equipment and support programme and providing critical advice to enable the recent successful renegotiation of the aircraft carrier programme heads of terms.

"The key to our role is provision of independent cost management advice. We provide objective advice on costs using techniques and methods that are in use in outside industry and commerce and this has helped provide a realistic view of future Equipment Programme costs – helping MOD negotiate value for money non-competitive contracts."

# Engineering development takes big strides forward

ENGINEERS AND scientists from across DE&S came together to discuss continuing professional development at the latest Professional Engineers Forum at Abbey Wood.

Director Technical, Air Vice-Marshal Julian Young, pictured, opened the event, describing it as “a key event bringing together engineers and scientists from across the organisation to create a cohesive professional grouping at the core of DE&S business.”

The Air Vice-Marshal summarised progress made to develop engineers, with a focus on achieving chartership. He encouraged attendees to attain further qualifications – funding is available to help – and promoted the Engineering Development Course to the 28th January audience of 190



engineers and scientists from across DE&S.

This was followed by a presentation on land-based electronic countermeasures by DE&S’ Steve Westwood and Alan Cook (dstl) demonstrating the challenges of protecting troops from Improvised Explosive Devices threats in Afghanistan, and showing the benefits from DE&S and dstl co-operation.

Richard Bolwell (DE&S) summarised engineering in the efficient but highly complex WR21 gas turbine on the Type 45 destroyer.

Barry Brooks, President of the Institution of Engineering and Technology, described continuous development as ‘the cure for skills shortages’, with more focus on structured professional development likely in future.

Representatives from engineering institutions, training providers and Technical Development Partner teams provided advice and guidance on skills, development opportunities and professional registration throughout the event.

The next Forum will be held on Tuesday 29th July.

Further information on Eng Pol events please contact Rachel Dyer-DES TECH EngPol-Skills1a@mod.uk

## Staff briefed on weapons safety

AIR COMMODORE Mike Quigley – Head of Engineering in the Weapons Operating Centre – launched the fifth safety Learning from Experience event at Abbey Wood.

It focused on best practice approaches to ensuring delivery of safe systems on time to meet users’ needs.

Air Commodore Quigley said: “As part of our continuous improvement drive in the Weapons domain, in May 2013 I instigated a repeatable evidence-based Weapons-wide review – a ‘health check’ – of safety and engineering delivery. I was new in post and wanted an objective assessment of safety and engineering, not an audit.”

He explained how a Quality Management System has been introduced to address common challenges across project teams.

He also presented the Weapons, Ordnance, Munitions and Explosives Skills Strategy to ensure DE&S develops and sustains suitably skilled staff.

*Cranfield*  
UNIVERSITY

# Cranfield works for me

Find out how postgraduate study in Forensic Ballistics can work for you

Visit [www.cranfield.ac.uk/cranfield-works-for-me.html](http://www.cranfield.ac.uk/cranfield-works-for-me.html) for details of our programmes delivered at the Defence Academy of the United Kingdom

# 'An opportunity we must not miss'

**'E**ngagement really matters. All successful organisations think so. The reasons are obvious enough: if people feel engaged with their organisation they will contribute more and better.

That is why we use the annual Your Say survey to ask staff how engaged they feel, and why the DE&S Board puts significant time into looking at the results and at our engagement strategy.

More than 9,000 DE&S staff completed the survey: a big thank you to all.

Our headline score improved by one point (from 52 to 53). That is comparable to other big government departments, but some way short of the best in government, who score more than 60. I feel strongly that in DE&S we should be aiming to be up with the best. So there is some way to go.

The survey measures whether staff speak positively about the business; are emotionally committed and attached to it; and motivated to do the best for it ('say', 'stay' and 'strive' in the jargon). Our scores on all three have improved a bit, with emotional attachment better than motivation. What people do for defence clearly matters to people, but we do not do enough to make them feel motivated.

If we look at the more detailed questions some themes come through:

- We score well in objectives and purpose: staff are clear what they are about.
- We score well in teamwork and inclusion: the way that staff work day-to-day in teams and how we treat one another is generally well regarded.
- We are getting better at learning

## David Ball, DE&S Director HR, reviews results of the 2013 MOD Your Say survey, key action areas and new staff engagement ideas for 2014



DE&S Director HR David Ball

and development but there is still more to do.

- We do not score well for leadership and managing change. Senior leaders are more visible but there is a long way to go to build buy-in to the way change is managed at all levels.
- Staff are concerned over resources and workload – particularly

the quality and availability of the tools to do the job.

- There is low satisfaction with pay and reward.

I doubt these results will come as a surprise. But I like to think there is a strong link between the things that staff are concerned about and the transformation programme we are embarking on. It is all about getting the framework for managing and rewarding people that fits our specialist business; the specialist tools to support it; and the professional environment for developing careers.

A couple of final thoughts, reflecting the discussion at the Board:

- The change programme we are embarking on as we become a new entity making our own decisions on all sorts of things provides an unprecedented chance to get involved. We have been put in charge of changing ourselves, with external help; so please get involved!
- As we design new structures for DE&S, we really need to make sure that they give staff room to take decisions and take responsibility, not just feed the machine. We are not just here to administer procurement processes, but to add value. If we trust people to take decisions then we are genuinely engaging them in the business. There is an opportunity here that we must not miss.'

## The refreshed DE&S Staff Engagement Strategy will focus on . . .

### Supporting development of 'engaging line managers':

- Identifying and disseminating examples of engagement good practice from high scoring teams, including 'engagement' briefing sessions as appropriate

### Learning and Development:

- Intensifying engagement via the professions by establishing further learning and development opportunities

including rolling-out the work by Director Technical for programme and project managers and engineers across all professions and continuing to promote the leadership development offer for Band Bs

### Top Team visibility, communications and 'improving staff experience':

- Continuing Chief of Defence Materiel Town Halls and Talk to the Board 'Live' events
- Continuing to provide a range of opportunities for staff to engage on the development and implementation of the

### Materiel Strategy programme

- Three Families Days to be held this year
- Further site improvements

### Well-being and diversity:

- Identifying opportunities for practical improvements to staff well-being
- Raising DE&S' game on diversity by producing a new DE&S Diversity Strategy and establishing 1\* diversity champions in each operating centre

## MOD bill payment figures looking even better

MINISTER FOR Defence Equipment Support and Technology Philip Dunne has told MPs the MOD paid 92 per cent of correctly submitted invoices within five working days in the last financial year.

The majority of the less than 1 per cent of late payments made by the MOD were a result of incorrectly submitted invoices. All correctly submitted invoices were

paid within 30 days in 2012-13.

He said: "This department, under this Government, is well aware of the benefits of prompt payment and the importance of cash flow to SMEs. That is why not only are we paying our suppliers on time, we are also encouraging them to pay their subcontractors within 30 days of receipt of a valid invoice.

"When this issue was raised

in November I inadvertently misled the House and I would like to put the record straight. I informed the House that the MOD had incurred a single late-payment penalty on only one invoice out of some four million. It has now come to my attention that in fact we paid almost five million invoices last year – a penalty payment rate of 0.00002 per cent."

# Abbey Wood centre will lead disaster response

RESPONSES TO major incidents in DE&S will be co-ordinated by a new organisation at Abbey Wood.

The Incident Management Operations Centre will add to the well-practised Establishment and Operating Centre contingency plans.

It will focus on co-ordinating the wider emergency response while freeing on-site staff to address the immediate incident.

The Centre will operate from 1st April at the Defence Supply Chain Operations and Movements (DSCOM) operations centre in Neighbourhood 3.

It will operate 'as required' but be ready to act around the clock with core staff manning during normal working hours.

A duty officer will be available in Abbey Wood during out of hours and stand down periods with an on-call team of five DSCOM military staff able to establish the centre within two hours of call out. Further staff will be available, depending on the nature of the incident.

The aim is to react in a controlled way while keeping DE&S' Board and others in defence informed.

Brigadier Angus Fay, Head of Incident Management in DE&S, said: "Incident management for an organisation as diverse as DE&S should be based on the complementing pillars of prepare, react, control and report if it is to be successful."

"The various Establishment and Operating Centre contingency plans provide a firm foundation on which to



Disaster response: Abbey Wood will co-ordinate the DE&S reaction. Above: a recent response exercise at Corsham with volunteers as accident 'victims'

build. But we must now enshrine those plans in an overarching system that guarantees an immediate and coherent pan-DE&S response.

"We can always be better prepared and must ensure we are able to react in the most appropriate and timely manner."

Brigadier Fay added: "The

incident management duty officer post will provide that timely response and will be able to activate the Centre which can then co-ordinate the follow-on response.

"I ask all DE&S staff to take an interest in this important aspect of our task to support the wider defence community."

## Facebook all set to boost recruitment

DE&S HAS launched social media pages on Facebook and Twitter to help promote its Bulk Recruitment Programme.

The programme has entered its fourth phase which includes campaigns for engineering, programme and project management, finance and quality.

There have been more than 720 appointments and the programme is on target to reach 1,000 by the end of this month.

The next challenge once the programme completes in May is to continue raising awareness of the department to meet future recruitment requirements, including graduate and apprentice intake. A social media presence will play a critical part.

DE&S Recruitment Head, Mark Large, said: "Recent research has shown that over half of UK job seekers use social media in their search for employment.

"Twitter and Facebook are a brilliant platform to enable us to raise the awareness of DE&S and the wide range of career opportunities we have here".

By following on Facebook ([www.facebook.com/DESCareers](http://www.facebook.com/DESCareers)) and Twitter (@MOD\_DES\_Jobs) potential candidates will receive information on current and upcoming vacancies, and a flavour of what working for DE&S is like.

## Red tape red light

THREE MORE ideas from the Red Tape Challenge have been put in place.

These are simplified processes on staff departures; a 'freecycling' scheme for sharing IT spares among Army support brigades; and changes to the Joint Personnel Administration system to enhance unit reporting.

The Red Tape Challenge ran from April to June last year, inviting bureaucracy-busting ideas.

# A fellowship of excellence



DE&S Fellowship: Fellows get together at Abbey Wood, with Director Technical Air Vice-Marshal Julian Young, right, and Director HR David Ball, second right

DE&S IS breathing new life into its Specialist Fellowship Scheme to continue developing the most important skills towards global recognition.

The scheme has 40 Fellows and Senior Fellows among its ranks – there are places and funding for a maximum of 50 – who are expected to maintain the highest levels of expertise. For that, they are financially rewarded and supported in their continued professional development towards world-class qualifications.

Air Vice-Marshal Julian Young, DE&S' Director Technical, addressed a gathering of Fellows at Abbey Wood on 10th February and pointed the Scheme towards a future of greater heights brought about by continued upskilling of staff.

"This organisation cares about knowledge and expertise," he said. "But I am aware in times of not being able to recruit as many people as we would like, and when pay has not been enhanced in

the last few years, of how this sits with people.

"Hopefully we can be better in the future at attracting, rewarding and retaining those people we most need for our business. What we do is technically challenging every day and we need to retain skills and knowledge as much as we can."

Air Vice-Marshal Young put the Scheme at the forefront of skills development at DE&S. "You are being retained and rewarded and hopefully funded in the future to maintain the expertise and knowledge you have," he told Fellows. "Congratulations and thank you for having been accepted into the scheme and for what you bring to this organisation."

Many members of the scheme, which began in 2007, are engineers while specialisms of Fellows include

cost accounting, naval architecture, airworthiness, naval welding, maritime propulsion, nuclear safety, munitions testing and food safety.



## Who are DE&S' specialist Fellows?

THE FELLOWSHIP is made up of members – Fellows and Senior Fellows – who are expected to maintain particularly high levels of expertise, for example in areas of technical safety assessment and certification.

Such expertise takes a long time to develop and often individuals are required to remain in the same post for much longer than a normal tour length.

For some, developing and deepening specialist skills at the expense of broader core competence and managerial skills means they tend not to be in the field for promotion or advancement to develop their careers.

DE&S' Specialist Fellowship Scheme rewards and recognises such deep expertise and supports people in continued professional development. It applies to only a small number of people at any one time with

numbers at each level determined by a selection process.

**Fellowship members:** Hilary Bollan, Philip Cheese, Morgyn Davies, John Duncan, Helen Peterson, Simon Rusling, Richard Savage, Paul Wrobel, Ian Barnes, Nicholas Barnett, Ian Batten, Richard Brewin, Paul Burden, Ian Carr, Richard Denning, Nicholas Desmond, Michael Edwards, Sam Ellis, Carolyn Faith, David Flemington, Lisa Galeozzie, Tina Goodall, Ian Graham, Craig Hoing, Peter Hopkins, Craig Jones, Duncan Kemp, Martin Lowe, David Manley, Stephen Marshall, Francis Parkinson, Colin Paterson, Stephen Quinn, Simon Ransom, Martin Sloan, Nicola Stanton, Brian Sugden, Geraint Swann-Price, George Wallis, James Ward

The Air Vice-Marshal pointed to the many ways in which DE&S is upskilling its staff, including 40 new MCS students in systems engineering starting this year, the recruitment of 130 graduates and 85 apprentices, and an increase of 30 students on the latest undergraduate course at Bristol's University of the West of England.

All Fellows have been asked to provide an annual report by 1st June on how they have developed their professional competences; what they have done to deliver DE&S, defence and wider government outcomes; and how they have helped grow other people in their specialisms.

And all Fellows will have to reapply for the scheme by 2016, and be judged against new applicants. New applicants will be sought later this year for membership starting in April 2015.



## Defence for today and tomorrow – a research and development showcase

ABBEY WOOD'S Neighbour Two is to host a Research and Development showcase on 11th March.

From 10am-4pm, colleagues and technical experts from the Defence Science and Technology Laboratory (dstl) and industry will guide staff through the crosscutting role of DE&S and dstl, industry and academia throughout the research, development and delivery pipeline.

DE&S staff will be able to discuss

current and future defence capabilities, challenge current thinking and enhance understanding of research, development and delivery, and how this can lead to the acquisition of cost-effective, integrated solutions.

Further information: DES TECH-TD P02 (Roger Price) or DES TECH-TD LogSys-PPM-1 (Irene Carter).

□ Cranfield University and the Defence Science and Technology Laboratory have

signed a Strategic Relationship Charter.

Chief Executive of dstl Jonathan Lyle said: "Cranfield University plays a major role in developing and sustaining the UK's base of skills, capabilities and facilities for defence science and technology. This Charter reflects our commitment to work together to better align and utilise each other's capabilities to strengthen UK defence and security."

# Wives strike a chord in Bristol

Below: Lt Gary Turner, the wives' conductor, during their performance at DE&S

Bottom: The Bristol Military Wives line up for the camera during their visit to Abbey Wood last month

MORE THAN 30 military wives living in Bristol have come together to launch a new choir.

The Bristol Military Wives launched their new venture with a special performance at Abbey Wood last month.

Covering songs such as Adele's "Make you feel my love" and the Queen's Golden Jubilee song "Sing" (Sir Andrew Lloyd Webber/Gary Barlow), the women hope to attract more members to their venture.

Conductor Lt Gary Turner, who was involved with Plymouth Military Wives Choir, one of the original choirs started by BAFTA award-winning choirmaster Gareth Malone, said: "The Bristol Military Wives Choir aims to bring women together to have fun and enjoy singing.

"More importantly it is a way to socialise and offers a global network of support to each other when a husband, partner, or in fact any family member is away from home whether it is with the Royal Navy, Army, or RAF or the Reserves – our door is open to them all."

Although it is only early days for the choir they have already been approached by the British Royal Legion to support the Bristol Poppy Launch and Festival of Remembrance this year and they are hoping to perform a number of charity concerts at the Colston Hall in Bristol and at national First World War commemorations later in the year.

Money raised will go to service charities, predominantly SSAFA, which supports members of the Armed Forces and their families, and the Royal British Legion.

Lt Turner added: "This is an exciting time for us and we are looking forward to building this choir up and providing a supportive and fun network for the military wives of Bristol."

The choir meets every Tuesday 7-9pm at Mangotsfield United Reformed Church in Emerson's Green.

Contact [BristolMD@militarywiveschoirs.org](mailto: BristolMD@militarywiveschoirs.org) or [militarywiveschoirs.org](http://militarywiveschoirs.org)



# Man and beast - Ashley's in perfect harmony



Oliver and Ashley get into the competition during their appearance on Channel 4

Picture courtesy of [www.imageandpicture.com](http://www.imageandpicture.com)

THE PERFECT combination of man and his best friend has earned national television recognition for DE&S' Ashley Russell.

Ashley, a commercial officer with the Networks Beyond Line of Sight team at Corsham, joined his German short-haired pointer called Oliver Twist on the Channel 4 series Superstar Dogs.

The 15-part programme was hosted by presenter and dog lover John Barrowman and tapped into the UK's affection for everything canine.

With dogs and their owners from all over the UK competing in a number of challenges and the final spectacular Dogstacle Course, the series was full of sporting drama and entertainment.

Ashley and Oliver were filmed in MediaCity UK at Salford Keys, Manchester at the end of January competing against 30 other dogs and handlers for a cash prize and a grand unveiling at Crufts.

The programme was transmitted in the second half of February, with Ashley and Oliver acquitting themselves well. The pair won their first round heat and were leading the semi-final before being edged out.

But they enjoyed their time in the spotlight. Ashley said: "I was extremely pleased with Oliver's performance on the days' filming; the bright lights and TV audience seemed to encourage him rather than hinder his performance.

"I asked Oliver to work out of his comfort zone on obstacles he was unfamiliar with and I couldn't have asked for more effort nor commitment from my best friend and companion.

"Entering this competition has further built mine and Oliver's bond and I could not have asked for a better or more loving dog than Oliver Twist."

## Neptune fired up to take on field gun challenge

THE FIELD gunners of *HMS Neptune* have laid down a challenge to the teams taking part in this year's Field Gun competition.

Some of the fittest men and women at Clyde naval base will be proving their mettle in the contest on 31st May at *HMS Collingwood* in Portsmouth. Other areas of DE&S are likely to be pitted against them.

The 18 sailors gearing up for the gruelling event against other teams from across the services and DE&S, have been given a boost with £12,500 backing from Lockheed Martin UK.

"We have an excellent chance this year," said the team's No 1 trainer, Warrant Officer Gary Nicolson.

"There is a high level of field gun skill and experience in Faslane at the moment. The training package adds to that, making sure the crew get to a peak of physical fitness for the competition and can stand up to the rigours of hauling the gun around without injury."

The field gun itself will arrive at Faslane next month from storage at *HMS Collingwood* to signal the next phase of training.

Captain Alistair Willis, Captain of *HMS Neptune*, said: "The Field Gun competition upholds the key tenets of the Royal Navy, including discipline, commitment, integrity, respect, enthusiasm and honesty."

The origins of the competition lie in the siege of Ladysmith in 1899 during the second Boer War where members of the Naval Brigade came to the aid of the British Army, transporting field guns across country.



Gun boost: Martin Davidson from Lockheed Martin, left, presents Captain Alistair Willis, Captain of *HMS Neptune*, with a sponsorship cheque for this year's field gun team

Legend has it that some sailors carried a 12-pounder gun for more than two miles.

The modern competition consists of a 78-metre long track, with the 18-strong team completing a timed total run of 160 metres.

## Clyde sees revamp of popular charity venue

SENIOR RATES at Clyde will benefit from an upgrade of their Mess recreational facilities.

The refurbished Kennedy Bar has been officially opened by Captain of the Base, Captain Alistair Willis.

The facility was given the facelift after £22,000 from the Royal Navy and Royal Marines Charity.

"The facility is a popular venue for functions and charity events," said Warrant Officer Stephen Thorpe, the Mess President. "We have over 500 Mess members and all of them will

benefit from this work. With Clyde set to become the sole operating base for the submarine service the popularity of the Mess can only grow."

The refurbishment work, which was carried out by Miller Shopfitting, consisted of renewing the work surfaces and the main bar area. The money was also used to purchase a new fridge and equipment.

Kennedy Bar was named after a former Chief Petty Officer – Alan Kennedy – who designed the original bar back in 2000.



From left: WO Stephen Thorpe, Captain Alistair Willis, WO David Mason and WO Andy Stevenson at the refurbished facility

Cash handover at Portsmouth will help families in the workplace

# A classic occasion!



In harmony: classic cars, and a classic ship

PORTSMOUTH HAS played host to a group of classic and sports car enthusiasts as they boosted the Royal Navy and Royal Marines Children's Fund.

*HMS Victory* provided the backdrop to the handover of £6,800 by the Sporting Bears car club adding a touch of glamour to the ceremony by bringing 12 of their most prized vehicles.

The cash was raised by a series of Sporting Bears fundraising events, most masterminded by Warrant Officer Class 2 Baz Firth – the Bears' south west regional organiser.

He said: "I have seen the support the charity offers to families in my workplace and I'm proud to think that in some small way we can help them continue providing such a valuable service."

Forty Sporting Bears members attended the handover ceremony and were treated to a tour of *HMS Victory*, hosted by Second Sea Lord, Vice Admiral David Steel.

Among the cars lined up next to the ship were an Aston Martin DB9, Bentley GT Speed, Ferrari California, Corvette CO6 and a Jaguar XJ220.

WO2 Firth also used his fundraising skills outside the Sporting Bears to provide the fund with an extra £4,500. As a member of the Rotary Wing Committee at RNAS Yeovilton, he collected £2,000 from a charity ball and raised another £2,500 by raffling a Sandrail lightweight car donated by Dreamshack which gives engineering training to homeless ex-servicemen and teenagers.



Left: Vice Admiral David Steel, Second Sea Lord, at the cash handover in Portsmouth

## Mick looks set to get a flying start

ENGINEERS AT industrial partner Supacat – designers of the Jackal patrol vehicle – have completed their sit-ski rig in time for the Winter Paralympics.

Mick Brennan, a member of the Combined Services Disabled Ski Team, which Devon-based Supacat backs, took delivery of the new rig with its high-tech suspension for his participation in Sochi.

Mick lost both legs ten years ago in a suicide bomb attack in Iraq while serving with the Royal Signals. He got onto skis for the first time in 2008 as part of his rehabilitation.

"For the last five years I have been climbing the world rankings in an attempt to get to the highest level in disability skiing," he said.

"The main equipment change that has made the greatest difference is the suspension system; without this I would be nowhere."

Pictured is Supacat's Jamie Clarke, below left, handing over the refurbished rig to Mick Brennan as he left Heathrow for pre-event training.



## Sign up, have a swab taken, and help save a life

MEMBERS OF the Command team at Yeovilton are encouraging people to register as potential bone marrow donors to help save a life.

Commodore Jock Alexander joined members of his team in having a swab taken for the charity Delete Blood Cancer UK.

Registering as a potential bone marrow donor and taking a swab to identify tissue type is simple and takes a few minutes.

There is a 1 in 500 chance of being asked

to donate bone marrow so the likelihood is low; but considering more than 4,000 work on the air station – thousands more across DE&S – there is a chance that some may hold the key to saving a life.

More info at [www.deletebloodcancer.org.uk/become-a-donor/register.html](http://www.deletebloodcancer.org.uk/become-a-donor/register.html)

Pictured from left: Cdr Kevin Fleming, Cdr Terry Tyack, Cdre Jock Alexander, Surg Cdr Marcus Philpot, Cdr Mark Langrill and Cdr Con Burns,



## Geoff battles the elements in title hat-trick



DE&S' ORIENTEERING star Geoff Ellis is pictured in miserable conditions at the Southern Championship, near Bagshot.

Geoff, of DE&S' Falcon team at Corsham, battled heavy going to retain his men's title in the 35-40 age range that he won in 2012 at Epping Forest and retained in 2013 in the demanding dunes of Penhale Sands, near Newquay.

He achieved his aim and has now won the title in all three of the southern regions, confirming his ability across a multitude of terrains.

Picture: Ian Buxton

# Kimberley – 'an excellent role model'

DE&S APPRENTICE Kimberley Hill has been named runner-up in the national EEF/EAL Outstanding Achievement by a Final Year Apprentice Award at the EEF Future Manufacturing Awards.

Kimberley, pictured, who works for the Air Defence and Air Traffic Services team, won a south west award towards the end of last year, taking her through to the national finals.

She was named national runner-up on 30th January for her commitment to and determination to succeed in her apprenticeship, and good understanding of her employer and its training programme.

Judges praised her for being an excellent role model with tremendous potential, developing her placement programmes for others to follow.

Julia Chippendale, Managing Director of EAL, the specialist awarding organisation for industry qualifications, said: "Huge congratulations to Kimberley. It is testament to her hard work and dedication that she has been acknowledged in the awards.

"Apprentices are such a vital part of the future of the engineering and manufacturing industry and it is great to see such outstanding talent being recognised for their efforts."

Phil Brownsord, regional director for the south west, said: "Ensuring that the UK has future engineers, team leaders and managers is essential to long economic prosperity, which is why it is important to nurture the talents of apprentices such as Kimberley.

"Her enthusiasm is infectious and I hope that this passion and interest encourages more young people to become engineers."

Kimberley was one of the youngest apprentices taken on in 2010 when she was just 16.

The awards were presented at a gala dinner run by EEF, the manufacturers' organisation, at the Grand Connaught Rooms in London.

■ Calling all apprentices: page 47



## Ginny's Imperial tonic

GINNY LINDOW is pictured receiving her Imperial Service Medal from Air Commodore Mark Sibley.

The medal recognises civil servants who have completed more than 25 years of loyal meritorious service.

Ginny was Executive Assistant to Head of Helicopters 3 at Abbey Wood before retiring under the early release scheme.





## Helicopters celebrate treble delight

Left: Helicopters' running team tired but elated at the end of the challenge

Right: Cdre Andy Lison, Head of Helicopters 1 at DE&S, presents a cheque to Paul Smith of the Brainwave charity which helps children with disabilities to reach their full potential



# Collect for Kerry's Corner



A ROYAL Navy Commander is appealing to colleagues at Abbey Wood to support his fundraising efforts for Oxfam.

Commander Kerry Marmont has been giving his free time to the charity for the past ten years, commuting each weekend to his home in Helensburgh, Scotland, where he runs the local Oxfam shop's music and media corner.

Since 2007 Kerry has helped raise around £50,000 and with just 18 months to go before he retires, he is asking kind-hearted Abbey Wood staff for their help.

"Before I leave the Navy I would like to ask those at Abbey Wood to help by donating their unwanted, good quality items to Oxfam," said Kerry.

"Running the media corner means that I am particularly interested in vinyl, CDs, DVDs, cassettes, electronics, photography equipment and computer games.

"My colleagues in the

## Staff urged to donate music and media items for charity

Torpedoes, Tomahawk and Harpoon team have been very generous with their donations over the last two years and I have been really grateful for their support. Everything that is donated can be used to help the charity; we do our best to ensure that nothing ever goes to waste."

Kerry began helping the charity after his wife Melanie volunteered at the Helensburgh shop. He would call in on a Saturday morning for a coffee and a chat but soon started helping the volunteers. His love of music saw him begin to run the media section.

Kerry's Corner, as his fellow

Oxfam workers have dubbed the media section, now boasts a fantastic selection of items for the collector and music enthusiast. The shop also holds the odd item of naval interest.

"Recently we were given a number of model Royal Navy ships to sell," he said. "They are handmade from wood and of such good quality that I am sure that whoever made them had access to some very detailed plans."

The ships are all vessels from the 1940s and 50s – *HMS Cossack*, *HMS Alamein*, *HMS Amethyst* and *HMS Dainty*.

"They were donated by an elderly lady and were apparently made by her husband," said Kerry.

"I have seen a number of warship models around MOD establishments over the years, but these are more detailed and of better quality than the majority. Ideally I would like to see them go to someone with a naval connection who would really appreciate them."

A TEAM from DE&S' Helicopters Operating Centre has more than trebled its fundraising target from a 75-mile cycle ride followed by the New Forest Half Marathon.

The cycle route on quiet roads in Somerset, Dorset, Wiltshire and Hampshire was followed by the equally picturesque half marathon.

Last September's event followed two previous Helicopters challenges including the Bristol Half Marathon in 2011 and a 200-mile cycle from RNAS Yeovilton to RNAS Culdrose in 2012.

Commodore Andy Lison, Head of Helicopters 1, led the challenge and said: "We set the goal of having fun, getting fitter and raising £2,000 for the excellent Brainwave charity and we have more than delivered.

"We were supported throughout by colleagues, family and friends who worked tirelessly to ensure that everything ran smoothly for us.

"We achieved more than £7,000 taking the overall total that we have raised for charities in the last three years to £13,000.

"This is an outstanding team effort and I am hugely grateful to our team of amateur athletes from DE&S, Navy Command, Lockheed Martin, AgustaWestland and Selex.

"The next big challenge for me is to work out how we could possibly better this in 2014."

□ Kerry is happy to collect larger donations. If you can help his charity efforts, contact him on Abbey Wood ext 35484 or at DES WpnsTTH-3@mod.uk

HMS ASTUTE hosted a veteran submariner from her World War Two namesake as Clyde naval base turned back the clock.

Ron Raymond, 77, is one of the last known living sailors to have served with the original *HMS Astute*, an *Amphion* class vessel launched towards the end of World War Two.

At the end of January, Ron was treated to a tour of the modern-day *Astute* alongside in her home port of Clyde.

During the day the Grangemouth man met with some of the 98 crew on board and spent time exploring the high-tech submarine.

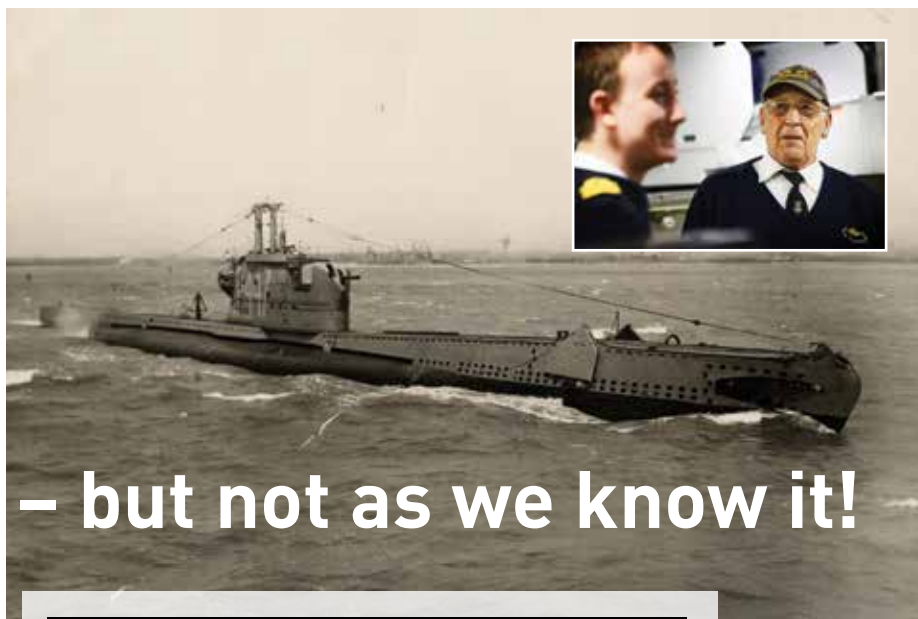
“HMS *Astute* is a lovely boat,” said Ron. “The conditions on board are a hundred times better than I was used to on the original *Astute*.”

“One of the things that stands out in my mind is the quality of food we had on the old submarines. After a while the bread would start to get green and mouldy and we’d be living on what’s known in the Navy as ‘babies’ heads’ – that’s tinned steak and kidney puddings.

“Touring today’s *Astute* was fantastic. I am sure I will keep in touch with the crew through the Grangemouth Submarine Association.”

The *HMS Astute* which Ron served in was built by Vickers at Barrow-in-Furness and launched in April 1945.

Eighteen of the class were ordered, but only two were completed before the end of the war, with neither seeing action. By the time Ron joined *Astute* in 1958, the Cold



## Astute – but not as we know it!

### Astute then and now

1,620 tonnes	Displacement (dived)	7,400 tonnes
85.50 metres	Length	97 metres
6.80 metres	Beam	11.3 metres
5.12 metres	Draught	10 metres
61 personnel	Complement	98 personnel
Diesel-electric	Power	Nuclear
Vickers, Barrow	Constructed	BAES, Barrow
30th January 1945	Launched	8th June 2007

Above: the 20th century’s *HMS Astute*

Inset: Ron Raymond in the 21st century *Astute*’s Wardroom

War was underway.

Commanding Officer of the current *HMS Astute*, Commander Stephen Walker, said: “After hearing about Ron’s service with the original *Astute* you realise how far submarine technology has come.

Today’s *HMS Astute* is relatively luxurious in comparison to the submarines of Ron’s day, but there is the same professionalism, sense of duty and spirit of adventure which unites submariners from all eras and nationalities.”

# DINs - released this month

Defence Instructions and Notices (DINs) are defence-wide instructions, guidance and notices for military and civilian staff, containing up-to-the-minute information to help people carry out their duties. Some of the latest issued on Defence Equipment and Support are:

**2014DIN04-008:** The Promina network system which has provided secure voice and data communications throughout deployed operational theatres since Operation Grapple during the Balkan Wars will be declared End of Life with the end of Operation Herrick on 31st December this year.

**2014DIN04-011:** Some variants of the Hilti gun ammunition are to be withdrawn and replaced with newer variants. There will be a transitional period when some variants of the legacy stores and replacement stores will be available to the user. The legacy store will be removed from service with no further issues of this store after 28th March.

**2014DIN01-016:** The 56th International Military Pilgrimage in Lourdes will take place from 15-19th May for the UK (by air) contingent and from 14-20th May for the British Forces Germany (by train) contingent. The pilgrimage is open to all service personnel, Reserve Forces and any interested civilians regardless of religious affiliation or none.

**2014DIN01-032:** From 6th April, any staff in receipt of an Excess Fares Allowance based on public transport costs in accordance with Change of Work Location in the UK, will have payments increased by 7.2 per cent. There is no change to those payments based on the Private Travel Rate of Motor Mileage.

Further information and more details on the latest DINs see:

<http://defenceintranet.diif.r.mil.uk/Reference/DINsJSPs/Pages/DINsindex2014.aspx>

## From the way we were . . .



Above: the first apprentice entry in September 2004, back row from left – Matthew Gooding, Neil Wallace, Christopher Ryall, Toby Bryant, Dale Humphreys, David Moulding. Front: Kevin Dix, Holly Pennington, Joshua Macey and Ben Marsh.



# Ten years on – the hunt for DE&S apprentices

Above: the 2013 intake of apprentices, pictured at Abbey Wood over the summer

CALLING ALL apprentices! DE&S' scheme is now ten years old, and the apprentice team at Abbey Wood wants to hear from all those who have gone through the scheme during its lifetime.

They want to know where you are, what you are doing and how your time at DE&S helped you in your career.

"We would love to hear from all the ex-apprentices to find out where they are now," said the team's Tracey Cruse.

"We know many have moved on but we would like to know what they are doing."

All will be asked to take part in a short survey for the team to help improve the scheme still further.

Mike Waite was tasked with creating an Engineering Apprenticeship in 2003.

The team was recruited and formed up in early 2004 with the first intake of apprentices in September of that year.

Ten apprentices were recruited with the total who have gone through the scheme now nearing 300.

The scheme was expanded in 2009 when it took over the management of Rosyth and Devonport apprentices although the Rosyth scheme

On the hunt for young talent of the last decade: some of DE&S' apprentice team 2014. This year's team is made up of Air Vice-Marshal Julian Young (Director Technical), Duncan Kemp, Vince Doyle, Phil Rotherham, Paul Gilbert, Andy Maul, Michele Donald, David Ford, Krishna Gurung, Kate Perry, Tracey Cruse, David Greenham and Kelly Davis



was later closed.

DE&S apprentices include those employed at Devonport and Defence Munitions Gosport including technician and craft apprentices.

Over the decade apprentices have won many competitions internally and nationally against external

engineering firms – notably Gosport's 2011 MOD Apprentice of the Year Wayne Bantick, now employed as a C2 in the Weapons area at Abbey Wood.

The first female Apprentice of the Year was Polly Blaikie from DE&S in 2012 who has just been promoted to C2 in

Future Submarines.

Hannah Stanbury from Gosport won the national Women In Science Engineering Award last year.

Apprentices will be emailed by Kelly Davis (DES TECH-EG ESĐT-BM1a). Any who miss out should e-mail or phone 030679 37741.

□ DE&S' three-year apprenticeships work towards a Higher National Certificate and an NVQ Level 3 in Technical Support. Applicant requirements are: 16+ years as at 1st September 2014, a minimum of 5 GCSEs at Grade A-C Level passes or equivalent, to include Maths, English Language, Science and two others. Applications are invited until 14th March 2014. Further information and how to apply at: <https://www.gov.uk/government/publications/defence-equipment-and-support-advanced-apprenticeships>

Secure communications  
you can depend on



# DFTS Smartnumbers

## A better way to manage your calls

“With DFTS Smartnumbers I’m always available and I can work more flexibly. That not only makes me more productive, but also means I can achieve a better work life balance.”

Major Owen Finnie, ISS Networks Fixed SA Voice,  
MOD Defence Equipment and Support

Find out what we can do for you:  
0800 389 2272 option 8  
[dfts.comms@bt.com](mailto:dfts.comms@bt.com)  
[www.dfts.r.mil.uk](http://www.dfts.r.mil.uk)  
[bt.com/defence](http://bt.com/defence)

