

# desider

Feb 2014 Issue 69



Ministry of Defence

the magazine for defence equipment and support



## Lasers light the way forward

Latest DE&S organisation chart [See inside](#)



Anson goes on the road



Scanning for the future



Testing is put to the test



Systems flying high



Sensors earn their award



### Marines to the rescue

ROYAL MARINES vessels are pictured on the River Tamar last month, ferrying cars which were stranded at Christmas after a road collapsed, cutting off part of the village of Calstock.

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Picture: Andrew Linnett

## cover image

Major Nick French demonstrates a laser light that can illuminate targets up to 800 metres away. Weighing just 244 grammes it fits onto the SA80 rifle to increase accuracy in low light.

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# desider

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### 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 WC1A 1NU  
Tel: +44 (0)20 7657 1837  
Fax: +44 (0)20 7379 7155  
richard.stillman@tenalps.com

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# insiderguide

# Bernard Gray

## Chief of Defence Materiel

### ‘The freedoms that we are seeking for the new organisation have not changed’



Following the Secretary of State’s announcement of the fresh direction for the Materiel Strategy before Christmas a great deal of hard work has been done to start to develop a roadmap to establish an innovative bespoke trading organisation structure from April.

A part of the work that we are engaged on is talking to industry about the best way of acquiring some of the specialist support that DE&S needs.

I was pleased to brief industry representatives recently at a first soft market testing event at which we explored the scope and role of the planned Managed Service Providers (MSPs).

MSPs will help us transform DE&S to become a ‘match fit’ organisation, specifically in the areas of Programme and Project Management, Management of Information and Finance and Human Resources.

We will continue to shape this requirement over the next few weeks, and intend to launch the commercial competitions shortly.

The launch of the new organisation is less than two months ahead of us – April is not that far away – and we are all very much focused on that date.

These are exciting times for everyone working in this organisation – and achievement of success will involve each one of us playing a part in the changes that will be required. There is still much work to be done to ensure we are fully ready for vesting day.

The freedoms that we are seeking for the new organisation have not changed. They are still focused on making sure that people working in DE&S are properly equipped with the right skills and support to do their jobs well and that DE&S has the power to reward and retain high-performing staff.

As always I will seek to ensure that you are kept informed as the programme develops and the detailed plans are worked through. Communication with all of you about the progress we are making with the Materiel Strategy is very important to me.

From the start I have always said that I view this programme as a ‘team sport’ and that remains my position.

Your views have always been and will continue to be important for the development of our plans.

ON 10th December the Defence Secretary announced that it was not in the public interest to continue the Materiel Strategy GoCo competition with only one commercial bidder.

Instead, Philip Hammond announced that DE&S would be established as a Bespoke Central Government Trading Entity. Barry Burton, Director Materiel Strategy, responsible for delivering this new organisation by April 2014, has outlined his plans to deliver the changes announced by the Defence Secretary to fundamentally change and improve the way that DE&S operates over the next three years and make it ‘match-fit’ for future challenges.

At a recent meeting, he told the entire Materiel Strategy team that, as a result of the Secretary of State’s announcement, changes to DE&S had already begun. The need for reform remained and there was now the opportunity to get it done more quickly, he said.

“The new entity will be launched in April 2014. It will begin to trade during 2014 and 2015 when we will transition to a different organisational form. We will then be able to transform the operation to make DE&S match fit to face whatever future challenges arise and to test the market for a future GoCo, if we need to do so, or to continue to deliver with our transformed organisation.

“This also provides an excellent opportunity to change the way we engage with the business. Without the firewalls necessary for the Assessment Phase, we will more openly engage with our stakeholders, seeking their views on how we should change DE&S, telling staff what is happening and how the organisation will change.”

Mr Burton added: “We should be clear that we have only managed to get to this point because of the work we have done



# Strategy team turns to making DE&S 'match fit'

Mat Strat team: page 6

A bespoke entity: page 6

Defence Secretary's view: page 7



Pictures: Andrew Linnett

Strategic planning: members of the Materiel Strategy team debate the future direction of DE&S with, below left, Programme Director Barry Burton, on the left, and Director Future DE&S Model Paul Blakiston leading the way

to develop the two options – which show that we need to change. Without this we wouldn't have the momentum to make this happen.

"We have a significant amount of work to do between now and vesting day and

beyond to deliver radical change and by transitioning to become a bespoke central Government trading entity."

"We now need to focus on establishing the new trading entity, and running the commercial competition to identify three Managed Service Providers to help us transform the business, in particular in the areas of programme and project management, management information/finance and HR. Soft market testing has already started and we expect to launch the formal commercial competition soon."

He told his team members: "What you are doing will genuinely make a major difference to DE&S. Your work is hugely important and I'm confident that I have got the right mixture of talent and resource in the team to carry through this high profile and intensely demanding piece of work. It will not be easy; but it is necessary and you will make a difference"

He explained: "We now expect that the Cabinet Office and HM Treasury will

grant the freedoms we need through MOD and it is our job to help DE&S implement the changes we need as a result.

"As an Arms Length Body, DE&S would be managed by MOD through a Framework Document and Corporate Plan, which would outline the services DE&S was required to deliver and the resources and freedoms it has to deliver them."

Mr Burton was supported at the team meeting on 17th January at Corsham by his own senior team, all of whom have fresh seniorities.

Paul Blakiston is now Director Future DE&S Model and Dr Liesl Neale is Head Organisational Design. Richard Smart is now Head Implementation and Support Partners with Dawn Cunningham-Martin Head Governance and Engagement.

## So what will change?

By March 2017 the way DE&S operates and its philosophy and culture will be fundamentally changed and improved. Key changes mean DE&S will:

- be more business-like
- understand customers better
- be more personally accountable for what it delivers
- reward its own staff better for what they do through an incentivisation mechanism.



# DE&S – a Bespoke Central Government Trading Entity

THE NEW Bespoke Central Government Trading Entity will be established in accordance with Chapter 7 of the HM Treasury document 'Managing Public Money.'

It will have a hard boundary between it and the rest of the MOD, a clear and separate governance and oversight structure with a strong Board under an independent Chairman, and a Chief Executive Officer (CEO) who will be an Additional Accounting Officer, accountable to Parliament for its performance.

The new organisation will have

significant freedoms and flexibilities, agreed with the Treasury and Cabinet Office, around how it recruits, rewards, retains and manages staff along more commercial lines, to reflect its role of running some of the most complex procurement activity in the world.

This April, the Arms Length Body will be created and for that financial year it will 'shadow trade' in preparation for starting full trading from April 2015. Shadow trading will enable the development of charging rates and mechanisms to recover operating costs.

While DE&S will remain a Crown Body

## Who's who at Materiel Strategy

### BARRY BURTON

□ As Programme Director, Barry Burton, pictured right, has overall responsibility for delivery of the Materiel Strategy programme and will focus on managing the stakeholders across the entire MOD.

He said: "It will certainly be a challenge to get everything done by March 2017 but I am confident that we can deliver by then a reformed DE&S which will look and feel radically different"



'I am confident we can deliver a reformed DE&S which will look and feel radically different'



### PAUL BLAKISTON

□ Director Future DE&S Model, Paul Blakiston, above, will focus on the business, getting the senior management ready for change. His wide experience in DE&S is invaluable for this work.

He said: "There is much good work going; we need to capitalise on this and take a view on whether it should be rolled out across the business.

"We need to ensure that the business understands the key principles of design and the role of the Managed Service Providers, that the future operating model is coherent and that DE&S is match fit to run things like hard-charging for services.

"Ideally in three years' time I want DE&S to be in a position where we are as competitive as any external provider in delivering our services to the Armed Forces."

He said he wanted an open debate about whether it was best to have one DE&S way of doing business and meeting the needs of the Armed Forces or whether Operating Centre Directors could be empowered to run their work as they decide.

### RICHARD SMART

■ Head of Implementation and Support Partners Richard Smart, right, is responsible for the rollout of business change to deliver the future design in a well-structured, properly resourced, coherent fashion and in a way that fully engages and involves the DE&S workforce and external stakeholders.

He is also responsible for bringing in the Managed Service Providers and is currently looking at three areas – project delivery, management information/finance and Human Resources.

He said: "I'm keen to help ensure that implementation builds on what exists in DE&S today while also fully exploiting the hard-won opportunities that the Materiel Strategy now offers to the MOD and us as a business."



### DAWN CUNNINGHAM-MARTIN

■ Head of Engagement and Governance Dawn Cunningham-Martin, right, is responsible for stakeholder engagement, freedoms and controls, the Corporate Plan and external governance, legislation and Bill management.

She said: "It is a unique role in the sense that I have both an enabling stakeholder management role and delivery functions covering freedoms and controls and the Corporate Plan.

"MOD will continue with the current Defence Reform Bill legislation, to have it in place should a decision be taken in the future to test the market for a GoCo when DE&S is match fit."



### DR LIESL NEALE

□ Head of Organisational Design Dr Liesl Neale, left, is to lead on developing a future blueprint for a transformed DE&S.

She is working closely with the Customer Design team led by Major General Peter Fox to ensure alignment with the Acquisition System Operating Model.

She said: "The organisational design will be shaped by a number of driving principles, which we are developing through discussions with the DE&S senior leadership team. We will be looking at the organisation from a number of different perspectives in order to develop a coherent design."

and part of the MOD, its staff will continue to be civil servants but there will be a number of significant changes including:

- Governance will be through a Non-Executive Chairman and a CEO (the Chief of Defence Materiel), supported by a Board with other non-executive directors;
- DE&S will be accountable to Ministers through an Owner's Council;
- Funding will be via MOD

Estimates and in due course through charging MOD customers for work;

- DE&S will publish its own plans and will produce annual reports and accounts which will be consolidated within those of the MOD;
- DE&S will be accountable to Parliament through the CEO as an Additional Accounting Officer;
- DE&S will have the freedom to pay, grade, promote and manage Civil

Service staff.

These changes will reinforce the customer-supplier relationship between the military command customers and DE&S and allow DE&S to move earlier to a hard-charging regime.

DE&S will procure crucial private sector skills through a series of support contracts to deliver key changes to systems and processes, and to strengthen programme management.

DE&S will be able to recruit the key technical skills it needs at market rates and with minimum bureaucracy.

# Defence Secretary: Bigger tests to come on value for money

DEFENCE SECRETARY Philip Hammond has told MPs that DE&S would become a Bespoke Central Government Trading Entity, reinforcing its position as a public sector organisation, while retaining the possibility of running a fresh GoCo competition in the future.

He told members of the House of Commons Defence Committee at a hearing on 12th December, during which he was supported by Chief of Defence Materiel Bernard Gray: "Under current legislative provisions and arrangements between the Treasury and the House of Commons a new trading fund cannot be set up as a central Government body.

"There is, however, provision for bespoke arrangements to deal with situations like this one, in which an entity has a trading relationship but will be in the public sector and will be a central Government body.

"That is why I have defined it as a Bespoke Central Government Trading Entity. It is not technically a trading fund, because trading funds can only be outside central Government as newly created bodies."

The Secretary of State said the annual Major Projects Report should show very strong DE&S performance on managing projects within budgets.

He said: "I would describe, and have described, the organisation currently as stable but underperforming. It is stable in the sense that we have budgets set which we are highly confident we can deliver within. It is underperforming in



Looking to the future: Philip Hammond, pictured with Sgt Alexander Buchanan during a visit to RAF Waddington

the sense that I am also confident that the cost budgets for projects are currently too high.

"Over time, with better commercial business skills in the organisation, we will be able to drive down the costs of projects going forward and deliver better value for money for the taxpayer. That is the purpose of exploring these alternative options."

MOD could make significant progress through injecting private sector skills and support into DE&S allied with additional freedoms and flexibilities.

He said: "Those are definitely

worth banking and will deliver real value to DE&S. Will they deliver the culture change that a GoCo would have delivered? I do not believe so.

"However, it is clear to me that once we have got DE&S through the public sector construct into a proper form, as fit as it possibly can be, it would then be appropriate and in the interests of the taxpayer to test again the question of whether a private sector GoCo partner, by changing culture and behaviour in the organisation, could add yet further value."

The key issues were the freedom to move outside the senior civil service pay structure, the ability to recruit without going through civil service processes and the flexibility, agreed with the Treasury, to veer and haul between what was spent on staff pay and what was spent on private sector consultancy support.

**'With better commercial business skills in the organisation, we will be able to drive down the costs of projects and deliver better value for money'**

## NEWSREEL



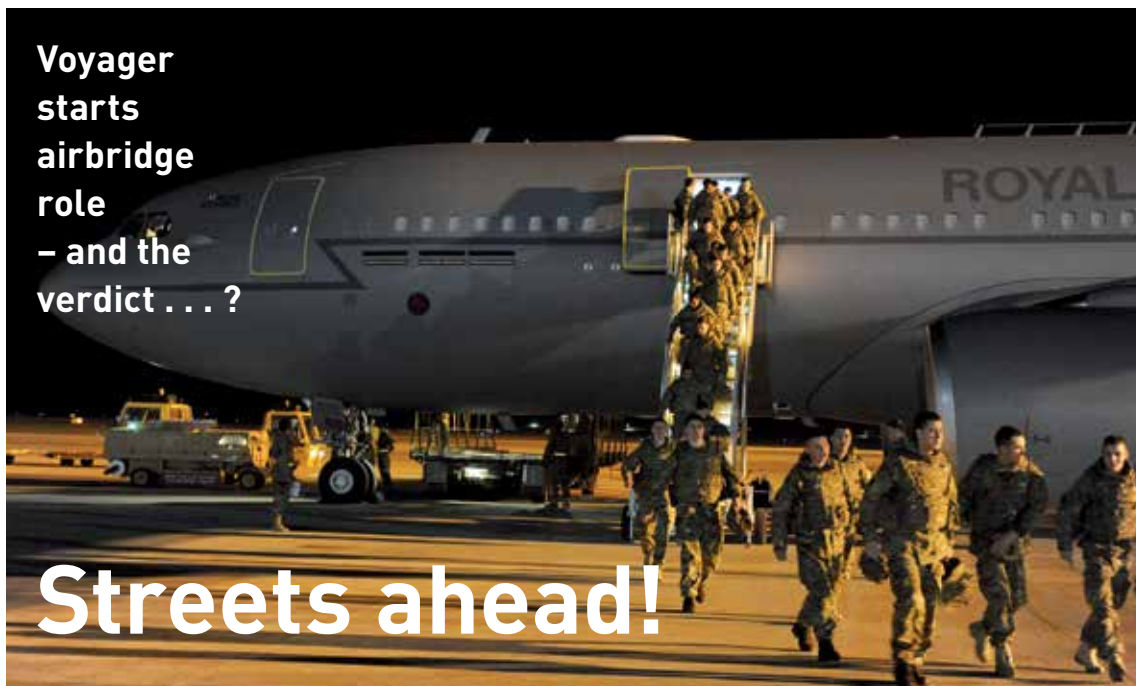
### New Director Combat Air

SUE Gray is the new Director Combat Air at DE&S and has been promoted to Air Vice-Marshal. Air Vice-Marshal Gray, above, who was due to take up her new post at the end of last month, joined the RAF in 1985 and was commissioned into the Engineer Branch. During her career she has deployed to Iraq on the first Gulf War in 1991 and on Operation Telic in 2003 when she was Chief Engineer for the Joint Helicopter Force. She is the second woman in the RAF to be promoted to Air Vice-Marshal after Elaine West was appointed Director of Projects and Programme Delivery at the Defence Infrastructure Organisation last August.

### Rosyth plans

ROSYTH Royal Dockyards has applied to the Office for Nuclear Regulation for consent to begin initial dismantling of seven laid-up defuelled nuclear-powered submarines at the Scottish dockyard. The ONR has launched a three-month consultation ending on 21st April. The wider Submarine Dismantling Project aims to deliver a safe, responsible and cost effective solution for dismantling 27 former Royal Navy nuclear-powered submarines.

## Voyager starts airbridge role – and the verdict . . . ?



Home safe and sound: the first UK personnel on their journey from Camp Bastion

VOYAGER HAS notched up another milestone with the first flights transporting personnel to and from Afghanistan.

Two Voyagers – the RAF's transport and air-to-air refuelling aircraft which will replace the VC10 and TriStar fleets – have begun flying between Brize Norton and Helmand Province to support the operational airbridge used by personnel heading to and from theatre.

First flights have taken place ahead of schedule.

A converted Airbus A330 aircraft adapted for a military role, Voyager gives passengers heading home for R&R or at the end of their tour more space and comfort for the journey between Afghanistan and the UK.

Major Peter Jennings, one of those on the first Voyager flight out of Camp Bastion, said: "Having previously flown on

different RAF aircraft, they do not compare to Voyager – it's streets ahead!"

Minister for Defence Equipment, Support and Technology Philip Dunne agreed: "Voyager's greatest strength is its versatility. Troops now have a more comfortable and reliable journey to and from operations, while the aircraft can also refuel our fighter jets and in future will support humanitarian aid efforts."

Voyager team leader Chris Dell said: "The first flight into theatre marks an important milestone in the deployment of the Voyager fleet and it is

very satisfying to see a further leap forward on this important project to update the RAF air tanking and transport capabilities."

Six aircraft are already in service and the core fleet of nine aircraft is on track to be in service by this May.

Fourteen Voyagers – nine will be constantly available to the Armed Forces – will be delivered by September 2016 as part of the Private Finance Initiative service contract with AirTanker.

Shareholders of service provider AirTanker are Cobham, EADS, Rolls-Royce, Thales and Babcock.

□ Multi role Voyager is more efficient and more capable than the TriStar fleet it will eventually replace.

Voyager is capable of carrying:

- 300 passengers over a 6,000-mile range;
- 111 tonnes of fuel, some of which is used for the air-to-air refuelling of RAF Tornados and Typhoons;
- Up to 40 stretchers and critical care facilities for medical evacuations;
- 43 tonnes of cargo.

## Bidders line up to be future military suppliers

THE LOGISTIC Commodities and Services (Transformation) Project has released Invitation To Negotiate (ITN) documents to external bidders and the internal LCS Value for Money Solution team.

The project aims to deliver a modern logistics and commodities operating model to ensure military supply at best value for money.

Response from industry has been extremely positive with a strong combination of organisations.

Consortia selected to go through to negotiation are: Defence Integrated Supply Chain Solutions comprising Babcock and DHL; Leidos as the prime, subcontracting to Kuehne & Nagel and TVS Supply Chain Solutions.

Bidding consortia will be compared against an

MOD option, the LCS Value for Money Solution.

The project covers all areas of activity that LCS is responsible for, except BFPO, DSA and Bulk Fuels, which are subject to separate change projects. Broadly these are: inventory management; procurement and supply of commodities; storage of all non-explosive materiel; and freight distribution.

Director LCS Neil Firth said: "This is a significant step forward representing a real commitment from all sides to drive the change that is required."

"Getting the ITN detail right was critical because it provides bidders and the Value for Money Solution team with essential information on which to base their detailed responses. It also sets the criteria by which we will be assessing the responses."



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## Solvings joins Niteworks

SOLVINGS is the latest company to become an associate member of Niteworks. Solvings supplies IT infrastructure services, support and project consultancy. Its teams are providing change network engineering services to British military bases in the UK and Germany as part of the Atlas Consortium. Samantha Page of Niteworks said: "Since January 2013 we have worked on 94 projects for the MOD with over 500 people from across the partnership." Niteworks is a partnership between the MOD (including the Defence Science and Technology Laboratory) and industry analysing problems to help the MOD make better, faster and more informed decisions.

## Airbus rename

EADS has been rebranded as Airbus Group. The company has been divided into three divisions – Airbus, focussing on commercial aircraft activities; Airbus Defence and Space, integrating the Group's defence and space activities from Cassidian, Astrium and Airbus Military; and Airbus Helicopters.

## Combat fits

FIRST fit of the Surface Common Combat System Version 1 to a Type 23 frigate is planned for spring 2015 during routine docking, Defence Minister Dr Andrew Murrison has said. Fits to the remainder of the Type 23s are to be completed in the order the remaining ships undertake similar maintenance periods.

# Unmanned systems show value of DE&S work



Left: Armed Forces Minister Mark Francois watches as personnel at Waddington take part in an exercise involving Reaper

THE FULL scope of the work of DE&S' Unmanned Air Systems team has gone on show twice in the last few weeks at RAF Waddington.

Armed Forces Minister Mark Francois toured the Lincolnshire base on 15th January to see the UK's unmanned aerial systems capability.

His visit came just a month after all current UK systems had been put on show to the media, along with a visit to Waddington by Defence Secretary Philip Hammond.

Mr Francois spoke to operators of Navy, Army and RAF unmanned systems, including Scan Eagle, Desert Hawk and Reaper.

He also saw the inside of a Reaper control cabin and was shown how a highly-trained and highly-qualified team controls the aircraft, with pilots, sensor operators and analysts all working together to make decisions in real time.

Mr Francois' visit was part of a wider drive by MOD to dispel

some of the myths around the use of unmanned aerial systems, demonstrate the vital role they play in supporting personnel

□ Air Commodore Peter Grinsted is the new head of the UAS team at Abbey Wood.

"I am delighted and privileged to be joining at such a pivotal and exciting time," he said.

"Clearly, there are challenges ahead as we continue to support operations and look to deliver Watchkeeper into service later this year.

"However, looking forward, the transition of UORs to more robust certification and support arrangements, the assessment of future options, and the Future Combat Air System programme all combine into a broad portfolio which confirms UAS as an increasing and enduring part of UK defence over the coming years."

on operations in Afghanistan, and confirm the utility of such systems for the future.

Mr Francois said: "Our remotely-piloted systems provide life-saving intelligence, reconnaissance and surveillance on operations as well as giving us the ability to strike precisely at those who pose a risk to our personnel and the people they are trying to protect.

"I was delighted to meet

with and listen to the talented personnel who operate this capability. They deserve great credit for the work they do in saving the lives of our ground troops, our Afghan and international colleagues, and Afghan civilians."

Ground troops who have served in Afghanistan were also at RAF Waddington to describe how UAS assets had provided them with life-saving support at vital times.

Air Vice-Marshal Philip Osborn, Joint Forces Command Capability Director, said: "The UK's unmanned aerial systems provide

UK and allied forces with persistent surveillance of enemy positions without putting their lives at unnecessary risk. In today's operational environment they are still used predominantly in surveillance and reconnaissance roles.

"When precision strike capability is required by ground commanders, this is always in accordance with international humanitarian law and governed by the same strict rules of engagement as those governing manned aircraft."

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## NEWSREEL

## Typhoon still good value

TYPHOON remains the best value-for-money advanced multi-role combat aircraft available on the export market, said Defence Equipment, Support and Technology Minister Philip Dunne in a Parliamentary answer following the breakdown in talks between BAE Systems and the United Arab Emirates on purchase of Typhoon. "BAE Systems, with Government support, has worked very hard over the past 14 months to secure a deal that would have seen the UAE become the eighth nation to select Typhoon for their air force," he said. "The Government shares the company's disappointment that, for commercial reasons, the Emirates have decided not to pursue this option any further at this time."

## DSG sale update

THE sale of the Defence Support Group land business is still on for the financial year 2014-15. "I see a sale as the best opportunity for the front line to retain access to a DSG with the capacity, capability and access to investment needed to support Armed Forces of the future," said Philip Dunne, Minister for Defence Equipment, Support and Technology in a Parliamentary answer. "It will enable DSG to diversify and grow and reduce its dependence on the MOD as its sole major customer."



## Anson centre stage

THE FORWARD end section of *Anson*, the fifth of the seven-strong *Astute* class of submarines, has been taken by road to the Devonshire Dock construction hall in Barrow-in-Furness for the next stage of her build. She joins sister submarines *Artful* (boat three, above left) and *Audacious* (boat four, above right).



Pictures: BAE Systems

# Future equipment 'is now affordable,' says PM

PRIME MINISTER David Cameron told MPs in a statement on the annual report on the National Security Strategy and Strategic Defence and Security Review that a balanced defence budget meant MOD could now afford its future equipment programme.

He said tough negotiations with industry led to a renegotiation of the aircraft carrier contract, agreeing a cost of £6.2 billion and moving to a model which properly incentivises industry efficiency.

He said: "We expect to launch *HMS Queen Elizabeth* in 2014, with flying trials from the carrier beginning in 2018. We will also be ordering three new Offshore Patrol Vessels for the Royal Navy.

"In July, the Government published an unclassified version of the Trident Alternatives Review, a Cabinet Office-led study into alternative deterrent systems and postures. The Review demonstrated that no alternative system is as capable,

or as cost effective, as a Trident-based deterrent. Government policy remains to maintain a continuous at sea deterrent and proceed with the programme to build a new fleet of ballistic missile submarines."

The report itself stated that MOD had continued to make good progress, including implementation of the recommendations made by Lord Levene in his 2011 Defence Reform review of the department.

"The changes needed to delegate capability planning and financial responsibility to the Commands are in place, with further reforms scheduled by April 2014. The new Joint Force Command achieved Full Operating Capability in April 2013. The £38 billion budget excess has been eliminated and new mechanisms are in place to hold Top Level Budget holders and other senior responsibility holders formally to account against their plans," it said.

"Overall these changes

mean we have now put in place the main organisational building blocks envisaged in the Strategic Defence and Security Review and the Defence Reform Review; and these have enabled us to reduce the defence civilian workforce by over 20,000 so far."

Good progress continued to be made in the procurement of high-quality new equipment for the Armed Forces and the MOD remained on track to achieve the structure by 2016 necessary to deliver Future Force 2020.

The report said that in addition, following the 2013 Spending Review, the MOD would make approximately £875 million of efficiency savings in 2015/16. This included around £300 million through a ground-breaking deal with the Cabinet Office to hand responsibility for procurement of a range of non-military goods and services to the Government Procurement Service, and £350 million from efficiencies in the equipment support budget, including the renegotiation of contracts.

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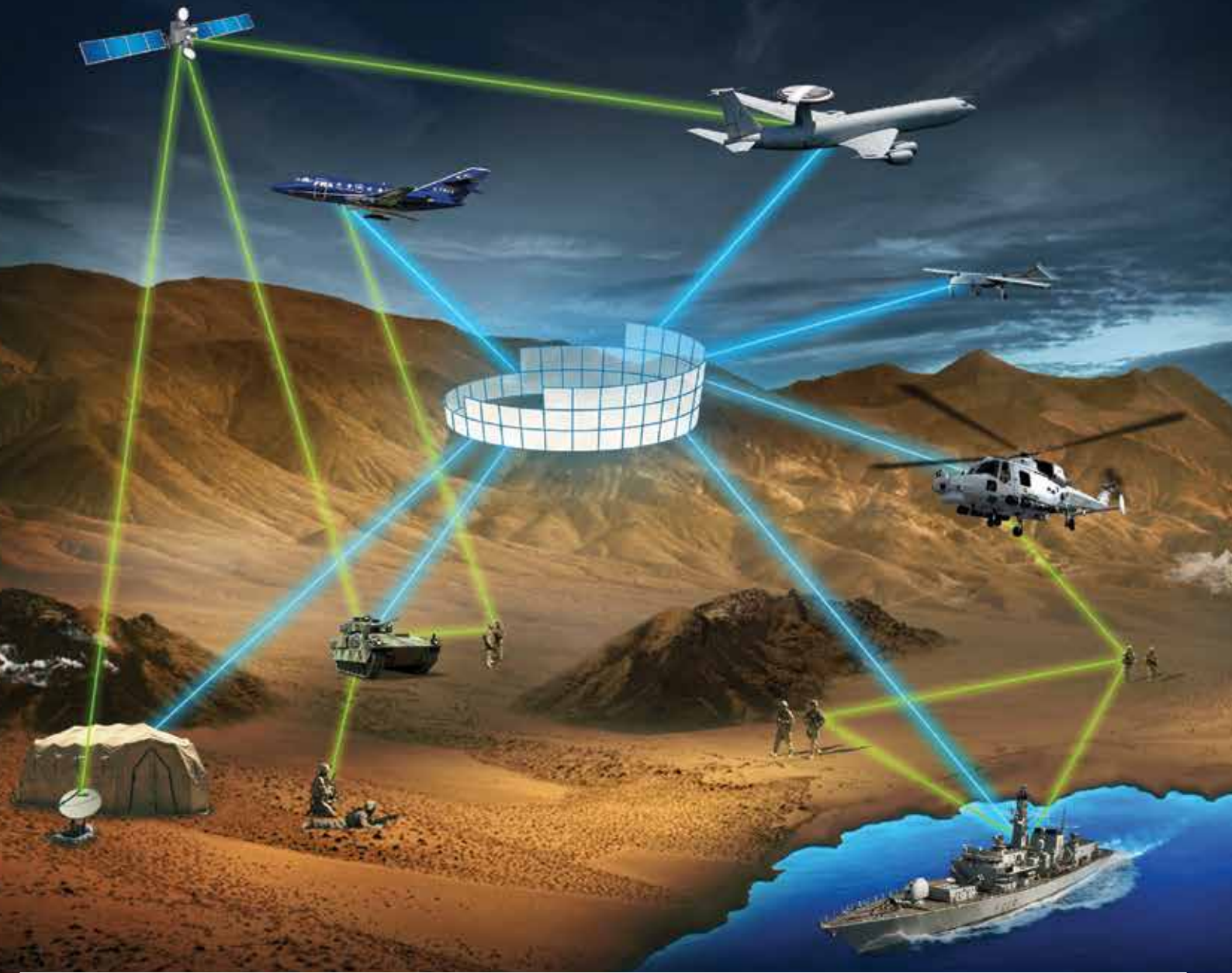


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## NEWSREEL

## Patrol ship work begins

WORK has begun as part of a £22 million BAE Systems contract to support and maintain the three Royal Navy River class offshore patrol vessels. The company was awarded the contract last September for the next five years. It will provide the Royal Navy with 320 'operationally available days' per ship per year to carry out their primary roles of fishery protection, environmental, search and rescue and maritime security. Similar support is provided to two Royal Navy hydrographic vessels, *HMS Echo* and *HMS Enterprise*, as well as *HMS Clyde* which is based in the Falkland Islands.

## Centre funding

PLEXTEK Consulting has announced its latest defence project to create a revolutionary battery-powered video-based tracking solution, that enables soldiers to track their movements within a GPS-denied environment. The system is being funded by the MOD's Centre for Defence Enterprise.

## Feeding time

THE daily budget allowance for feeding personnel on operations, known as the Operational Daily Messing Rate, is £3.36 per person, according to the latest figures. This does not include cost of transporting, preparing, cooking or serving meals. This is an approximate figure based on 90 raw ingredients necessary to provide the daily calories and nutrition.

## Type 23s to take on enhanced surveillance



Type 23s will be fitted with enhanced electronic surveillance in a new seven-year contract. Pictured: Type 23 frigate *HMS Portland* leaves Devonport on 13th January for a seven-month Atlantic patrol

THE ROYAL Navy's Type 23 frigates will be able to carry out enhanced electronic surveillance following a new contract with Babcock.

The company, teamed with principal sub-contractor Argon ST, will provide an off-the-shelf communications electronic support measures (CESM) system.

Known as Hammerhead, it will require no development work so will enable rapid replacement of obsolete equipment on the Type 23s with low risk delivery offering excellent value for money.

The system will support tactical indicators and warnings and its commonality with other CESM systems in use provides the opportunity for common

spares, training and operator flexibility.

Babcock also leads the Type 23 Class Output Management team in maintenance of the vessels, so has plenty of experience of working on the 13-strong fleet.

DE&S' Joint Electronic Surveillance team placed the seven-year contract as part of a cost-capped procurement aimed at maximising the system's performance against a constrained budget.

The team will work with Babcock to bring CESM into service next year.

The contract includes through-life support and the ability to upgrade through the project life to 2021.

# Radio upgrade boosts Herrick troops' comms

FRONT LINE soldiers will have greater access to satellite voice communications with the upgrade of more than 1,000 radios.

Integrated waveform (IW) software for UHF channels, an Urgent Operational Requirement, has been uploaded to more than 800 Harris 117F manpack radios and around 200 Harris 152 handheld radios.

The UOR, due to be completed at the end of last month, was managed by Raz Elahi in DE&S' Battlefield and Tactical Communications and Information Systems team and has already achieved Full Operating Capability.

The UK has continued to increase the number of radios available on Operation Herrick with tactical satellite terminal voice capability. But with satellite capacity remaining constant there has been pressure on

Upgraded comms: for handheld radios, right, and manpacks, below,



channels available to support voice capability for all operational needs.

The new software upgrades the UHF tactical satellite-capable radios while control equipment to enable IW has been installed

in UK satellite ground stations. IW has a master communications channel which allocates other channels at either 5 or 25kHz.

As well as the use of voice, the team is managing delivery of a data capability that can be used over the IW satellite links. Known as PDA-184 it will be used on the IW channel, making IW voice and data compatible.

## NEWSREEL

**Bloodhound's extra thrust**

THE Bloodhound Project has announced a new partnership with Nammo, the Norwegian rocket propulsion company. Nammo will supply its hybrid rocket technology for the 1,000mph land speed record-bidding racing car being built in Bristol. Rocket motors will provide around 27,500 lbs of thrust which, combined with 20,200 lbs thrust from the car's EJ200 jet, will generate the equivalent of 135,000 'thrust' horse power – eight times more power than all the cars on a Formula 1 starting grid combined. Bloodhound, a showcase for science and engineering with help from the MOD, aims to reach 1,000mph in South Africa in 2016.

**Army takes to the screen**

A new Army recruitment campaign has begun with TV advertising showing the range of roles available in the Army, proving it is more than just front line combat. The campaign launches as new research reveals one in four Britons are not satisfied with their current career. Chief of the General Staff, General Sir Peter Wall, said: "The Army offers people unique opportunities for challenge and adventure at home and overseas, during peacetime and on operations. It develops personal qualities that are key to success in any walk of life: leadership, judgement, determination, and physical stamina."

# Vanguards start to take on new power source

FIRST INSTALLATION of a new onboard power conversion system has been achieved during overhaul of *HMS Vengeance*, pictured right, in Devonport.

New main static converters replace traditional 650kw motor generators, providing an electronic power alternative avoiding the need for rotating machinery.

They will be more reliable with considerably reduced maintenance.

Installation and initial power-up by Babcock marks a milestone in the overhaul – known as the Long Overhaul Period and Refuel – and a first-of-class implementation of life extension measures for *Vanguard* submarines.

Cdr Ian Bartlett of DE&S In-Service Submarines said: "Introduction of MSCs to the *Vanguard* class through this successful project underlines the benefits of delivery through a partnering approach between MOD and our industrial partners.

"The 650kw motor generator sets have a high maintenance requirement and have historically injected significant tension during submarine maintenance periods. Their removal improves the delivery of continuous-at-sea deterrence."

MSCs will eventually replace motor generators on all four *Vanguard* class submarines.

Installation began last January with power-up before Christmas. Commissioning continues while the boat's diesel generators are operating,



involving the MOD, Babcock and Ultra PMES, the original manufacturer and design authority.

The installation phase has taken around 18,000 staff hours, while commissioning will have involved around 10,000 hours by the end of the overhaul period.

Babcock Project Manager Jon Benzie said: "Babcock's ability to work with the customer from the concept phase to final detailed designs and installation onboard has ensured that, from the outset, the people doing the job have been involved in the whole design cycle.

"This engendered an excellent team spirit with everyone fully committed to making this an absolute success."

followed by testing during steam machinery trials when they will work alongside turbo generators. Final commissioning will be in around 18 months, during final preparation for sea trials.

Babcock and In-Service Submarines have been working on this since January 2009, and the development programme has been taken forward by a team

## Forces restructure is a step further forward

RESTRUCTURING OF the Armed Forces has moved a step nearer completion with details of the final set of redundancies, previously announced in the 2010 Strategic Defence Security Review.

This tranche will consist of up to 1,505 personnel, a maximum of 1,425 soldiers, ten medical officers from the Royal Navy and 70 medical personnel from the RAF.

Defence Secretary Philip Hammond said: "Tough decisions had

to be made to balance the defence budget and this included restructuring the Armed Forces to create a more sustainable military.

"This fourth and final tranche will draw a line under the uncertainty of the last four years, bringing a renewed sense of security about the future to our servicemen and women.

"Our Armed Forces in the future will be properly equipped, sustainable and better placed to meet the challenges of the future."



# Bangor gets ready to operate in hot climates

HMS BANGOR is expected to leave Rosyth in the summer at the end of her six-month support docking period.

Work on the *Sandown* class minehunter is being carried out under Surface Ship Support Alliance Class Output Management arrangements by a Babcock-led team.

Several upgrades will increase the ship's ability to operate in hot climates along with major galley and laundry updates, installation of modernised communication systems, and an updated fire detection system.

There are also plans to replace the ship's existing

diesel generators with modern, economical, environmentally friendlier and supportable machines.

Babcock Warships Managing Director Mike Whalley said: "The work package for *HMS Bangor's* support period has been defined to reflect the ship's needs and minimise the level of emergent work, based on knowledge of the ship's material state and our experience of previous *Sandown* class refits, to optimise efficiency and value for money. We look forward to delivering *Bangor* on time and in budget."



HMS Bangor is all set for her docking period

**LTPA**  
T&E begins here

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SUPPORT FOR in-service performance of T101 and T102 radars is to continue for another three years.

The contract is between DE&S' Air Defence and Air Traffic Systems team and BMT Reliability Consultants.

From the Falklands to the UK and deployed locations – often remote – throughout the world, the ADATS team is responsible for the through-life management of air defence and air traffic systems.

This includes surveillance capability to support military operations and enabling a safe, cost effective capability for air traffic management.

Flt Lt Dean Wilson of ADATS said: "ADATS is pleased to renew its association with BMT Reliability Consultants as it provides essential support towards the achievement of our business objectives."

## Contract extends radar support



Global reach: ADATS manages air defence and air traffic systems across the world

# Falcon – job done!

Delivery of communications system comes to an end with vast quantity of equipment supplied in rapid time



A good job well done: the Falcon delivery team, from left, Ed Bunning, Gary Smith, Paul Butcher, Pete Hammonds, Andy Young, Eddie Joel, Rob Tucker, Richard Pryke, Sean Mallon, Tony Clayden, Sam Taylor, Mike Armstrong, Brian Woods, Phil Larkin, Dr Ruth Seabrook, Courtney Wilding, Karen Milsom, Janie Warne

THE DELIVERY and fielding phase of the Falcon communications system has come to an end with the original fielding timescale being cut by more than half.

With work complete the Falcon office at the Defence Support Group (DSG) in Ashchurch has now closed.

Falcon is providing the Army and the RAF with a trunk communications system for contingent operations.

The system replaces the obsolete Ptarmigan and Cormorant systems with a secure system based on Internet Protocol.

Staff were faced with fielding a system which encompasses a vast quantity of

equipment now fielded to the military users.

This included 155 communication installations, 9,430 items of assorted ancillary equipment ranging from IP phone packs to fibre optic cables.

Delivery and fielding of the equipment was simplified by using just the one location at Ashchurch.

The Falcon Asset delivery team at Ashchurch was made up of two people from the Falcon project team, six DSG staff, four Royal Signals personnel, and a BAE Systems project manager.

The team carried out numerous equipment schedule checks, MOD acceptance tests on 107 vehicles and 214 diesel

and hydraulic generators, integrated Bowman radio to all vehicles and made accounting and management database entries for the Unicom, Merlin and JAMES asset management systems.

Fielding of Falcon from Ashchurch began in April 2012 with the arrival of the first vehicle installations.

Activity accelerated to match the contracted schedule of deliveries resulting in the original fielding plan of three-and-a-half-years being reduced to 18 months representing a fantastic achievement by the joint team.

Falcon is now in service and in use across a number of military exercises.

# 'Long-term' is put to the test

**How DE&S guarantees  
the next generation  
of military equipment  
in its partnering  
agreement with  
QinetiQ**

**Pages 20 and 21**



# Outstanding beauty – outstanding value

## How DE&S puts future military equipment to the test

They may be areas of outstanding beauty with some of the most rugged coastlines and spectacular rolling countryside. But thousands of square kilometres of the UK are in use every day to test, evaluate and guarantee the next generation of military equipment while at the same time training the people who will use it.

It's all part of DE&S' Long Term Partnering Agreement (LTPA) with QinetiQ which provides the MOD and a number of prime DE&S contractors with the services of 17 ranges and other facilities across the country.

From Pendine Sands and Aberporth in south west Wales to the Essex beaches of Shoeburyness and the Kyle of Lochalsh and the Hebrides in Scotland, QinetiQ manages and conducts testing of a host of current and new equipment in the air, land and maritime domains. The £5 billion LTPA was signed in 2003 with regular five-yearly reviews which will see the company managing the ranges up to 2028.

Under the LTPA, ageing facilities have been replaced and new equipment has been brought on stream while future planning is more certain as a result of the long-term nature of the deal.

"It is a partnering agreement and we operate very much on that basis with the MOD," said QinetiQ's LTPA programme director Cathy O'Carroll.

"It is continual activity which goes on through the duration of the LTPA; 25 years is a long time and requirements will change during that time so we have a contract which is built to embrace change. This is the best way for the MOD to build and manage its strategic test and evaluation capability, to test and evaluate equipment."

The LTPA contract is managed by the Trials, Evaluation Services and Targets (TEST) project team, part of DE&S' Weapons Operating Centre. Team leader Gp Capt Andrew Tait said: "This arrangement allows us to draw on the specialised test and evaluation skills of QinetiQ through a contract that is designed for change and improvement, and allows the MOD and QinetiQ to share benefits to mutual advantage."

The contract covers well over 30,000 square kilometres of water-space including 'Danger Areas' where testing of weapons and ordnance takes place. Add to that many more thousands of square kilometres of air danger area, much of it to an unlimited height, and

you have a huge undertaking. QinetiQ also manages more than 100 square kilometres of estate which includes 2,000 buildings.

In the air domain the contract covers missile and weapon tests, deployable air trial instrumentation services, aerial and surface targetry, parachute and store testing drops as well as navigation and GPS testing.

For the land domain there is testing of munitions and weapon systems, warheads, proof of armour, safety testing of hazardous stores, environmental testing and ordnance disposal.

Testing of tracking systems, sonobuoys, torpedoes and sonar, signature measurement and electronic warfare calibration are all carried out in the maritime domain ranges.

A further range of flight testing and aircraft modification and installation goes on at Boscombe

Down, where MOD and QinetiQ have a joint presence. Across all sites sophisticated equipment records data from testing which is then analysed to present relevant information to project teams for them to assess their ability to deliver military capabilities. This can be either directly for the DE&S project teams or through their UK prime contractors.

And it's all long term. "A key part of the contract is that it gives everyone continuity and coherence," said Cathy O'Carroll. "We can look at what we need to provide at all our sites in the future, and then we can plan our investment. It's not all short term any more."

Spare capacity at LTPA establishments can be made available to third parties. Recent international customers have included the Danes,



### LTPA sites

**Aberporth (south west Wales):** tracking radar, surface target and aerial target facilities, optical instrumentation, munition and weapon performance, unmanned aerial systems testing

**Boscombe Down:** unmanned aerial systems testing, aerospace technology demonstration, design and development, radio trials, safety consultancy, aircraft maintenance

**BUTEC (British Underwater Test and Evaluation Centre, north west Scotland):** acoustic signature services and target echo strength, munitions and weapon performance



A shell leaves a 155mm turret during testing at Eskmeals in Cumbria

the Swiss and the Turks, along with the US Air Force. It is a small but growing percentage of QinetiQ business. Some of that money will go back to the MOD.

It brings benefits in terms of employment too. The MOD ranges managed by QinetiQ are, to put it mildly, often in out of the way places. Attracting staff can be an issue. There are 2,700 people employed on work covered by the contract and there is access to wider QinetiQ staff and knowledge when required. Around 200 military staff also support LTPA work. All need to be kept up to speed on the latest testing developments.

"It's about keeping and developing people's skills and getting involved in



Blast off for a Mirach aerial target from ranges on the Hebrides

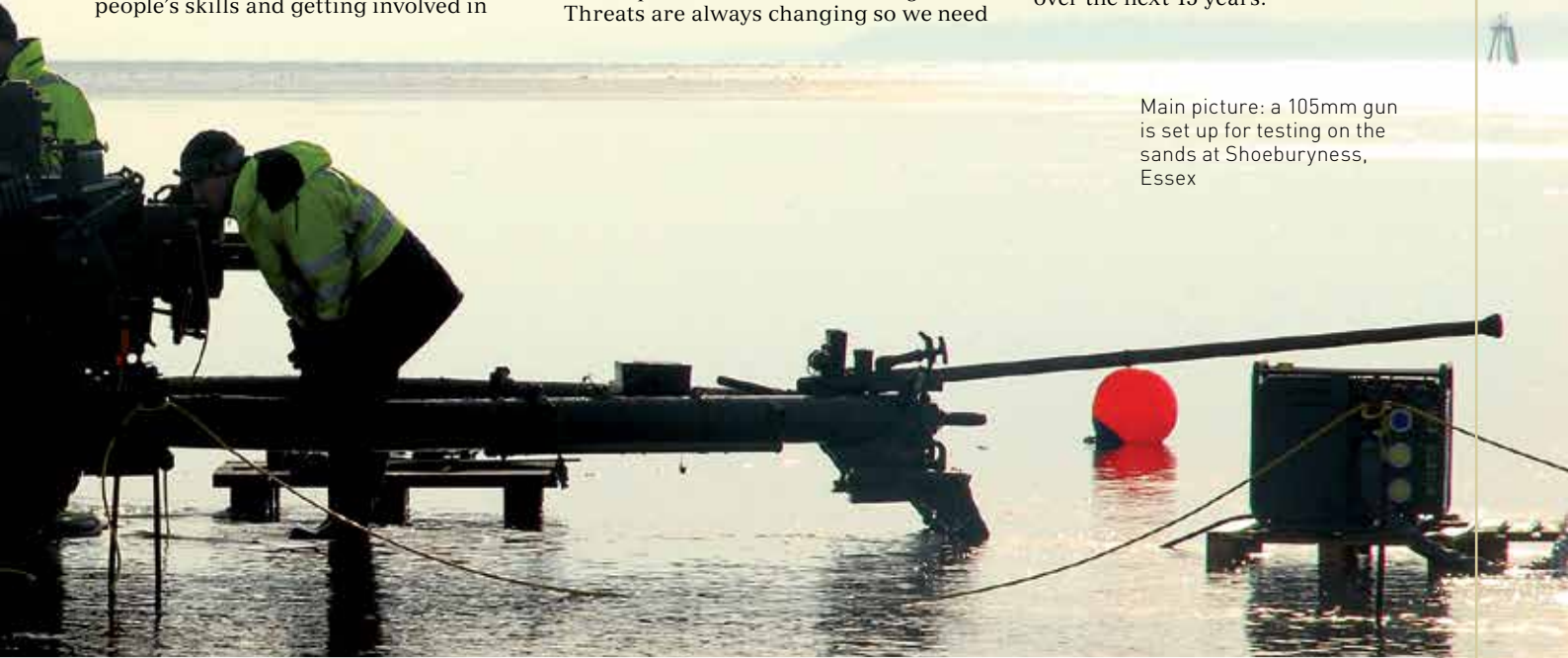
their training. We look to move people around to make sure the skills base is maintained. People are transferrable; the days are gone when each individual site retained all its own skills. We need people who are flexible."

LTPA demands that DE&S and QinetiQ are always looking to the future. "There are always emerging systems that the MOD will need to test and train on, Unmanned Aerial Vehicles, longer range missiles for example," said Cathy O'Carroll. "We need to develop new techniques to meet these challenges. Threats are always changing so we need

to be agile enough to make sure our services are able to deal with them. We will always be shaping the LTPA to future MOD requirements. It's not necessarily all going to happen in the current five-year agreement but it's all certainly going to be out there at some time."

Gp Capt Tait added: "This is about long term thinking as well as today's test and evaluation activity. I'm proud to be involved in work that looks at benefits to UK defence and industry over the next 15 years."

Main picture: a 105mm gun is set up for testing on the sands at Shoeburyness, Essex



**Eskmeals (Cumbria):** munitions and weapon performance and safety

**Hebrides:** air platform test and evaluation, data analysis, in-service firings, unmanned aerial systems testing, munitions and weapon performance

**Larkhill (Wiltshire):** target services, munitions and weapon performance, radar signature services, target services

**Loch Goil, Loch Fyne (Firth of Clyde) and Grove Point (Dorset):** acoustic signature services and target echo strength

**Pendine (south west Wales):** munitions safety, weapon performance

**Plymouth, Skipness and Portsmouth:** electromagnetic services, electronic warfare calibration

**Portland Bill:** electronic warfare calibration, magnetic assessment services

**Rosneath and Barons Point (Firth of Clyde):** electromagnetic signature services

**Shoeburyness (Essex):** Munitions safety and performance, demilitarisation

**West Freugh (south west Scotland):** air platform test and evaluation, munitions assessment, target services, unmanned aerial systems test and evaluation

# See further – and in more detail

Media day highlights  
the latest visual  
equipment put on  
show by DE&S



Report: Clare Trenholm  
Pictures: Andrew Linnett

Journalists at a media day at the Infantry Training and Development Unit in Warminster were given the opportunity last month – courtesy of DE&S – to test out the latest equipment to help identify targets more easily.

The Head-Mounted Night Vision System (HMNVS) was put to work in a pitch black room, while live firing took place on one of the 25-metre outdoor ranges nearby, using the Laser Light Module (LLM) Mk3. Everyone had the opportunity to trial the new Steiner binoculars and compare the weight of them with the current L12A1 binoculars. In all it represented investment in £53 million of new equipment.

Defence Equipment, Support and Technology Minister Philip Dunne also tried out some of the equipment. He said: “The ability to see further and in more detail will allow British troops to stay one step ahead of danger. This multi-million pound investment makes clear the MOD’s commitment to equipping our Armed Forces, including Reservists, with world-class battle-winning technology. These binoculars, laser aimers and night vision goggles will improve situational awareness and reduce collateral damage across the battlefield.”

Matt West is project manager with DE&S’ Soldier System Programme and has overseen the binocular and laser light module Mk3 improvements from start to finish.

He said: “Obviously it’s very satisfying to see the first binoculars and LLMs be distributed to the troops, knowing that they will make an appreciable difference from day one. We’ve tested the equipment virtually to destruction in various climates ranging from sub-zero temperatures in Norway to the heat and humidity of Brunei. Only by being so

thorough at the development stage do we know that the equipment can stand up to the rigours of combat for the British Armed Forces.”

He explained that the binoculars are only 600g, which is half the weight of the previous standard issue kit.

He added: “Clearly halving the weight is noticeable, but the exciting thing is that if we can add this to other equipment weight savings and future projects to slim down kit that has to be carried, we can reduce the burden on the soldier. By reducing fatigue and improving the capability of each item in many cases, we can increase operational efficiency at the same time.”

Andrew Davies from DE&S oversaw the additional buy of the HMNVS. The AN/PVS-14 Night Vision Goggles are used in conjunction with the LLM Mk3 and are sourced from ITT Exelis, based in the United States.

Lance Corporal Herblin Biscette of 2nd Battalion, The Royal Regiment of Scotland tested the equipment before it was delivered to forces while working for ITDU. He said: “This new kit will help us to stay accurate and heighten awareness in difficult, low-light conditions. Being able to mark our targets from so far away means that we can prepare for the situations ahead and do the job with confidence. This kit also gets tested virtually to destruction – they get dropped from height, submerged, blasted with sand, left out in minus 20 degrees – all conditions that we might have to face when using it, so we know that it won’t let us down.”

Below left: Matt West, Dave Clark, Philip Dunne, Ceri Adlam and Brig James Daniel

Below: LSBC binoculars



## Kit at a glance

- Three pieces of equipment were trialled by media last month: a pair of new binoculars, the upgraded Laser Light Module (LLM) Mk3 and the standard Head-Mounted Night Vision System (HMNVS).
- The new ergonomic binoculars are made by Steiner and imported by Hampshire company GMK in a contract worth £5.5 million. The initial 14,500 pairs are being distributed across the Army, with a further smaller number set to go to the Royal Navy and Royal Air Force in due course.
- Upgraded aimer, LLM Mk3, has been produced by Rheinmetall in a contract worth more than £33 million. The LLM Mk3 is attached to the SA80A2 to mark targets beyond the 600-metre range of the rifle, depending on weather and light conditions. This is a huge improvement on the Mk2, with hundreds of metres of visibility added to the module’s capability in some conditions.
- These LLM Mk3 units are to be distributed to every infantry soldier, which includes Reservists who previously did not have a night-fighting capability. The AN/PVS-14 Night Vision Goggles (designated as HMNVS in the British Army) are used in conjunction with the LLM Mk3 and are sourced from ITT Exelis, based in the United States.



L/Cpl Herblin Biscette



### Why paint aircraft?

- To protect them from environmental and accidental damage.
- To improve tactical performance and survivability by imparting visual camouflage and other stealth properties.
- To prevent chemical and other non-conventional weapons from penetrating through to the structure and enable effective decontamination.
- To improve appearance.



# Merlin's coat of many years

Tests on the grey paint of the earliest Merlins have revealed a surprising lack of degradation, with implications for future repainting programmes on other aircraft

Scientific studies into how the operating environment affects paint on Merlin helicopters may delay the need to repaint aircraft, potentially saving future maintenance costs.

The Merlin was probably the first modern aircraft painted at manufacture using a polyurethane topcoat instead of an acrylic one. Others have since converted to polyurethane. Though the acrylic paint was easy to apply and remove and was tolerant to ultraviolet light, it was not resistant to chemical attack, only lasted up to six years, and its aesthetic appearance deteriorated over time.

The first Merlin is now 15 years old and still looks as good as new, so there is no repaint programme in place. But coatings age in subtle ways through the effects of ultraviolet light and environmental contaminants.

Andy Dutch of 1710 Naval Air Squadron at Yeovilton has been part of the biggest study into coatings ever done in the UK on a single aircraft fleet.

"Paints are polymers, formed from chains of molecules that hold together to produce a fairly homogeneous film," he explained.

"Exposure to UV and the elements will break down the links in those chains. Until paint has seriously degraded, it is not possible to simply look at a coating to see if it has changed to the extent that it no longer meets our requirements."

DE&S' Merlin team tasked the squadron and QinetiQ to assess the Merlin Mk1 fleet, the oldest in service having been exposed to the most diverse environments. Tests were carried out on six Mk1s being converted to Mk2 at AgustaWestland in Yeovil.

Mr Dutch, who works in the squadron's materials and monitoring area, said: "The only tests we could do were those that the paint had passed to be selected in the first place; if the coatings met those test requirements then they could be considered to be within specification and able to remain in place."

Twelve test areas included gloss measurement, chemical resistance, paint layer thickness, scratch hardness and infra-red reflectance. AgustaWestland also produced test coupon panels, painted at the same time as the aircraft were originally sprayed, and then stored under controlled conditions. This allowed the study team to determine the level and rate of degradation.

"The outcome surprised everyone," said Mr Dutch. "While there had been some minor degradation when we compared the coatings on the aircraft to the test

coupons, we determined that the coatings on every aircraft measured were still within the limits for a brand new paint. This means that there is no tactical, engineering or cosmetic requirement to repaint the Merlin Mk1 or 2 aircraft.

"The recommendation is that the aircraft do not need to be repainted for at least another five years. Two of the older aircraft in the fleet will be subjected to the same testing in five years time to determine if they have deteriorated to a point where refinishing will be necessary. At this point some of the Mk2 aircraft will have paint that is 20-plus years old."

Mr Dutch added: "Given the low levels of degradation over the range of ages tested, it may be possible to push the refinishing requirement out for another five or ten years beyond the current extension. This could mean that we never have to refinish a whole Merlin for the entire service life of the aircraft."

Implications are wide. Merlins, along with other helicopter fleets, are scheduled for repainting every eight or nine years, meaning two or three repaints in their lifetime.

"The Merlin Mk1 is painted in medium sea grey polyurethane paint. Most other aircraft are painted in similar coatings, so it may be possible to reduce

depth servicing times by cutting out unnecessary whole aircraft refinishing," said Mr Dutch.

"Extending this work to fixed wing aircraft, which generally operate at faster speeds and at higher altitudes, we can also ask: is there a genuine need to strip the whole aircraft at every major maintenance or should we be switching to a more 'on condition' approach to aircraft refinishing?"



# Keeping the fleet ship

The Sensors Support Optimisation Programme received the Special Prize at the last Minister for Defence, Equipment, Support and Technology Acquisition Awards for its outstanding contribution to delivering defence capability. *desider* takes a closer look at its successes

On a biting cold winter's day, a team of highly specialised Thales engineers are working at the stern of *HMS St Albans* to carry out essential repairs to the 2087 towed array sonar, the sensor that makes the Type 23 frigate one of the most advanced anti-submarine warfare platforms in the world.

Elsewhere in Portsmouth's naval base, engineers are on board *HMS Cattistock*, carrying out maintenance to the sensor systems and identifying any potential operational defects that may have arisen while out at sea.

With essential spares and equipment stored in a Thales facility within minutes of the ship, the work to keep the Hunt class vessel at operational readiness begins even before the crew has disembarked.

The scene is common across Faslane, Devonport and Portsmouth dockyards where DE&S and Thales provide a key integrated link in keeping the Royal Navy operational, by bringing engineering support and spares to where they are needed most, the waterfront.

The Sensors Support Optimisation Programme (formerly Project) – signed

last May between DE&S and Thales – provides the Royal Navy with a flexible support service that has transformed the traditional image of naval services.

The £600 million contract is expected to save around £140 million over its ten-year life, while ensuring the continued readiness and availability of sonar, periscope, optronic mast and electronic surveillance capability across the Fleet.

The project has its origins in the Contractor Logistic Support contract signed between DE&S' predecessors and Thales in 2003 that evolved to provide a combined sonar and electronic warfare support service.

Under the terms of the new project, in-service support has now been extended to all submarine vision systems, including periscopes for the *Vanguard* and *Trafalgar* class submarines and the *Astute* class optronic masts, previously supported under separate contract arrangements with Thales.

The new contract also secures employment for 230 Thales employees and a further 300 people within the extended UK supply chain. Major suppliers include J+S Ltd, MacTaggart

Scott, Atlas Elektronik UK, Parkburn Ltd, AB Precision (Poole) and the Defence Support Group.

The programme is managed by the Maritime Combat Systems Underwater and Electronic Warfare team based at Abbey Wood – a joint team of DE&S and Thales personnel which provides a central focus and strategic overview of activities.

The team manages rectification of operational defects, obsolescence resolution and the two-way flow of repairable stocks.

Defects and maintenance are dealt with at the dockside, saving time and money. Supported ships at the waterfront include Type 23s, Type 45s, mine countermeasures vessels and all classes of submarines.

Portsmouth-based Thales electronic warfare support engineer Wally Hammond said: "One of my tasks is to meet the ships when they come in to assess if there are any operational defects that need rectifying. I deal directly with the maintainers (the naval senior rates who maintain the ship's equipment) and I can offer them the continuity of expertise

*HMS St Albans*



# shape

of working with a particular system.

“Our priority is to understand the crew’s requirements and more crucially, identify potential issues before they turn into major defects or problems.”

Phil Jones, Thales UK’s Director of Maritime Customer Services and Support, said: “The original intention of the project was to cut out waste, bureaucracy and unnecessary activity and concentrate the available budget on ensuring the ships are operationally available to meet their specific missions. The concept was developed in conjunction with the MOD and it is only by working together that we have successfully delivered – and even exceeded – what was envisaged at the outset.”

DE&S Maritime Combat Systems Underwater and Electronic Warfare team leader Captain Ivan Stace added: “This is a very significant new breed of support contract that includes a strong incentivisation mechanism and follows the latest government thinking on single source procurement.

“I am very proud of the joint team’s efforts in establishing this arrangement and it fully deserves the recognition given by Minister for Defence Equipment, Support and Technology Philip Dunne at the recent Acquisition Awards where it scooped the top spot with the special award for outstanding achievement.

“Central to the success of this contract will be in delivering the equipment performance and availability required of the Royal Navy and, to date, I continue to be very pleased to say the least with Thales’ performance and I look forward to us working together to safeguard this for the future.”



Above: Capt Ivan Stace, second from right, visits Thales’ facility at Templecombe



# UK eyes in the skies

The MOD and the RAF have unveiled the mysteries of the UK's Unmanned Aerial Systems and the work of more than 100 DE&S military and civilian staff involved in helping to protect lives in operational theatres

The hi-tech operations room at RAF Waddington in Lincolnshire where members of 13 Squadron remotely operate the RAF's Reaper aircraft in Afghanistan has gone on show to the world.

Reaper remotely piloted aircraft systems (RPAS) is just one of a range of unmanned systems operated by all three services providing vital life-saving intelligence, reconnaissance and surveillance on operations.

And in putting the systems on show, the work of DE&S staff covering project management, engineering, finance, commercial business management and a host of other functions came in for high praise.

"The performance of the Unmanned Air Systems supporting current operations has been truly impressive," said Air Vice-Marshal Sue Gray, outgoing head of DE&S' Unmanned Air Systems team based at Abbey Wood.

"Since being introduced into service from 2007, these systems have flown a combined total of 170,000 hours in support of operations in Afghanistan and Iraq. The Unmanned Air Systems team can therefore be rightly proud of the key part it has played in project managing the delivery and continued support of those systems and working so effectively with the user, industry and key allies in making such an achievement possible.

"However, as well as the re-deployment of these systems from Afghanistan, 2014 promises to be another year of delivery with both the Watchkeeper tactical UAS and Scan Eagle maritime UAS expected to enter service over the coming months.

"Furthermore, the assessment phase is now underway to scope the solutions available to meet the future UAS requirement and longer term we continue to support the department's consideration of possible options to meet the emerging Future Combat Air System requirement."

She added: "After two years

of leading the team, and as I take up promotion as Director Combat Air, I therefore have a sense of enormous pride tinged with regret to be leaving the team given the exciting times ahead."

Among the UK systems on show at RAF Waddington were:

- Reaper ground stations (RAF)
- Watchkeeper (Army)
- Hermes 450 (Army)
- Desert Hawk III (Army)
- Black Hornet Nano (Army)
- Tarantula Hawk (Army)
- Scan Eagle (Royal Navy)

Defence Secretary Philip Hammond said showing the capability of the systems to a wider audience would help dispel some of the myths surrounding them.

"Vital to our efforts to protect our forces and the people of Afghanistan, this battle-winning technology allows us to: understand the situation on the ground more clearly; develop better intelligence; and precisely strike, within our rules of



#### Watchkeeper Tactical Unmanned Aerial System:

Unarmed. Will provide surveillance and intelligence.

Will provide enduring tactical UAS capability.

Remotely piloted by trained members of the Army (Royal Artillery).

Features state of the art sensors and laser designators.

54 aircraft have been procured from Thales UK.

More than 500 hours flown in UK to trial the system ahead of going into service.

Total approved cost of around £1 billion.



engagement, those who threaten or hurt the people we are protecting," he said.

"Much of the criticism of Unmanned Aerial Systems is based on misunderstanding. This is an opportunity to better inform people about these life-saving assets and their variety of purpose."

Air Vice-Marshal Philip Osborn, Joint Force Command Capability Director, said: "The UK's unmanned aircraft systems – or as they are increasingly called 'remotely piloted air systems' – provide UK and coalition forces with vital intelligence derived from the aircraft's unique ability to loiter over the enemy for hours, and provide persistent

surveillance of enemy positions without putting our servicemen and women at unnecessary risk.

"In today's operational environment, unmanned and remotely piloted air systems are increasingly vital to keep one step ahead of the enemy, and to save military and civilian lives. Highly trained and experienced personnel are at the heart of the capability, and human oversight and control is always paramount. This is a capability just like every other across defence – it has skilled and motivated people at its core, people who are in charge of technology and use it in strict accordance with the law."



**Desert Hawk Mini Unmanned Aerial System:**

Unarmed. Provides key surveillance and intelligence. Operated by trained members of the Army (Royal Artillery).

Carried by Forces on the ground and launched by hand.

Can be used day and night on the front line in Afghanistan.

MOD has 34 DH3 systems. Each system is made up of 8-10 aircraft

Manufactured by Lockheed Martin.

30,000 hours flown in support of operations in Afghanistan and Iraq.

Total approved cost of £70 million.



**Hermes 450 Tactical Unmanned Aerial System:**

Unarmed. Provides video surveillance to UK ground forces day and night.

Remotely piloted by trained members of the Army (Royal Artillery).

Up to nine Hermes 450s available for use.

Aircraft and system provided by Thales UK via a service provision contract.

85,000 hours flown in Afghanistan and Iraq since 2007.

Total approved cost of £215 million.



**Reaper MQ-9 Remotely Piloted Aircraft System:**

Remotely piloted by Royal Air Force pilots.

Designed for medium altitude and long endurance surveillance operations.

Carries precision guided air-to-ground missiles and bombs.

Weapons can only be fired on the command of RAF pilots.

UK Reaper only used within Afghanistan.

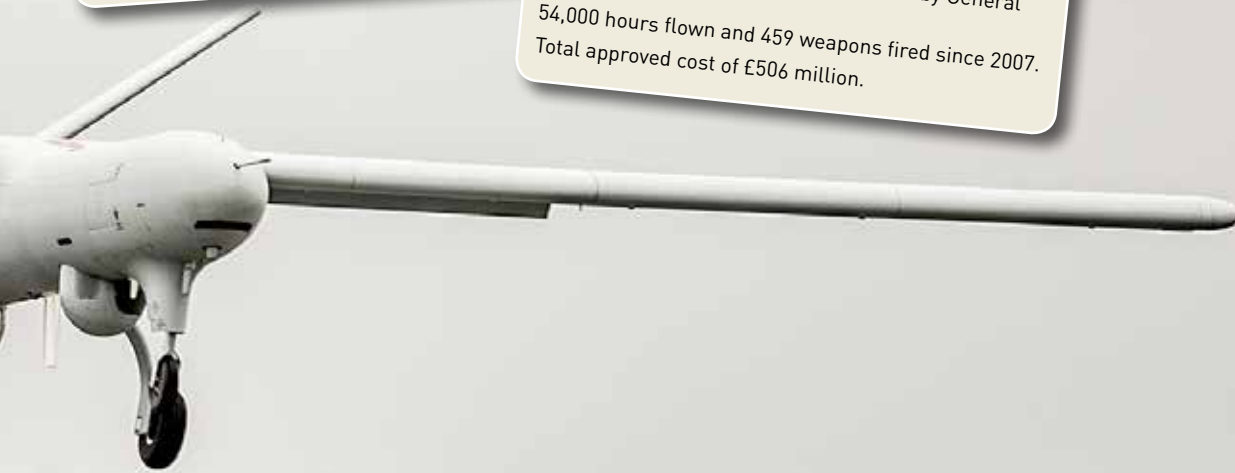
Five aircraft in-service which will expand to a fleet of ten this year.

Procured from USAF and manufactured by General Atomics US.

54,000 hours flown and 459 weapons fired since 2007.

Total approved cost of £506 million.

■ Unmanned Air Systems: separating fact from fiction – page 30



## Fact versus fiction

**Fiction:** Unmanned Aerial Systems (UAS) and Remotely Piloted Aircraft Systems (RPAS) are operated by machines, not humans.



### Scan Eagle Maritime Unmanned Aerial System:

Unarmed. Provides key surveillance and intelligence.

Operated by a specialist contractor team on board Royal Navy vessels.

The first maritime-specific unmanned reconnaissance asset that operates from UK warships and auxiliaries day or night.

Manufactured by Insitu, a subsidiary of Boeing. 600 hours flying per month.

Total approved cost of £38 million.

**Fact:** UK RPAS and UAS are only flown by RAF pilots and trained members of the Armed Forces. UK RPAS and UAS are always flown and controlled by trained personnel and on Reaper, the only armed UAS, it is a qualified and experienced RAF pilot – not a machine – that decides whether a weapon is fired.

**Fiction:** All UAS are armed and their sole purpose is to drop missiles.

**Fact:** Only Reaper, which makes up a very small proportion of the MOD's overall UAS capability, carries weapons. In fact the main purpose of all MOD UAS is to provide surveillance, reconnaissance and intelligence to inform front line troops and save both military and civilian lives in Afghanistan.

**Fiction:** There are hundreds of armed 'drones' flying every day in Afghanistan.

**Fact:** The current fleet of UAS has flown nearly 170,000 hours in support of operations in Afghanistan and Iraq. All are operated by trained pilots or operators. Only 459 weapons have been fired in more than 54,000 hours of Reaper RPAS operations in Afghanistan (as of last November). This is less than one weapon in every 120 hours of Reaper aircraft flying. Unarmed UAS have flown

around 115,000 hours, more than double that of armed missions.

**Fiction:** A computer decides what to target and fire upon.

**Fact:** All UAS are operated by professional and trained personnel. For Reaper, trained pilots, not a computer, decide whether to fire a weapon. Weapons are only released under strict rules of engagement on legal targets.

**Fiction:** The MOD is planning to create weapons that have no human control.

**Fact:** The MOD has no plans to create weapons that operate without human control. Trained members of the Armed Forces will always be involved in the command and control of UAS/RPAS.

**Fiction:** UAS strikes are not very accurate.

**Fact:** UAS/RPAS offer precision. The ability of UAS to monitor a situation for extended periods of time offers the ability to ensure that strikes are completed with the absolute minimum risk of civilian casualties. The professional aircrews flying RPAS are often assigned to operations for extended periods and may consequently fly missions in Afghanistan for many years which gives them an unrivalled depth of knowledge and familiarity with the environment in which they are operating.

**Fiction:** UK UAS are responsible for the deaths of many civilians.

**Fact:** In over 50,000 hours of Reaper operations there is only one known operation that has resulted in the deaths of civilians. On 25 March 2011 an attack on two pick-up trucks resulted in the destruction of a significant quantity of insurgent explosives and the death of two insurgents. Sadly four Afghanistan civilians were also killed. An ISAF investigation concluded that the Reaper crew acted in accordance with established procedures and rules of engagement.



### Black Hornet Nano-UAS:

Unarmed. Provides surveillance and intelligence.

Operated by infantry.

Used in Afghanistan since 2012.

Manufactured by Prox Dynamics. Total financial approved of £20 million.



### Tarantula-Hawk Unmanned Aerial System:

Unarmed. Examines possible IEDs to allow safe passage and assist in the clearance of these devices.

Operated by the Royal Engineers Counter Improvised Explosive Devices task force.

Designed for short endurance, lightweight, vertical take-off and landing.

Around 550 hours flown.

Total approved cost of £15 million.

### Taranis:

A Technical Demonstrator Programme for stealth, unmanned combat aircraft. Joint project with BAE Systems, Rolls-Royce, QinetiQ & GE Aviation.

Evidence from the Taranis programme is already helping to inform future combat air capability planning.

Joint MOD and industry funded with a current contract value around £180 million.



# Information – critical to DE&S' smooth running

AIR VICE-Marshal Julian Young has become DE&S Chief Information Officer (CIO) in a re-alignment of responsibilities.

David Ball, Director HR, is taking responsibility for Infrastructure, Security and the role of DE&S Senior Information Risk Owner (SIRO).

The DE&S CIO team has now transferred to the Technical Directorate.

In a paper to the DE&S Board – Protection and Management of Information – Air Vice-Marshal Young outlined the importance of information as a critical asset to the smooth running of DE&S.

He stressed the need for it to be valued and protected against existing and emerging threats, such as cyber attack.

He also emphasised the importance of improving maturity in the management of information so that activities relating to its management and protection become second nature and DE&S' focus can move towards its exploitation as a valuable business resource.

Recognising the pivotal role information professionals play in achieving this goal consistently and coherently, Air Vice-Marshal Young sought Board agreement for DE&S CIO staff to undertake Countersigning Officer duties for some information staff from April.

First Reporting Officer duties will continue to be performed within the business area, but, wherever



New information chief:  
Air Vice-Marshal Julian Young,  
above, right

practicable, this will be performed by staff with specific information responsibilities like Senior Information Officer or Information Asset Owner.

Following Board approval, the DE&S CIO team is working with the business areas to plan implementation.

Further detail on the roles of DES CIO and DES SIRO, and other information roles and deliverables contact DES CIO-Front Door or the DE&S information portal.

## On the CIO agenda for 2014/15

- DE&S information strategy and architecture
- Management of information risk
- Introduction of Government Security Classifications
- Delivery of DII Capabilities including records management (Meridio), digital signatures, document encryption
- 'Refresh' of DII components
- Management information support
- Laptop and Blackberry support
- Social media pilots (Yammer, Facebook, Twitter, LinkedIn, etc)
- Information training co-ordination (RFI, Records, MOSS)
- Information compliance audit programme

## 'Vector plays a huge role' – Minister

INDUSTRY STAFF who keep Chinook, Lynx and Sea King helicopters up to operational standards have been praised in a 23rd January ministerial visit.

Vector Aerospace UK welcomed Philip Dunne, Minister for Defence Equipment, Support and Technology to its Fleetlands site in Gosport.

Mr Dunne was given a behind the scenes look at the highly skilled work and toured the aero engines repair shop.

"Helicopters are an essential capability for all three services, and high-quality maintenance is essential to ensure that our fleets are ready to deploy where they are needed," said Mr Dunne.

"Sites like Fleetlands have a huge role to play in defence, and I thank the workforce here for their help in ensuring British troops have the top-class equipment they need."



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## NEWSREEL

**Teamwork gets a boost**

A £6million contract to extend support to HMS *Illustrious*, the Hunt class and Type 23 warships has been signed with BAE Systems. This extension to the existing phase two service contract will continue Class Output Management and Design Management Services which offer global support to ships. BAES provides 'class' focus by bringing together ship support roles across industry, DE&S and the Royal Navy to work in a single team at the waterfront. The Alliance model encourages partnering at Portsmouth and Devonport.

**MOD success**

THE MOD is among employers recognised for creating inclusive workplaces for lesbian, gay and bisexual employees, being the most improved employer in the Stonewall Workplace Equality Index 2014, earning praise for community engagement which helped the department rise from 174th last year to 35th. The Armed Forces are also well represented: the Army makes it into the top 100 for the first time in 79th, a position it shares with the Royal Navy, while the RAF is 108th.

**F-35 purchase**

WE have been asked to clarify that the F-35B Lightning II aircraft is an International Co-operative Programme and not procured through a Foreign Military Sale, as stated in the January edition.



# A pattern emerges

ABBEY WOOD'S new Pattern Room, pictured above – where military uniforms from down the ages are stored – has attracted national interest within days of opening.

BBC defence correspondent Jonathan Beale brought a camera crew to the Abbey Wood North site to film a feature on the development of clothing and personal kit that has been issued to the Armed Forces since the beginning of the conflict in Afghanistan.

While he was there he was also briefed on the extensive collection of uniforms, regimental standards, ceremonial gear and clothing for a range of military and civilian staff which the DE&S

## BBC captures Abbey Wood's uniform collection

Defence Clothing team procures and supports.

Examples of clothing are stored to ensure that the next generation of kit procured for UK Forces meets or exceeds the exacting standards of the past.

The Room has moved from its former home at Ensleigh – it was previously at Caversfield and Colchester – and was formally opened last October by Minister for Defence Equipment, Support

and Technology Philip Dunne during a visit to Bristol.

"While staff of the Pattern Room regard their place of work as a reference library for clothing and its specifications, for a wider audience it is a fascinating historical record of uniforms and clothing down the ages including kit from current operations," said DE&S press officer Hannah Swingle.

"We were approached to assist the BBC with their story. Jonathan and his team were fascinated by what they saw. The Room is a unique place and we were proud to show it off to them."

BBC's coverage of the Pattern Room appeared on television last month.

## Battlefield mission tests prove Terrier reliability



THREE PRODUCTION Terriers – the Army's latest engineering vehicle, left, – have completed the required number of battlefield missions to prove reliability.

The vehicles finished 38 battlefield missions in the Reliability Qualification Trial, which ended in November.

It marks the end point of a reliability growth programme that has seen the vehicle's reliability 'grow' along with successful implementation of engineering fixes by BAE Systems.

The trial began on Salisbury Plain last July using scripted battlefield missions representing typical activities for the vehicle, but more intense due to the short trial time.

The trial was witnessed by the Terrier team and a QinetiQ observer on hand to understand the nature and circumstances of any incidents on the trial.

By the end of the trial incidents were few and far between. Terrier met all the key system requirements for reliability.



# Scanning for the future

A deployable CT scanner procured for UK forces by DE&S is proving an important capability with high export potential

FIXED SCANNERS are being used in the permanent field hospital in Camp Bastion, helping to assess trauma cases among casualties on Operation Herrick.

But a £1million deployable version – known as the CCTS or Containerised CT System – has been training military medical staff before deployment, and will play its part in the medical component of Force 2020.

The Philips scanner – CT stands for computerised tomography – is a technology that uses computer-processed X-rays to produce tomographic images (virtual ‘slices’) of specific areas of the body, allowing the user to see what is inside it without surgery. Digital processing is used to generate a three-dimensional image of the inside of an object from a large series of two-dimensional x-ray images. Imagery is in the hands of medical staff just a few minutes after the scan.

It is built into a container, designed by the Marshall Aerospace and Defence Group, which opens out to replicate a conventional ‘CT room’ in a format that is ideal for a high-readiness hospital in an austere environment.

“This is a unique product, part of a military ‘must have’ for UK

forces,” said John Abbott, Marshall’s Medical Business development manager. “It is a highly sophisticated piece of modern technology.”

The ruggedized system – scanner and container can be up and running four hours after arrival – conforms to modern medical standards, with the scanner kept at its operating temperature of between 18 and 24 degrees Centigrade, regardless of conditions outside.

It also complies with military logistic standards and folds neatly into a 20ft ISO container, which has earned Marshall a Queen’s Award for Innovation.

Since procurement it has been used on exercises to train the radiographers who operate the scanner and the radiologists who interpret the information to make a diagnosis.

“CT has been in use in the Camp Bastion Hospital for some time now and has been a major enhancement in the hospital’s ability to deal with trauma cases. In fact, CT has become such an

essential diagnostic tool for military trauma that it has driven the need for a deployable format,” said Mr Abbott. “It will be a big part of Force 2020 and a vital capability for UK Forces returning to contingent operations.”

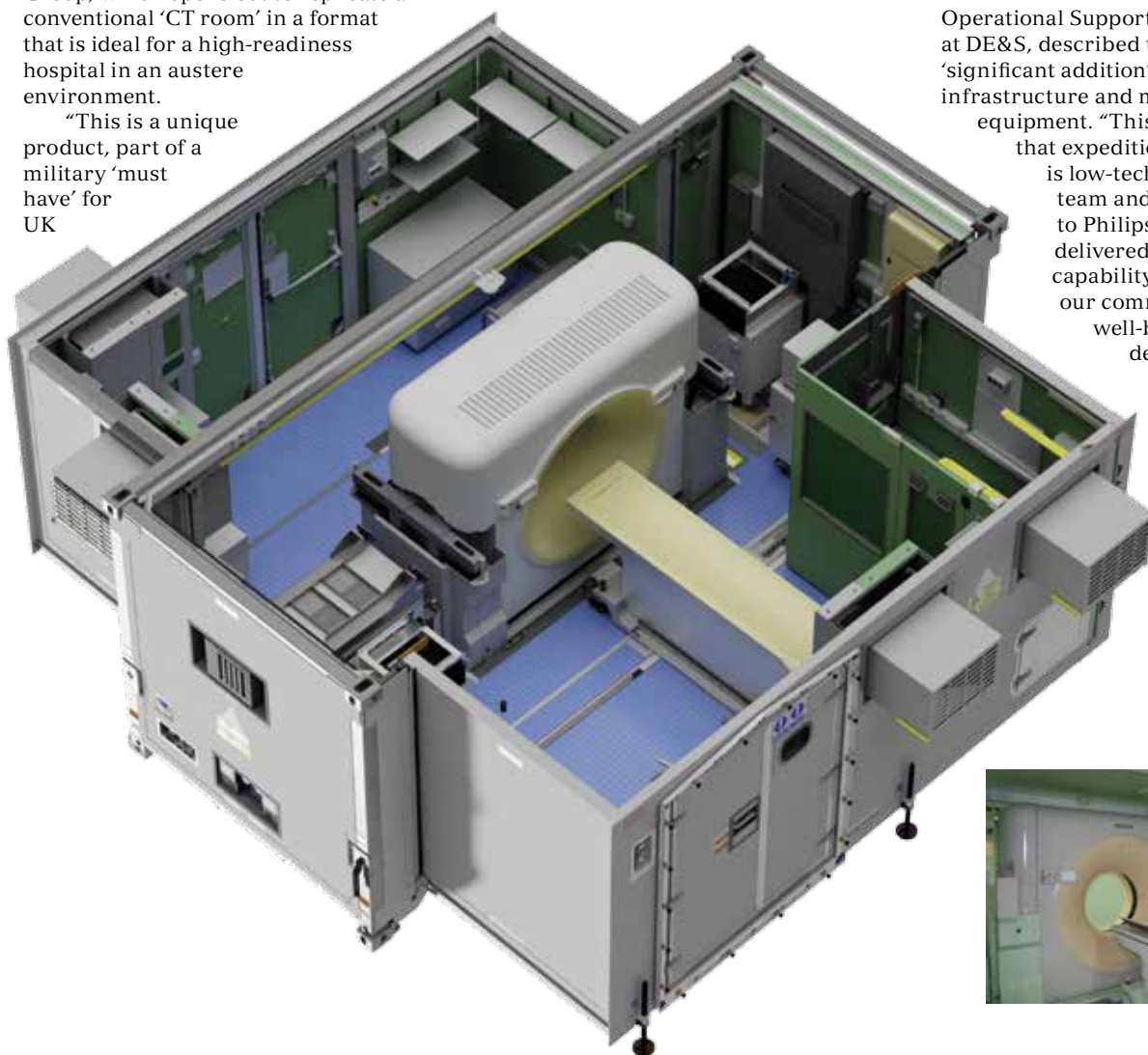
France has already bought one scanner with further orders on the way. Several other Nato nations have declared an interest, and wider interest includes a number of nations looking at the potential to provide mobile CT to dispersed civilian populations living in harsh climates and terrains where a ruggedized mobile system is needed.

Brigadier Peter Rafferty, head of



Operational Support Programmes at DE&S, described the scanner as a ‘significant addition’ to deployable infrastructure and medical support equipment. “This dispels the myth that expeditionary infrastructure is low-tech,” he said. “My team and Marshalls, allied to Philips Healthcare, have delivered a world class capability which underpins our commitment to the well-being and support of deployed personnel.

“Its success is further demonstrated by the interest shown by other defence departments and by the prestigious award for innovation granted by Her Majesty.”





# Emergency!

## Real-life 'disaster' scenario puts Corsham staff to the test

TEN MONTHS of meticulous planning saw Information Systems and Services conduct its first major business continuity exercise at its Corsham headquarters – with an extra layer of reality.

Exercise Rush resulted from co-ordination between the ISS Head of Establishment team, the Wiltshire and Swindon Local Resilience Forum, which offers help and advice for families and businesses on how to prepare for emergencies, and key local agencies.

Emergency planners, part of the LRF, worked with ISS to co-ordinate responses from all involved, especially Wiltshire Police, Wiltshire Fire and Rescue Service, Wiltshire Council, South Western Ambulance Service, Public Health England, St John's Ambulance, the British Red Cross and the Environment Agency.

The charity Amputees in Action were also involved to provide extra reality to the overall scenario.

Rush began with a complete evacuation of Corsham's main office accommodation following a devastating

'explosion' at the front of the building. Throughout the morning certain high-profile areas in building 405 remained out of bounds, with teams operating in designated fall-back areas to maintain their business outputs.

In the afternoon, the ISS Business Continuity Response Group played out scenarios with counterparts from the emergency tactical command group.

The exercise highlighted several areas where business continuity planning, process and procedure could be improved. Similar exercises will be carried out in future.

Cdre Jamie Hay, ISS' Head of Programmes,



said: "This was extremely useful for all of us – ISS and external agencies alike. Rush certainly challenged what we knew about our business continuity plans and procedures and exposed what we didn't know, which can only bode well for ISS in the future."



Centre: a member of Amputees in Action plays a walking wounded member of staff during the morning exercise

Above: The External Agency Tactical Command Group and the ISS Business Continuity Response Group meet during the afternoon desktop exercise

Left: Wiltshire's Hazardous Accident Response team treats a 'casualty' during the morning exercise

DE&S STAFF are included in a new offer which includes thousands of pounds off new cars across eleven of the biggest names on UK roads.

The Defence Discount Service Car Programme could save staff, Armed Forces personnel, veterans and their families up to £7,170, with average savings of £3,250, on each new car purchase.

The deals, not found anywhere on the high street, include some of the biggest names in the car industry who have got behind the programme to show their support for all those who serve their country.

Exclusive discounts include:

- Up to £7,170 on a Seat Alhambra;
- Up to £6,100 on a Peugeot 5008;
- Up to £4,300 on a Renault Scenic;

## DE&S included in discount car deal

- Up to £3,500 on a Kia Sportage;
- Up to £3,200 on a Kia Carens; and
- Up to £2,400 on a Renault Clio.

The programme is one part of the Defence Discount Service, launched in October 2012. More than 2,500 companies have now joined this and pledged generous discounts to show their support for the Armed Forces community. Staff will be able to view the full range of unique bargains online via the new Defence Discount Service Cars website or by walking into their local dealer and ordering a new car at a significantly reduced price.

Defence Minister Anna Soubry said: "The

Defence Discount Service is a great example of ways to help Armed Forces families by offering money off everyday items or more significant items like a new family car. I hope to see even more companies around the country signing up to the Defence Discount Service to show their support for our Armed Forces community."

The car manufacturers who have signed up to the scheme are Citroen, Fiat, Alfa Romeo, Chrysler, Jeep, Kia, Mazda, Peugeot, Renault, Skoda and Seat.

To view car discounts visit [www.ddscars.co.uk](http://www.ddscars.co.uk).

For more information on how to sign up visit [www.defencediscountservice.co.uk](http://www.defencediscountservice.co.uk)

# Graduates get together to celebrate achievement

THE MOD's Permanent Under-Secretary Jon Thompson will be present at the award ceremony during the Defence Commercial Graduates Programme annual Alumni Day at Abbey Wood next month.

Mr Thompson will join Chief of Defence Materiel Bernard Gray and Director Commercial Les Mosco among others to recognise the achievements of the graduates on the programme and thank those who have provided support to their development.

The two-year developmental programme - recruitment is annual - is for graduates with a minimum 2:1 degree (or equivalent).

During the two years members work in a wide range of purchasing and contract management roles through 4-6 month placements across different areas of the MOD.

Graduates are exposed to business environments ranging from major equipment projects dealing with whole life management issues, through to projects providing support

to service personnel and their equipment.

A senior manager is appointed from the commercial function to act as mentor to help map out development and provide professional support and guidance.

Members develop personal and professional competences through a bespoke training programme and an intensive course to achieve professional qualification through the Chartered Institute of Purchasing.

At the two-year point all programme members are assessed against the Civil Service Core and Procurement Competence Frameworks and will re-grade to C2 if they demonstrate suitability for a range of C2 commercial posts.

The Alumni Day on 31st March features presentations from senior MOD personnel and 'market stall' discussions on a selected theme - this year's is 'Celebrating Commercial' and will focus on DE&S successes in meeting challenges faced in defence procurement.



Jon Thompson

## DE&S helps develop tomorrow's leaders

ABBEY WOOD played host to almost 300 MOD staff from across the south west last month for the latest in a series of engagement events for staff at Band B level.

The event was opened by a video message from Permanent Under Secretary Jon Thompson focusing on leadership and change.

"My ambition is for every Band B to have attended one of these leadership events," he said.

"I'm trying to keep the focus on leadership and our responsibility as leaders."

The event took the form of two separate panels followed by discussion and questions and answers. The first panel consisted of Gerry Cantwell, Director Information Systems and Services, and Barry Burton, Director Materiel Strategy.

The second panel was made up

of Angela Owen from PA Consulting and Laurence Bryant, Director of DE&S' Weapons Operating Centre. David Ball, DE&S HR Director, was on hand to contribute to the discussions that followed.

A further Band B leadership event will take place next month at the Defence Capability Centre, Shrivenham. Details on how to register will be on the Defence Intranet.

# Day the marines came racing to the rescue

Devonport personnel ferry stranded cars away from flood-hit village



GRATEFUL VILLAGERS have praised the military for recovering cars stranded in a flood-hit village in Cornwall by moving them down

river by Royal Marines landing craft.

Motorists in Calstock on the River Tamar were cut off from the national road network after a retaining wall carrying the highway collapsed.

The only way to return the estimated 50 cars to the road network was by ferrying them down river to the next nearest

slipway and road connection.

The rescue came about after ten-year-old Charlie Southcott met Devonport base commander, Cdre Graeme Little, at the annual Royal Navy/Babcock Christmas carol service.

The two had a ten-minute chat, after which the Commodore handed Charlie his business card.

Charlie later handed contact details to a local

councillor with the request to the Marines eventually coming through Cornwall Council.

1 Assault Group Royal Marines, based in Devonport, took the vehicles including a tractor and tradesmen's vans one by one with their owners to be off-loaded in torrential rain at the National Trust's Cothele Quay slipway.

Charlie's mum Vanessa said: "It's really great that the Marines have given up their time to help us out. The whole village is really grateful. We don't see the Marines in a quiet place like Calstock and it's been a big event. Loads of people have come out to watch."

Colonel Garth Manger, Commanding Officer of 1 Assault Group Royal Marines, added: "This is not strictly a humanitarian issue, but it is a great opportunity to put our skills to good use – helping the community on our doorstep and also helping refine the results of our training.

"This is only a few miles away and the Royal Navy is delighted to come to the aid of the civilian authorities who would normally assist the public.

"However, we are more used to moving military four-wheel drive vehicles which are higher riding. This produces extra challenges in making sure cars can safely get on and off a slipway via landing craft. There's also the fast running river and the tide to take into account. But Royal Marines are ideal for this kind of work."

## SPORTS LOTTERY December

**£10,000:** Sharon Power (RAF Northolt). **£5,000:** Eileen Elgar (Winchester). **£2,000:** Yvonne North (Whale Island). **£500:** David Hughes (Donnington), Denise Brinkworth (Andover). **£100:** Tom Jones (Manchester), Stephanie Partridge (Abbey Wood), Peter Sims (Cromwell), James Holland (Corsham), Kevin Marshall (Portsmouth), Fung Lau (Andover), Taylor Corrie (Longtown), Rebekah Powell (Bicester), Gillian Williams (Donnington), Christopher Cowan (Abbey Wood), Heather Arnold (Abbey Wood), James Hunter (Clyde), Lawrence Large (Andover), Caroline Kilgannon (Stirling), Graham Robertson (Chicksands), Mark Spicer (Andover), Gregory Ponting (Blandford), Gary Kennedy (Glasgow), Simon Graham (Liverpool), Derrick Healey (Aldermaston).



Able Seaman Jessica Metcalfe from *HMS Neptune* lays a wreath at the commemoration service.

## Neptune marks wartime disaster

PERSONNEL FROM *HMS Neptune* at Clyde naval base have remembered one of the worst maritime tragedies of the Second World War.

Sailors took a moment to mark the anniversary of the sinking of the wartime *HMS Neptune* which was lost off Tripoli in 1941.

A short service was held at Clyde, led by *HMS Neptune* Chaplain, Reverend Simon Beveridge. During the solemn ceremony there was also a wreath laying at the base's memorial to the tragedy, as well as a bugler sounding *Last Post*.

Part of 'Force K', a squadron of ships formed to intercept Axis convoys, *HMS Neptune* struck an Italian mine and capsized.

Of the 767 crew on board the light cruiser, only 30 survived the initial sinking. After five days adrift in the Mediterranean without food or fresh water only one survivor remained, 20-year-old Able Seaman Norman Walton.

The modern-day *HMS Neptune* is the shore establishment at Clyde, providing accommodation, administration, medical and support services to thousands of people at the site.

# A helping hand for the homeless

A TEAM from Abbey Wood spent a day in Bristol helping out the homeless.

The seven members of the Marshall project team volunteered at Julian House, a charity for the homeless, in a visit arranged by team member Jane Cooke through the Civil Service Local office.

Work involved moving and sorting around 100 refuse sacks of clothing, along with a mountain of food donations to the charity's Christmas appeal.

"All of us were overwhelmed with the generosity of the public and local companies with the amount donated, especially tins of baked beans and tea bags," said Jane.

Team members have vowed to get involved again at the end of this year, if not before. One has already been back for a couple of days over Christmas, cooking the meals the charity was providing.

Staff at Abbey Wood are entitled to volunteering days at team leaders' discretion.



Jane Cooke, on the right, is joined by colleagues Gary Stenning, Nick Evans, Shona Bates, Sharon Wilkins, Ceris Holder and Cynthia Chia at Julian House

## DE&S engineers enjoy a cathedral celebration



A GROUP of DE&S engineering apprentices joined hundreds of celebrating students at the City of Bristol College's higher education awards at the city's cathedral.

All students who had completed higher education qualifications such as HNC, HND or Foundation Degrees in 2013 through the College were invited to attend the ceremony.

The ten from DE&S received their HNCs from governing body Plymouth University.

The occasion saw the cathedral packed to the rafters with family, friends and representatives from employers. Students were congratulated on their achievements by Kerry McCarthy, MP for Bristol East.

Phil Rotherham of Director Technical accompanied the group – Chris Miles, Jo Whitlock, Chris Griffin, Bill Rowles, Hayley Barnden, Kelsey Hyde, James Harris, Lee Kyte, Nick Schuster and Naomi Slack – to the cathedral.

THE HEAD of DE&S' Lightning team and the former Director Land Equipment at DE&S led the way in the New Year's Honours List which saw a number of DE&S staff rewarded for their work.

Major General Carew Wilks, who left his post last year, became a Companion of the Most Honourable Order of the Bath, a title and order conferred on British and Commonwealth citizens, both civil and military, to recognise conspicuous service to the Crown.

Commodore Rick Thompson, leader of the Lightning team, was made a Commander of the Most Excellent Order of British Empire (CBE) while there were a number of OBEs (Officer) and MBEs (Member) among DE&S teams and industry partners.

Jason Purveur in the Land Equipment Protected Mobility team received an MBE for a career spanning 25 years and for delivering protected mobility vehicles as an urgent operational requirement to support troops in Afghanistan.

Jason said: "I am completely overwhelmed and humbled by this honour. I never expected my work would be considered in such high regard as to prompt recognition of this magnitude.

"I have been fortunate to work in an extremely motivated team with people who care deeply about delivery of equipment to the front line. They have all paid a massive part in helping me deliver the outputs that have been considered worthy of this honour. I hope they share some of the pride I have."

Another MBE is Matthew Whittington from the Land Equipment Operational Support Programmes, Programme Management Office.

Matthew solved the problem of 'brown out' which has dogged helicopter operations in Iraq and Afghanistan for ten years. The dust suppression landing system he procured for Operation Herrick saved lives and increased operational effectiveness.

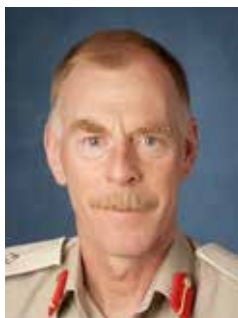
Matthew said: "I thoroughly enjoyed this project and was supported by a very good group of people,

"Motivation to do a good job isn't hard when you know the outcome can improve life for our troops at the sharp end of things. Just the satisfaction in knowing you have made a difference is great but to then get this unexpected award is fantastic."

Paul McDermott from the Merlin project team also received an MBE. Paul initiated and, during the last seven years, managed the Merlin Capability Sustainment



Paul McDermott



Maj Gen Carew Wilks

Programme which converts the Mk1 into the Mk2.

He also successfully delivered a number of Mk1 urgent operational requirements in support of counter-piracy as well as providing security support for the Olympics in 2012.

Paul said: "I am very honoured to receive this recognition for a job that I have enjoyed immensely for more than a decade. It has been both challenging and hugely rewarding.

"I have had the privilege to work both now and in the past with a fantastic team of people from within DE&S, industry and the Royal Navy. The recognition I have received is due in no small part to that invaluable support."

# DE&S successes earn New Year honours



Brown out: for a Chinook, and an MBE for Matthew Whittington, right

## DE&S HONOURS

Major General C L Wilks	CB (formerly Director Land Equipment)
Commodore R C Thompson	CBE (Lightning)
Mr N Febrarro	OBE (In Service Submarines)
Mr P McDermott Mr J Purveur Mr M Whittington Mr I Brown Mr D Gibbings Mr G Redgrave	MBE (Merlin) (Protected Mobility) (Operational Support Programmes) (KBR) (AgustaWestland) (Marshall Aerospace)
Warrant Officer 1 G P Smith WO 2 D J Holyoake	MSM (Maritime Platform Systems) (formerly Puma 2 Gazelle)
WO 1 J L Pope Sqn Ldr A Wilson Flt Lt H Smith	Military commendations, for service before joining DE&S (Maritime Combat Systems) (Fast Air Support) (Networks)

A YEOVILTON-BASED Royal Navy Warrant Officer was awarded an MBE for his work on the Lynx helicopter.

Barry Firth, 42, from Yeovil played an important role in the team along with unstinting support of children's charities including the Sporting Bears Motoring Club which has raised £1.2 million so far.

"Two things went through my mind when Caitlin, my wife, read it out to me on the phone," he recalled. "One was an overwhelming sense of how surreal it seemed at not feeling worthy and the other was relief that it wasn't a speeding ticket as I was concerned that it was a cream colour, letter-sized envelope sent from Portsmouth! It's slowly sinking in and I feel very honoured."

Barry has been responsible for maritime modifications to the helicopter including dual control configuration, that will bring immense advantage to the aircraft.

Barry is Deputy Engineering Training Officer at Yeovilton. He is responsible for training air engineering technicians on Lynx, Wildcat and Sea King helicopters.



Barry Firth

Jim Morris

## 'I was relieved it wasn't a speeding ticket!'

He is joined in being honoured with an MBE by WO Jim Morris, a Royal Marine who helps organise care for recovering injured troops at Devonport.

Jim said he was proud at being recognised for his work with Hasler Company in the naval base, a tri-service unit co-ordinating the needs of sailors, Royal Marines, soldiers and airmen recovering from combat and non-combat injuries and illnesses.

Jim said: "It has been a

massive surprise being awarded the MBE. But it is really for the team here. The staff here put a lot of time and effort into making things work for the lads."

His citation said he 'demonstrates drive, tenacity and compassion' and his 'desire to improve the well-being of injured service personnel has combined with exceptional devotion to deliver first class support to men and women recovering from extremely complex injuries.'

## Brian enjoys his special day out

SPECIAL CONSTABULARY Area Officer Brian Hewlett, working in the Phoenix team within Operational Support Programmes, has received his MBE from the Queen at a ceremony in Windsor Castle.

Brian, below, originally joined the MOD at the stores depot at Aston Down in September 1968. Alongside this he has undertaken 40



Brian Hewlett

years of unpaid work as a special constable.

Brian still takes an active role in policing his home town of Stroud and said receiving the award was a great surprise and honour.

He added: "I would certainly recommend the Special Constabulary to anyone who is thinking of joining. I can guarantee that your self confidence will improve and you will meet interesting characters from all walks of life."

# 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:

**2014DIN01-004:** Guidance notes have been refreshed offering advice, top tips and practical help for service personnel applying for personal unsecured and secured loans. These continue to be available on the gov.uk website [www.gov.uk/government/publications/financial-top-tips-for-service-personnel](http://www.gov.uk/government/publications/financial-top-tips-for-service-personnel) and the MoneyForce website [www.moneyforce.org.uk](http://www.moneyforce.org.uk)

**2014DIN01-001:** This instruction provides an update to the kit and equipment provision to civilian personnel deploying to or visiting an operational theatre and amendments to the policy relating to the Operation Deployment Grant.

**2014DIN04-001:** This informs the Front Line Commands of the revised out of service date for the 40mm Multi Shot Grenade Launcher L14A1 (MSGL). The confirmed date is now 31st December 2017.

Further information and more details on the latest DINs see:  
<http://defenceintranet.diif.r.mil.uk/Reference/DINsJSPs/Pages/DINsindex2014.aspx>

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