

desider

Jan 2014 Issue 68

the magazine for defence equipment and support



Ministry
of Defence

Successor – the shape of things to come



Latest Front Line Command Finance and Military Capability chart [See inside](#)



Frigate hits
the sheds



Wildcat clocks
up a first



Skills earn
their reward



Counting the
cost of kit



Acquisition
excellence



Chinook lends a hand

AN RAF Chinook was deployed to the north east of England last month along with a six-strong team from RAF Odiham's Joint Helicopter Support Squadron to support the Environment Agency as they carried out repairs to flood defences after abnormally high tides. The Chinook provided heavy lift support, moving around a ton of sandbags into breaches in sea defences. Above: Staff from the Joint Helicopter Support Squadron hook the bags of aggregate to the Chinook to reduce further erosion of the defences.

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18 Pride in delivery

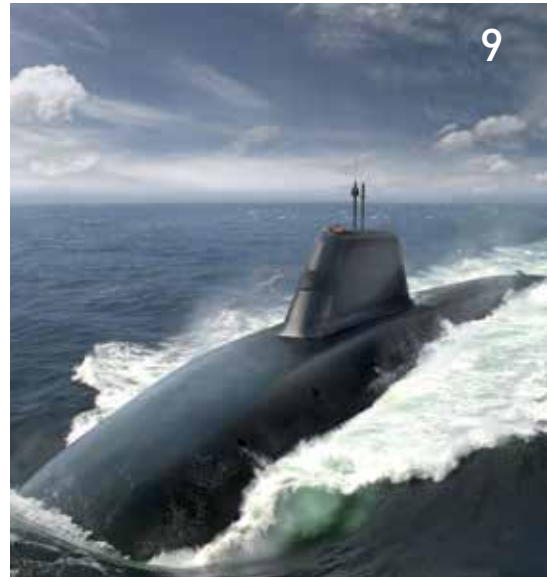
Teams at the forefront of procuring equipment and support for the Armed Forces have received their reward at the annual Minister for Defence Equipment, Support and Technology Awards in MOD Main Building in London, an event which has become a leading showcase for the work of DE&S teams.

22 Counting the cost

Next year sees the centenary of the MOD's cost assurers, now part of DE&S Finance, with 400-plus cost engineers and accountants providing independent costing advice to enable effective business decisions on acquisition and support. The work they do has been a vital part of equipment acquisition since the time of Henry VIII

24 Celebrating the best of the best

The brightest and the best of the MOD's young apprentices have received their rewards at MOD Main Building, in an event hosted by Pete Worrall, DE&S' Chief of Materiel (Joint Enablers), and attended by Defence Minister Anna Soubry and DE&S' Director Technical, Air Vice-Marshal Julian Young



Picture: BAE Systems

cover image

Pictures have been issued of how the next generation of nuclear ballistic missile submarines may look when they enter service later in the century. The submarines will replace the four *Vanguard* class boats.

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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

Printing:



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insiderguide

Bernard Gray

Chief of Defence Materiel

‘In a few months DE&S will be set up as an innovative bespoke trading organisation’



I was very pleased to share with you shortly before Christmas the next steps in taking forward the Materiel Strategy programme following the Government's decision not to proceed with the GoCo competition.

In a few months DE&S will be set up as an innovative bespoke trading organisation with the governance and freedom needed to achieve real improvement in the way we deliver our business. DE&S staff will remain civil servants and other change initiatives, such as the transformation of Logistic Commodities and Services and the transfer of Information Systems and Services to Joint Forces Command, will continue as planned.

As an organisation with the ability to guide its own future, we will introduce many of the key benefits that have been identified in the Materiel Strategy programme. It will reinforce the customer-supplier relationship between the military and DE&S, facilitating a more business-like approach, feeding culture change. We will be able to have freedoms and flexibilities around how we recruit, reward, and manage staff along more commercial lines to reflect our work in carrying out some of the most complex procurement activity in the world.

To do this, we will also bring in private sector partners, to target particular areas, such as business

change, programme delivery and management information systems. The work conducted in the Materiel Strategy programme to date has already identified the requirement, and we have significant knowledge of the market.

We will transform DE&S to ensure it becomes “match fit” as the public sector comparator for future market testing of a GoCo proposition using the legislation we are now putting in place in the Defence Reform Bill.

We are making progress. While not wishing to pre-empt the Major Projects Report, I am confident that it will show significant improvement over the period since we balanced the budget in 2012.

I hope that you will welcome the clarity delivered by this news, we have all felt uncertainty for some time, and we can now get on with implementing this change. I appreciate that you may have many questions about this decision and what it actually means for you personally and for the organisation.

We are about to enter a period of significant and far-reaching change which I am convinced will help you do your jobs better and improve the ability of DE&S to deliver to the Armed Forces. You are, as always, the key to the success of these changes. There is still a lot of detail to be worked through and we will of course share that with you.



DE&S WILL become a new organisation from this April, with the ability to shape its own future and with more freedoms than other existing MOD arms-length bodies.

It will be led by Chief of Defence Materiel Bernard Gray, who has accepted the position of Chief Executive, offered to him by Secretary of State Philip Hammond. Mr Gray's title will continue to be Chief of Defence Materiel.

Mr Gray unveiled the future look of DE&S to staff at a packed town hall session in Abbey Wood on 10th December.

At the same time Mr Hammond was announcing the future of DE&S to MPs in the House of Commons, explaining the Government had decided not to pursue a GoCo solution at this stage.

Mr Gray said: “The Secretary of State is today announcing that we are stopping the GoCo competition and will move DE&S to a new status. The new body will be unique and have more freedom to manage its own affairs.

“This innovative status has been agreed by the Treasury and the Cabinet Office. We will be able to recruit, retain, promote and reward staff using our own methods. This allows us to compete for the kind of people with the skills we need and shows how different we will be from much of the Civil Service.”

He added: “The Secretary of State has recognised we have to do this in a way where the taxpayer is guaranteed to benefit.

“This will allow us to pick and choose the best organisational format and design, an entity which works for us, while being supported by some private sector expertise.



Bernard Gray addresses staff at his December town hall session

DE&S is all ready to take on more freedom

It will increase our ability to do our job and leave us well prepared to consider, in the future, a potential next step towards a GoCo.”

Mr Gray said that this means a lot of change in a short time but he and the DE&S Board were confident it could be delivered.

“I hope you will all welcome this news”, he said. “We will have the freedom to manage our work, and how we manage our business which is very, very different to anything which has been done in the past, including the Defence Procurement Agency. It’s a lot of work but we are in a position to get on with it.”

Mr Gray acknowledged the quality of the single GoCo bid that had been received from Materiel Acquisition Partners and said it had been credible and had offered major savings.

Staff heard that the core DE&S would remain as it is. Information Systems and Services Operating Centre would transfer to the three-star Chief Information Officer at the beginning

of the New Year. The competition to outsource Logistics Commodities and Services would continue until 2015.

Mr Gray thanked staff for the work they had done in 2013. He highlighted DE&S recent successes, which included restructuring the aircraft carrier programme, introduction of Voyager into service, and changes to the Cipher programme which DE&S had reset.

“We have stability in the programme and the focus now is to give us the tools to deliver that core programme,” he said.

“Sometimes you may feel you are in an uphill fight but I can assure you, we are making progress and it is shown in the results. Thank you for your hard work in 2013; 2014 will be a year of building and much more positive.

“To my mind what we have here is a significant step forward. We are further forward than before. We can shape our future for the first time in a long time.”

DE&S ‘to be a bespoke trading entity’

DEFENCE SECRETARY Philip Hammond told MPs that DE&S was to become a bespoke central government trading entity from April with a wide range of freedoms covering recruiting and rewarding its key staff.

In an oral statement to the House of Commons on 10th December Mr Hammond said he had decided not to continue with a commercial competition for a potential GoCo solution for DE&S following the receipt of only one bid.

He said: “We have always recognised that there are risks inherent in the GoCo approach. With only one bidder remaining in the competition at this stage, I have had to make a judgment about whether the public sector comparator alone would generate sufficient competitive tension to ensure an effective outcome for the Armed Forces and value for money for the taxpayer.

“My conclusion is that a GoCo remains a potential future solution to the challenge of transforming DE&S, but that further work is necessary to develop DE&S financial control and management information systems to provide a more robust baseline from which to contract with a risk-taking GoCo partner.”

He said the only realistic prospect of resolving the challenges facing DE&S in an acceptable timescale was through a significant injection of private sector skills.

He had decided to build on the DE&S+ proposition, transforming DE&S further within the public sector, supported by additional private sector input. This would ensure DE&S became “match-fit” as the public sector comparator for a future market-testing of the GoCo proposition.

To do this MOD would:

- Recognise the unique nature and characteristics of DE&S as a commercially-facing organisation by setting it up as a bespoke central government trading entity from April 2014;

‘The new body will be unique and have more freedom to manage its own affairs’ – Chief of Defence Materiel Bernard Gray

□ continued on page 6

New DE&S to address pressing issues

■ continued from page 5

- Give DE&S a hard boundary with MOD, separate governance and oversight with a strong board under an independent chairman,

- Permit DE&S significant freedoms and flexibilities on recruiting, rewards, retention and staff management to reflect its role running some of the most complex procurements in the world;

- Consult with trades unions on the practical arrangements for implementation.

The Defence Secretary said the changes would reinforce the customer-supplier interface between military command customers and DE&S, facilitating a more business-like approach, allowing an earlier move to a “hard-charging” regime.

DE&S would be able to procure crucial private sector input through contracts to deliver key changes to systems and processes, and to strengthen programme management. Key commercial and technical staff would be recruited at market rates and with minimum bureaucracy.

Chief of Defence Materiel Bernard

Gray had agreed to become the first Chief Executive, providing continuity between the original Gray report and the continuing DE&S reform agenda.

Mr Hammond told MPs there was wide acceptance of the need to deal with the problems Mr Gray’s 2009 report had identified – an overheated programme, a weak interface between DE&S and MOD, and a lack of business skills in DE&S.

The government had moved to address all three by balancing the defence budget, implementing the recommendations of Lord Levene’s report on Defence Reform to strengthen the interface between DE&S and the front line commands and starting to close the business skills gap in DE&S, through the appointment of Mr Gray and other key staff.

He said: “We are beginning to see the evidence of progress, and while I do not want to pre-empt the Major Projects Review report the National Audit Office will be publishing in the New Year, I am confident that it will show significant improvement in respect of the period since we balanced the budget in May 2012.

“But we recognise there is still a

We are seeing progress, says Defence Secretary Philip Hammond, pictured above, left, during a visit to Headley Court rehabilitation centre

■ MOD ‘more business-like’: page 27

long way to go. The reforms we have already instituted are only a start and the challenge of recruiting and retaining the necessary business skills in DE&S is growing, not diminishing – and is likely to get bigger still as the economic recovery gathers pace.

“A more radical reform of DE&S is necessary if it is to sustain the skills it requires to support our Armed Forces effectively.”



In answer to MPs’ questions Mr Hammond said: . . .

□ All the evidence from the competition showed that GoCo could deliver a value for money proposition for the taxpayer, the Defence Secretary told MPs.

“It remains a possibility for the MOD, once DE&S+ is match fit, to consider running the GoCo competition again to test the proposition, in the interests of the Armed Forces and the taxpayers, and to challenge the private sector to come forward with a proposal that will deliver value for money against the match-fit DE&S.”

□ Mr Hammond said the MOD could deliver significant change within the public sector by bringing in private sector skills to advise – while civil servants still made decisions.

He said: “That does not fundamentally change the culture. It is an open question whether we can get far enough through that construct or whether, once we have made DE&S as lean and fit as it can be within the public sector, we will

need to test again what additional value for the taxpayer could be generated by making the culture shift that having a risk-taking private sector strategic manager take over day-to-day running of the operation would deliver.”

□ Mr Hammond said: “What we envisage in the DE&S+ model is probably three separate contracts: one to provide us with programme management support, a spine for the organisation; one to provide us with HR support, an area of particular weakness in DE&S; and a task-and-finish project to install some additional financial control systems within the organisation.”

□ The Defence Secretary told MPs that the military component of about 1,500 people in DE&S was vital.

Hiring in specialist skills from the commercial sector would not alter the important role that the military would continue to play.

□ DE&S was almost wholly commercial in what it did, the Defence Secretary told MPs. “Most of its interaction is with the commercial sector and it is competing directly for skills with the private sector marketplace. It is not like a policy making department.

“The freedoms and flexibilities that the Treasury and the Cabinet Office have agreed for DE&S+ will free us from that constraint, which will make DE&S+ a much more credible and commercially focused proposition.”


□ “We are 800 posts gapped in DE&S at the moment, so this is not some project to reduce the number of staff,” Mr Hammond told MPs.

The objective was to increase the number of staff by filling some of the gapped posts. But there would need to be a more robust approach to upskilling staff and monitoring their performance.

■ Defence Under Secretary Lord Astor of Hever told the House of Lords during a debate on the second reading of the Defence Reform Bill that the chairman of the new organisation’s board would be non-executive.

“We will use the private sector expertise we plan to bring in through business partner contracts to help us deliver a transformed HR. This will include getting the best out of freedoms that we have agreed with Her Majesty’s Treasury and the Cabinet Office, which are necessary for the new DE&S,” he said.

“DE&S civilian staff will remain civil servants and members of the Armed Forces will continue to make a contribution to DE&S, as they do today. We will be able to create a more business-like organisation which is better able to recruit, reward, retain and manage its staff.”



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MAY BE
NOTHING LIKE
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Portsmouth options

BUILDINGS used by BAE Systems for shipbuilding at Portsmouth could be made available for future commercial use. Philip Dunne, Minister for Defence Equipment, Support and Technology, has said the current assumption is the buildings will return to the MOD when shipbuilding ends in the second half of next year. Some buildings will be used to support Portsmouth-based warships while others will be involved with greater engineering work needed by the *Queen Elizabeth* class aircraft carriers. "Once options analysis work is complete, the MOD will seek to establish the extent to which there may be scope to make wider commercial use of any surplus facilities," he said.



Robotic arm

CORPORAL Andrew Garthwaite, above, who lost his arm serving in Afghanistan, has become the first person in the UK to receive a mind-controlled prosthetic limb. The revolutionary 'robotic' prosthetic, funded by the MOD, was shown off during his final visit to the Defence Medical Rehabilitation Centre in Headley Court, last month.

■ More on Headley Court: page 28

THALES UK'S Crawley facility became the focal point for senior officials from DE&S, Royal Navy, the wider MOD and stakeholder companies in November after the company hosted a maritime technology day, showcasing future and current products and services.

Guests included Captain Ivan Stace,

DE&S' Underwater and Electronic Warfare team leader.

The visitors were welcomed by Jeremy Standen, Thales UK Vice President, Maritime Mission Systems, before receiving presentations from technology experts on the current capabilities and future innovation programmes on display.

Thales unveils future

Duncan enters service four months early

HMS DUNCAN has entered service with the Royal Navy four months ahead of schedule – to the delight of DE&S.

The sixth and final ship of the 7,500-tonne Type 45 destroyers will now embark on a programme of trials to prepare the ship and her crew for operational deployment.

And the team – DE&S, industry and the Royal Navy – has been congratulated on a major achievement.

"I would like to commend my Type 45 team within the Ships Support Alliance and acknowledge the support they have received from DE&S colleagues across the Ships and Weapons operating centres," said Commodore John Newell, head of the Ships Support Alliance.

"I also extend my thanks to our contractors from prime contractors BAE Systems (ship) and MBDA (Sea Viper missile system) to the dozens of other companies involved in the project, and the Royal Navy for all the very hard work that has gone into advancing the in-service date of this final ship of the class by four months."

He added: "It is a huge achievement and it brings to an end a long build programme which has not been without its challenges. Now the focus of the team's work moves to the in-service support of these very advanced and potent air defence ships.

"We hope to see them serving Britain's interests around the world into the middle of this century. My team will be supporting them throughout the



coming decades to ensure their capability is maintained."

This latest milestone in the Type 45 programme marks the end of a 13-year build programme to provide the Navy with a fleet of the largest and most powerful air defence destroyers it has ever received.

Minister for Defence, Equipment, Support and Technology, Philip Dunne said: "The Type 45 programme has provided the Royal Navy with one of the most sophisticated and effective air defence ships available anywhere in the world. We expect these vessels to see decades of service and play a key role in escorting aircraft carrier

HMS Queen Elizabeth when she enters service."

Commander James Stride, *HMS Duncan's* Commanding Officer, added: "We are witnessing the culmination of the hard work and dedication shown by all those people that have been involved in the building of *HMS Duncan*."

"The ship's company are rightly proud to be on board such a cutting edge warship as she becomes a fully-fledged member of the operational Fleet."

The first Type 45, *HMS Daring*, arrived in Portsmouth in January 2009. The ship has provided vital aid and support to the Philippines in the wake of Typhoon Haiyan.

Daring has been followed by *HMS Dauntless*, *Diamond*, *Dragon*, *Defender* and now *Duncan*. They are all based in Portsmouth.

'It is a huge achievement and brings to an end a long build programme' – Commodore John Newell, DE&S

Successor – next generation continues to take shape

AROUND £79 million of investment has been made in the next generation of Royal Navy submarines.

The Successor submarines, which will carry the UK's strategic nuclear deterrent, will be the largest and most advanced boats operated by the Navy and their design and construction will be the most technologically complex in the history of the UK.

Two contracts worth £47 million and £32 million have been awarded to BAE Systems Maritime – Submarines, based in Barrow-in-Furness.

The investment will allow BAES, which currently has more than 1,000 people working on the Successor programme, to begin work on some initial items for the submarines that are due to

replace the *Vanguard* class from 2028.

It is essential these items, which include structural fittings, electrical equipment, castings and forgings, are ordered now to ensure the submarines are able to meet their in-service date.

Defence Secretary Philip Hammond said: "This £79 million investment is another important milestone in our preparations to build these submarines. The current *Vanguard* class of deterrent

submarines perform a vital role in the defence of the UK and the replacement for this capability is of national importance.

"The Successor programme is supporting around 2,000 jobs, and up to 850 British businesses could benefit from the supply chain as we exploit the most modern technologies, and employ a significant portion of the UK's engineers, project managers and technicians over the coming years."

Successor, inset below, will replace the *Vanguard* class submarines. Pictured is *HMS Vanguard* returning to Faslane after a patrol



The submarines are expected to see operational service from the late 2020s right up to the 2060s.

UK industry to take on complex engineering

THE 2013 Update to Parliament on the UK's future nuclear deterrent says the programme is among the most complex ever undertaken by British industry and will employ a large number of the country's engineers, project managers and technicians.

The report, published on 16th December, states that the Successor submarine is designed to be one of the stealthiest submarines in the world.

It will also be the largest, safest and most technically advanced submarine ever built in the UK, requiring step changes in manufacturing processes and practices.

Despite these advances, the report states, Successor will be built in a shorter period than that taken for the much smaller *Astute* class boats.

"To meet these aims, a number of world beating new and adapted technologies are in use and/or planned in both the later *Astute* and Successor programmes. The range and scale of innovation in production and other disciplines is being carefully managed to provide clear and deliverable benefits to schedule and cost performance without introducing unwarranted additional risk to the production process," the report states.

"One of the major innovations in Successor is the design and integration of the innovative PWR3 reactor. There is an extensive engineering and development programme under way to prove the efficiency and safety of the design, including construction and operation of highly advanced test rigs."

MOD announced in 2011 the start of a five-year, £3 billion assessment phase to refine the design of the submarine and capture the associated costs in order to make a Main Gate investment decision in 2016.

Subject to this decision in 2016, the programme is expected to cost £11-14 billion at 2006 prices, employ a minimum of 3,500 people, peaking at 6,000 during the build phase from 2016 to the late 2020s, and involve more than 850 British companies in the supply chain.

The assessment phase is led by MOD and conducted by a highly integrated team comprising MOD employees and staff from the three industrial partners: BAES, Rolls-Royce and Babcock International.

The report states the next stage in the design activity is to develop the functional design of each individual system – of which there are around 200.

Collaboration with the US is being maintained, specifically in the areas of nuclear propulsion and the strategic weapon system.

The report states: "The MOD has this year agreed the strategy for procuring and building the Common Missile Compartment – a design which will be common to both Successor and the US *Ohio* Replacement SSBNs – which means that the UK will build the missile compartment in the UK with outfitted missile tubes supplied pre-constructed from the Electric Boat division of the General Dynamics company in the US.

"The prototyping programme is underway and the manufacture of four prototype forgings for the upper tubes has commenced. Engineers and manufacturers in the UK are currently proving their ability to produce the highly complex shape meeting required tolerances in a controlled and repeatable process, a key element to de-risking the missile tube programme."

Under the Submarine Enterprise Performance Programme savings of about £220 million were expected from Successor, of which about half had been taken with measures to find the remainder identified.

NEWSREEL

Firms ready to compete

RICARDO has formed a partnership with two other companies in a bid for future contracts to upgrade the Mastiff, Ridgback and Wolfhound fleet of protected patrol vehicles. Ricardo, Morgan Advanced Materials and Ultra Electronics are UK-based and owned. "This is a highly effective partnership, drawing together world-class engineering and extensive experience in military vehicle design, development, manufacture and overhaul," said Ricardo UK managing director Martin Fausset. Ricardo was responsible for initial design, development and engineering of the Foxhound vehicles, of which 376 have so far been made.

Focus on reservists

DEPLOYMENT of reservists could hit 3,000 a year – 20 per cent over the current norm – if the MOD is engaged in major operations in the future. Armed Forces Minister Mark Francois has told Parliament this reflects the increased future role for reservists. The full 30,000 would only be deployed in the event of a full-scale national emergency.

Comet departs

THE front fuselage of Comet aircraft C2 XK699, gate guardian at the former RAF Lyneham, has been sold by the MOD to the Boscombe Down Aviation Collection, a registered charity.

Precision accuracy:
Paveway IV fitted to
Tornado GR4



Paveway IV heads for UK weapons range testing

PAVEWAY IV – the RAF's combat-proven all-weather 24-hour precision guided bomb – has been cleared for trials and training on air weapons ranges in the UK.

This will increase training opportunities for fast-jet crews, reducing UK reliance on overseas ranges, which will in turn reduce deployment costs.

Clearance has been obtained by the Defence Ordnance Safety Group, a team of Abbey Wood-based military and civilian engineers and scientists who advise on the safety of weapons, ordnance, munitions and explosives.

The Group also advises on air weapons range safety, where the greatest challenges arise from

accommodating modern long-range munitions delivered from fast-jet aircraft using greater weapon release heights and stand-off distances than during the Cold War, hence the need to use bigger overseas ranges for testing and training with those weapons.

"With the increasing accuracy and reliability of munitions, data from in-service trials and operational weapon releases and the use of the latest analytical software, we have been able to analyse historical data of Paveway IV delivery performance and reliability," said Wg Cdr Jim Press of the Group's Air Delivered Weapons.

"Working with scientists and Nato experts, a safety argument

for the use of Paveway IV on UK ranges was produced to show that the associated risks were within UK legal tolerability and in line with Defence Land Ranges' risk threshold policy.

"This piece of technical work continues to demonstrate that, by exploiting current technology and embedded knowledge and skills, DE&S continues to deliver relevant solutions and cost effective advice for front-line customers and wider defence organisations."

The Group advises project teams, agencies and contractors in the UK and overseas on munitions safety and provides independent advice on safe use of munitions and lasers during military training.

Company to upgrade submarine escape software tool

QINETIQ MARITIME will upgrade and maintain a specialist software tool to aid the decision-making process of submarine escape and rescue systems.

The Submarine Escape, Rescue, Abandonment and Survival (SMERAS) assessment model software provides a method for analysing numerous scenarios based on expert agreed assumptions relating to distressed submarines and the rescue of survivors.

It has been used by the MOD since 1998 supporting in-service submarines and to drive the design of new builds.

QinetiQ, who also developed Paramarine software, was asked to review the software and

assess its usability and future development. Now it has been contracted to recode and maintain the software in a modern development language.

"The SMERAS software is an important safety component in support of the Royal Navy's submarine fleet," said Commander Dickie Randall of DE&S' In-Service Submarines.

"We selected QinetiQ Maritime because of their world leading SMERAS knowledge and understanding and also because they have a significant software development capability which has been built around their Paramarine advanced marine design software."

Type 26 – Minister outlines the latest progress

MINISTER FOR Defence Equipment, Support and Technology Philip Dunne told MPs during a debate on Royal Navy Ships, that the Type 26 Global Combat Ship would be the most flexible vessel of its kind and the most modern frigate design available in the world.

He told MPs: “The flexibility of the Type 26 is provided by the mission bay, which is a much larger hangar space than that of the Type 23. It can carry a payload of ten 20-foot containers, a medical centre or a command and control centre.

“It can contain four landing craft for rapid response by Royal Marines. The vessel has been designed to have a smaller crew than that of the Type 23, but it can accommodate some 100 Royal Marines or other personnel for protracted engagements, or a much larger number of individuals for a short time, when the vessel performs an evacuation role.

“It will be the most flexible vessel of its kind and the most modern frigate design available in the world, so we believe that it will have some export potential.

“We are making good progress with the design. Some 70 per cent of the equipment systems have been selected or are being selected by the design authority, BAE Systems, and we have increasing confidence in the maturity of the design.”

Mr Dunne said the Royal Navy’s surface fleet was undergoing a period of regeneration and was moving from legacy ships to a new high-tech, latest-capability fleet.

He said: “It is important to emphasise that we see the carrier strike capability as offering a step change in power projection, giving the UK the ability to project decisive political intent and military will at reach.

“The carrier has been designed as a multi-role platform in addition to carrier strike. In its littoral manoeuvre role, it will be able to land Royal Marines, evacuate non-combatants and deliver humanitarian aid, disaster relief or international defence diplomacy and engagement. The programme is



Lt Cdr Simon Collins, commanding officer of 700 Naval Air Squadron, presents Cdr Gordon Ruddock with the squadron crest, with Wildcat in the background

Wildcat makes Type 23 landing

WILDCAT, THE Royal Navy’s replacement for Lynx, has made its first in-service landings on a Type 23 frigate at sea.

The Wildcat of 700 Naval Air Squadron from Yeovilton landed on *HMS Monmouth* to conduct the flight deck trials of the Royal Navy’s newest aircraft.

Monmouth is one of the ships Wildcat will operate from when entering operational service next year.

Fliers and the ship’s crew now have a better understanding of how the helicopter – which has more powerful engines, new radars and cockpit and more capable avionics than its predecessor – will work alongside the existing ships as well as the warships of the future. The exercise has also helped a significant tactical development of the new aircraft’s capability.

HMS Monmouth’s captain, Cdr Gordon Ruddock, said: “It has been a privilege to have provided support to 700W NAS tactical development of the Wildcat and the exciting future of the Fleet Air Arm that it represents.

“Wildcat provides a sea-change in what units such as *Monmouth* can expect of their ship’s flight above and beyond the excellent service Lynx has provided.”

on track to deliver an operational capability for carrier strike in 2020.”

The Minister explained modularity and interoperability were features of new systems MOD sought to introduce.

This included the Sea Ceptor air defence missile, now on contract for the Type 23, which

had many features in common with a version capable of being launched on land.

Helicopter fleets were being rationalised to allow greater interoperability.

The Wildcat helicopter, to be carried on Royal Navy frigates and destroyers, would also be used by the Army Air Corps.

NEWSREEL

Tornado trials new systems

THE first Tornado GR4 aircraft will begin ground trials next month on a traffic avoidance system, Minister for Defence Equipment, Support and Technology Philip Dunne has announced in Parliament. Design began after contract award to BAE Systems in December 2012 and two aircraft were delivered to BAE Systems, Warton last August for the trial installation. Flight trials are expected during March and April. The programme, forecasted to cost £53 million, is on track to meet its in-service date by the end of this year.

Cabin keeps crew working

IT will be business as usual for Royal Navy crews when their ships are being refitted, thanks to a portable data centre. Managed by Hewlett Packard Enterprise Services, the Atlas consortium designed and built a secure, fully functional server room in a 1,169 cubic feet container. This Refit Office, completed in just five months, provides a ship’s company with uninterrupted access to Defence Information Infrastructure (Future) systems during refits. It is currently enabling the crew of *RFA Gold Rover* to stay connected while work is carried out in yards at Birkenhead on the Wirral.

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Enhanced effectiveness: a new contract will design computer infrastructure for the Type 23 Surface Common Combat System. Pictured is *HMS Sutherland* returning to Devonport from deployment in November

■ *Sutherland* heads for the sheds: page 17

Contract set to improve frigate combat capability

A DE&S Ships operating centre project team has awarded a £26 million contract to BAE Systems for design, development and integration of the Surface Common Combat System computer infrastructure for Royal Navy Type 23 frigates.

The project will provide a shared computing environment on all Type 23 frigates and an enhanced combat system network. It is expected to lead to cost savings and enhanced combat effectiveness.

Maritime Combat Systems - Combat Management Systems (CMS) programme manager Mike Smerdon said: "A shared infrastructure means other combat system equipment processing elements can be hosted on the shared computing

environment, reducing hardware and demands on ships services and reducing cost of ownership for the MOD.

"The project also supports the development and de-risking of the Type 26 Combat System which is based around a shared infrastructure. We hope that the cost savings we anticipate will carry forward into the Type 26."

The contract was for Version 1 which will see delivery of a shared infrastructure on all Type 23 frigates and their DNA2 command systems, providing new software to run in this environment.

The Version 2 project has yet to be initiated, is under study and subject to MOD approvals.

It could further enhance resilience and enable the

addition of other combat system equipment from other suppliers to be hosted.

CMS project manager Lt Aleesha Mitchell said: "This project builds upon other work we have done in CMS which will see the replacement of ADAWS with DNA2, hosted on a shared computing environment, on *HMS Ocean*, *HMS Albion* and *HMS Bulwark*.

"We plan that the in-service date for SCCS on board the Type 23s will be late in 2015.

"This would be when the first ship is fitted with the new equipment and training and support is in place. The project came about when we took a wider perspective of support issues. It supports the Director Ships Convergence initiative."

First Tranche 3 Typhoon makes its debut in the air

THE FIRST of a new standard of Typhoon has started its flight tests.

The Tranche 3 aircraft embodies a number of 'under the skin' changes that effectively future-proof the aircraft and make it more attractive to current and potential export customers.

Taken together there have been hundreds of modifications, changes and additions which means Typhoon has taken a massive step forward.

Mark Kane of BAE Systems said: "For casual observers the aircraft is little changed from its sleek predecessor but it has a number of provisions that will allow it to take on additional capability in

the future. One of the few visual clues is a number of small panels on the fuselage which are there to accommodate the fitting of conformal fuel tanks.

"Once fitted, these would give the aircraft greater range and free up positions under the aircraft for larger or additional weapons."

The first Tranche 3 has been produced for the RAF by the Eurofighter consortium and assembled by BAE Systems.

Under the Tranche 3A contract signed in 2009, 112 aircraft have been ordered for the four European partner nations of Germany, Italy, Spain and the UK, with 40 aircraft bound for the RAF.

NEWSREEL

Partners rewarded

INTERSERVE'S partnership with the Defence Infrastructure Organisation's PFI team at Corsham has won a Premises and Facilities Management award. Now in its 20th year, the PFM awards recognise best practice at delivering facilities and support services across the private and public sectors. For 25 years, Interserve has worked with the MOD to support modern communications for UK Armed Forces. Nearly 40 different services are provided through the Corsham PFI Project, which went live in 2008. Interserve also manages the underground military town at Corsham, which provides an important link to Cold War history.

Philippines costs

NO part of the MOD's budget is committed specifically to assistance in the Philippines in the aftermath of Typhoon Haiyan, Armed Forces Minister Mark Francois has confirmed. Under an existing memorandum of understanding concerning humanitarian relief after natural disasters, the net additional costs of military support to the Philippines will be met from the budget of the Department for International Development. Net additional costs are those which the department would not have incurred had the operation not taken place.

The UK has a fleet of C-17s, thanks to procurement under the US' Foreign Military Sales scheme. Pictured are two RAF C-17s at Evreux airbase near Paris, before embarking French equipment and troops to deploy to Mali, Africa, last year

Below: Susanna Mason



Exports: taking the US lead

Survey will shape new security culture

DE&S STAFF are being encouraged to take part in a survey on security culture within the MOD.

The short survey will provide vital information to help develop a security culture strategy, signposting where there are strengths in the MOD, and where improvements might need to be made.

It will also help make staff aware of the threats they may face from third parties.

"We are trying to change behaviours and attitudes to security over time. To access how successful or not this is, we want to assess the state of 'security culture' now as a baseline" said Mark Preston, MOD security officer.

"This survey is the best means of accessing current security culture."

The aim is to deliver a security culture which is informed, efficient, effective, agreed and accountable.

The survey carried on the Defence Intranet runs until 17th January.

THE MOD is leading a study into the US Foreign Military Sales (FMS) system to see what the UK can learn for its own approach to defence exports.

In 2012 the US sold a massive \$69 billion of military equipment and services to friendly nations through the long running system.

The UK is one of the larger customers, procuring major items such as C-17 and Reaper through this route.

The key feature of the system sees customer governments make a contract directly with the US Government, which then makes its own arrangements with US industry to satisfy that contract.

In the UK this government-to-government approach is the exception as most contracts are made directly by customers with UK companies.

In some key growth markets for defence exports, there is often a preference for greater government involvement in contracts, with greater certainty and wider relationship benefits seen to be offered by FMS.

The study

is being undertaken by a small team in Director General (Exports and Commercial Strategy) looking at the system and associated US policy and legislation. They are supported by colleagues across government, and from the British defence staff in Washington.

The study is in co-operation with industry, who are contributing ideas and experience. The study team has had initial contacts with the US Department of Defense, and the results of the study will be shared.

Susanna Mason, Director General (Exports and Commercial Strategy), said: "It is important to clarify the most effective role for government in defence exports – how to ensure that the UK is easy to buy from while ensuring UK defence and

security interests are protected. This study, working closely with industry, is an opportunity to do just that."

Paul Everitt, Chief Executive of industry trade organisation ADS which is closely involved in the study said: "This study is an excellent opportunity for Government and industry to assess how current support for UK defence exports might be enhanced so that the UK can increase its already impressive share of the global defence market."

The study will report back in the first half of this year, giving options for changes to the way the UK approaches government-to-government defence export programmes.

For further information, contact the study lead John Moffat, at decs-fmsstudy@mod.uk.



Another FMS success for the UK: Reaper, left,

Phalanx keeps up ship defence

BABCOCK WILL deliver four Phalanx 1B kit modifications and undertake two conversions of the land Phalanx system to its original marinised configuration.

Phalanx – a rapid-fire, computer-controlled radar and 20mm Gatling gun system – is a vital defence for ships against the threat of anti-ship missiles.

The 1B upgrade incorporates a side-mounted forward-looking infra-red camera enabling the system to defend the ship against surface targets and slow air targets in addition to anti-ship missiles.

The 1B configuration can also counter the threat from small surface craft.

Babcock is the in-service support provider to the MOD for Phalanx systems under a long-term availability contract awarded in 2006.

The company is already under contract to upgrade 16 Phalanx systems to the 1B configuration.

Latest requirements for the four kits and two conversions will be delivered under an amendment to the existing support and upgrade contract.

Babcock will procure the Phalanx 1B systems from original equipment manufacturer Raytheon. The systems are due to be delivered by March.



Close-in defence: Phalanx

Covenant cash backs the services

SERVICE PERSONNEL, veterans and their families up and down the country will benefit from a record-breaking £65 million to help improve their lives, Defence Minister Anna Soubry has announced while publishing the latest Armed Forces Covenant Report.

Projects have included:

- £28 million to charities supporting the Armed Forces;
- £19 million to provide service children in schools through the School Support Fund and Service Pupil Premium;
- £4 million funding innovative local community covenant projects; and
- £5 million introducing a new benefit so that seriously injured veterans are guaranteed £7,000 a year for life.

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BABCOCK HAS begun an eight-month docking period to upgrade and maintain *HMS Sutherland*.

Work has been planned by the Type 23 industry-led Class Output Management (COM) team under the Surface Ship Support Alliance which brings together DE&S, Babcock and BAE Systems.

Among 16 upgrades to the frigate are the installation of Artisan (Advanced Radar Target Indication Situational Awareness and Navigation) 3D radar to improve the ship's air defence, anti-ship and air traffic management capabilities.

The DNA(2) Command System, central to the ship's capability against air, surface and underwater threats, will also be installed.

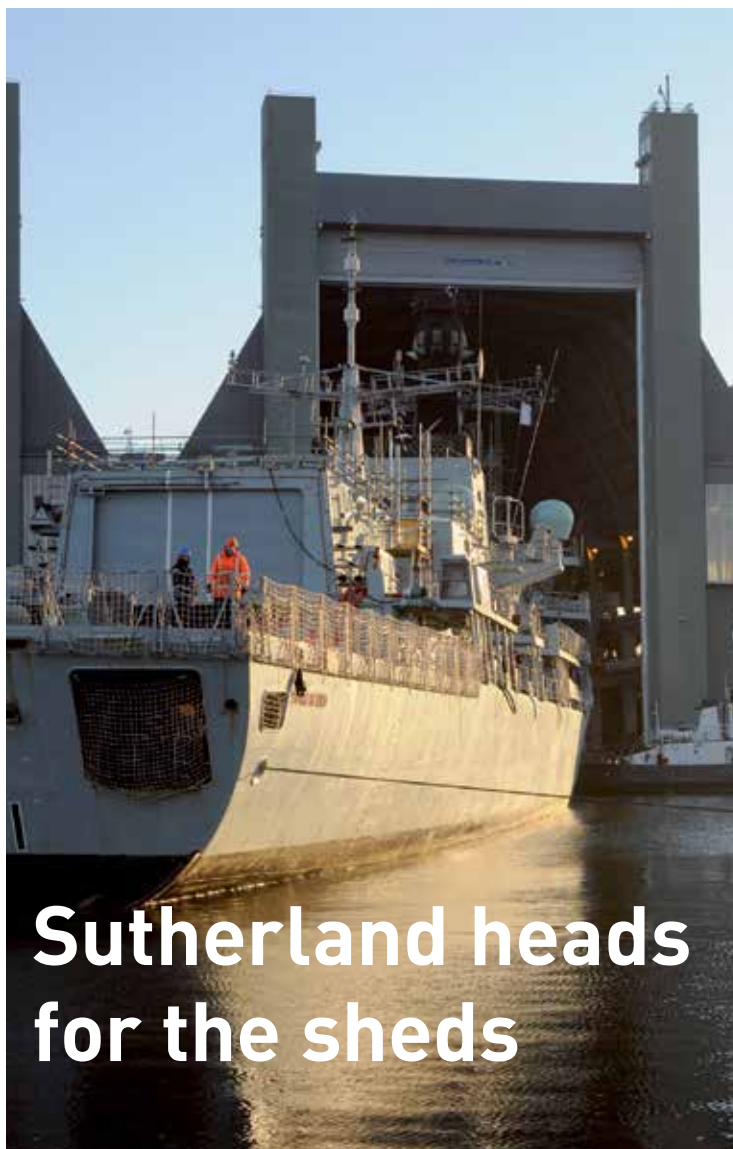
The docking will include deep maintenance of rudders and stabilisers, propeller shafts and associated bearings, overhaul of the helicopter handling system, overhaul or renewal of all underwater and shipside valves and numerous pumps and motors from various ship systems, replacement of laundry equipment and of the sonar bow dome, and overhaul of refrigeration and fresh water systems.

Babcock's Simon Dyer, said: "This is the first T23 upkeep where the entire end-to-end planning process has been under the Surface Ship Support Alliance Phase 2 and where industry has led on the content and optimisation of the package to provide the necessary through-life availability and capability.

"T23 COM will continue to take this through-life view and build up an even deeper understanding of *HMS Sutherland's* material state to aid further planning of Fleet Time packages."

Capt Matt Harrison of DE&S' Type 23 team added: "The *HMS Sutherland* upkeep project is a key element of the surface ship programme that will enable further benefits to be realised by both industry and MOD members of the Alliance."

HMS Sutherland is due to leave for sea trials in the summer.



Sutherland heads for the sheds

HMS SUTHERLAND is the first to enter Devonport's Frigate Refit Complex following handover of new doors – part of significant investment and upgrade in the dockyard by operator Babcock.

Refurbishment of the Complex, built in the 1970s, is one of a range of capital expenditure projects. This includes replacement of the three massive doors and re-cladding, as well as development of new offices to house the warship support team, including the Class Output Management team and Fleet Time Support Group.

Elsewhere in the dockyard there has been major refurbishment of 10 Dock to provide an excellent facility to service the amphibious fleet, installation of new caissons (vital structures at the entrance to docks or basins that allow them to be emptied, or basin water levels to be maintained) and penstocks (controlling water flow into or from basins or docks).

A specialist self-propelled floating Devon Samson crane has been refitted, which provides valuable capability, including replenishment-at-sea testing.

Fellows to highlight scheme success

MANY OF DE&S' Specialist Fellows will be together next month to highlight successes of the scheme.

The Specialist Fellowship Scheme rewards a small number of civilian experts required by the MOD to develop and maintain their specialist skills, for example in technical safety assessment and certification.

The scheme is a means of rewarding and recognising deep expertise and supporting individuals in their continued professional development.

The Abbey Wood event on 10th February will be a chance for Director Technical Air Vice-Marshal Julian Young to explain his view of the scheme, its future and his expectations of members.

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Pride in delivery

The teams at the forefront of procuring world class equipment and support for the Armed Forces have been recognised at the Minister for Defence Equipment, Support and Technology Acquisition Awards

Pride was to the fore as the best work of DE&S' huge contribution to the Armed Forces earned its annual reward – pride in delivering projects, pride in providing cutting edge equipment, and pride in the hard work of staff who are critical to the success of UK Forces on operations.

Eleven MOD teams were in Main Building on 28th November for the eleventh annual Minister for Defence Equipment, Support and Technology awards, presented by Philip Dunne, recognising and rewarding excellence in the field of acquisition.

Of the eleven awards, eight went to DE&S teams and in addition DE&S also took the top spot – the Special Award, which was announced by the Minister at the close of the ceremony. This award went to the DE&S Sensors Support Optimisation Project, for outstanding contribution to delivering defence capability.

The award recognised the project's long-term support arrangement of sonar, periscope and electronic surveillance equipment across the Royal Navy's ship and submarine flotilla, ensuring the continued readiness and availability of this vital defence capability.

DE&S Maritime Combat Systems Underwater and Electronic Warfare team leader Capt Ivan Stace said: "It is fantastic that all the winning teams have been recognised by the Minister for their hard work. And I am particularly proud that my team has been awarded the Special Award for outstanding contribution to MOD acquisition from such a high calibre field.

"Three to four people from my team worked for two-and-a-half years to close this contract - that probably adds up to ten people over the full term of the work. They were set a tough target of achieving 15 per cent savings against the former contract and they beat that target and achieved 18 per cent savings.

"It is a £600 million contract and embodies expected savings of about £140 million over its ten-year life. I think the team's work could be said to an extent to prefigure the MOD vision on single-source pricing, as set out in the Defence Reform Bill.

"This was a huge tribute to the team's work, but I also want to pay tribute to our contractor Thales, who worked with us throughout the process and is now upping its game on a programme that is not without

The Sting Ray Torpedoes Insensitive Munition Warhead Team

The Sting Ray Torpedoes Insensitive Munition Warhead Team for integrating an insensitive munition warhead onto the Sting Ray Torpedoes, which they did three months ahead of schedule.

The team delivered an innovative design, and implemented a warhead fuse modification and software update that increases shallow water performance, giving the Front Line greater operational flexibility and improved weapon safety.

The Joint Propulsion Team RTM 322

The Joint Propulsion Team RTM 322 delivered the future support arrangements for the RTM 322 helicopter engines, which powers the UK's Merlin and Apache fleets.

The team's arrangements ensured serviceability is central to the availability of both helicopters in their peacetime and operational roles.



THE
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FOR
DEFENCE
EQUIPMENT,
SUPPORT
AND
TECHNOLOGY
ACQUISITION
AWARDS

its delivery challenges." Winning teams demonstrated the full spectrum of MOD acquisition activity from delivery of Urgent Operational Requirements in Afghanistan, to very advanced science and technological research.

Mr Dunne said: "The Min(DEST) Awards celebrate the very best in defence acquisition and each award winner can be proud of delivering world class equipment, support, technology or infrastructure to the Armed Forces.

"I was honoured to have the opportunity to recognise these achievements today. The success of the

winning teams shows that the MOD can rise to some of the most demanding and challenging tasks to deliver cutting edge technology and services to each domain of our Armed Forces."

After the ceremony the Minister met and chatted to award winners during a buffet lunch in MOD headquarters.

His thoughts were echoed by one of the judges, the MOD's Head of Industrial Policy, Paul Hamilton. Mr Hamilton said: "This year's judging was probably the most difficult we've encountered with many good projects being turned down for an award. I congratulate everyone

who has been recognised this year.

"What was clear from the award ceremony was the obvious pride that people have and rightly so in delivering projects that are critical in supporting the UK Armed Forces."

Among the awards was the DE&S Weapons operating centre Torpedoes, Tomahawk and Harpoon team's Sting Ray Torpedoes Insensitive Munition Warhead team for integrating an insensitive munition warhead onto the Sting Ray Torpedo, which they managed three months ahead of schedule, including extensive trials and qualification tests.

■ continued on page 20

The PRIDE (Wyton) Programme Team

The PRIDE (Wyton) Programme Team was responsible for a programme of rationalising, relocating and integrating defence intelligence capability at RAF Wyton.

The outcome was state-of-the-art, intelligence accommodation, and the Pathfinder Building, which was in service three months ahead of schedule, within budget and to specification providing the MOD with what are considered to be world class facilities providing an enhanced defence intelligence capability.

DE&S Engineering Operations – Kabul Information Communications System Uplift Project Team

The team responded to an Urgent Operational Requirement to design, acquire, deploy and install communications and computer networks to UK forces on deployed operations in Kabul.

The team successfully delivered a multi-discipline, cross-technology solution against the background of an extremely volatile period in Afghanistan.

The DE&S Secretariat Corporate Communications Multimedia Team

The DE&S Secretariat Corporate Communications Multimedia Team is a small in-house team that provides graphic design, 3D animation, film and photographic capability. The team produced an Operational Personal Protective Equipment Clothing User Guide for all three services.

The guide provided a clear, simple and easily understood instruction, usable in classroom presentations and on operations, via a wide variety of IT, at minimum cost and in one third of the time normally allowed for a job of this scale.



DEST)
ARDS 2013

■ continued from page 19

Team members delivered an innovative design, and implemented a warhead fuse modification and software update that increases shallow water performance, giving the front line greater operational flexibility and improved weapon safety.

Future support arrangements for the RTM 322 engines, the mainstay of the UK's Merlin and Apache fleets, earned an award for the engines' DE&S Combat Air operating centre Joint Propulsion team. Members' work ensured serviceability remained central to the availability of the helicopters in peacetime and operational roles.

New buildings at Wyton helped win an award for the DE&S PRIDE (Wyton), jointly composed of DE&S ISTAR &

Information Systems and Services staff, DIO and JFC Programme Team. Members rationalised, relocated and integrated defence intelligence capability at RAF Wyton from other sites. The outcome was excellent intelligence accommodation and the Pathfinder Building, in service three months ahead of schedule, within budget and to specification.

The small in-house multimedia team from DE&S Secretariat Corporate Communications, which provides a graphic, 3D, film and photographic capability, produced an Operational Personal Protective Equipment Clothing User Guide for all three services, earning team members an accolade.

The guide provided a clear, simple and easily understood instruction, usable in classroom presentations and

on operations, via a wide variety of IT, at minimum cost and in one third of the time normally allowed for a job of this scale.

In addition, David Tucker, a photographer on the MultiMedia team shot and edited film of each of the award winners, which was used to set out each team's achievements before the Minister handed out awards.

Mr Dunne said: "Thank you to the DE&S Secretariat Corporate Communications MultiMedia team, and in particular Mr David Tucker, for their contribution to this year's award ceremony in producing the supporting video footage for each of the winning teams."

Rapid acquisition of two BAe 146 aircraft from the civil market

The Sensors Support Optimisation Project

The Sensors Support Optimisation Project arranged long term support which is essential for the continued readiness and availability of the Royal Navy worldwide and underpins this vital defence capability.

The contract provides for the repair and maintenance of sonar, periscope and electronic surveillance equipment fitted across the Royal Navy's ship and submarine flotillas.



The Centre for Defence Enterprise

As part of the Defence Science and Technology Laboratory, the Centre for Defence Enterprise helps MOD access innovative science and technology research from non-defence markets and from Small and Medium Enterprises that have traditionally struggled to access defence opportunities.

Drawing on industry best practice, CDE developed innovative, agile and competitive procurement processes that still meet strict procurement regulations, deliver value for money and allow MOD to be the largest contributor to the government's flagship Small Business Research Initiative.



The C-17 & Command Support Project Team

The C-17 & Command Support Project Team was responsible for an Urgent Operational Requirement to support and continue airworthiness of BAe 146 and HS 125 Command Support fleet.

This involved acquisition of two BAe 146 aircraft from the civil market, and project managing substantial military modifications and maintenance and achieving certification/release-to-service of this new aircraft before deployment to theatre.



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and managing substantial military modifications and maintenance saw the DE&S Air Support operating centre C-17 and Command Support team win an award. The team's work on the Urgent Operational Requirement saw team members achieve certification/release-to-service before deployment to theatre.

Thirty-two life-saving Urgent Operational Requirements to Afghanistan was an amazing achievement for the DE&S ISTAR operating centre Force Protection Delivery Team in its task to deter, detect and defeat the threat from improvised explosive devices and small arms fire. Without team members' work the tactical advantage of British Forces to dominate ground while minimising exposure to attack would have been lost.

An award went to the Centre for Defence Enterprise which developed innovative, agile and competitive procurement processes that still meet strict procurement regulations, deliver value for money and allow MOD to be the largest contributor to the government's flagship Small Business Research Initiative.

The objective of the Single Living Accommodation Model Project Team was to develop 14 individual Single Living Accommodation projects in a tight timetable. More than 2,000 bed spaces were provided across the UK.

The projects were dispersed around the country, and included two Grade 2 Listed buildings.

Work against the background of an extremely volatile period in Afghanistan

earned the DE&S Engineering Operations – Kabul ICS Uplift Project Team an award. Members responded to an Urgent Operational Requirement to design, acquire, deploy and install communications and computer networks to UK forces on deployed operations in Kabul.

What stood out for the judges was the progress made by the award-winning Sentinel Joint Community team in tackling safety and availability concerns over nine months as it directed, delivered and supported Sentinel operational capability for the Air Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) Force. With much of the fleet deployed, the team maintained 80 per cent availability.

Sentinel Joint Community

The Sentinel Joint Community team's objective was to direct, deliver and support Sentinel operational capability for the Air Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) Force.

Progress was made by the team in tackling safety and availability concerns over nine months – which was highly impressive, especially given the operational commitments at the time.

With much of the fleet deployed, the team managed to maintain 80 per cent availability throughout.

Single Living Accommodation Model Project Team

The objective of the Single Living Accommodation Model Project Team was to complete a challenging programme, developing 14 individual Single Living Accommodation projects in a tight timetable, delivering over 2,300 bed spaces across the UK.

The projects, many with challenging site constraints, were dispersed around the country, and included two Grade 2 Listed Buildings, but the provision of high quality single living accommodation is fundamental to the moral component of our Service personnel.

The Force Protection Delivery Team

The Force Protection Delivery Team's objectives were to deliver and support capabilities for British Forces deployed in Afghanistan to deter, detect and defeat the threat from improvised explosive devices and small arms fire.

Over the past five years, the Force Protection Delivery Team has been charged with the delivery of over 32 life saving Urgent Operational Requirements to Afghanistan.

Without this capability the tactical advantage of British Forces to dominate ground while minimising exposure to attack would have been lost.



DEST
ARDS 20

Min(DEST) Acquisition Awards 2013 – Winners

Standard Awards

- | | |
|--|--|
| 1. Sting Ray Torpedoes Insensitive Munition Warhead Team | 7. Centre for Defence Enterprise |
| 2. Joint Propulsion Team RTM 322 | 8. C-17 & Command Support Project Team |
| 3. PRIDE (Wyton) Programme Team – Defence Intelligence Estates Rationalisation | 9. Sentinel Joint Community Team |
| 4. ISS Engineering Operations – Kabul ICS Uplift Project Team | 10. Single Living Accommodation Model Project Team |
| 5. DE&S Secretariat Corporate Communications Multimedia Team | 11. Force Protection Delivery Team |
| 6. Sensors Support Optimisation Project | |

Special Award

DE&S Sensors Support Optimisation Project

Counting the cost

Cost engineers and accountants provide DE&S with expert advice on what military kit should cost. *desider* looks at a vital service which celebrates its centenary next year



Above: Dr Tim Sheldon
Top: Samuel Pepys

The names of Henry VIII and Samuel Pepys are not listed among the employees at Defence Equipment and Support – for obvious reasons.

Yet their influence on the way military equipment is procured for the UK's Armed Forces is as important today as it was when governments first needed to know the true cost of kit. Value for money was as high up the agenda for them as it now is at Abbey Wood.

For King Henry, his task was to build up the meagre number of ships he inherited from his father to ensure national defence and fulfil his expansionary ambitions in Europe. Construction of ships such as the *Mary Rose* took vast numbers of labourers, and huge areas of forestry. Keeping track of the cost was vital, particularly as Henry was forming the nascent naval force which became the forerunner of today's Royal Navy. Henry opted for specialist advice on *Mary Rose's* construction bill before shelling out £700.

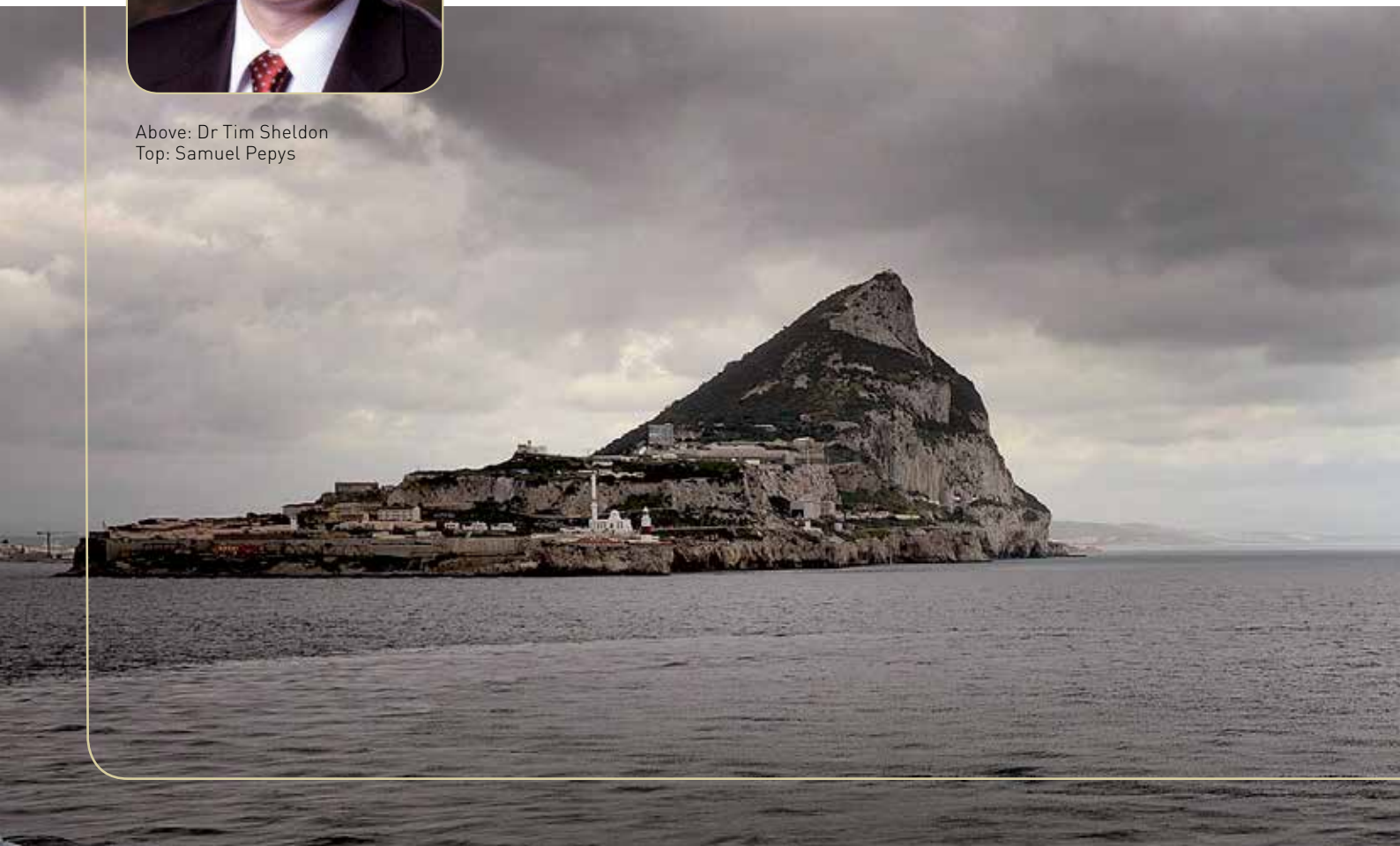
Likewise Pepys, as Chief Secretary to the Admiralty more than 100 years later, needed to keep a handle on costs. His job required dispensing money and making contracts, bringing in a centralised approach to supply and making the

Admiralty an efficient department of state. His reforms, including a technical cost estimating and accounting capability, helped shape acquisition of all naval equipment.

Henry needed cost assurance; Pepys provided it. The work of the pair, many years apart, is now carried out by the Cost Assurance and Analysis Service (CAAS), part of DE&S Finance, with 400-plus cost engineers and accountants providing expert independent costing advice to enable the MOD to make effective business decisions on equipment acquisition and support.

"We have a proud heritage," said Dr Tim Sheldon, head of the Service. "We were formed in World War One to prevent the munitions industry from overcharging the government. And we have been playing a pivotal role ever since."

"The complexities of equipment procurement – ships, tanks, planes and submarines – in World War One forced the government of the day to recruit its own technical cost engineers into the Civil Service to advise commercial colleagues what non-competed contract prices should be paid to industry. That formed the basis of the work that the



CAAS does today. We aim to be the MOD's professional service provider of choice for independent cost assurance and analysis."

Such cost engineers and cost accountants were vital in planning efficient aircraft production during World War Two with the cost of a Spitfire, for instance, being held to less than £5,000 each, enabling the country to build many more at rapid speed. Even with cost avoidance measures today a Typhoon costs around £70 million.

Since then the role of the service has increased, with a more obvious public profile. The value of an independent financial perspective came into its own recently, with a major contribution towards the MOD's announcement that it had balanced its equipment budget. The Service's advice helped inform the annual budgetary cycle on the top 65 equipment projects.

"Staff have recently played an important role in the aircraft carrier negotiations, working with the Ships Acquisition team to successfully secure many millions of pounds in cost reductions," said Dr Sheldon. "We are also heavily involved in the Single Source Pricing Regulations, providing support to implementation of the Defence Reform Bill."

CAAS cost engineers visit UK and overseas contractors to scrutinise their cost proposals, with cost estimating, modelling and risk analysis helping to assess evidence for negotiating taut fixed prices at contract placement.

The Service is going through a development programme to increase the reach and impact of its work supporting finance and commercial colleagues across the department. This will improve the quality of historic cost management services alongside new services to meet



Price control: the cost of a Spitfire in World War Two was held to less than £5,000, guaranteeing that more could be built

current and future customer needs, including the Front Line Commands and the wider MOD. The Service provides support to DE&S customers through a strategic partnership with KPMG.

"This transformation of the Service has adopted a relentless focus on the customer and the upskilling of our staff, both existing and new joiners, will only increase the professionalisation of the service we offer," said Dr Sheldon. Staffing is expected to increase from 300 in 2010 to 475 by April 2015.

"We are making a real strategic difference. Our cost estimates supported the MOD to develop an affordable equipment programme, improving pricing support on major projects and

contractor rates," he said.

"Our expertise is widely recognised as having evolved to cope with industry's changes in technology, the way contracts are written and drawn up and the development of international co-operation. Our Civil Service counterparts in many other nations have adopted similar cost investigating strategies."

With its centenary next year coinciding with the next review of defence spending, the spotlight will fall on the Service like never before. "We have a bright future," said Dr Sheldon. "And we are really looking forward to our support of the next Strategic Defence and Security Review in 2015."



CAAS: the rock on which cost accounting rests. Type 45 destroyer *HMS Dragon* is pictured during exercises off Gibraltar



MINISTRY OF DEFENCE

MOD Apprentice of the Year Competition

In 1977, the Competitions Committee decided that there should be a competition to find the "Apprentice of the Year" from apprentices in their final phase of training. The competition was previously split into two groups (Procurement Executive and Service Support), with the winners of each group competing for the overall title of Ministry of Defence Apprentice of the Year.

However, with the changing face of the department, it was felt that the format of the Competition required to be reviewed and in 1993, the Competitions Committee agreed to dispense with the two groupings system and introduce a wider framework. This now encompasses a paper sift and two suitability interviews to determine the top three apprentices in the Ministry of Defence. The winner is expected to be a suitable ambassador for Ministry of Defence engineering apprentices. The winner is required to demonstrate good communication and team working skills, very strong academic attainment and vocational learning with a good knowledge of their own and the department's role. They should also have in depth understanding of their chosen engineering field. The winners each receive a medal, certificate and cash award. A trophy is given to the winner of the gold award, to be held by his/her parent establishment for the ensuing year.



Best of the best

The future engineers of DE&S have been recognised for their outstanding abilities in the latest awards at Main Building



The brightest and the best of the MOD's young apprentices have received their rewards at a ceremony in Main Building.

The annual event, now in its 26th year, was hosted by Pete Worrall, DE&S' Chief of Materiel (Joint Enablers), while the Minister for Defence Personnel, Welfare and Veterans, Anna Soubry, awarded prizes and congratulated the winners. Air Vice-Marshal Julian Young, as Director Technical a big supporter of the organisation's young talent, also attended the ceremony.

Anna Soubry praised apprentices' 'huge importance and value' at a time when Sir Bob Kerslake is focusing on bringing youngsters into the Civil Service.

She said: "The MOD is the largest deliverer of apprenticeships across government, so I'm particularly proud. It's a growth area, really on the up, and it's a great time to be an apprentice."

The event celebrates young apprentices in their final phase of training. The prestigious 'Apprentice of the Year' gold medal went to Tom Vaulters (Abbey Wood), with the talented trio of Claire Scanlon, Sam Jennings and Kimberley Hill all tying for silver.

The competition encompasses a paper sift and a preliminary and final interview to determine the MOD's top three apprentices, who each receive a medal, certificate and cash award.

Tom said: "I'm quite shocked as I didn't expect to win, but I'm very pleased as I was up against some tough competition."

The winning Tom Nevard Memorial competition team comprised Elliott Rogers (Defence Munitions Gosport), Patrisha Goodman, Nick Bennett and David Friday (all Abbey Wood). The competition started in 1952 as a tribute to Tom Nevard, a former Assistant Secretary in the Ministry of Supply and a member of the departmental committee whose recommendations still influence modern apprenticeship schemes.

Kersey Segger won the handskills first phase, with Andrew Hall taking the prize for the second phase. The category for machining first phase was won by Daniel Drury (DE&S Devonport), with Gareth Hopton (DSG Devonport) topping the second phase category.

Andrew Willoughby and Craig Kitcher of DM Gosport shared the Sir Henry Royce Memorial Foundation Medal for work of outstanding merit and in the tradition of excellence of engineering design and quality of workmanship for which Sir Henry was famed.

Hayley Barnden from Abbey Wood picked up the Sir David Cardwell Memorial Prize in memory of the late Chief of Defence Procurement. The award is given to an apprentice who makes exceptional progress during training and overcomes great personal or physical difficulty to complete their apprenticeship.

Kimberley Hill from Abbey Wood won the EEF Outstanding Achievement by a Final Year Apprentice Award for the south west. The award goes to the apprentice who has done most to seize training and development opportunities during the final year of their apprenticeship and makes a significant contribution to support the business activities of their employer.

Phase 1 engineering apprentice Sam Kantor became a national finalist in the World Skills Show UK while Hannah Stanbury, 19, an apprentice weapons fitter at Defence Munitions Gosport, won a crystal trophy at the WISE (Women in Science and Engineering) awards.



Hannah takes a top award: page 30

Main picture: Apprentice of the Year Tom Vaulters with Defence Minister Anna Soubry

Left: Sir Henry Royce winners Andrew Willoughby and Craig Kitcher from DM Gosport with Anna Soubry and foundation trustees Linda Scott, Peter Hall and John Lowe.

Right: Abbey Wood's Hayley Barnden, winner of the Sir David Cardwell Memorial Prize

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Team updates on air defence missile progress

STAKEHOLDERS HAVE been briefed on the latest developments as the joint DE&S/MBDA Future Local Area Air Defence System team held its annual stakeholder event at Abbey Wood.

The FLAADS programme is looking to replace the Seawolf missile system on Type 23 frigates and the land-based Rapier system.

The weapon system is also intended to be fitted to the Type 26 Global Combat Ship.

Representatives from across the MOD, MBDA and its supply chain were

welcomed on 26th November by Adrian Birch (Short Range Air Defence leader) with opening remarks from Jonathan Barratt (Head of Team Complex Weapons) and Mark Slater (Director of Future Systems in MBDA).

Following presentations on the FLAADS programme and the associated Future Forces Ground Based Air Defence and Air Surveillance programme, attendees were encouraged to browse market stalls and view a FLAADS (Land) Fire Unit Concept Vehicle.



FLAADS (Land) Fire Unit concept vehicle on show at Abbey Wood

MOD 'more business-like and finance-focused'

SIGNIFICANT PROGRESS has been made to transform the MOD into a more professional and responsible organisation, an independent report has concluded.

In a follow up to his major independent review of two years ago, Lord Levene has praised the MOD for embracing complex and radical change to improve both efficiency and financial management.

Lord Levene's 2011 Defence Reform report made 53 recommendations on how to transform the MOD into a leaner and more effective organisation that could better support the needs of the Armed Forces.

Since then, he has monitored progress and in his second stocktake has praised successful reforms that have taken place.

Lord Levene said elimination of the £38 billion budget deficit was a remarkable achievement and that there was now clear evidence that the MOD was more business-like and finance-focused.

His report welcomed imaginative ways in which the MOD increased accountability and reduced bureaucracy by delegating responsibility to the heads of the Royal Navy, Army and RAF.

He said the Materiel Strategy programme, which has been examining options for the future of DE&S, should be brought quickly to a conclusion to end uncertainty and the demands the programme placed on senior management.

He recommended that the

Levene praises moves towards greater efficiency

Chief of Defence Materiel was made a formal Accounting Officer.

The report acknowledges that better leadership, direction and prioritisation have led to a

a welcome endorsement of the progress we have made in reforming defence. We are streamlining the MOD with a reduction of 33,000 civilian posts in total to make it leaner and more strategic, better able to support the Armed Forces of the future."

Chief of the Defence Staff, General Sir Nicholas Houghton, added: "Defence Reform has required some innovative changes to the structure and management of defence. But the results of these changes will lead



Embracing change; DE&S has played its part in greater efficiency. Bernard Gray, above, explains future developments to staff at Abbey Wood

more strategic approach in the MOD.

Defence Secretary, Philip Hammond said: "We have rightly focused our efforts on re-shaping our Armed Forces to meet future threats and delivering better value for money for taxpayers.

"Lord Levene's report is

to a more agile force structure with capabilities better suited to the security challenges of the age.

"The advent of Joint Forces Command and the greater delegation of authority to the three single services is fundamental to this change."

NEWSREEL

JSP review hits the mark

THE review into Joint Service Publications continues its work to ease the regulatory burden on MOD personnel. The Defence Reform Unit has been running the review since August, and has reviewed 347 JSPs covering many subject areas and scales, ranging from the Packers Handbook to the Defence Nuclear Response Manual. Policy leads and subject matter experts have been consulted during the review.

Chart hits

FURTHER copies of the Defence Finance and Military Capability (Front Line Commands) organisational chart carried in this edition of *desider* are available from the DE&S press office. Contact Geoff Hale at DESSEC-internet@mod.uk

Staff figures

THE total number of staff recruited to the MOD between 1st April 2010 and the end of last October is 7,580, 58.8 per cent of which were male, the latest figures show.

NEWSREEL

Information excellence

NOMINATIONS can be accepted until 14th March for this year's MOD Information Excellence Awards. These reward those who reach high standards in creating, sharing, exploiting and disposing of the information used in everyday work. Categories are: inspiring leadership, innovation, exemplary practice, plus an information team of the year award. Nominations open this month and the award ceremony will be in Main Building.

No 2 takes up the Typhoon

THE RAF's 2 Squadron is to be re-equipped with the latest Typhoons. The move is part of the transformation of the RAF's combat air capability which will see the Tornado GR4 aircraft replaced by Typhoon and Lightning II. The squadron, based at RAF Marham, is training for its next tour in Afghanistan. The unit will then begin swapping Tornados for Typhoons and transfer to its new base at RAF Lossiemouth in Scotland next spring. The squadron will become the fifth front line RAF unit to fly the Typhoon.

Safety updates

UPDATES to Volume 3 of Joint Service Publication 375 – the health and safety handbook advising staff and contractors on high risk infrastructure on the defence estate – were published on 13th December. Full details are available through the MOD's website

New contract gives F-35 STOVL capability a lift

ROLLS-ROYCE has been awarded a \$215 million contract to produce and support LiftSystems for the F-35 Lightning II programme.

The technology of the Rolls-Royce system provides F-35B aircraft with the capability to perform short take-offs and vertical landings (STOVL) and is in service with the US Marine Corps in Arizona.

The new agreement with Pratt and Whitney for the sixth production lot includes six LiftSystems, plus sustainment, programme management, engineering and field support.

Rolls-Royce has delivered 42 LiftSystems and has expanded field support to include five places where F-35B aircraft are flown.



A UNITED Kingdom F-35 Lightning II breaks left out of a formation flight with other F-35 aircraft over Eglin Air Force Base in the US last month.

The joint programme reached a new single-day record for F-35 sorties on 4th December with 45 training missions between all three models of the aircraft.

The B-model being bought by the UK completed 32 of the flights, the A-model had ten flights and the Carrier Variant C-model flew three missions.

Picture: Andy Poulastides

'Bionic' limbs change lives

Funding applies science to ease lives of injured service personnel



Cpl Matt Webb of the Royal Marines shows the versatility of revolutionary prosthetics at Headley Court

THE LIVES of service personnel who lost their legs on operations have been dramatically improved through revolutionary prosthetics.

Government funding is providing new prosthetics including the Genium 'bionic' leg made famous by Derek Derenalagi in the 2012 Paralympic Games.

Last year the Government committed more than £6.5 million to guarantee that injured personnel and veterans with above knee amputations could receive the latest technology prosthetics.

Since then, more than 50 patients have been fitted with 90 'bionic' legs which have enabled them to step over obstacles, negotiate stairs and walk backwards safely.

Patients have told inspirational stories about how their lives have been improved.

Funding builds on the new £17 million Rehabilitation Complex at Headley Court and £5 million to refurbish accommodation.

Defence Secretary Philip Hammond said: "Our priority has always been to give our troops the best possible care and support. That's why we announced £6.5 million to ensure our personnel and veterans injured in Afghanistan and Iraq have been able to upgrade to the most technologically advanced prosthetics available."

Royal Marines Cpl Matt Webb, injured in Afghanistan, said: "Since I have been using the Genium joints, I have found it a lot easier to stand still and negotiate slopes and stairs. The other main benefit for me is being able to walk without expending as much energy as I used to, which helps me walk for longer."

The Government is also making £11 million available over the next two years to improve prosthetics and rehabilitation services for ex-servicemen and women who are amputees.

This funding will ensure veterans are able to access similar care and prosthetics to that of serving personnel.

Warehouse hunt is on as UK kit comes home

AS THE military reshapes for the future, support systems are adapting too.

Logistic Services (LS), part of Logistic Commodities and Services (LCS), stores, maintains and processes hundreds of thousands of items of equipment on behalf of project teams and defence customers.

This amounts to more than 871,000 cubic metres of warehousing and storage space mainly at Bicester and Donnington and other sites across the UK and Germany.

Before the Business Continuity Project began, the storage capacity of LS was running close to maximum.

An efficient warehouse should be no more than 85 per cent full. The other 15 per cent is used for processing goods including stock rotation, sequencing, inspections and routine maintenance. LCS was operating with an average utilisation rate of 81.7 per cent across all its warehouses.

Storage capacity must also be able to handle current and future changes in the defence inventory. The procurement of new equipment and the Operation Herrick drawdown will see additional stock moving through the LS storage network.

Future Force 2020, the move from Germany and the subsequent merger and drawdown of units will introduce a range of changes to the MOD's future storage requirements.



Logistic Services warehousing at St Athan

Working with teams and other initiatives (such as Inventory

LCS' Business Continuity Project (BCP) is already implementing initiatives to deliver these changes. Additional co-ordinated warehousing will ensure that materiel returning from Operation Herrick is stored in suitable conditions and in a place where it is readily available for onward issue.

To improve efficiency LS has set up another warehouse operation at St Athan in south Wales, and acquired more space in Portsmouth to relocate Naval stock from warehouses at Bicester and Donnington. More warehouses at Bicester will also be used as non-DE&S users move out.

As well as additional storage capacity, the project team is responsible for rebragading stock to ensure space is made available when and where it is required.

Management Transformation (IMT) the team is also identifying stock appropriate for disposal.

Stock for St Athan or Portsmouth has already started to move. Last September and October 161 40ft loads of stock were moved to St Athan and Portsmouth.

Maintaining day-to-day performance levels for service to the military customer is paramount in everything LCS does.

As LCS reconfigures its storage to modernise its warehouse process, addressing old warehousing and previously high stock levels along the way, through the BCP and LCS Transformation, work to implement change must ensure levels of service from LS will be maintained and business will continue as usual.

NEWSREEL

Patrick earns his medal

FORMER Arctic Convoy veteran Patrick Gallagher, now 94, has received his Arctic Star Medal from personnel at Clyde naval base. Captain Alistair Willis, Captain of shore-based facility HMS Neptune, joined family members as Mr Gallagher was presented with his medal at Erskine Park veterans' home near Glasgow last month.

❑ *desider* people news starts on page 30

Career learning

THE MOD is funding more than 90 staff on degree and other courses, according to figures released in Parliament. The MOD sponsors around 15 engineering and science undergraduates each year from those who have taken A-levels at the Defence Sixth Form College. In addition, as part of DE&S upskilling, some civil servants are funded to undertake higher education/degrees in engineering and science. Figures were released in a Parliamentary answer by Defence Minister Anna Soubry.

Pie in the sky

THOUSANDS of personnel on operations tucked into mince pies and Christmas cakes over the festive period, thanks to Wrights Food Group of Crewe. The 800 staff at the family-run company, founded in 1926, had to start baking months beforehand to make sure pies and cakes were ready to be sent abroad for Christmas.

DE&S pairs up to increase engineering skills

DE&S HAS become corporate partners with the Institution of Engineering and Technology.

As part of this partnership a company-based professional registration scheme for engineers is being set up. The scheme will provide a structured process for applying for professional registration at EngTech, IEng, CEng and Fellowship levels.

Draft applications will be required next month for a three-stage advisor review using DE&S IET industrial registration advisors.

Support, guidance and practical advice will then be provided to candidates to enable them to complete their applications. Final

applications are required to be submitted by early June.

Applications will then be processed by the IET and interviews will be held on site at Abbey Wood during the summer.

An information and registration session will be held at Abbey Wood on 16th January, bookings via e-solutions.

All must be a member, or in the process of joining, the IET to register for this scheme. Contact Nicholas Brown at DESTECH-EGIET@mod.uk for details.

All DE&S staff are welcome to apply; there is a separate scheme in place for staff at Corsham.

DE&S takes the glory

Staff show off their expertise to the world

A FEMALE DE&S apprentice who led a male-dominated team in the Brathay Apprentice Challenge last year has won a national award for inspiring girls to choose a career in engineering.

Hannah Stanbury, an apprentice weapons fitter at Defence Munitions, Gosport, was presented with the Women in Science and Engineering (WISE) apprentice award at a glittering award ceremony at the Science Museum, London by The Princess Royal.

The award, sponsored by the Institution of Mechanical

WISE introduced the apprentice award.

Gosport's Apprentice Training Officer Kevin Haydock said: "Hannah is by far the hardest working and determined student we have."

Trudy Norris-Grey of WISE said: "The desire to make a difference shines out from all the winners.

"These women bring vision, creativity, commitment and above all a passion for what they do which is truly inspiring. Britain needs more like them to bring their talents into UK industry. Then we



Winning smile: from Hannah Stanbury

Hannah's triumph is the toast of Gosport

Engineers and the BBC, was presented to Hannah for being a fantastic role model.

One of only two female apprentices at DM Gosport, Hannah achieved a star distinction in her level 3 BTEC national diploma in mechanical engineering. She is now studying for the Higher National Certificate.

Nationally, only 400 women started an engineering apprenticeship last year, compared to 12,880 males, which is why

will get the real re-balancing of the economy which the country needs."

WISE aims to help push female employees in science, technology, engineering and maths from 13 per cent to 30 per cent by 2020, boosting the talent pool to drive economic growth and build a better future for UK industry.

WISE membership is open to companies, educational institutions and individual supporters.

Dave makes the most of breaktime

DAVE EMMERSON made best use of an unpaid career break by walking off with an Armed Forces technician of the year award.

Staff Sgt Dave (pictured), of DE&S' Operational Infrastructure Programme received the first award from the Institution of Engineering and Technology at an event in London.

His award recognised a broad range of work carried out during his break reading for an MSc in Product Design (Virtual) at Loughborough University.

During his work he developed a range of modular blast and ballistic protective infrastructure concepts, drawing from lessons learned during recent operations to provide lifesaving systems for the future.

He provided detailed briefings to specialists in these areas in the MOD and US Department of Defense.

In addition to that work Dave developed a

polymer protective wall which provides rapidly deployable protection against weapon threats, flooding and pollution.

His extra work earned him a Red Dot design award, a globally recognised standard in design.

The Royal Society of Arts has also granted him a fellowship for a unique, innovative prosthesis design, which provides a solution to problems associated with traumatic amputation as a result of exposure to improvised explosive device detonation.

Dave plans to leave the Armed Forces in the near future. "I'm really looking

forward to applying my ability and new skills in support of UK defence and wider humanitarian operations in my civilian career," he said.



MOTTO – THE MOD LOTTERY October

£10,000: John Ward (Headley Court).
£5,000: Alan Sorrell (Kentigern House). **£2,000:** Christine Nailer (Thatcham). **£500:** Marc Harris (High Wycombe), Helen Stevens (DGC Feltham). **£100:** Paola Hayes (Gosport), Keith Pasmore (RAF Honington), Stephanie Lown (RAF Mildenhall), Richard Guy (Guterstoh), Colin Currie (Bicester), Samantha Swift (Corsham), Gordon Aitken (Clyde), Sandra Trayte (Abbey Wood), Joanne Davies (SPVA), Michael Hobson (Catterick Garrison), Debbie Hollands (UKHO), Thomas Corcoran (Rosyth), Carmel Grant (Andover), David Beniston (Abbey Wood), Edgar Bray (Glen Douglas), Nigel Dyer (RAF Lakenheath), William McCann (Portadown), Charles Baker (Saffron Walden), Rachael Brown (Abbey Wood), Simon Phillips (Abbey Wood).

November

£20,000: Jacqueline Meechan (Kentigern House). **£10,000:** Douglas Proctor (Gosport). **£5,000:** Jennifer Keeley (Abbey Wood). **£2,000:** Martyn Wilcockson (Whitehall). **£500:** Sally Wareham (Blandford), Caroline Thompson (Donnington). **£100:** Jacqueline Gabb (Abbey Wood), Alastair Davies (RAF Molesworth), Colin Birtwhistle (UKHO), Melanie Young (Gosport), Gwendolene Waddell (RAF Henlow), George Thompson (Holywood), Ben Reed (Abbey Wood), Sandra Hayes (Corsham), Debra McKinna (RAF Wittering), Patricia Helley (Devonport), Hugh Wood (Feltham), Dale Tyson (Beverley), Emily Kermod (Abbey Wood), Marl McCrae (Liverpool), Louise Hunt (Corsham), Jeffrey Nicholson (Liverpool), Stuart Gallacher (Regents Park), Angela Sullivan (Abbey Wood), James Bowman (Pirbright), Keith McGorman (Holywood).

Subs staff earn partner's silver salute

DR HILARY BOLLAN and Chris Clarke from DE&S have been toasted for their contribution to a step change in a vital piece of safety equipment on board future Royal Navy submarines.

Hilary and Chris were part of the team that developed a new piece of equipment, drawing on space age know-how, to monitor the atmosphere of a submarine.

The result, which has now become part of the Successor Trident replacement submarine design, is an atmosphere analyser that can measure three times as many gases with increased accuracy for lower cost than the currently available system.

The team, which brings together expertise from Successor industry lead, BAE Systems, and the Open University Planetary Sciences Department as well as DE&S, has received a silver award in the BAE Systems Chairman's Awards global recognition scheme.

Hilary joined other members of the team at a ceremony at the Manchester Hilton.

The development was supported with MOD Technology



Silver salute – BAE Systems Programmes and Support Managing Director Nigel Whitehead (far right) presents the Chairman's Silver Award to, from left Mark Scaife, Dr BOLLAN, Andrew Crabtree, Viv Tozer, Mike Anthony, Dr Mark Leese, Dr Geraint Morgan and Neil Mitchell

Demonstrator Programme funding to investigate technology and develop a prototype.

The team succeeded in adapting and repackaging commercial off-the-shelf equipment designed for laboratory use into a submarine-capable piece of equipment. This was achieved by drawing

on expertise across the team. Air management, calibration, software and control and instrumentation are all novel aspects.

The equipment has been tested on patrol, and has demonstrated a significant performance improvement over the existing equipment.

Brigadier hits career 'zenith'

BRIGADIER PETER Rafferty, Head of Operational Support Programmes in DE&S' Land Equipment Operating Centre, has been appointed Colonel, The Duke of Lancaster's Regiment.

Brigadier Rafferty, pictured, and predecessor Brigadier Mike Griffiths enjoyed an audience with the Queen to mark the handover.

Reflecting on his five-year appointment Brigadier Rafferty said: "I have spent the last five years as Deputy Colonel but it is the greatest privilege imaginable to be asked by my Regimental family to be their Colonel.

"My main responsibilities are



to guard Regimental traditions, foster esprit-de-corps and represent Regimental interests within the Army and infantry and more widely among the communities from which we recruit.

"My job is to sustain the Regiment into the Army and Future Reserve 2020 era and support the wider Regimental family of Kingsmen, Regular and Reserve, their families, our veterans, our cadets, our 26 freedom towns, cities and boroughs, and our affiliated regiments across the globe.

"While continuing with my 'day job' in Abbey Wood, I look forward also to this wonderful opportunity to serve my Regiment as Colonel, the zenith of any Regimental Officer's career."

The Regiment was formed in 2006 with the amalgamation of The King's Own Royal Border Regiment, The King's Regiment and the Queen's Lancashire Regiment.

Keeping Bastion flying



Some of those involved with the Bastion task. Front, from left: Fraser Steedman (Hd of Flight Inspection), Sara Llewellyn (Mission Planner), Angela Bickerton (Strategic Planner), Steve Fryer (Flt Ops), Back: Lee Scott (Ops Mgr), Mark Summerbell (Flt Ops), Gp Capt Ian Mitchell (ADATS leader), Craig Rothery, Flt Lt Simon Hamilton-Bing (MOD Flt Chk Mgr), Mal Hammans (Dir Flt Inspection), Carole Ann Havard (Flt Chk Mgr)

CRAIG ROTHERY, a pilot with Cobham Flight Inspection based at Durham Tees Valley Airport, has been awarded the Operational Service Medal (Afghanistan) for his support to Camp Bastion.

Over the last two years Craig completed six detachments carrying out in-flight assurance checks of the air traffic control navigational and landing

systems. He amassed more than 30 flying sorties over a cumulative 57 days in theatre.

A delighted Craig said: "It was truly a team effort and without the support from the operations, planning and engineering staff the task would not have been possible."

The medal was presented by Gp Capt Ian Mitchell, leader of the Air Defence and Air Traffic

Systems team at RAF Henlow. He said: "It is a great privilege to award the Operational Service Medal as a symbol of appreciation for the hard work and inherent risks involved."

While contractors on deployed operations regularly receive the medal it is thought this is the first time it has been awarded to contractor staff for flying duties.



Get sharp: staff show off their handiwork while presenting funds to the Flying Colours Appeal

Staff get razor sharp

PERSONNEL AT Yeovilton downed their razors in November to raise money for Yeovil's Women's Hospital. Members of 815 Naval Air Squadron supported the hospital's Flying Colours Appeal by donating £5 each to go unshaven.

Royal Naval personnel are not allowed to grow a moustache but must support a full beard and only after permission has been obtained from their commanding officer. A cheque for £400 has been presented to the appeal.

Staff join forces on domestic violence awareness

STAFF FROM the Commando Helicopter Force at Yeovilton were out and about to raise awareness of International Day for the Elimination of Violence Against Women at the end of November. Together with Somerset County Council, Naval personnel and other staff at the base, the Force's Royal Naval Police were out and about in the community to offer advice about the help and support available to victims, witnesses and others who may have come into contact with domestic abuse. Regulating Petty Officer Oonagh Maguire of the RN Police said: "The service community occupies a large number of homes in and around the Yeovil area and we are all a reflection of civilian society and therefore must accept and understand how personnel and their families could become victims of domestic abuse."



Above: Devonport staff are pictured with Routeways representatives to sign the covenant

Below: Out and about to increase awareness of domestic abuse

Devonport marks first sign-up

ROUTEWAYS CENTRE has become the first organisation in Plymouth to sign the Armed Forces Corporate Covenant. Senior members of Devonport naval base were on hand to see signing of the covenant recognising Routeways' continuing support of the Armed Forces community and of the value of serving personnel, both regular and reservist, veterans and military families to business in the UK.

Captain Gary Pettitt, Captain of the Base, said: "Routeways generates a great deal of benefit for civilian and Forces communities across Plymouth. I am delighted that they are building on the work that has already been done to promote integration and understanding for service personnel, their families and veterans by being one of the first organisations to sign the Corporate Covenant scheme in the city."

Routeways will endeavour in their business dealings to uphold the key principles of the Covenant

Routeways manages a range of projects that aim to improve people's lives by helping people to help themselves.



It's good to care – shoppers and stallholders show their Devonport support



Left: Stallholders deliver some cheer to personnel under long-term care at Devonport

RECOVERING ROYAL Marines and sailors living at Devonport have taken delivery of boxes of donations from kind Plymouth market traders.

Stallholders and shoppers of Plymouth Indoor Market collected the items to help improve the life of Royal Marines and sailors living away from home under long-term care.

Ray Robins, Plymouth Indoor Market Traders Association chairman, and colleague Matthew Jones delivered books and other items designed to make the troops' life more homely at dedicated therapeutic accommodation in the naval base.

Ray presented the items to members of Hasler Company and said: "As can be seen on a daily basis there is a lot of goodwill towards our Forces in Plymouth and these gifts show this well – but just scratch the surface of the depth of this feeling. It is a garrison town after all, with the naval base here – everyone knows someone in the Armed Forces.

"We just hope these gifts show we care and that they make daily life away from home more comfortable for the troops under care."

Hasler Company oversees the needs of tri-service personnel with long-term challenges whether wounded in combat or on exercise or with other complex issues.

Major Scotty Mills, Officer in Command of Hasler Company, said: "These gifts are very much appreciated. It makes a real difference to know that people are thinking of us. There is a lot of support in Devon and especially Plymouth for the Armed Forces and this demonstrates this feeling."

Joe's super seven are the air cadet drill kings



Joe Smith, on the left, is pictured with his proud Banner Drill squad at RAF Halton along with Air Commodore Dawn McCafferty, Commandant of the Air Cadet Organisation, centre

A TEAM of seven cadets from a squadron – led and drilled by a DE&S volunteer – has swept the board in the annual Air Training Corps drill contest.

Joe Smith, a civil servant in the Supply Chain Optimisation team at Abbey Wood, spent much of last year training the team from the 40-strong 2002 (Kingswood) Squadron, based near Abbey Wood.

Joe is an Air Training Corps sergeant and part of his role is to instil discipline into the cadets and ensure uniform is worn appropriately.

He coached the cadets in Banner Drill which replicates the movements and drills for how the Colour of the RAF would be paraded, using a Squadron

Youngsters learn marching skills with the help of DE&S

Banner as a representation.

This is an exceptionally difficult routine to master, as the Banner must be treated with reverence at all times while carrying out the drills.

Having never broken into the top three in the Wing competition against 28 other units from the Bristol and Gloucestershire area, the Kingswood squadron took the title and progressed to the regional contest against winners from the other five south west wings.

A single-point win saw them progress to the national corps finals at RAF Halton towards the end of November.

In a day of total triumph the team earned a clean sweep of awards, winning Best Banner Bearer for Cadet WO Samantha Rich, Best Turned-out Region, and Best Overall Banner Squad.

Joe said: "The moment where you can see the cadets realise they have achieved something truly remarkable is the reason I continue to give my time every night I wear this uniform.

"The MOD and indeed DE&S staff do not volunteer for recognition, or for any thanks or gratitude, but for the knowledge that they have made a difference to a young cadet's life."

Speed and distance is key to hospice fundraising

A TEAM of sailors from the Devonport-based Flag Officer Sea Training (FOST), pictured right, has raised more than £5,000 for St Luke's Hospice.

The money was raised by sponsored events including the Plymouth Half Marathon, an auction at a FOST dinner and a Hadrian's Wall walk of 84 miles in four days from Bowness-on-Solway to Wallsend.

Captain Tim Peacock presented a cheque to Robert Maltby, Communications and Marketing Manager at St Luke's Hospice.

Robert said: "Over £5,000 is an impressive amount raised and will help towards the £4.5 million we have to raise every year to provide free end of life care to our local community.

"We would like to thank FOST for their continued support and can't wait to hear what exciting challenges they have in store next year. Thank you from everyone at St Luke's."

FOST staff have also raised £435 for the Jubilee Sailing Trust enabling two children from Plymouth to spend time at sea on the tall ship *TS Tenacious* and £500 has been raised for the Royal Navy and Royal Marines Charity.

■ Geoff Ellis of the Networks Falcon Team rounded off an outstanding orienteering year with his third consecutive victory at the Southern Night Championships at Wareham.

Geoff maintained composure over the tough terrain for victory in the Men's 35-40 category.

This is the second year running that Geoff has secured both day and night titles at M35 in the south, confirming his status as a UK leading orienteer across a variety of terrains in varied conditions.



Abbey Wood the toast of 2013 – now for 2014



Powerplay: Abbey Wood's field gun crew enjoyed a successful 2013

ABBEY WOOD'S field gun crew will kick off 2014 looking to build on a successful 12 months which saw them earn a brace of silverware.

The team wowed a crowd of around 12,000 enthusiastic spectators when they took part in the Birmingham International Tattoo at the start of December.

The National Indoor Arena was spellbound by the skills of the teams, who display a mix of bravery, muscle, speed and dexterity in taking apart a field gun weighing a tonne, carrying its parts around an obstacle course before reassembling it and dragging it home in a sprint

Team targets more success after double trophy glory

finish. The event maintains the spirit and tradition of the Royal Navy's contribution to the relief of the siege of Ladysmith.

The Rob Pascoe Memorial Trophy was secured by the Abbey Wood team in a competition featuring RAF Cosford and 7 Air Assault Brigade REME.

Success built on the capture

of the RN/RM Sports Lottery Cup during the summer when the crew took part in the Brickwoods Trophy, the annual Royal Navy/Royal Marines charity event at *HMS Collingwood*.

Formed in 2003, the Abbey Wood crew has become an established tri-service competitor within the Armed Forces. This season's crew represents a mix of all three services, and members are grateful for the support of the hard-working back room staff, and sponsors Debut Facilities Management, Xpedite, Selex ES, BMT Group and the RN/RM Charity.

Devonport pays tribute to the Royal Navy warship known by many as . . .

. . . the most decorated of them all

THE 100TH anniversary of the launch of what many consider to be the greatest British warship has been honoured at a tribute event in Devonport.

More than 200 guests attended a celebration of the battleship *Warspite* – revolutionary in design for her day – and the sailors who served in her.

The event recreated the original launch ceremony at Number 3 Slipway where, in November 1913, the ship was launched in front of 30,000 people including First Lord of the Admiralty Winston Churchill.

Commodore Graeme Little, Naval Base Commander, said: “*HMS Warspite* is the iconic battleship of the last century, it is extremely important as a reference point to the Royal Navy, the city of Plymouth and Devonport.

“I am delighted to be able to host the commemoration of the launch of *HMS Warspite* in advance of what will be a very important period of reflection for the Great War.”

A memorial service was staged at the slipway attended by civic



leaders, veteran sailors and former admirals with a recital by Burraton Male Voice Choir and music by HMS Drake Volunteer Band.

A super *Dreadnought*, *Warspite* was the seventh warship in Royal Navy history to bear the name, which dates back to 1596 when Sir Walter Raleigh was her captain, sailing out of Plymouth on a famous raid against Cadiz.

Warspite garnered more battle honours than any other single ship in British naval history.

Above: visitors admire a model of *HMS Warspite* while, below, the power of a *Warspite* broadside



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:

2013DIN04-181: This announces introduction of a new red vulcanised fibre disc ID tag to give water safety equipment a local ID number. The new ID tag will replace the existing red fibre disc ID and can be demanded through the normal Naval Stores procedure.

2013DIN04-184: The 7.65mm L47A1 Walther pistol has been issued to RAF and Royal Navy fast jet crews since the 1980s. It is being replaced by the 9mm Glock L131A1 pistol. Work on an integral holster to accommodate the L131A1 has finished and fielding of the L131A1 is scheduled to complete by next September. The out-of-service date for the L47A1 will be 30th September 2014.

2013DIN04-190: This describes the mandated process for use of maritime strategic facilities by MOD projects, their contractors and sub-contractors. The Maritime Strategic Capability Agreement is a 15-year contract with QinetiQ to provide a sustainable set of strategic capabilities.

2013DIN04-193: The Defence Medical Services Training Group, currently at Ash Vale, Aldershot, will move to Whittington Barracks, Lichfield from 7th April and be called the Defence College of Healthcare Educational Training.

Further information and more details on the latest DINs see:

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

AN INSPIRED GENERATION.

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

