

# desider

May 2012 Issue 48

de&s

the magazine for defence equipment and support

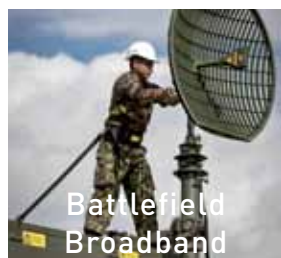


MINISTRY OF DEFENCE



## Vengeance – the final refuel

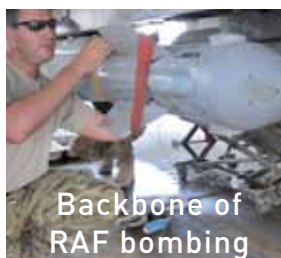
Countdown to DVD – DE&S' industry day for the Land Environment [See inside](#)



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Broadband



Tonnes of  
progress



Backbone of  
RAF bombing



Praise for  
logistics



Service  
take-off

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The special status of Devonport as the only place to handle refuel and deep maintenance of Royal Navy submarines has guaranteed the dockyard's future for years as a contract for the refit and refuel of *HMS Vengeance* is announced

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Stocks of the RAF's 'weapon of choice' are to be replenished in a contract to sustain UK jobs. Paveway IV, highly effective during Operation Ellamy in Libya last year, is among the most advanced precision bombs in the world

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DVD, DE&S' annual stakeholder event at Millbrook next month, is shaping up to be one of the highlights of the year for those involved in equipment and support for the Land Forces

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Cutting-edge technology went on display to the world at Abbey Wood as DE&S hosted a variety of equipment and specifically developed technologies for the defence sector



Picture: Babcock

## cover image

Workers at Devonport have been given reassurances that the dockyard will continue to be a centre for the overhaul and maintenance of Royal Navy submarines. *HMS Vengeance* has entered dry dock at the start of her three-and-a-half-year Long Overhaul Period (Refuel).

MAY 2012

# desider

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Logistics staff have been praised for their work in supporting the Armed Forces during a debate held in Westminster

# insiderGuide

# Bernard Gray

## Chief of Defence Materiel

**‘DE&S is continuing to deliver against its outputs and teams should be justifiably proud of progress’**



Last month, I updated you on developments on The Materiel Strategy. You may be aware that DE&S has now begun a soft market testing exercise with industry to obtain the market's view on DE&S options and explore the potential roles that the private sector might fulfill in any future model. Ministers will review the DE&S options in light of this further work and they intend to make a decision later this year.

In the meantime, the Interim Structure project continues to work with the Operating Centre Directors to set out a new structure in the summer which will enable us to meet the staff reduction targets that were set out in the SDSR while ensuring we also meet our outputs safely and professionally. The Board is considering a range of measures and working with Directors to understand the impact of these measures on output.

Alongside the significant change we are seeking to deliver, I am ever conscious that DE&S continues to deliver against its principal outputs and that teams should be justifiably proud of progress with some of our most important projects. Notable highlights from the past month, all of which are covered by stories in this month's edition, include:

- The joining of two hull sections on the *Queen Elizabeth* class carrier at BAE Systems, Clyde was subject to wide and positive media reporting over the Easter holidays. This was very welcome and I expect to see more progress on the delivery of major hull sections later this year as the first of these very impressive warships starts to take shape.
- The Fast Air Support Team has played a significant part in securing a £446 million contract award to BAE Systems that will ensure provision of engineering support to RAF Typhoon combat aircraft for the next five years at significantly reduced cost;

- The Trident missile submarine *HMS Vigilant* left Devonport after a three and a half year refit by Babcock – meeting one of DE&S' strategic milestones for the month. The boat's commanding officer has praised DE&S and Babcock for the high standard of work on the submarine;

- She was succeeded in Devonport by the fourth of the class, *HMS Vengeance*, which is now in the early stages of a similar overhaul following the announcement of a £350 million contract award to Babcock Marine by the Secretary of State;

- The first Voyager aircraft supplied under a PFI contract to provide the MOD with a considerably upgraded air tanker and transport service has flown under a limited Release to Service, while air-to-air refuelling trials continue;

- A £45 million contract awarded jointly to QinetiQ and BAE Systems which sustains the kind of expertise in maritime combat systems integration and testing that the MOD has benefited from for the past 40 years. The contracts deliver a considerable saving and provide a better service to the Royal Navy;

- Raytheon UK was awarded a £60 million contract for production of further Paveway IV guided bombs – a weapon that has proved itself on operations both in Afghanistan and during the UN Libyan intervention.

These programme milestones, important though they are, do not cover anything like the range of activity undertaken in DE&S in an average month. But they do provide a visible demonstration that against a background of continuing change and some uncertainty, you in DE&S are maintaining your focus on support for current and future operations.

# Block move

TWO OF the biggest sections of the first 65,000-tonne *Queen Elizabeth* class carrier have been joined together.

The two giant sections, making up Lower Block 04 which is the aft section of the hull, were brought together in a two-hour move at BAE Systems' Govan shipyard in Glasgow.

The section under construction is now so large, almost the full length of a football pitch, that it stretches beyond the doors of the ship build hall in which it sits.

The company used a fleet of 132 remote controlled transporters to move one of the sections weighing more than 4,000 tonnes 100 metres across specially reinforced concrete.

The section was carefully lined up with the rest of the block. Workers then began the painstaking process of aligning the units and closing the five centimetre gap in preparation for welding the block together.

Rear Admiral Steve Brunton, Director DE&S Ships Acquisition, said: "The successful move of this large part of LB04 and its alignment to the rest of the block ready to join the two parts together over the next eight weeks marks a massive step forward in the assembly of *Queen Elizabeth*.

"The visible manifestation of all the hard work to date on *Queen Elizabeth* is already impressive, so to think that she will begin to be recognisable as an aircraft carrier very quickly this year is an extremely exciting prospect."

Steven Carroll, *Queen Elizabeth* class Project Director at BAE Systems, added: "Bringing together Lower Block 04 marks the beginning of an exciting stage in the block's life. The team will now shift their focus back to outfitting of the block, including installing 12,000 pipes and 100,000 kilometres of cables, ahead of her departure to Rosyth later this year."

Housing the two main engine rooms, a medical area and accommodation, the block will weigh more than 11,000 tonnes on completion, standing more than 23 metres tall, 86 metres long and 40 metres wide.

The block, which will be transported to Rosyth in the autumn, will be the last hull section of *HMS Queen Elizabeth* to arrive and will join the other units and sections of the ship in dry dock where she is being assembled.

At Govan, work also continues on the mid section of the second ship, *HMS Prince of Wales*. Since the first steel was cut on this section last May, more than 80 units of LB03 are currently in production.

Meanwhile, workers at BAE Systems in Portsmouth are gearing up for the transit of Lower Block 05 and Lower Block 02 of *Queen Elizabeth* to Rosyth, due to begin at the end of last month.

# sees Queen Elizabeth take shape



**First carrier now reaches 11,000 tonnes as two sections are joined together in Glasgow**

## Carrier work at Portsmouth is shaping up too



Rollout: one of the rings for Lower Block 05 of *Queen Elizabeth* is rolled out towards the barge at Portsmouth

TWO RING sections of *Queen Elizabeth*'s Lower Block 05 – the aft section of the carrier's hull – emerged from BAE Systems at Portsmouth last month ahead of their journey to Rosyth.

The block, made up of two rings and weighing around 1,820 tonnes, houses switchboards, air treatment units and the vessel's steering gear, as well as some of the accommodation areas.

The two rings were fastened and secured onto a barge, called *Viking 7* measuring 300 feet by 90 feet from Stavanger in Norway, before the four-day journey along the English Channel and the east coast to Rosyth.

The sections were moved onto the barge each using two trains of self propelled module transporters – 22 axles in total giving 176 wheels per block.

Lower Block 05 will be the second hull section to arrive in Rosyth where the ships are being integrated in dry dock.

Paul Bowsher, BAE Systems' carrier project leader said: "It's a very proud moment for the team here at Portsmouth to see the sections of Lower Block 05 being moved onto the barge. The load out is the culmination of 15 months of hard work so it's a fantastic sight to see.

"We are proud to be part of the team delivering the nation's flagships and, despite seeing the blocks every day, the size and scale of the work still amazes me.

"The load out activity is the start of a very intensive period for the team as we deliver Lower Block 05 and then move our focus onto the delivery of Lower Block 02 due to depart for Rosyth in May."

## As nuclear submarine HMS Vengeance heads for her refuel in Devonport . . .

THE COMMANDING officer of *HMS Vigilant* has praised the work of DE&S and the organisation's industrial partners as his vessel left Devonport after a three-and-a-half-year nuclear refuel.

Commander Mark Lister took the *Vanguard* class submarine out of the port on 28th March to begin sea trials.

The vessel was taken in hand by Babcock in 2008 and is the third *Vanguard* submarine to undergo a Long Overhaul Period (Refuel) at Devonport.

She moved out of dry dock in November 2011 to conduct final reactor commissioning and crew training.

Contracts for the fourth and last refuel, to take place on *HMS Vengeance*, were announced as *Vigilant* departed.

Commander Lister said: "It has been a huge privilege to have worked with the dedicated and highly skilled members of the joint project team that have delivered *HMS Vigilant* back to the Royal Navy to such a high standard.

"The relationship forged between Defence Equipment and Support, Babcock Marine, Rolls-Royce and the submarine's staff, as well as the suppliers and contractors that have supported them has prospered during the natural significant pressures present during this technically complex long overhaul period and refuel.

"The submarine's crew and I are excited to be taking *HMS Vigilant* to sea for the first time in three-and-a-half-years and we are looking forward to seeing how she performs on her extensive sea trials.

"As I leave Devonport, the whole of 'team *Vigilant*' should be justifiably proud of a job well done."

*HMS Vigilant* has been refuelled using a Rolls-Royce-designed upgrade to the nuclear reactor which will power the submarine to the end of her life. The project cost more than £300 million.

The joint project team is finalising comprehensive sea trials to support delivery of the submarine to the Royal Navy next month.

# Vigilant team earns praise for a top job



Heading for the open sea: *HMS Vigilant* leaves Devonport

■ *Vengeance* guarantees Devonport's special submarine status: pages 19-21

THE ROYAL Navy's shore test facilities have been sustained by a four-year contract with QinetiQ and BAE Systems.

The new Naval Combat System Integration Support Services (NCSISS) contract, worth around £45 million, will provide shore test facilities, specialised testing and analysis equipment and deep technical expertise to approve combat systems equipment for warships before being fitted on ships.

For 40 years the shore testing facility at Portsmouth Technology Park, Portsmouth, has tested complex combat equipment for all Royal Navy warships. It is a unique and highly specialised facility that makes sure the Royal Navy has safe and capable combat

## Portsmouth to carry on Navy shore testing

equipment ahead of setting sail on operations across the world.

Peter Luff, Minister for Defence Equipment, Support and Technology said: "This is good news for the Portsmouth Technology Park, which remains a strategic national asset, and for the local economy as 250 local jobs will be sustained."

DE&S' Chief of Materiel (Fleet), Vice Admiral Andrew Matthews, added: "The facility in Portsmouth is a jewel in the MOD's crown as it provides our Royal Navy with a UK-based centre of excellence for the integration of maritime combat systems. It makes sure that

our ships have all the right equipment working seamlessly, so our sailors can trust that their equipment will work correctly, first time and every time."

The contract has been welcomed by the employees of both companies. Sarah Kenny, MD of QinetiQ's maritime business, said: "This new contract maintains Portsmouth Technology Park's position as a UK centre for complex system integration utilised widely by industry and MOD to deliver the systems that make up the Royal Navy's fighting capability.

"It is great news for the 150

people that QinetiQ employs on site and the Hampshire companies that we rely on to help deliver our services."

Mark Townley, Combat Systems Director at BAE Systems, added: "We selected this facility as a centre for the Type 45 combat system integration and have further developed it for the mission system for the *Queen Elizabeth* aircraft carriers.

"This facility is currently supporting the world class T45 destroyers as they complete their build programme and commence deployments around the globe."

## Technology is key to operational advantage

THE MOD will need to take a hard look at its processes, the way it does business and up its game in key skills areas, Defence Minister Peter Luff has said.

Mr Luff, Minister for Defence Equipment, Support and Technology, told a conference on The Manufacturing Economy that: "Defence will have to become a more intelligent and demanding customer. We will need to take a long hard look at our processes, and the way we do business and at the same time, upping our game

when it comes to having the right skills in areas like financial and project management."

The Minister told the conference about the White Paper 'National Security Through Technology'. He said: "In the world of business, technological advantage – quite properly – means making money and increasing your market share. For defence it's now crucial to our *modus operandi*, and making sure we have operational advantage over potential adversaries.

"We need to invest in technology to be able to meet an increasingly capable and diverse range of threats. A commitment to technology and open procurement also means opening up defence to providers with agility, innovation and the ability to exploit new and emerging technologies," Mr Luff said.

"That means making defence a lot more accessible to small and medium enterprises."

□ Technology Day at Abbey Wood: pages 28 and 29

# Contract gives Typhoon five years of support

A £446 MILLION contract has been placed with BAE Systems for engineering support to the RAF Typhoon fleet for the next five years.

The contract replaces a number of existing legacy contracts to form an overarching umbrella arrangement.

Work, which is part of a wider contract between NETMA (Nato Eurofighter and Tornado Management Agency) and the Eurofighter consortium, has been placed on behalf of the MOD and European partner nations.

It will sustain 600 jobs at BAE Systems sites at Warton and Samlesbury in Lancashire focused on engineering, supply and project management. It will also help drive down Typhoon support costs.

Air Commodore Hugh Donohoe, leader of DE&S' Fast Air Support Team, said: "With over half of the UK Typhoon fleet now delivered to the RAF, we are firmly into the in-service phase of the aircraft's life cycle, and have been working with international partners and industry to make sure the contractual arrangements for support are modern, fit for purpose, ensure the ability to meet operational demands, and provide value for money for the taxpayer.

"With the first two of four new contracts to replace 11 legacy contracts now signed, this is a significant step toward achieving projected savings in support costs in the coming years."

He added: "The new



## Last Tranche 1 in for upgrade

THE LAST of the RAF's Tranche 1 Typhoon aircraft has arrived at BAE Systems for upgrade, above.

The Typhoon upgrade programme brings the early Tranche 1 deliveries up to the final Block 5 standard. It has been undertaken in 5 Hangar at Warton over six years and by the end of this year 43 RAF aircraft will have been upgraded.

These modifications enhance the aircraft's multi role capability, allowing it to operate in the air-to-air and air-to-surface roles.

This enables the latest avionics capabilities to be introduced in line with the standard used during Operation Ellamy over Libya last year.

arrangements with industry will provide a solid foundation in meeting partner nation through-life support requirements and will provide an adaptable vehicle to respond to export market demands."

The contract will underpin essential day-to-day support to air force operations across four

nations (Germany, Italy, Spain and the UK).

Martin Taylor, BAE Systems' Combat Air Support Director, said: "The contract will deliver significant savings to the customer and will ensure that we have the skills, capabilities and funding in place to support Typhoon users across Europe."

## NEWSREEL

### Raytheon to do Centre work

RAYTHEON UK has been selected by the Weapons Technology Centre to assess warhead fragmentation modelling and predictive techniques across UK industry. The one-year contract will see Raytheon collaborating with the Centre and industry to help improve assessing warhead effectiveness for future Complex Weapons programmes. The Centre was established in August 2010 as a partnership between MOD and the UK Complex Weapons industry operating under a prime contract between the Defence Science and Technology Laboratory Programme Office and QinetiQ.

### Learning from Howard

HOWARD Mathers, Director Technical at DE&S, will be speaking on lessons learned from his time in the MOD at the next Learning from Experience seminar in the CFB Lecture Theatre at Abbey Wood on Friday 11th May from 11.30am to 12.30. Bookings through e-solutions events booking system.

### A400M power

EPI Europrop International has started delivery of the first production series TP400-D6 engines which will power the French Air Force's first A400M military transport aircraft into service in early 2013. Since the first engine run in 2005 the TP400 has completed 20,000 running hours.

□ A400M: page 16

## NEWSREEL

## Assessing the costs

**COSTS** of maintaining the UK's nuclear deterrent are expected to stay around five per cent of the defence budget during the current comprehensive spending review period covering 2011-12 to 2014-15 according to Minister for Defence Equipment, Support and Technology Peter Luff. Around £3 billion will be spent on the assessment phase of the programme to replace the *Vanguard* class submarines which started in February 2011 and will continue through to Main Gate approval in 2016.

## Heading west

**DEFENCE** partner Marshall SV has opened an office in Bristol at the heart of the UK defence industry in the south west. It will provide space for meetings with customers including DE&S, prime contractors and partners. "This will enable us to be closer, geographically, to customers who have facilities in the area," said Peter Callaghan, Chief Executive of parent company, Marshall Land Systems.

## Centre boost

**NINETY-EIGHT** proposals submitted to the Centre for Defence Enterprise in 2009-10, in response to competitions aligned with the Small Business Research Initiative were approved for funding to a total of £5.3 million. In 2010-11, 100 proposals were approved for funding to a total of £4.9 million, according to figures released in Parliament.

## Voyager lift-off



**First flight signals start of air transport service**

Inaugural voyage: the specially converted A330-200 aircraft takes off from Brize Norton. Each of the 14 planned aircraft will carry up to 291 passengers with associated freight or aero medical patients (up to 40 stretchers) in addition to its refuelling role. Inset: Air Marshal Sir Kevin Leeson, DE&S Chief of Materiel (Air)

THE FIRST Voyager aircraft has made its maiden flight in the air transport role under the command of an AirTanker crew.

The occasion, on 8th April, signals the start of the Future Strategic Tanker Aircraft service to the RAF.

The aircraft, a version of the Airbus Military A330 Multi Role Tanker Transport, took off from RAF Brize Norton for a training sortie around the UK to allow the AirTanker crew to familiarise themselves with the aircraft and achieve the first part of the Voyager crew training schedule.

□ DE&S' Chief of Materiel (Air), Air Marshal Sir Kevin Leeson, has described Voyager as 'a hugely capable addition to the Royal Air Force'.

He said: "This first stage of the release-to-service in the air transport role marks the beginning of its introduction into RAF service. Crew training has now started at RAF Brize Norton and flight trials in the air-to-air refuelling role continue.

"My thanks go to all who have been involved in this landmark private finance initiative, most notably those in the DE&S STAAR team, the Release to Service Authority, HQ 2 Group and our industry colleagues in Airbus Military and AirTanker."

The Voyager aircraft was delivered by Airbus Military to AirTanker at the end of last year and will provide the RAF with an advanced air-to-air refuelling, passenger transport and aero medical capability.

AirTanker plans to deliver the full capability of 14 aircraft by 2016. The nine aircraft that form the RAF core fleet will be delivered by May 2014.

Phill Blundell, Chief Executive of AirTanker, said: "The aircraft is a magnificent airframe which combines efficiency, effective tasking capability and reliability.

The programme brings together the best of the civilian aviation industry with military operational expertise and will offer an innovative and multi-functional capability to meet the demands of the 21st century."

Dave Mitchard, Managing Director of AirTanker Services which will operate the aircraft, added: "We have all been looking forward to introducing Voyager into service as a valuable asset for the MOD.

"I am proud of the team's achievements and the hard work will now continue to ensure we offer the best possible service for the RAF."

The next 12 months will see the Voyager team conduct planned procedural activities ensuring the aircraft continues through its intensive programme to be ready for future operational environments.

## Contract continues overseas troops' links with home

AROUND 16,000 British troops will benefit from the renewal of the welfare communications contract with Astrium.

The £45 million contract, known as WelComE and renewed on 1st April, will enable personnel to keep in touch with family and friends when on operational duty in Afghanistan, the Middle East and on board Royal Navy vessels.

Astrium will continue to provide communications through Paradigm Services.

Simon Kershaw, Director of the Telecom Governmental business, said: "This contract

delivers existing capability, and also includes new enhancements and better services that will offer the MOD improved capabilities and cost efficiencies at a time of budgetary pressures."

In addition to the WelComE contract, 14 FOBLINK systems, which further develop welfare communications, have been ordered.

The FOBLINK service is modular, offering greater value for money and providing users with wireless internet and telephone services in Forward Operating Bases and harsh front line locations using the Skynet 5 secure satellite constellation.

Our UK employees are proud to provide kit for Britain's armed forces. We design, manufacture and maintain fighter jets, armoured vehicles and naval vessels including the Typhoon aircraft, Scimitar light tanks and the Astute Class of submarine. But we're prouder still of the contribution and sacrifices made by our armed forces every day. Thank you.

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## NEWSREEL

Small firms  
in the money

AROUND 40 per cent of the overall contracts let by the MOD from April to September last year, the latest for which figures are available, went to small and medium sized companies. This compares with 32 per cent by the Defence Science and Technology Laboratory from April 2011 to last February, and 45 per cent by the UK Hydrographic Office in the same period. From January to December last year the Defence Support Group let 54 per cent of its contracts to SMEs.

Guard figures  
to be reduced

PROPOSED changes to civil police and guarding policy are likely to see a reduction in the MOD Police from 3,600 officers in 2009 to around 2,400 by 1st April 2016, compared to a current strength of just under 3,100. The MOD Guard Service is expected to reduce from 4,000 in 2009 to a little under 2,200 by 1st April 2015, compared to a current strength of 3,300. Changes, subject to consultation, were announced in Parliament on 27th March.

## Sub update

BABCOCK has been contracted to update software on Eddystone, the communications electronic support measures system on *Trafalgar* class submarines. The contract introduces enhanced system functionality and addresses hardware obsolescence, to improve important operational capability until the submarine goes out of service.

# DE&S readiness work breaks new ground

HMS ALBION has entered a lay-up period to prepare her for 33 months in extended readiness.

The Royal Navy amphibious assault ship was handed over to Captain Ian Shipperley, leader of DE&S' Capital Ships in-service support team, in a ceremony at Devonport on 23rd March.

Following a busy operational period involving high profile operations, *Albion* entered the lay-up period last November to prepare her for her extended readiness.

The work for the preparations period was derived by DE&S and Devonport's Superintendent Fleet Maintenance, drawing on knowledge and experience within the MOD, ship's staff and industry, in particular from Babcock.

Work included a complete de-store of the ship's contents, docking down and preparing the hull, extensive preservation of marine and weapon engineering equipment and systems, and installation of dehumidifying and remote monitoring systems.

Technologies applied during the package of work have broken new ground in ensuring sensitive high voltage (HV) systems are base-lined and preserved to prevent degradation.

The laying up of an HV ship is a first for DE&S and there is limited experience in the marine industry; *Albion* may well become 'best practice' should such a ship be laid up in the future.

Extended readiness will end in autumn 2014 with a support period to complete regeneration and allow the ship to rejoin the Fleet.



*HMS Albion* has entered a lengthy readiness period

While in readiness *Albion* will provide training for landing craft davit operations and maintenance, ensuring her sister ship *HMS Bulwark* can deliver amphibious capability.

Captain Shipperley paid tribute to the ship's company, staff at Abbey Wood and in the naval base. "This was a major project delivered on time and against a very taut budget by a committed team drawn from

MOD and industry," he said. "It has broken new ground, particularly in the area of marine engineering high voltage preservation."

"The close working relationships developed between everyone concerned has helped to make this a real success."

On current plans *HMS Albion* will return to operations in 2016.

## Industry gathers to look at the future of defence facilities

THE DEFENCE Infrastructure Organisation (DIO) has hosted more than 200 industry representatives to discuss future contracting arrangements for managing defence facilities across England and Wales.

The event at Shrivenham focused on three new regional prime contracts for facilities management which includes a Regional Prime South West involving Abbey Wood and RNAS Yeovilton.

The contracts, expected to be awarded in 2014, have an estimated combined value of up to £4.35 billion over a minimum of five years and a maximum of ten. Individual contract values range between

£500 million and £1.8 billion, depending on potential contract extensions.

The industry day provided potential bidders with an understanding of the procurement process, and enabled smaller supply chain businesses to network with those pursuing prime contracting roles.

Brigadier John Wootton, Director of Land Forces Infrastructure, said: "A modern, fit-for-purpose defence estate and supporting services are fundamental to the generation of trained and motivated forces for operations and for success once deployed. Future MOD contractors and suppliers will play a key part in this."



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AN INCINERATOR to dispose of unserviceable small arms ammunition has been delivered to the front line ahead of schedule and well under budget.

The Small Arms Ammunition Incinerator is needed for a stockpile which has built up during operations in Afghanistan.

Such ammunition normally has a six-month life at the front line, with extreme temperature changes typically found during day and night speeding up the time when it becomes less stable to use.

Ammunition is also often changed for new when replacement British units arrive to serve in theatre.

Despite careful management and storage, ammunition also degrades after being carried around in pouches, vehicles and helicopters for months with sand, dirt and water having an impact.

Disposal in theatre is cheaper than bringing it back to the UK.

Project Manager Major Nick Stanford of DE&S' Defence General Munitions team, said: "This unique Urgent Operational Requirement has been a challenge from the outset, whether complying with civilian arms controls, pollution legislation or for the world's largest cargo aircraft to fly it to Afghanistan in addition to the normal project pressures, issues and safety concerns.

"The provider, UK-based EODS Solutions, provides proven equipment with support for demilitarisation tasks around the world. The incinerator

# Team sets about disposing of ammo stockpile

offers sufficient capacity to cope with the demanding conditions that it will be operating in for the next two years."

Team leader Colonel Richard Aspray added: "This unique solution

to a challenging task will aid our redeployment, thus freeing up resources in Afghanistan and the UK, enabling their efficient use over an extremely busy period for defence."



## MAJOR CONFLICTS WORLDWID SOLDIERS IN ACTION: 530,000 ONE PARTNER FOR SECURITY S

**SECURITY OF DEPLOYED FORCES.** Wherever in the world, situations arise in which interventions inevitably have to be made and force has to be applied, all while trying to avoid collateral damage.

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Below: the new incinerator which will dispose of small arms ammunition which has completed its shelf life in Afghanistan

Left: an Antonov transport aircraft was used to take the incinerator to theatre

Left: Kenn Underwood, managing director of EOD, pictured on the left, joins Major Nick Stanford and Steve Turner, in-theatre SAAI manager, to discuss siting the small arms incinerator at Camp Bastion



## DE&S set to host on equipment safety

SPREADING GOOD safety practice is the aim of ESAS – the DE&S-sponsored Equipment Safety and Environmental Symposium – at Abbey Wood on 12th and 13th June.

ESAS will give DE&S the opportunity to spread the word about its own latest safety and environmental policy directives, both within DE&S and to industrial partners and internal customers.

It will enable internal MOD customers from the user community to raise issues related to safety and environmental aspects of DE&S equipment.

It will also enable MOD and industry to share best practice to become more aware of the latest thinking on equipment safety and environmental protection in the academic world.

A series of themed formal presentations will take place in the Central Facilities Building, interactive workshops in the SI Suites along with trade stands from participating defence safety contractors.

The theme for this year is The Challenge of Change and the event will be considering how the MOD and industry can continue to improve in the face of future sector changes.

Contributors confirmed so far include: Director Technical - Howard Mathers; Head of Safety and Environmental Protection - Rosalind Roberts; Health and Safety Executive - David Snowball; Defence Safety and Environment Agency - Daniel Applegate; Chief Environment and Safety Officer (RN) - Stuart Collier; Chief of Materiel (JE) - Pete Worrall; Chief of Materiel (L) - Lt Gen Gary Coward.

Registration is through <http://www.esas2012.co.uk/index.php/registration>

Further information from Steve Jones (DESSESEP-Comms@mod.uk).

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## Liverpool to Portsmouth – for the final time

HMS LIVERPOOL'S long Royal Navy career has come to an end.

The Type 42 destroyer was decommissioned in Portsmouth on 30th March at the end of 30 years' service and 921,700 nautical miles.

Built by Cammell Laird at Birkenhead, *HMS Liverpool* was launched in 1980 and lists the South Atlantic in 1982, the Persian Gulf during the Iraq War and work off the coast of Libya last year among her operational successes.

Her Commanding Officer, Commander Colin Williams, said: "Every ship has a life span, and it is with great pride that we make way for the new Type 45 destroyers, and the enhanced capability they bring to today's Royal Navy."

"*HMS Liverpool* has served her country and ship's companies well to the end, and all should be rightly proud to have served in her. We brought her home as a ship at the top of her game, a fitting farewell to 30 years of dedicated service."



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## Sorting out aircraft issues

BAE SYSTEMS has secured a £5.7 million contract from Lockheed Martin to provide a TrilogiView software enterprise licence agreement for the F-35 Lightning II Joint Strike Fighter programme. BAE Systems delivers



major units and systems for the F-35 to Lockheed Martin Aeronautics in the US and keeps the aircraft maintained.

When a maintenance team has logged an issue into the maintenance management system, TrilogiView links to the correct procedure needed to resolve it.

TrilogiView hosts the electronic flight and maintenance manuals without which pilots could not fly and maintenance personnel could not work on the F-35.



Production of F-35 aft fuselages will be increased after the latest extension work at Samlesbury

## Facility set to increase F-35 production

PRODUCTION ON the F-35 programme has passed another milestone with BAE Systems opening the latest phase of the stealth fighter jet manufacturing facility at Samlesbury in Lancashire.

As part of the company's £150 million investment in the F-35 programme at Samlesbury, the facility when completed will enable workers to produce one F-35 aft fuselage set every day, compared to the current rate of one set per week.

The extension is the second part of a three-phase expansion to the facility as the programme gears up for peak rate production by 2016.

Chris Allam, Senior Vice President on the F-35 programme, said: "F-35 is an important

programme for BAE Systems and the capabilities that this facility provides are equal to anywhere in the world.

"We're using state-of-the-art machines and manufacturing techniques to ensure we can meet the rates of production that the F-35 programme demands.

"It's fair to say that this facility is proof that we're standing up to that challenge and we're keeping ourselves at the forefront of UK manufacturing."

BAE Systems is responsible for design and delivery of the aft fuselage and empennage for each of the three F-35 variants. It also plays a key role in other areas including vehicle and mission systems, life support system and prognostics health management integration.

# New postcodes to deliver home comforts for Forces overseas

SERVICE PERSONNEL who are stationed overseas will soon enjoy the same access to online goods and services as they do at home thanks to the introduction of new online postcodes.

The MOD, British Forces Post Office (BFPO – part of DE&S) and Royal Mail are introducing UK-style postcodes for 100,000 personnel and their families serving in places such as Germany, Cyprus and the Falkland Islands.

The new postcodes will help by improving access to products and services from

the internet, as proposed in the Armed Forces Covenant. It will also help personnel maintain a UK credit history recognised by financial service providers.

BFPO numbers are not compatible with many online ordering systems, including credit agencies.

Under the changes personnel will be able to order everyday products online and eventually have better access to mortgages and credit cards.

UK businesses will be able to make their goods and services available to British Forces around the world, simply by updating their

online ordering systems.

Minister for Defence, Personnel, Welfare and Veterans Andrew Robathan said: "This is good news for our Forces and their families overseas, who should enjoy the same access to goods and services as UK residents.

"One of the aims of the Armed Forces Covenant introduced by this Government was to minimise the impact of military life so this is another great step forward to make service life as easy as possible."

BFPO Head of Policy and Plans, Lieutenant Colonel Ian Stark, said: "For our personnel

stationed abroad, this will make a big difference. BFPO and Royal Mail have created a database that opens up access to internet services and the ability to carry out internet transactions, whether it is online shopping, registering your car or applying for a mortgage or credit card."

BFPO numbers take the form BFPO 123. Each BFPO number will now be linked with a unique UK-style (but non-geographic) postcode solely for use online.

BFPO numbers as the location descriptor for mail are to be retained.

HIGH ALTITUDE performance tests have seen A400M, the next generation airlifter for the RAF, visit La Paz in Bolivia, high up in the South American mountains.

The aircraft completed a number of flights from the airport at La Paz which is more than 13,000ft above sea level.

Operations from high-altitude airports are challenging because of the low air density.

Tests took place shortly after the aircraft visited airshows in Chile and Peru during its first deployment to Latin America.

Airbus Head of Flight and

Integration Tests, Fernando Alonso said: "High altitude testing is a critical part of the overall flight test programme which will ensure that we deliver on our performance guarantees to customers. I am pleased to say that the early results from these trials have been very positive."



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# Terminal repair shows the value of partnerships

REPAIR OF Link 16 Data Link Terminals at RAF Waddington has passed from DE&S to the private sector.

DE&S' Tactical Data Links team has signed a contract with Data Links Solutions – a joint venture between BAE Systems and Rockwell Collins – to support 200 Link 16 terminals which will save around £1.5 million a year.

Although now outsourced, the work will continue to be carried out at the team's RAF Waddington second-line maintenance facility. Three civilian members of the DE&S team have been transferred under TUPE terms to the company, and four RAF team members will be replaced with company staff before the end of the year.

"This is a successful example of partnering" said Tactical Data Link team leader Mike Roach. "For the staff, the transfer was relatively painless, since they will all stay in the same jobs, which are guaranteed by their new employers, and will remain embedded within the team's Link 16 Support Authority at RAF Waddington."

The £18 million five-year contract provides an 85 per cent availability for terminals used on a range of air and naval platforms, including the E-3D Sentry, Type 42 Destroyer, Sea King Mk7, Sentinel R1, and Tranche 1 Typhoon.

The number of terminals covered by the contract is set to double in the next few years with Tranche 2 and 3 Typhoon and the Tornado GR4.

DE&S' Air Command and Control Systems and Tactical Data Links teams have merged to form Situational Awareness Command and Control. Merger makes the best use of resources in the current economic climate.

The team is based at Abbey Wood with outstations at RAF Waddington and Portsmouth.

# PM backs apprentices to boost UK skills base

PRIME MINISTER David Cameron has highlighted the importance of apprenticeships as a career choice and to sustain and develop UK skills base.

Mr Cameron was visiting the Typhoon final assembly facility at BAE Systems Warton on 20th April where he saw the work of apprentices supporting production of the fast-jet fighter.

The Prime Minister was visiting the north of England to highlight the importance of apprenticeships as a career-choice and as a means of sustaining and developing the UK skills base.

BAE Systems has one of the largest apprentice programmes in the UK, with around 1,000 apprentices in training at any time on three-year, high skill-based programmes.

Mr Cameron said: "I want young people to have the chance to learn a skill and that is why the government has put £1.5 billion extra into the apprentices system and we want to see that grow. This is a great example here of what we would like."

Ian King, Chief Executive of BAE Systems added: "BAE Systems believes that apprentices are vital to maintain the skill base of the company; they bring with them fresh thinking that keeps us at the forefront of industry."

"We are delighted that we have had the opportunity to showcase to the Prime Minister the part apprentices play in building aircraft at the UK's leading military aircraft facility."

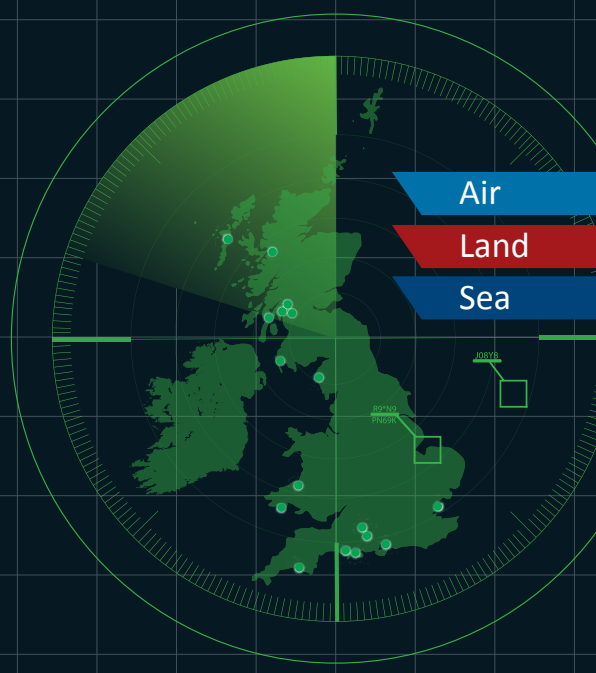
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# The final refuel

**DE&S and industry team takes over Vengeance for the last Vanguard class long overhaul and refuel**





Pictures: Andrew Linnett

The special status of Devonport as the only place to handle refuel and deep maintenance of Royal Navy submarines has guaranteed the dockyard's future for years.

Defence Secretary Philip Hammond delivered the positive message on 26th March as he secured the future of 2,000 jobs with the signing of a £350 million deal to refit and refuel *HMS Vengeance*.

Work will sustain more than 1,000 jobs at Babcock Marine in Devonport and a further 300 at other companies in Plymouth. Such is the scale of the refit that another 700 jobs in the industrial supply chain across the UK will also be sustained.

*HMS Vengeance* is one of the UK's four *Vanguard* class submarines, designed to carry the UK's Trident nuclear missiles and the last to undergo such a refit.

Mr Hammond praised the Royal Navy, DE&S and Babcock's workforce saying they were uniquely skilled. He thanked them personally for their work to date on previous submarines.

The upgrade, known as a Long Overhaul Period (Refuel), is expected to take three and a half years – clocking up 2.5 million staff hours. It will involve a complete overhaul of equipment on the submarine as well as installation of improved missile launch equipment and upgraded computer systems.

A new reactor core – the energy source that powers the 15,000 tonne vessel – will also be fitted meaning that

# Devonport kicks off

*HMS Vengeance* will be able to operate until the end of her remaining operational life without having to refuel again.

Mr Hammond said: "Devonport is at the heart of maintaining and supporting the Royal Navy and I am pleased that such a large number of jobs will be protected."

"Our White Paper published earlier this year said we would support key sovereign capabilities in British companies that help us to protect our national security and this contract with Babcock is evidence of that commitment."

*HMS Vengeance* is the last of the four ballistic missile submarines to undergo a complete overhaul and refuel. The Royal Navy's newer submarines are designed so that they never need to be refuelled. Devonport will however continue to support the current fleet of boats to ensure they operate safely and effectively, along with the *Astute* class when they come into service and any successor to the *Vanguard* class in the decades beyond 2030.

Rear Admiral Simon Lister, DE&S' Director of Submarines, echoed Mr Hammond's words.

"I am very pleased this contract has been placed; it is proof positive that we will continue to refit submarines in Devonport," he said.

"Continuous at sea deterrent is the name of the game in ballistic missile submarines and it is important that we keep our submarines up to scratch and well maintained.

"There is no alternative to refitting

our submarines but the placement of a contract where the price has been agreed, and the efficiency arrangements have been agreed and the scope has been agreed, that's a milestone on the way."

The contracting agreement between Babcock and DE&S on *Vengeance* reflects successful arrangements established on submarine *HMS Vigilant*, which has only just left Devonport after her own refuel. The focus is on joint working and fully embedded partnering, greater transparency of information including financial data, cost-reduction while improving safety and quality standards, and incentives to achieve or better the agreed schedule.

Babcock Managing Director Submarines, Mike Homer, said: "I cannot over-emphasise the benefits achieved via the joint partnering ethos, that places delivering to meet the customer's needs as the utmost priority for all parties involved – this includes the customer's own team who have a vital role in soliciting inputs and decisions from the wider MOD, Royal Navy and stakeholder community – and for all parties to proactively engage on finding resolutions for complex technical issues.

"The joint team is already focused on making this contract a success. Project Manager Jonathan Benzie and the MOD's Project Contract Manager Commander Ian Bartlett have the full backing of the MOD and Babcock teams to support them in their objectives."

Contract is evidence of commitment to UK companies, says Defence Secretary Philip Hammond



# Vengeance overhaul

Stocks of the RAF's 'weapon of choice' are to be replenished in a contract which will sustain hundreds of UK jobs.

Paveway IV, which proved highly effective during operations over Libya last year, is among the most advanced precision bombs in the world and considered the backbone of the RAF's bombing capability.

The contract has been awarded to Raytheon UK and will sustain 450 jobs in advanced weapons manufacturing at its plants in Glenrothes, Scotland and Harlow, Essex. Glenrothes will be responsible for the weapon's guidance control and for final integration of the complete guidance unit.

Thales at Basingstoke will be the other major UK-based sub-system supplier, designing and building the hard target fuze.

Further work will be sustained at subcontractors Portsmouth Aviation, and EDO/MBM Technologies in Brighton.

Delivery schedule is around seven months.

Paveway IV is also being used on Tornado jets in Afghanistan. It is fitted with Global Positioning System (GPS) technology and laser guidance systems which mean that the precision delivery of the capability is unaffected by clouds or smoke screens, giving the UK the capability to conduct 24-hour attacks against a wide range of targets.

The weapon has a UK-developed fail-safe fuze mechanism meaning the bomb will only detonate once it has reached its intended target.

Paveway's future: plans are in hand to fit Paveway IV to Typhoon, here pictured with a fit of Paveway II



# Sophisticated and proven – Paveway still the backbone of bombing capability

Minister for Defence Equipment, Support and Technology, Peter Luff, said: "The Paveway IV bomb has been proven in combat in Afghanistan, where it continues to equip RAF Tornados, and in operations in support of the United Nations over Libya. It is a highly sophisticated weapon and this contract will both boost the MOD's weapon stocks and support the employment of hundreds of skilled staff at plants across the UK who are working on this project.

"As we progressively stabilise the defence budget, we are increasingly able to commit to equipment projects which help to safeguard our national security."

Raytheon has been praised by DE&S for its help in supporting UK operations.

"Raytheon UK has provided flexible and responsive support to Paveway operations over a considerable period; in particular, their outstanding efforts were key to the RAF success in the recent Libyan campaign where the Paveway series of weapons were used extensively," said Wing Commander Clive Roads of DE&S' International Guns, Missiles and Rockets' Freefall Weapons team.

"We are extremely pleased to work with a company which understands the operational imperative, placing this first in their support to

our Forces. Raytheon UK have been able to react very quickly to the need to replenish our stocks of the high precision, all-weather Paveway IV weapon system to maintain our ability to react at short notice to emerging threats.

"The weapon has now been extensively used in all types of employment roles and has proved to exceed all expectations for reliability, accuracy and its ability to limit collateral damage through its sophisticated and integrated guidance, and fusing systems."

Bob Delorge, chief executive of Raytheon UK, added: "The Paveway IV contract sustains highly skilled jobs in the UK's advanced manufacturing arena and is one of the UK's leading examples of technology transfer success. A pivotal element of the RAF's air-to-surface target engagement capability, Paveway IV enhances the nation's military capability and has been the precision-guided bomb

of choice for the Royal Air Force since 2008."

Raytheon continues to pursue a number of export opportunities for Paveway IV, particularly where Typhoon and Tornado are deployed and the weapon is already integrated. Raytheon is also under contract to integrate Paveway IV for the UK onto the Joint Strike Fighter aircraft.

Assistant Chief of the Air Staff, Air Vice-Marshal Baz North, said: "Paveway munitions have long been a success story for the Royal Air Force in terms of their precision bombing capability. The ability to operate in any weather means that we are able to support operations 24/7; Paveway IV weapons are a real asset to the Royal Air Force and to defence as a whole."

Paveway IV was first introduced to operations in Afghanistan in 2008 and plans are in hand to fit it to the RAF's Typhoon combat aircraft next year.



Ground crew complete checks on an RAF Tornado GR4 at Gioia Del Colle, Italy. The aircraft is armed with Paveway bombs and Brimstone missiles

## Paveway

Paveway IV is an advanced and highly accurate weapon that provides the RAF's strike force with a state-of-the-art precision guided bombing capability. Manufactured by Raytheon Systems UK, Paveway IV entered service in November 2008.

Equipped with the latest inertial navigation and Global Positioning System technology and a 500lb weapon, Paveway IV provides a low-cost, all-weather, 24-hour precision bombing capability able to defeat the majority of general purpose targets.

The weapon is cockpit-programmable and

allows the aircrew to select weapon impact angle, attack direction and fuzing mode to detonate in airburst, impact or post-impact delay modes. The fuze minimises collateral damage through the ability to detonate the weapon when buried or partially buried, and is fitted with a 'late-arm' safety functionality that will not allow an off-course munition to arm. The warhead is also designed to meet the latest requirements of Nato Insensitive Munition safety policy.

The increased accuracy of the system allows for a warhead half the size of the earlier Paveway weapons. The lighter Paveway IV provides greater flexibility giving the

potential for a single aircraft to carry more weapons and so strike multiple targets in a single pass.

Other improvements over older weapons include less drag, greater accuracy, higher resistance to GPS jamming, better supportability, zero maintenance, lower cost and improved safety signatures.

The weapon went straight onto an operational footing after its introduction into service being carried by Harrier GR9 in Afghanistan. It was later integrated onto Tornado GR4 with outstanding success on missions in Afghanistan and Libya.

# Highlighting DE&S success

**DVD is back on the DE&S calendar and this year offers a chance to capture and share unique knowledge and skills in the land environment, says Major-General Carew Wilks, DE&S' Director Land Equipment**

**'D**VD2012 is shaping up to be one of the highlights of the year for those of us involved in equipment and support for the UK's Land Forces.

Bringing together the acquisition community with military personnel and industry, the event will take place on 20-21 June at Millbrook Proving Ground in Bedfordshire and will include informal discussions, briefings and demonstrations.

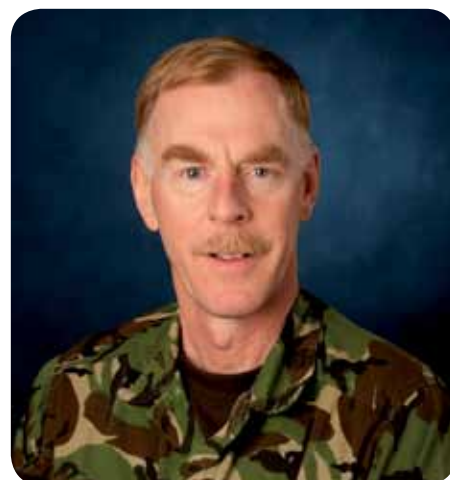
As well as showcasing how we are supporting operations in Afghanistan, DVD2012 – Defence Vehicle Dynamics is the full title – will particularly recognise the growing benefits of a systems approach in the land environment, with the main theme being systems integration and the development of a Land Open Systems Architecture (LOSA).

LOSA seeks to develop and encourage systems integration and interoperability

so we can have coherent military units for peace time training and for operations, now and into the future.

It may sound dry, but systems engineering and integration are, put simply, the basis for future platform success. Military units such as an infantry platoon or a combat logistic patrol consists of three basic platforms: soldiers, vehicles and headquarters or bases. LOSA's development will encourage systems included on these platforms to be multi-role and compatible with those from different companies – making our equipment more efficient, in terms of cost and usability.

To enable this, MOD is producing a generic architecture for each platform. These are open standards which standardise the interfaces to the infrastructure, power and data and, in the case of headquarters or bases, water, waste and fuel. They will be available to



anyone wishing to build a sub-system that will connect to the infrastructure. This means that sub-systems can be quickly and easily added, changed or updated as needed.

DVD2012 provides an opportunity to capture and share the unique knowledge and skills in this area of work through demonstration of varying capabilities and how they fit together. Practical demonstrations by exhibitors will bring this subject to life and will build on the work of soldier, vehicle and base architectures. A mock Forward Operating Base will be displayed, offering a good example of where



systems like toilets, kitchens, accommodation provided by different manufacturers can link to the power, data, water, waste and fuel infrastructure through the use of open standards. There will also be a representational operations room where we can bring together and display a wide variety of data from across the exhibition. Visitors will be able to see what the various participant systems are doing, how they are performing and we hope this will include imagery and streaming video.

Such exhibitions will allow us to highlight the challenges we face in today's world. Our platforms and systems need to be able to cope with these – or be easily adapted to cope with them. To take Afghanistan as an example – a single road trip of just a few miles could involve a vehicle using roads, wadis and other difficult terrain, all of which need to be taken account of in platform and system development. In parallel to this, we need to increase the use of communication and situational awareness across the battlefield. I hope DVD2012 will challenge and encourage all stakeholders to meet the higher demands that an open systems approach brings.

DVD is a well-established opportunity to bring together MOD and industry to focus on equipment capabilities in the land sector. It's an excellent forum to exchange ideas, review new technologies and promote innovation in defence and industry. The scale of DVD2012 highlights the huge volume of manufacturers that exist to support our platforms in service. It will showcase a cross-section of this industrial capability and allow us to highlight the success that the MOD has achieved in recent years in taking the best on offer into operational deployment.'



Millbrook in Bedfordshire, the home of DVD, has provided testing facilities for a range of vehicles including Jackal, far left, Foxhound, below, and Warthog, above



# Storage for the battlefield



Peli Area Lighting systems are innovative rechargeable floodlights designed to be portable, accessing and illuminating areas where there is no mains power. They can be easily carried and rapidly deployed.

Eliminating the need for fuel or cumbersome expensive generators, these rechargeable systems are silent running and are ideal for urgent operational requirements. The energy-efficient LEDs offer a considerable saving over the running costs of halogen lights. The 9430 area light is also available as a spot light and as an Infrared version.



Peli's watertight, crushproof and dustproof Protector case range is a cost-effective packaging and storage system. Peli cases are o-ring sealed against sand, dust and moisture ingress – reducing the chance of rust and corrosion.

Peli cases are used by Armed Forces across the world to safely transport

communications, IT and medical equipment, spare parts, photographic gear, and weapons. Produced in black, olive, drab green and desert tan for specialist military use, their rugged dependability makes them ideal for the most challenging and hostile conditions throughout the world.

For a number of years the Royal Navy's Divers Signal flares were contained and transported in metal ammunition boxes which corroded due to the seawater spray. Consequently, the original containers were not watertight resulting in

the contents becoming wet and having to be discarded. Having identified this problem, the



MOD considered Peli Protector Cases as an alternative. Using the Peli 1430 watertight and corrosion proof case solved these problems. This eliminated the wastage of flares, providing a more economical solution.

Similarly, a Peli case to hold the General Purpose Machine Gun instead of the traditional wooden box has dramatically reduced weight and transportation costs. The Peli case has been drop-tested and is sand, dust and waterproof.

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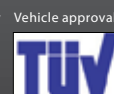
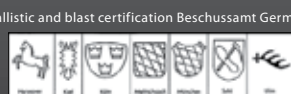


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# Defence without science is no defence

**Technological innovation will be the backbone of future defence equipment**

Cutting-edge technology has gone on display to the world as concepts for the future of defence equipment were demonstrated to the media last month.

Abbey Wood hosted a demonstration of a variety of equipment and specifically developed technologies for the defence sector.

The event, organised by the Technology Delivery team at DE&S, was attended by Minister for Defence Equipment, Support and Technology,

Peter Luff, who spent the morning speaking with the exhibitors and DE&S staff.

Mr Luff was shown a wide range of equipment and various technologies, including a holographic eye display mounted onto a pilot's helmet and providing constant information from the aircraft's instrument panel.

He also saw a compact thermal imager for dismounted infantry, which clips onto existing in-service image intensifiers fusing both thermal and the

near infra-red images, increasing night vision capability in zero light conditions; and a portable, lightweight solar thermal panel, which unlike conventional solar panels doesn't contain any glass and is therefore rugged enough to be driven over by a Land Rover!

Rob Eason, Head of Technology Delivery at DE&S, said: "This event clearly demonstrates that you can't have good defence without leading-edge science and technology. The technologies on display offer opportunities to enhance fighting capability and also to reduce the cost of defence equipment and support."

Mr Luff had spoken at the Defence Science and Technology Laboratory's (Dstl) Centre for Defence Enterprise (CDE) showcase in London only a couple of days before, where he was impressed with the innovation and prototypes on display from small and medium-sized enterprises (SMEs). At this event he announced that CDE and DE&S would each be focusing more on supporting SME engagement.

Mr Eason added: "Visiting the CDE event earlier in the week gave the Minister the opportunity to see the links between new and emerging technologies and how they can be developed. By working together with Dstl and our industry partners, the best of these technologies can soon become a reality and ultimately out to the front line."

Innovations at the CDE event included:

- An 'ex-fix' bike which is being used by injured soldiers at Headley Court – Frazer-Nash developed the customisable bike to support patients' changing needs throughout the rehabilitation process.

- An imagery-based system to locate hostile forces from the air – 2d3 Sensing has had four CDE contracts totalling £240,000 and has been combining conventional GPS with a new vision-based tracking system.

- E-textiles which allow electrical power and data to pass through material – Surrey-based Intelligent Textiles, which is developing the 'electrical' fabric, holds a Guinness World Record accolade for the 'most advanced soldier system uniform.'

Mr Luff said: "It is essential that small and medium-sized enterprises have

Spreading the word:  
Peter Luff at Abbey Wood

Pictures: Andrew Linnett



Testing out the future:  
Peter Luff on his visit to  
the Centre for Defence  
Enterprise, right, and to  
Abbey Wood, far right  
and below



their own platform within the defence industry. Championing these firms requires us actively to encourage and drive greater pull through of innovative ideas into applications and contracts.

“The Centre for Defence Enterprise will mentor smaller companies, guiding and helping them to maximise opportunities for exploitation on the international stage. The Centre will be a promoter, giving these firms the opportunity to present their innovations to leading defence and other suppliers and users.”

He also announced an additional £2 million funding for SMEs working on defence research. The funding, from the Department of Business, Skills and Innovation’s Small Business Research Initiative, will help further support SMEs to develop their ideas.

The role of CDE is set to grow as outlined in the recent Government White Paper – National Security Through Technology. This includes its novel marketplace scheme to provide dedicated support to mentor and promote the best projects from SMEs to help them grow and work with the main defence suppliers, MOD and other government departments. The first marketplace will be held on 1 November.

Head of CDE Jonathan Byrne said: “We reach out to the widest range of

possible innovators, provide funding to prove the value of innovative concepts, and now, through our planned marketplace events, champion the most successful outputs across both MOD and the established defence industry.”

CDE was established in 2008 to overcome traditional barriers to innovation within the defence sector and encourage the rapid delivery of cutting edge research and development in support of frontline operations. Since then it has provided funding of more than £23.5 million, 43 per cent of which has gone to SMEs.

The Centre for Defence Enterprise has now placed its 500th contract to Itsus. This small Welsh company will receive £104,000 to look at improving existing network systems for military operations. Bandwidth is a scarce and valuable commodity on the front line. The aim of this project is to provide an enhanced tactical advantage, improved incident response and significantly cheaper operating costs.

The CDE runs open and themed calls on key sectors, as well as seminars and workshops. It also holds regular surgeries – ‘one to ones’ – where individuals and companies can get personalised guidance on what the MOD is looking for, and practical help on how to pitch an idea to DE&S.



## Dragon joins the Fleet as Dauntless sets sail



Left: the ship's company of *HMS Dragon* parade as their ship is formally commissioned while, main picture, *HMS Dauntless* departs on her first deployment

**HMS DRAGON** – the fourth of the Royal Navy's new Type 45 destroyers – has been formally commissioned into the Fleet.

Hundreds of guests including families of the 190 ship's company attended a colourful 'Christening' ceremony on 20th April at Portsmouth which marks the ship's transition into front-line service.

A few days earlier *HMS Dauntless*, the second Type 45, left the south coast port on her first deployment to the South Atlantic.

Reflecting *HMS Dragon*'s strong Welsh connections (the ship is affiliated to the city of Cardiff), among the principal guests was Secretary of State for Wales Cheryl Gillan.

## Future armour put to the test

INDUSTRY HAS been handed the chance to put its armour systems of the future to the test.

Scientists at the MOD's Defence Science and Technology Laboratory (Dstl) in Wiltshire are used to testing armour materials and systems in rigorously controlled ways as part of the development and acceptance of armour for UK Armed Forces.

Such testing is often difficult for industrial small and medium-sized enterprises (SMEs) to undertake.

As part of its quest to find the best armour for UK Forces, Dstl's Armour and Protection Science and Technology Centre (A&P STC) is providing access to test facilities for SMEs who have developed armour materials or systems but who are having difficulties in putting them through their paces.

The first trials were well attended. The A&P STC hopes that the trial series will lead to further investment in the SMEs' products, ultimately providing UK personnel with improved protection.

## MPs take a look at Abbey Wood



MEMBERS OF the House of Commons Defence Committee, right, were hosted by Chief of Defence Materiel Bernard Gray during their visit to Abbey Wood on 20th April. As well as being briefed on the latest position on the Materiel Strategy, the Submarine Enterprise Performance Programme, protected mobility and logistic support to operations, members had the chance to look at Foxhound, the next generation light protected patrol vehicle.



## An Afghan college styled on Sandhurst

BRITAIN AND Afghanistan will continue their defence relationship beyond the end of combat operations in 2014 with the signing in Kabul of a Statement of Intent by Defence Secretary Philip Hammond and his Afghan counterpart.

Included will be a British-led officer academy for the Afghan National Army modelled on the Royal Military Academy, Sandhurst. The UK will provide approximately 75 per cent of the mentoring staff at the academy planned for Kabul.

# Research gives a boost to virtual airspace training

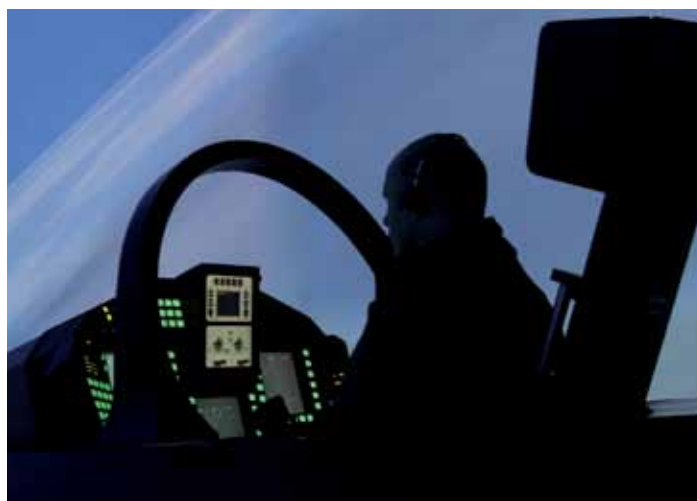
THE DEFENCE Science and Technology Laboratory (Dstl) has developed a new virtual training concept that will enable the MOD to train Armed Forces to combat-ready proficiency.

It will reduce the cost and environmental impact of using valuable equipment, which would otherwise be deployed on military operations.

Over the last 12 years, a Dstl team has been developing a series of war-gaming simulations for MOD training needs. This work has evolved into the Defence Operational Training Capability – Air (DOTC(A)) research programme.

Ebb Smith, from Dstl, said: “The aim of DOTC(A) is to provide the air element of a pan-defence training capability for MOD by developing a simulation and synthetic training environment, which is efficient and cost-effective.”

Exercises have been held using live and virtual aircraft – the virtual aircraft flown from cockpit trainers at the Air Battlespace Training Centre at



Wargaming: Dstl has been developing a series of simulations for training needs

RAF Waddington.

With initial trials completed and user buy-in secured, future work in this area will see virtual air assets from the Training Centre plugging into live exercises in other areas such as land and maritime.

## Stick to the info golden rules

STAFF ARE being reminded about the important role of information management in day-to-day business during the current DE&S change programme.

The DE&S Information Management Policy Statement has recently been published together with the DE&S Golden Rules of Information Management to remind staff of key principles.

These two documents are designed to be quick guides and supplement the detailed JSP 747 policy and protocols.

All DE&S staff are asked to familiarise themselves with the Policy Statement and comply with the Golden Rules where possible.

Both documents are available on the Defence Intranet via the DE&S CIO home page at Defence Intranet\DE&S\DE&S CIO.

For more detail on JSP 747 refer to MOD CIO Information Portal at Defence Intranet\Quick Links\Information Portal.

DE&S CIO can help with TLB information matters and advise on the application of MOD IM protocols. Contact 030677 02514 or email DES CIO-Front Door (multiuser).

## More medical capability – the hunt is on

THE CENTRE for Defence Enterprise is looking for ways to provide the best medical capability to the front line.

It wants proposals from industry, academia and innovators on novel approaches to military needs and translation of civilian medical systems into the military.

Surgeon General, Surgeon Vice Admiral Philip Raffaelli, said: “Defence Medical Services are recognised as delivering exemplary trauma care.

“The Centre’s call provides an opportunity for further innovations to help care for our wounded and be translated into caring for many thousands of people who require treatment for injuries each year in the UK.”

Proposals closes at noon on 31st May; all proposals via the CDE Portal at [www.science.mod.uk](http://www.science.mod.uk)

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## Advertisement



## Beyond the military

### How can industry help to address the rising number of unemployed ex-service personnel?

With unemployment rates currently at a 16-year high and the recent announcements of as many as 5,000 redundancies across the military, private sector organisations are recognising that military personnel have skill sets that lend themselves well to the specific tasks and demands of a business environment.

Perhaps most valuable, is that ex-military personnel have a working knowledge of the environments and estates that companies working alongside the MOD operate within.

Partnering with organisations such as the Defence Recovery Capability's Employment and Opportunities Team to offer work placements and other opportunities to service personnel is a move that will not only help tackle the issue of rising ex-military unemployment figures but also bring positive change to a company's operations.



[www.interserve.com](http://www.interserve.com)

Between 31st March 2008 and 31st March 2012, the operating costs of Defence Storage and Distribution Agency and its Defence Equipment and Support units fell from £285 million to £231 million a year, a reduction of nearly 20 per cent, nearly 26 per cent in real terms.

Cost of transporting MOD equipment has fallen by 21 per cent over the same five-year period or 29 per cent in real terms.

Average cost per transaction has fallen from £103 for the financial year ending 31st March 2008 to £79 per transaction in the year ending 31st March 2012, an increase in efficiency of 23 per cent.

Manpower numbers have reduced by more than 2,100 posts and the service to the customer has significantly improved. The average customer wait time has fallen from about 49 days to four days.



## DE&S support chain work earns Minister's praise

DE&S LOGISTICS staff have been praised for their work in supporting the Armed Forces, during a debate in Westminster.

Operating costs have been reduced and reductions in the levels of the MOD's stock inventory are underway.

"It is the people who work at Bicester, Donnington and other sites who make logistics operations succeed," said Peter Luff, Minister for Defence Equipment, Support and Technology on 19th April.

"The efficiencies and improvements that have been implemented at those sites are testimony to the quality of the people we employ, and I am grateful to them for what they do. I have met many of them and know they are focused on providing the best support to our service personnel deployed on operations.

"They are rightly proud of what they have achieved, and they continue to achieve a great deal.

"We are proud of the spares and equipment availability in operational theatres such as Afghanistan, as it ensures that

commanders are not constrained in conducting missions.

"The same could be said for the manner in which we supported Operation Ellamy in Libya, which was another success for a logistics operation."

But Mr Luff added that the £29 billion stock holding was far

The closure of Bicester's A Site has been achieved on time.

Twelve months ago its closure was earmarked as a priority in the Stock Transition Programme.

The efforts of Logistics Commodities and Services, Project Hercules, team inventory owners, equipment capability sponsors and Front Line Commands saw the deadline met on 31st March.

In the last two years the programme and Project Hercules have removed nearly £2 billion of inventory. Challenging targets have been set to deliver further reductions over the next three years.

too high, which DE&S' Logistics Commodities and Services (LCS) was looking to reduce. "Too much inventory is stored for too long and at too great a cost

to the taxpayer," he said. "LCS is developing a transformation project, which aims to consider how we can improve further our inventory management and stock control, rationalise current stock holdings – we are trying to thin them down, rather than fatten them up – and improve and rationalise storage infrastructure. That will include releasing surplus for disposal.

"The project will also seek to improve commodity procurement and logistic processes, and optimise the size of the LCS organisation itself."

Mr Luff pointed to the MJDI (Management of the Joint Deployed Inventory) system which will enable the whole inventory in service overseas to be seen on one system.

"It will encourage better use of stock, which in turn will lead to reduced repeat demands, lower stock levels and saved costs in storage and transport, all generating improved operational performance," he said.

For the full text of Mr Luff's speech see <http://www.publications.parliament.uk/pa/cm201212/cmhansrd/cm120418/halltext/120418h0002.htm>



## Falcon – broadband for the battlefield

THE ARMY and Royal Air Force have started training on a new portable broadband-based communications system which will revolutionise the way they access information.

Falcon allows secure transmission of voice, data and video traffic between military personnel – dedicated internet-based broadband for the battlefield.

Once training is completed operators will be fully equipped for the system's field trials later this year.

Under the leadership of a team from BAE Systems in Christchurch, the training is delivered by Babcock and supported by DE&S' Corsham-based Networks team.

Specially equipped sites have been set up at the Defence College of Communication Information Systems in Blandford, Dorset and one at 90 Signals Unit at RAF Leeming in Yorkshire.

Training uses a mixture of task-based and technology-based training activities and course lengths vary from three to 30 days.

Taught in a variety of environments from specially-configured classrooms, to vehicle hangars, the majority of the training uses the actual Falcon equipment that personnel will use on the front line once the system enters service.

The system is versatile and can be deployed to where it is needed in containers on vehicles, in containers on their own, and in a palletised system.

Falcon training will see Army and RAF personnel ready for the latest 21st century communications system to revolutionise information access on the battlefield



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## How Land will increase flexibility

MAJOR-GENERAL Carew Wilks, DE&S' Director Land Equipment, welcomed industry to Abbey Wood to discuss the future of soldier system, base and vehicle acquisition.

A preview of the Land Open Systems Architecture (LOSA) was presented to the 60 or so companies as the framework in which the land domain intends to increase operational, technical and commercial flexibility.

DE&S' Simon Masley, managing the development of LOSA, said: "LOSA incorporates the three basic platforms, soldiers, vehicles and bases, ensuring that MOD owned, industry agreed, open standards exist to enable integration of the platforms and interoperability between them."

Hugh Bellars, Land Equipment Principal Engineer, introduced the developing governance arrangements. Mr Bellars, who will lead LOSA implementation on behalf of Chief of Materiel (Land) and Director Land Equipment, said that LOSA is 'going to change the way that we do business'.

LOSA is the key theme of DVD2012 – 20th and 21st June at Millbrook – where implementation will be formally launched.

This year will also see a pre-DVD conference on Open Systems in the Land Domain. The conference in Milton Keynes on 19th June hopes to build on international interest developing around LOSA and components Generic Vehicle, Base and Soldier Defence Standards.



Abbey Wood hosts industry with a presentation on Land Open Systems Architecture, a key theme of next month's DE&S-led DVD event at Millbrook in Bedfordshire

# Review teams put safety under the microscope

COMPANIES AND organisations who prioritise submarine safety have renewed their support for objective assessment of their safety culture.

The Submarine Enterprise Peer Review encourages people to consider safety as their overriding priority.

Safety involves submariners, people involved in production and in-service support of the vessel, its systems and weapons, and the public where nuclear sub-systems are transported or handled.

The Submarine Enterprise – DE&S Submarines, Royal Navy, BAE Systems, Rolls-Royce, Atomic Weapons Establishment and Babcock – embarked on the Peer Review in 2009 similar to one developed by the World Association of Nuclear Operators.

During its first cycle, which ended last summer, site safety was assessed by trained peer reviewers from across the Enterprise. Improvements were made where needed.

The second cycle began at the end of last year with a new approach seeing reviewers involved in pre-learning, intensive case studies and site familiarisation.

The first three reviews of



Safety first: Bruce Peacock of the Atomic Weapons Establishment delivers peer review at Rolls-Royce

the cycle have been positive for the organisations visited and reviewers taking part.

Major benefits will not be evident for up to five years but organisations have already reported improvements from

sharing expertise across the Enterprise.

Reviewers have gained better understanding of ways of doing business along with valuable evaluation and observation skills.

# Gateways to success – cutting out the duplication



**Thomas Dando, Power Gatekeeper with the Battlefield Utilities team, argues the role of Gatekeepers in DE&S project teams is a vital contribution to the acquisition cycle**

THE GATEKEEPER function has, informally, been in existence since before the formation of DE&S – providing subject matter expertise, advice and guidance to projects.

Individuals or groups of Gatekeepers are embedded in teams and there is no stage in the acquisition cycle where they should not have some involvement.

Gatekeepers' principal focus is standardisation to reduce unnecessary duplication of capabilities and the impact on the support infrastructure. We have to avoid proliferation of kit caused by MOD organisations and DE&S project teams making independent decisions without considering the consequences and not engaging with the relevant Gatekeeper.

Much of this kit will provide similar capabilities, all needing their own sets of spare parts, maintenance strategies and

operating procedures. It limits flexibility in theatre and increases the burden on the support chain.

Recent policy has been implemented to further support

**‘We have to avoid proliferation of kit caused by not engaging with the relevant Gatekeeper’**

the Gatekeepers' aims, raising the importance of a coherent approach to equipment capability across all the Defence Lines of Development.

This is supported further by emerging architectures and associated standards across MOD, such as the Land Open System Architecture, which will set open standards and support a coherent approach to systems integration and interoperability when interfacing with other domains and systems.

Support is not only provided to project teams. Gatekeepers provide a vital link to industry, keeping abreast of emerging technologies, future developments and highlighting exploitation opportunities.

Their involvement should be a natural part of the acquisition cycle – the earlier the engagement, the more effective their involvement.

By engaging with a relevant Gatekeeper, you have not only met your project and policy obligations, but also ensured that the resulting equipment is fit for purpose, provides the optimal contribution to the overall capability of the Armed Forces, and reduces the overall financial burden on the MOD.

## Scout boost for exports, says report

DE&S' SCOUT vehicle programme could generate exports of £1.3 billion in its first 16 years.

A study for contractors General Dynamics UK by accountants Ernst and Young based its estimate on expressions of interest from other countries.

The final value could be more as other countries replace their tracked combat reconnaissance vehicle (CVR(T)) fleets during the 30-year Scout programme.

Scout is planned to deliver the Army's Future Force 2020 reconnaissance capability.

### DSRA Lottery winners February

**£10,000:** Robert Barclay (AWE).  
**£5,000:** Paul Bleackley (Corsham). **£2,000:** N Wieczorek (PPPA).  
**£1,000:** Rebecca Curley (Abbey Wood). **£500:** Robert Avery (Beaconsfield).  
**£300:** Carl Chapman (Lyneham), Susan Tabor (Rheindahlen), Michael Watson (Corsham), Patrick Lewis-Brown (RAF Cottesmore).  
**£200:** Michael Bray (UKHO), Jolanta Blajek (Abbey Wood), Ian Hills (London), Graeme Connelly (Surrey), John Hewitt (Aberdeen), William Harvey (Swindon), John Porter (Abbey Wood), William McNulty (Bassingbourne), Steven Goodbourn (Abbey Wood), James Till (Abbey Wood), Cheryl Hibbert (RNAS Culdrose). **£100:** Lee Dunstan (RNAS Culdrose), Iraina Hughes (Bath), Neil Weaver (Portsmouth), Lesley Sharpe (Camberley), Nick Sutherland (Aldershot), Rosemary Martin (London), Roderick McKinnon (Donnington), Neil Robinson (Cheadle Hulme), Kenneth Anderson (Campbeltown), Jennifer Hill (Warminster), Norman Gunning (Abbey Wood), Sheila Smart (Abbey Wood), Hugh Lowry (Corsham), Janet Snead (Bicester), Stephen Bonner (Faslane).

# Simon's out in front on the Euro cycling trail . . .



SIMON FAREBROTHER put himself in tip top condition for a cycle ride across Europe by limbering up at Abbey Wood.

The Army major from the Queen's Dragoon Guards is currently requirements manager of DE&S' Special Projects, Communications, Information, Surveillance and Reconnaissance team.

He is due to return to his regiment, currently serving in Afghanistan, in August as a squadron commander after nearly two years at DE&S.

His European cycling goal was to join 14 other cyclists last month cycling from the military rehabilitation centre at Headley Court in Surrey to the Paderborne rehabilitation facility in Germany. The five-day ride was due to take place last month, covering 500 miles through four countries.

But to put himself in the best frame of mind and raise awareness for the European event, Simon set himself the challenge to ride 100 miles on a turbo-trainer in Abbey Wood's Neighbourhood Two. He was supported by a team of fellow officers, who rattled the tins for Help for Heroes.

"The final total raised was £915, a really great total," he said afterwards. "I was really chuffed with the generosity of my colleagues at Abbey Wood."

Simon's journey from Headley Court was due to take in cycling landmarks including the London 2012 Olympic hill climb, Box Hill in Surrey, Roubaix in France and Liege in Belgium.

Left: Simon gets into cycling shape at Abbey Wood

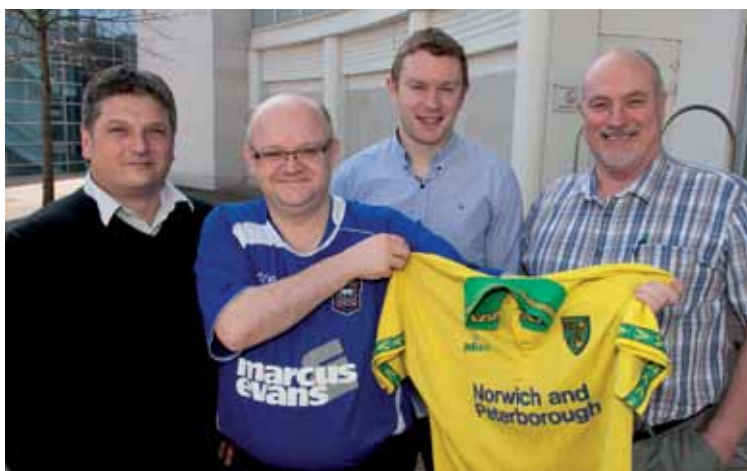
# . . . while a Canary cashes in on the 'shirt of hurt'

SCOT BUTCHER'S 'humiliation' in having to wear an Ipswich Town football shirt for a day saw him rake in £550 for Sport Relief.

As previously featured in *desider*, Scot, of Future Submarines at Abbey Wood, is a Norwich City fan but was persuaded to wear the 'shirt of hurt' – a shirt of his club's fiercest rivals – to raise cash for charity.

The final tally, boosted by £100 from BMT Hi-Q Sigma, beat his £500 target, and also brought a few more Norwich supporters out of the Abbey Wood woodwork.

Shirts from the day are likely to be sent to charities which donate football shirts to youngsters in Africa.



Still hurting: Scot Butcher (in the blue shirt, the one that 'hurts') is joined by colleagues Andrew Gray, Dominic Swann and George Reed of Future Submarines Programme Management team

## Duo fly the orienteering flag for DE&S

Megan Ashton gets to grips with the Lake District course and, right, with Geoff Ellis  
Pictures: Ian Buxton



Above: Geoff puts in a sprint finish in York

Picture: Peter Guillaume

**GEOFF ELLIS** of DES' Networks team at Corsham has continued his sporting success with two podium finishes at this year's British Sprint and British Middle Distance Orienteering Championships in York.

It was Geoff, a Flight Lieutenant, who produced the class run for the RAF to secure the sprint title which had eluded him the previous year, by a mere 12 seconds.

In the middle distance race held on Strensall Common, a military training area north of York, Geoff finished third.

The two podium places add to the second place Geoff achieved at the British Night Championships in February and consolidated his position at the head of the UK Masters Cup, a 19-race competition run throughout the year with Geoff the defending champion.

In the Combined Services' annual fixture

against the British Students Geoff was joined by Royal Navy Lieutenant Megan Ashton of DE&S' Lynx team.

Megan was the team's first Royal Navy member for six years and helped the Combined Services to fifth place in the event in the Lake District.

The victorious university was Edinburgh who beat the Combined Services and their fellow universities by an impressive margin.

# Clyde lines up to celebrate new Royal Marines unit

THREE HUNDRED Commandos at Clyde naval base were joined by family members and friends last month to mark the official formation of a second Scottish-based Royal Marine unit.

The new 43 Commando is one of only two Royal Marine units in Scotland and the largest in the UK with 790 men.

The last unit to hold the name was disbanded in the aftermath of World War Two after fighting with distinction in the Mediterranean, Italy and the Adriatic.

During a parade at the Royal Marines' home base of Clyde, medals were also presented to 15 Commandos and sailors, some of whom had taken part in counter-piracy operations.

The day was made all the more poignant for the Marines as it also commemorated the 67th anniversary of the battle of Lake



Comacchio, a World War Two encounter which saw Thomas Hunter – a Royal Marine from Edinburgh – awarded a Victoria Cross. One of Clyde's accommodation blocks, Hunter Block, is named after him.

During the parade there was

a short religious service followed by an address by the Royal Navy's Commander Operations, Rear Admiral Ian Corder.

Afterwards the Marines held a families' day at Clyde where visitors saw some of the equipment used in operations around the globe.

Marines of the new unit line up at Clyde while, inset, a building at the base is named after Thomas Hunter VC

## Defender salutes poppy effort

POPPYSCOTLAND has announced the total of the 2011 Scottish Poppy Appeal was a record-breaking £2.68 million – a 14.7 per cent increase on 2010.

At an event on board Type 45 destroyer *Defender* at BAe Systems in Scotstoun last month, crew members displayed £2,688,084 achieved thanks to the support of the public.

*Defender* has returned from four weeks at sea after completing final stage trials, ahead of her handover to the Royal Navy later this year.

Commander Nick Boyd said: "It gives us a boost to know that the public is behind our sailors, soldiers and airmen. By giving so generously PoppyScotland is able to fund its important work."

## Recovery centre handed a musical cash boost



RECOVERING SERVICE personnel benefited from a sell-out dinner and variety performance at Devonport.

*HMS Drake* hosted the mid-March event in aid of a new recovery centre for personnel with long-term health and fitness issues being built in the naval base and funded through the charity Help for Heroes.

Among the attractions at the 500-guest event were singing sailors Petty Officer Dave Wilson and Chief Petty Officer Jed Stones. Jed works for Flag Officer Sea Training in the dockyard and Dave at the Royal Navy training establishment *HMS Raleigh* in Torpoint.

They have recorded a song which is being sold for the appeal called Navy Bluez – Count on Me. The pair are regular performers and sang other tribute songs on the night.

Event organisers were Lieutenant Commander Jock Easton and Warrant Officer Neil Frame.

The charity dinner raffle prizes included concerts, a music recording session and military paintings, yacht trips, a flying lesson and Plymouth Argyle FC tickets.

The south west regional recovery centre will be run by the MOD when opened within the next two years.

Pictured: Jock Easton, far left, and Neil Frame

## Kids head to Clyde (for a naval base education!)

AROUND 35 children of Clyde naval base workers headed to the site for Sons and Daughters at Work Day.

The national event provides youngsters with the chance to visit the workplace, introducing them to the diversity of the working environment and providing an insight into possible careers.

The kids – all between the ages of 12 and 16 – had the opportunity to shadow their parents during the day on 22nd March, with some fun and educational activities provided by the Clyde Marine Unit, MOD Police dog handlers and Naval Base Sportsdrome.

Twelve year-old twins Emily and Rebecca Friels from Helensburgh accompanied dad David, 43, on the day as Business Manager for Captain of the Base and Superintendent Fleet Maintenance.

They spent a busy morning with their dad shredding and filing before heading to the site's civilian canteen to meet up with some schoolfriends who were also visiting the base.

"It was great to show Emily and Rebecca around the workplace and give them an idea of the different type of jobs available," said David.

"For them, though, the best bit of the day was the boat trip on the Gareloch with the Clyde Marine Unit. This gave them and the other kids a chance to see the kind of work the MOD Police does patrolling the shoreline around the base. There are many different jobs here at Clyde."

He added: "Later they spent some time with their aunt, Hazel Diffey, who also works in the base in Materiel Accounts; so they got to experience a few different working environments."

"Afterwards the kids had to write a report for school on the jobs of two of the people they met during the day."



David Friels is flanked by daughters Emily and Rebecca during their day at Clyde naval base

## Your chance to burn rubber on Goodwood circuit

FOLLOW IN the tyre tracks of Moss and Clark in your own road car on the historic Goodwood circuit.

That's the attraction offered by Barry Firth, who works in DE&S' Lynx team and is organising a track day at the Sussex venue on 4th June.

The event is called Planes, Games and Automobiles with money raised going to the Royal Navy and Royal Marines Children's Fund.

Dream Rides will cost £30 upwards depending on your car for a 10-mile drive around the countryside; passenger rides £25 for two laps of Goodwood; Parade Lap £25 to drive your car around Goodwood during the parade laps; while helicopter flights are available at £35 for a five minute flight.

Other activities will include static car displays, craft stall and a street party.

Further info from [bazfirth@talktalk.net](mailto:bazfirth@talktalk.net)

# Kermit hands smokers a hefty health reminder

CLYDE LED the way as workers were urged to 'take the leap' and kick the habit when the site's Medical Centre took part in National No Smoking Day.

To drive the message home medics had a couple of conspicuous helpers – an enormous frog, to encourage people to take the leap, accompanied by a walking, talking cigarette!

Kermit's older brother was in fact Medical Assistant James Patrick and the cigarette costume went to the Medical Centre's Jill Simpson.

But of course there was a serious message behind it all – the important health benefits of kicking the habit.

A stall was set up in the base's giant Supermess and in the Medical Centre itself, providing information on the help available to those wishing to quit.

Smokers were told that by getting the correct treatment they were four times more likely to succeed in stopping.



Habit-forming: James Patrick, in Kermit suit, helps his colleague Jill Simpson kick the smoking habit

Medical Centre Practice Nurse Maureen Anderson said: "We had a lot of interest in our stalls during the day and hopefully we have encouraged many to take that initial step to try giving up."

"Smokers do not have to wait long to experience the benefits of quitting. After just 20 minutes their blood pressure and pulse rate will return to normal and after 24 hours their

lungs will begin to clear out the tar.

"The benefits go on and on and we are happy to help and advise any naval base workers who want to be smoke free."

## RAF to go on the attack at Lord's

THE RAF will be defending its title as the Inter Services Twenty20 Cricket tournament returns to Lord's on 19th June for the third consecutive year.

The contest is a triangular competition between the Royal Navy, Army and RAF senior teams with three games of Twenty20 cricket in one day.

Combat Stress will be the supported charity.

Andrew Cameron, Chief Executive of Combat Stress, said: "Combat Stress is treating and supporting almost 5,000 ex-Servicemen and women suffering from trauma related mental ill-health. We hope this event will raise awareness of Combat Stress and encourage more people to seek our help, as well as raising much-needed funds for our vital work."

"Inter Services cricket attracts supporters who understand the challenges we are grappling with."

Ticket information – adult tickets are £14 – is available at [www.interservices20.co.uk](http://www.interservices20.co.uk)

## 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:

**2012DIN04-048:** This provides guidance to authorised demanding officers on the return of White Fleet/Phoenix leased vehicles when they are returned to the provider at the end of their lease period.

**2012DIN04-049:** 'Waterfront' organisations, ships' staff and MOD project and delivery teams are informed that the Naval Combat System Interface Co-ordination Griffin database, formerly known as the Systems Information Co-ordination Agency database, will be available via the MOD restricted local area network interconnect from this month.

**2012DIN04-054:** Nominations are sought for the MOD Sanctuary and Energy Awards 2012. Sanctuary awards have been running since 1991 and recognise group and individual efforts for projects – environmental, sustainability, heritage – on or within land and property that the MOD owns or uses in the UK or overseas. Energy awards were introduced in 2010 to recognise projects to conserve energy and cut carbon emissions. Closing date is 15 June.

**2012DIN04-061:** This confirms the out-of-service date of the Cobra radar as 31 December 2012 and outlines the management of its withdrawal from service.

Further information and more details on the latest DINs see:

<http://defenceintranet.diiweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/AtoZ/DinsIndex2012.htm>

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