











Our UK kit for B manufa armoure includin light tar submar contribu armed f ees are proud to provide armed forces. We design, nd maintain fighter jets, les and naval vessels phoon aircraft, Scimitar the Astute Class of we're prouder still of the d sacrifices made by our very day. Thank you.

# IN BRITAIN

**BAE SYSTEMS** WORK

INSPIRED

#### **FEATURES**

#### 24 Terrier is let loose

The latest armoured engineer tractor, which will go on show at DVD later this month, will provide Royal Engineers with a multi-purpose 'Swiss Army Knife' earth-moving capability providing vital support on the front line and elsewhere

#### 26 Ready for the next decade

A veteran of the Kosovo campaign and Operation Telic the value of Challenger 2 Main Battle Tank – to be on show at DVD – and its enduring role will be underpinned by the Army 2020 vision

#### 32 The best of DE&S

Chief of Defence Materiel Bernard Gray has described handing out his annual commendations as 'one of the joys of the job' with the latest winners representing the best of the good work which goes on at DE&S

#### 36 Carrier activity reaching a peak

Construction of the Royal Navy's two new aircraft carriers is reaching a peak as the hull of the first vessel *Queen Elizabeth* takes shape while Rosyth prepares for the first blocks of second carrier *Prince of Wales* 



#### cover image

Terrier is pictured showing off some of its capability as it gets set to come into service with British Army engineers. The vehicle can negotiate most terrain and its earthmoving bucket and excavator arm can make short work of digging and obstacle clearance

## desider

#### Assistant Head, Public Relations:

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

#### Deputy Editor:

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

#### Distribution Manager:

Dick Naughton - 9352 34342 or 0117 9134342 dessec-corp-busmgr1a@mod.uk

#### Advertising:

Richard Stillman – Ten Alps Media, 40 Bowling Green Lane, London EC1R ONE Tel: +44 (0)20 7657 1837 Fax: +44 (0)20 7379 7155 richard.stillman@tenalps.com

#### Printing:



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

#### © Crown Copyright

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



#### **NEWS**

- 4 'An enormous tribute' to DE&S staff
  Defence Minister Philip Dunne has praised DE&S
  staff for supplying quality equipment, during a town
  hall presentation at Abbey Wood
- 6 Materiel Strategy: what happens next?
  Companies interested in DE&S transformation are being invited to register their interest as the next stage of the Materiel Strategy takes shape
- 8 Truck delivery nears the end
  More than 7,000 Support Vehicles have now been
  delivered by MAN as part of a near £1 billion
  programme
- 10 New ISS Director sets out priorities
  Gerry Cantwell has acknowledged the scale of his
  challenge after being unveiled as the new head of
  Information Systems and Services
- 14 Lightning II 'great for Britain' The Government has said it is a great supporter of

the Lightning II programme as it is good news for UK industry and jobs

16 New ways of working with DSG
DE&S has signed a New Commercial Arrangement

with the Defence Support Group which combines a number of existing agreements into one

17 Apache will keep up the attack

A £15 million contract will replenish the Army's stock of supersonic Hellfire missiles which are used by Apache attack helicopters

18 Wolf fleet takes on more protection

More than 6,500 military Land Rovers can now boast greater protection after a three-year programme to introduce measures including a roll-over protection system



#### Bernard Gray

#### Chief of Defence Materiel

'We are all used to the way in which some people focus on the things that go wrong, rather than the overwhelming majority of our project outputs that go well'



THE annual Commendation Ceremony that I hold is probably the most enjoyable event of the working year for me. This year's ceremony was no exception. The quality of the work of DE&S Commendation winners, the well-deserved praise both team and individual winners received from their military customers, and the evidence of hard work, innovation and absolute commitment to delivery for the Armed Forces and in support of operations were both a huge encouragement and a personal delight to me.

As I said at the ceremony, we are all used to the way in which some people focus on the things that go wrong, rather than the overwhelming majority of our project outputs that go well.

The Commendation ceremony helps to restore the balance by reflecting a sample of some of the very best things that DE&S does. Chief among them is the continued high quality support that DE&S provides to operations, principally in Afghanistan but also in other parts of the world, that goes largely unreported.

These Commendations covered the work of DE&S teams in supporting last year's Olympics – a huge national success in which we in DE&S played our part. They represent the colossal scale and depth of DE&S activity both in procurement of new equipment and its through-life support.

Following the Secretary of State's announcement in April that approval had been given for the Materiel Strategy assessment phase to start, the programme has moved forward on studies of both DE&S+ and the Government Owned Contractor Operated (GOCO) potential solutions.

DE&S+ is investigating our key relationships, capabilities and the frameworks within which we

operate and is working on how these can be improved. A group of senior staff is providing help with the design and analysis of a DE&S+.

We've published a contract notice inviting the private sector to register interest in a potential GOCO solution – a process which is now complete. The next step is the issue of an Invitation to Negotiate in the summer.

Many of you will have seen that the Queen's Speech on the 8th May outlined the Government's intention to reform the way defence equipment is bought. A White Paper covering these proposals in more detail is expected to be published later in the summer.

I've said many times, both in desider magazine and in town hall sessions at which we have talked about the Materiel Strategy face to face, communications is a huge part of how we will together move DE&S forward. You all have your part to play in the conversation about the future of DE&S.

A Talk To The Board Live event is taking place at Abbey Wood later this month and I encourage you to attend to put your questions. We are also planning to hold these events at other major sites to share this opportunity across DE&S.

As many of you know, I am always keen to reduce bureaucracy. The MOD's "Red Tape Challenge" is a means to this end and I urge you to take part and contribute ideas that will help make your work easier.

Finally DVD 13 takes place later this month, this time with ownership shared between DE&S and Land Command. I look forward to the event continuing to demonstrate the excellent support that DE&S gives to Land Forces.

DEFENCE MINISTER Philip Dunne praised DE&S staff during a town hall presentation at the organisation's Abbey Wood headquarters for the quality of the equipment they supply to troops on operations in Afghanistan.

Mr Dunne, Minister for Defence Equipment Support and Technology, spoke to hundreds of DE&S staff a few days after the announcement that an Assessment Phase had been launched into the Materiel Strategy programme.

He was accompanied at the event by Chief of Defence Materiel Bernard Gray.

Mr Dunne told staff: "I was in Afghanistan in January and I asked the troops I met whether they had any equipment issues. The only issue that was raised was the lack of a lockable box on the back of a Husky vehicle.

"That's an enormous tribute to those of you who work in DE&S and it's in stark contrast to what would have been said a few years ago. The impression I have is that we have got very well-equipped forces now."

The Minister listed some of the important steps that had been taken to improve the way the equipment programme was delivered. He said the achievement of a balanced and affordable programme gave confidence to both DE&S and industry and put the MOD in a much stronger position to deal with future challenges.

The transfer of much of the customer organisation out of Main Building and into the Commands was a transformational change that would alter behaviours, he said

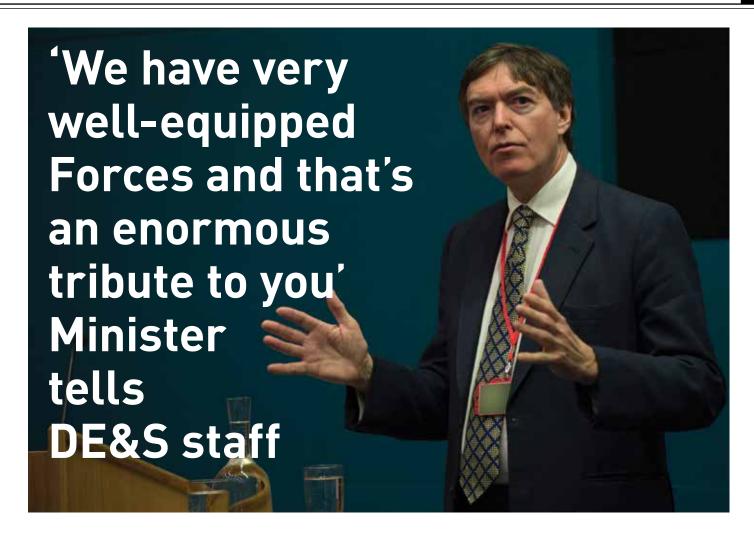
Making the Commands accountable and responsible for decisions on the programme, such as changing specifications when a contract was already in force, meant they would be responsible for additional costs.

The decision-making process that DE&S project teams dealt with would be shortened and decision-making made easier.

"If you look at private sector delivery of major projects, someone who is appointed as the leader sees the project through

Philip Dunne spoke to staff during a town hall session in the lecture theatre at Abbey Wood





and gets rewarded and incentivised on the basis of what happens. If we can instil that ethos in a new DE&S it will have immeasurable benefits in delivering projects to time and to cost," he said.

Recruiting external expertise would help unblock some logjams, leading to more rapid decision-making in a less constrained environment.

Mr Dunne said: "We stated clearly last July that our preference would be to go down the Government Owned Contractor Operated (GOCO) route. That remains our preference, given the state of knowledge that we have at the moment,



# Abbey Wood hears about improvements in the equipment programme

and it works well at the Atomic Weapons

"But we are also determined to look at DE&S+ and the freedoms that we can have while remaining within a Government-run entity. We are going to take this very seriously – we have stood up a team and I am going to talk to them later today."

"This is a complex exercise and we are determined to get it right."

He said part of the process was an examination of whether those parts of DE&S that were not associated with procurement should go forward into the new organisation or be absorbed elsewhere.

The Minister took a wide range of questions from staff on subjects which included the potential GOCO, staff issues and projects.

Later during his visit to Abbey Wood the Minister was briefed on key programmes and spoke to the Materiel Strategy team, praised team members for their work on the programme and said there was much more to do now the programme was in its Assessment Phase.

Above and below: Minister for Defence Equipment, Support and Technology Philip Dunne at Abbey Wood

Pictures: David Tucker



#### **NEWSREEL**



### Final 1-11 bows out

THE last remaining BAC 1-11 has flown into history, after its last flight by military aircrew from Boscombe Down to Newquay Museum. QinetiQ, which operates the airfield for the MOD, has donated the aircraft to the Classic Air Force Museum so this British designed aircraft can be preserved for future generations. Built in 1980 as a BAC 1-11 series 500 aircraft, it was placed on the military register as ZH763. The aircraft has been at Boscombe Down since July 1994 and owned by QinetiQ since 2003.

#### Gun control

SIMULATION company NSC has been awarded a contract by the **Defence Science** and Technology Laboratory to develop a shipmounted general purpose machine gun simulator to look at novel training methods for Royal Navy and Royal Fleet Auxiliary personnel. The system, using the latest version of Battlespace 2, puts users' fingers on the trigger as action unfolds on a three-metre curved screen.

#### **Forces Day**

A volley of gun blasts from Nottingham Castle will ensure that Armed Forces Day on 29th June kicks off with a bang. A full list of events is at www. armedforcesday. org.uk





Find out more about the Materiel Strategy and updates via the Blog on the DE&S Intranet site and post your comments.

A CONTRACT notice for the management of Defence Equipment and Support has been published by MOD, inviting potential private sector entities to register their interest and attend an industry event to learn more about DE&S transformation.

The notice forms part of the Materiel Strategy Assessment Phase, announced by Secretary of State Philip Hammond in April, which will allow MOD to make a comparison between two possible futures for DE&S – a potential Government Owned Contractor Operated (GOCO) model and a DE&S+ public sector comparator.

DE&S Director Materiel Strategy Barry Burton said: "The recent Parliamentary announcement by the Secretary of State paved the way for the start of the commercial competition to seek proposals for a GOCO.

"The issue of a contract notice on 25th April launched the Materiel Strategy's Assessment Phase and we expect it to produce a main gate business case in the spring of next year which will set out the results of the commercial competition and our work to develop the DE&S+ option for Ministers to consider.

"Whichever solution is implemented, we must expect there to be substantial changes to the way we do business. I believe that this represents a

real opportunity for all of us in DE&S and I hope therefore that everyone will play a part in developing our future.

"The Secretary of State announced last July that GOCO is the recommended option because, on the analysis carried out to date, it offers the greater benefits and higher likelihood

# 'We must expect substantial changes to the way we do business'

of being able to instil the radical change required to transform DE&S."

The notice states it is proposed to issue a formal invitation to negotiate next month with returns due in January 2014 and lists a proposed date of issue of any contract in September 2014.

It explains that MOD is proposing to let a contract with a private sector management company to own and operate, on behalf of MOD, an operating company into which certain services now provided by DE&S, and the staff providing those services, would be transferred.

The management company would provide and improve defence equipment, support and logistics acquisition services and enhance business capabilities.

The contract notice states DE&S' annual expenditure is about £19 billion, composed of approximately £15 billion in contracting with industry for equipment and support, £2 billion for logistics and other services, and £1.4 billion of operating costs.

The operating company, subject to delegation from the Secretary of State, would be able to award, agree, amend and terminate contracts on behalf of MOD.

Payments to suppliers would be made directly by the MOD following authorisation by the operating company.

The MOD expects that DE&S UK civilian staff would be transferred under the Transfer of Undertakings (Protection of Employment) Regulations 2006 to the operating company.

Military staff would be provided through secondment, or another arrangement, to the company.

It is intended the Government would own a share in the operating company on national security grounds.

Services currently provided by DE&S that are expected to be retained by the MOD and would be out of scope include those relating to Naval bases, Atomic Weapons Establishment, Defence Munitions and most of the Information Systems and Services Operating Centre. FOR THE Government Owned, Contractor Operated (GOCO) option team, the assessment phase has started with a sharp focus on mangaging the commercial process.

Following issue of the contract notice and Pre Qualification Questionnaire, in late April and early May respectively, the team plans to issue the Invitation to Negotiate during the summer and has been working through the option evaluation criteria.

As well as this the team is working out how a GOCO's performance, if chosen, would be managed across all areas of DE&S business.

Areas of activity for performance measurement

include: equipment delivery, equipment support, logistics provision, consultancy

and policy services, business change, business operations and overall conduct of the business.

A two-stage approach to implementation of the GOCO option is being pursued. Each stage moves initially through a short transition phase, followed by a transformation phase of approximately two years and a 'full operation' phase for the remainder of the contract.

As momentum of the commercial process continues Business Transition is a project that is part of the GOCO team's work. The purpose of this project is to identify the business

GOCO...

transition and separation issues that will need to be addressed with the transfer of DE&S activities into a GOCO model and identify actions, costs, timeframes and critical path for each of these actions.

Work on Business Transition has already progressed with ten DE&S Functional Working Groups and Directors supporting this with the required input and contribution.

This work will populate a High Level Functional Operating Model that will describe the 'As is' position as anticipated in 2014, the 'Day One' and 'End State'.

■ An Industry Day was held on 13th May inviting all top defence suppliers and trade associations to Abbey Wood. Bernard Gray opened the event and Director Materiel Strategy Barry Burton, right, provided an update on the current status of the programme.

Suppliers and trade associations heard from Maj Gen Peter Fox covering the customer design team established in MOD Head Office as part of defence transformation.

Both GOCO and DE&S+ were presented by the 1\* leads Richard Smart and Dr Liesl Neal

Suppliers had the opportunity to support the Materiel Strategy programme and were invited to provide their perspective on opportunities and issues requiring resolution as well as their role in advocating the Materiel Strategy.

Suppliers welcomed the progress of DE&S+ and being kept informed of how the GOCO option is developing. It was agreed to continue these events in the future.

## . . . and DE&S+

THE DE&S+ proposition will set out a viable alternative proposal for transforming DE&S while remaining within the public sector.

The proposition will consider what changes are required from how DE&S does business today to address the root causes of underperformance, and achieve a step change in improvement in defence acquisition performance. It will be evaluated against the most compelling of the GOCO bids so that an informed decision can be made about the best value for money option for the future of DE&S.

DE&S+ will look at the organisation's key relationships, both internal and external, its business capabilities (people, processes, tools) and the framework within which it operates and will consider how these can be optimised to successfully deliver agreed outputs.

While the organisation will remain within the boundaries of

government it is expected that it will need to draw on private sector support in making this significant strategic transformation happen.

Over the last few months the DE&S+ team has been looking at the problems hampering performance and working up ideas on how the organisation could operate better to address these.

This work has been informed by benchmarking which looked at what constitutes "best practice" in a number of areas core to the development of the DE&S+ option – processes and tools, governance (ie the relationship with the customer and Head Office), people capability and internal organisation.

The process involved interviews with organisations from public and private sector. While the organisations varied in size and industry, each had key similarities or characteristics of interest to DE&S.

The output from the benchmarking, along with ideas

collected by the team from other sources has started to shape ideas for how the organisation could change.

The team has been working with a DE&S+ Reference Group, which comprises representatives from across the organisation, to test and challenge their ideas and shape the outline proposition. Once agreed, this will form the basis for more detailed design work over the coming months.

The team expects to engage with subject matter experts in developing detail of the design. The team will also share information with the wider organisation on how things are going.

However, relationships will need to be managed carefully as it is a commercial process and there will be aspects of the detailed work within the DE&S+ Proposition that must be protected to maintain complete separation between the Materiel Strategy options.

#### **NEWSREEL**

### Talk to DE&S' senior staff

FOLLOWING the successful launch of the first Talk to the Board 'Live' session at DE&S in March, three further events are planned over the next couple of months.

14th June -Abbey Wood with Chief of Materiel (Fleet), Vice Admiral Sir Andrew Mathews; Chief of Materiel (Land), Lieutenant General Chris Deverell; Chief of Staff, Dr Simon Cholerton; Director Human Resources, David Ball; and Director Technical, Air Vice Marshal Julian Young.

15th July –
Corsham with Chief
of Materiel (Joint
Enablers), Pete
Worrall; Chief of
Staff, Dr Simon
Cholerton; Director
HR, David Ball; and
Director Technical,
Air Vice Marshal
Julian Young.

31st July –
Portsmouth Naval
Base with Chief of
Materiel (Fleet), Vice
Admiral Sir Andrew
Mathews; Director
Human Resources,
David Ball; and
Director Materiel
Strategy, Barry
Burton

#### **Lunch bites**

THE Defence Academy has announced more lunchtime seminars so staff can hear from senior leaders and managers on a range of topics.

5th June – Main Building, Jonathan Slater on Transforming Defence – The Reason for change

17th June

- Abbey Wood,
Stuart Fraser on

'Policy, Strategy
and Parliamentary
Profession'

25th June – Andover, Peter Ryan on 'HR Transformation'

27th June – Main Building, Susanna Mason, DG Exports

#### **NEWSREEL**



### New role for Andrew

ANDREW Tyler, above, formely chief operating officer at DE&S, will be chief executive for Northrop Grumman UK and Europe from 1st July. Dr Tyler joins Northrop Grumman from Siemens' Marine **Current Turbines** where he was chief executive. David Perry, corporate vice president, said: "Andrew's appointment will be important for our future success in the UK and Europe as we expand our international presence and broaden our market focus to one that is increasingly global." Five years at the MOD, Dr Tyler was Director, Land and Maritime in the Defence Procurement Agency, and then Director General, Ships, at DE&S. He became chief operating officer of DE&S in 2008.

#### Waste plant

THE LAST of six waste water treatment plants has been delivered by Babcock for the Queen Elizabeth class aircraft carriers.

The plants, part of the Integrated Waste Management System, handle fluid and solid waste generated on board. Waste is processed until benign and compatible with international requirements for overboard discharge or storage until the ship docks.

■ Carriers latest: pages 36, 37



7,000-up: a MAN vehicle is pictured at the company's production line in Vienna. Right: Brigadier Rafferty, centre, is pictured with MAN staff, along with equipment support manager Brian Edwards (third left), OSVP deputy head Phil Burton, fourth from right, and programme manager Simon Frame, far right

THE LAST major milestone at the end of the Support Vehicle (SV) programme has been achieved with the final chassis rolling off the MAN production line in Vienna.

It was received during a visit by Brigadier Peter Rafferty, DE&S' Head of Operational Support Programmes, and members of the Operational Support Vehicles Programme team.

Formal delivery of this last SV, with top hamper for bulk cargo added by Marshall in Cambridge, is scheduled to take place this summer.

The successful Category A

project has delivered more than 7,200 trucks at around £1 billion within time and budget.

SV has earned an excellent reputation for reliability and cross country mobility delivering life-sustaining and battle-winning supplies.

The vehicles are the Army's backbone for materiel distribution and no Combat Logistic Patrol in theatre succeeds without the heavy lift capability they provide.

With 6- 9- and 15-tonne chassis and a range of top hampers (for instance tanker and recovery) as well as trailers, this versatile platform brings

the benefits of standardisation and replaces a variety of legacy vehicles being withdrawn from service.

Phil Burton, Deputy Head of the Operational Support Vehicle Programme, said: "The delivery phase has not been without its challenges but the fact that the final chassis is rolling off the production line at the agreed time is testament to the hard work, dedication and effort of the DE&S project team and MAN Truck and Bus.

"The SV capability has proved itself in the operational environment and is well regarded by those who use it."

### Queen signals reform of Yellow Book

REFORM OF single source procurement – the 'Yellow Book' – has moved closer with the announcement of the Defence Reform Bill in the Queen's Speech.

Single source, non-competitive procurement averages around £6 billion per year, or 40 per cent of equipment and support spending, and is a key element of defence transformation.

A new Single Source Pricing Regulations framework will put the emphasis on value for money for the MOD and taxpayer.

It will encourage greater efficiency while allowing single source defence suppliers a fair and reasonable contract price.

Regulations will allow the MOD to scrutinise supplier costs rather than just focusing on profit, a small part of the overall price. A new office will oversee the regulations, to be put on a statutory footing as part of the Defence Reform Bill.

This demonstrates the lasting impact new supplier obligations and MOD rights will make on future single source contracts.

Before legislation, DE&S is being asked to realise benefits of the new regulations by using elements of them on new contracts.

Working with operational centres, a number of contracts and business units have been identified to incorporate elements of the regulations through inclusion of new contract and supplier codes.

These opportunities for early introduction have been shared with senior members of the commercial team for approval and support.

This transitional period will be used to improve the solution, supporting processes and input into the training requirements for when legislation and regulations become law.

For further details contact DECS-SSPRHelpDesk@mod.uk



AgustaWestland mobile App for Paris Air Show 2013

Come and see us from 16th to 23rd June, Chalet n260, Row A.

Keep up to date with the latest news View multimedia content Get the latest product information

Available on the App Store



#### Civil Service goes live nationwide

CIVIL SERVICE Live will 'Be Exceptional' this year with events in Gateshead (1st July), London (2nd July) and Bristol (3rd July).

Each 'Be Exceptional' event encourages staff to meet civil servants across government to discuss issues facing the Civil Service.

There will also be plenary sessions, workshops and 'dropin' clinics to book onto.

DE&S will contribute to the Bristol event showcasing project teams, apprentices and multimedia as well as a Materiel Strategy presentation and a talent management workshop run by the Engineering Skills Development team.

To register visit: https://registration. livegroup.co.uk/ csl2013/Registration/

# **New ISS Director sets out** his 100-day priorities

GERRY CANTWELL took over as Director Information Systems and Services on 17th May and, as the first civilian to take up the post, acknowledged the scale of his challenge.

"This is a huge task - ISS has massive demands placed upon it, both from the operational theatre and in the business space," he said.

"We are dealing with a large number of Urgent Operational Requirements, with no sign of this number tailing off and we must continue to deliver information and communications services to keep defence running smoothly."

Mr Cantwell, who takes over from Major General Tim Inshaw, spent more than 26 years at Government Communications Headquarters in Cheltenham.

rigorous five-week familiarisation has seen him touring the UK and abroad.



Gerry Cantwell

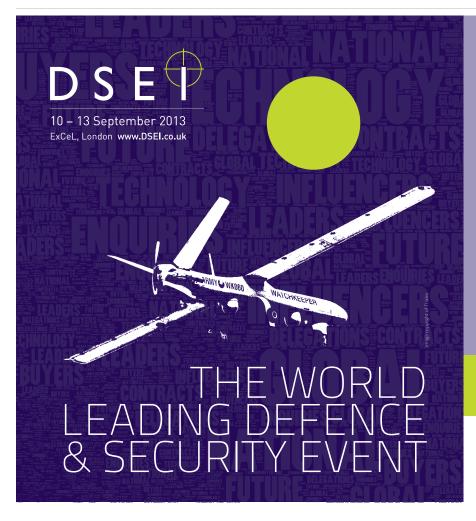
shaping his early impressions of the business: He said: "There is so much going on that has the potential to overwhelm ISS, from the impending transfer to Joint Force Command; responding to the outcome of the DE&S Materiel Strategy; delivering the DCNS Programme and ISS' own internal transformation programme, not to mention the everyday business

crucial service delivery. But I have been impressed greatly by the commitment and professionalism of the people I have met, especially within ISS."

Mr Cantwell's initial 100day plan includes a focus on ISS' people, governance, customers and industry relationships and will incorporate a series of 'deepdives' to better understand the business.

Born in Motherwell, Mr Cantwell's education focused on electrical and electronic engineering and his formative years were spent in the oil and steel industries, before joining GCHQ in 1986.

His career at GCHQ included hardware engineering, software engineering, project programme management, IT operations, operations strategy and information assurance across all aspects of GCHQ's business.



- + 1.400 international exhibitors an unrivalled range of suppliers from more
- + Specialised Air, Naval, Land, Security, Medical and Unmanned Zones
- + Visiting naval ships available to tour
- + Live Waterborne and Unmanned Ground **Systems Demonstrations**
- + Unbeatable networking the entire defence and security supply chain in one
- + NEW medical seminars and exhibitors
- + 6 free seminar theatres offering educational sessions and showcases
- + Static vehicle displays for land, air and naval sectors - our biggest offering yet
- + Unmanned focus UAS Conference and Unmanned Systems Showcase

**REGISTER NOW FOR** EARLY BIRD DISCOUNT www.DSEI.co.uk/early1k

IN ASSOCIATION WITH











BAE SYSTEMS GENERAL DYNAMICS United Kingdom Limited



#### Eurocopter contract to provide support to the latest Puma

A MULTI-MILLION pound contract has been placed with Eurocopter UK to provide initial support to the Puma HC2 for its first three years of service.

Under the contract, Eurocopter will provide the essential support – supply chain management, technical support and training services – to operate the Puma HC2 aircraft safely and effectively.

Follow-on arrangements until the aircraft's planned out of service date in March 2025 are being

developed. Gp Captain Malcolm French, leader of the Puma2/Gazelle team, said: "I am delighted that this initial support solution has been put in place as this is the final commitment necessary to ensure the effective support of the aircraft at Release to Service. My thanks to all staff in the team and Eurocopter UK for their efforts."

The aircraft's initial Release to Service is scheduled for this summer.

# Lynx crews go visual on all-weather flying



Touchdown: a Royal Navy crew brings a Lynx towards a carrier while operating the new Medallion 6000 simulator at RNAS Yeovilton

THEY SAY you can't control the weather, but with the latest training simulator unveiled for the Lynx helicopter, it's as if you can.

The new Medallion-6000 visual system for the Lynx Mark 8 developed by CAE, was due to be shown off at the International Training and Education Conference (ITEC) in Rome towards the end of last month.

Forming part of the Mk8 full-mission simulator, the visual system allows the weather and light levels to be altered, giving pilots a range of situations in which to practise flying.

Completed to time and on budget, the simulator is now in service at RNAS Yeovilton, ready to take pilots flying in all weathers.

Lt Cdr Nigel Cunningham,

the Royal Navy officer in charge of the Lynx Simulator Facility at Yeovilton, said: "The recent upgrade to the CAE Medallion-6000 visual system has allowed us to transfer a considerable degree of training from the live aircraft into the simulator, which obviously saves on real flying costs.

"The upgrade has the benefit of allowing Royal Navy aircrews to develop their low-level navigation skills during daytime operations, and more importantly, at night when using night vision goggles.

"Simulator training allows crews to train in an array of meteorological conditions, ranging from clear blue skies all the way to storm force gales."

Image quality is high thanks to the high fidelity visual system, with the power and capability of commercial workstation graphics programmes.

Scenes are detailed and realistic, with smooth movement of shadows from the sun or moon depending on whether the simulator is portraying day or night.

Ian Bell, CAE Business Leader Europe, said: "CAE offers a range of upgrade and update services that enable defence forces to extend the life of their valuable simulation assets while helping to increase the amount of training done in a synthetic environment.

"We have a long-standing partnership with the Royal Navy at Yeovilton as well as Culdrose, and are committed to ensuring their training devices accurately simulate the Royal Navy's fleet of operational helicopters."

#### **NEWSREEL**



### Lightning at the gate

A refurbished **Enalish Electric** Lightning aircraft has been unveiled as the gate guardian at MOD Boscombe Down, above. The unveiling was attended by Gaz Borland, Managing Director of QinetiQ's Air Division, Gp Capt Rob Humphries, Chief Test Pilot, the refurbishment team, two ex-Lightning pilots, Roly Jackson and Clive Rustin, and Eric Collinson, a retired Sergeant Airframe Mechanic who worked on and flew in the Lightning. The Lightning is believed to be the only aircraft to have broken the sound barrier while travelling vertically.

#### Weapons deal

QINETIQ has been awarded a four-vear contract to manage the Weapons Science and Technology Centre by the Defence Science and Technology Laboratory. The contract covers delivery of £8 million of research per year into technologies for Complex Weapons, General Munitions and Energetic Materials. QinetiQ will lead a team including MOD, MBDA, Thales, Chemring and BAE Systems.

#### **UK** spending

THE proportion of UK gross domestic product spent on the Armed Forces was 2.7 per cent in 2011 and 2.6 per cent in 2012, according to figures released to Parliament. Figures for 2012 are to be published shortly.





# **Keeping Forces biting fit!**

Report: Clare Trenholm

DE&S is helping to keep the Armed Forces smiling for the next two years using an innovative approach to dental supplies.

The contract to provide all dental products the MOD needs would usually have been retendered, taking time and resources to go through the process and to maintain a new contract in the longer term.

Instead, Logistic Commodies and Services and Medical and General Supplies team have taken an existing NHS contract that was advertised and tendered previously, and added an enabling arrangement to it.

Worth £6.1 million, this approach is in line with Cabinet Office advice to use contracts that already exist within Government.

Products being supplied include pharmaceuticals, consumables and small equipment, via Salford-based contract owner NHS Shared Business Services and supplier Henry Schein Dental, who have a distribution depot in Kent.

Defence Dental Services provides worldwide care across the three services including entitled civilians and families when serving abroad.

This contract will allow them to make around 9,000 annual order lines with payment made directly to the supplier.

More than 4,000 products

# Contract supplies dental products to the services for use across the globe

come under the arrangement and the team has worked with the contractor and supplier to ensure maximum continuity of service while the transition takes place. This contract also supplies dental products to Royal Navy ships when in the UK.



#### Dental kit performs to 'Max' effect

PROTECTION DOG Max is among the latest to benefit from the Forces' dental skills and the kit provided by DE&S.

Max's day job is to apprehend intruders at military installations but chronic toothache made it an unusual day at the office for RAF Waddington dental officer Flt Lt Minti Elcomb last month.

Veterinary Officer Major Claire Budge, based at the Defence Animal Centre in Melton Mowbray, said: "This is a specialist procedure requiring specialist equipment so I approached Flt Lt Elcomb at RAF Waddington to ask her to carry out the procedure.

"Although her day to day work is on human teeth she had the necessary equipment and is also allowed to carry out treatment on animals at the request of a veterinary surgeon."

Above: Flt Lt Elcomb and SAC Rebecca Powles get to work on Max

#### **NEWSREEL**

### Train on, says contract

SCS, a subsidiary of technology group Cohort, has won a 12-month extension to its £2.6 million training contract for Joint Force Command, Work includes rehearsing JFC's component organisations through live and simulated exercises. SCS has supported collective training of deployable headquarters for JFC and its predecessor, Permanent Joint Headquarters, since 2000, winning four competitive tenders.

### Planning facility opens

THE Advanced Mission Planning Aid (AMPA) opened its training facility at the Defence Academy, Shrivenham on 22nd April. Adjoining the Military Aviation Authority, the facility will support mission planning for Typhoon, Tornado, Hercules, Hawk T1 and Advanced Trainer, King Air and Tucano aircraft for the next three years. AMPA looks forward to welcoming A400M Atlas, and potentially other, aircraft into the programme next year.

### Deployments to be longer

**NEW** troop rotation arrangements could see some UK military personnel deploying to Afghanistan for eight or nine months, **Defence Secretary** Philip Hammond has announced. The new arrangements are designed to ensure force protection for UK troops is maximised during drawdown over the next 18 months.

#### Ryder green light on Germany's white fleet

VEHICLES IN Germany will continue to be supplied by Ryder Ltd, under a new and improved contract.

Ryder has been awarded a new four-year contract by the MOD for the provision of its 'white fleet' in Germany, following a competitive tender process using the Government Procurement Service frameworks.

The new contract, which follows the 40-month vehicle rental contract for the MOD in the UK awarded to Ryder in 2012, is worth approximately €30 million over four years and includes potential for a 12-month extension.

Ryder will supply a wide range of vehicles, including HGVs, minibuses, cars and modified vehicles and will reflect the MOD's planned troop reduction in Germany during this period.

Services include full fleet management to provide vehicles, supply maintenance, breakdown and incident management, as well as short term hire.

In addition, Ryder will also be supplying an 'intelligent vehicle booking system' as part of its Fleet Care online programme to help ensure that the fleet is used as efficiently as possible.

Ryder will also be providing fleet utilisation management information to optimise fleet size and deliver savings to MOD.

Phil Burton, deputy head of the Operational Support Vehicle Programme, said: "Ryder has an outstanding reputation for supplying vehicles for MOD operations both in the UK and in Europe. I look forward to the continuation of the close working relationship with the Ryder team during the coming months to deliver the capabilities and efficiencies we demand."

The project is managed by DE&S Land Equipment Operating Centre and specifically Operational Support Vehicle Programme within the Operation Support Programme.

Advertisement

Also ensuring flight safety by combining and displaying radar data for all MoD air traffic controllers

AoD's provider of Air Support to

**Operational Readiness Training** 

www.cobham.com

# Lightning II will be 'great for Britain' says Minister

THE F-35 Lightning II is 'great for Britain' and the Government is a big supporter of the programme.

The Lockheed Martin aircraft, which began life as the Joint Strike Fighter, is the fifth generation fighter the UK will base on land and on aircraft carriers from 2020.

Philip Dunne, Minister for Defence Equipment, Support and Technology, told a meeting of the Royal United Services Institute on 14th May that the programme was vital to UK national defence and economy.

"The UK aerospace industry is making a significant contribution to the whole global programme," he said.

"UK industry is responsible for manufacturing 15 per cent by value of each and every F-35 aircraft. That's not just for those aircraft manufactured for UK defence, but the entire global fleet.

"The UK's share of this production run alone will generate billions of pounds and tens of thousands of jobs for the British economy. To date, we estimate that almost £5 billion of contracted work has been placed with the UK supply chain."

Mr Dunne added that, from the Government's perspective, the benefits were obvious.

# The best available fighter, value for money and a big creator of jobs

"Our Armed Forces will be equipped with the best next generation jet fighter available, giving them the operational advantage they will need to protect our citizens for decades to come.

"The taxpayer gets value for money from the efficiencies that derive from international collaboration and the subsequent economies of scale.

"And our world leading defence industry benefits from its enduring involvement in a significant portion of the production work, creating jobs and promoting growth in our economy.

"That is why I believe the F-35 is 'great for Britain.' And that is why this government remains so committed to the programme."

Aircraft testing and pilot training continues in the United States. The third test aircraft destined for the UK has already made its maiden flight



#### Switch back to STOVL was right move – UK watchdog

THE UK's spending watchdog has praised the MOD for switching back to the short take off vertical landing (STOVL) version of the Lightning II aircraft in the face of escalating costs.

The 2010 Strategic Defence and Security Review favoured the carrier variant of the aircraft, a decision reversed in early 2012.

"The National Audit Office supports the decision to switch to the STOVL variant," said Defence Secretary Philip Hammond.

"Not only did it save £1.2 billion, it also means that by 2018 we will have the fifth generation stealth jets flying off the *Queen Elizabeth* carrier.

"The decision to act quickly, once more information was available, is evidence of the department's decisive efforts to keep our equipment budget in balance while delivering capability for our Armed Forces."

By February last year estimated costs of converting the ship for the carrier variant with catapults and arrestor gear had increased from £800 million to £2 billion.

Also the carrier variant could not be delivered until 2023, three years later than planned, leaving an undesirable capability gap.

The MOD expects to write off £74 million after reversing the decision but the cost could have been ten times higher if the decision had been made after last May

The NAO notes the carrier variant has a greater range and payload than the STOVL variant and would have provided a more effective strike capability.

But STOVL creates the option to operate Carrier Strike from two carriers, providing continuous capability.

The carrier variant could operate from only the one carrier installed with catapults and arrestors and therefore could provide capability for only 70 per cent of the time.

Mr Hammond has also answered NAO concerns on delays to Crowsnest, the helicopter based radar system making up the third element of Carrier Strike.

"We do not consider that the phased introduction of Crowsnest undermines delivery of Carrier Strike capability," he said.

"It will enter service in 2020 at the same time as *Queen Elizabeth* and the system will be fully operational by 2022."



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

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

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

Visit www.LTPA.co.uk to find out more.



0800 015 0594 www.LTPA.co.uk



# DE&S arrangement sets out new ways of working with DSG

DE&S HAS signed a New Commercial Arrangement (NCA) with the Defence Support Group.

The NCA brings together under one overarching agreement a number of separate existing commercial arrangements with DSG, the organisation which assembles, maintains, repairs and overhauls equipment, including vehicles, for UK Forces.

The NCA came into effect on 1st April and lasts for five years. Only the first year is committed while the other four years are indicative, to inform planning decisions.

It will be reviewed and updated annually.

The NCA is a flexible framework to accommodate changing customer requirements.

It will provide improved ways of working with DSG around performance governance, process improvements, new key performance indicators with customer obligations, and agreed



DSG chief executive Archie Hughes and DE&S' Director Land Equipment Major General Carew Wilks sign the new agreement

management information to support the Agreement. DE&S and DSG will work with key stakeholders to include additional areas of work for DSG, such as the development of a management service across the Army's fleets.

New to the NCA is a customer relationship charter to promote collaborative ways of working.

Copies of a jointly produced NCA guide are available to staff on the NCA MOSS open document library.

#### The Arrangement also includes . . .

a revised pricing agreement/main repair agreement, including programme and district load activity; □ Transfer activity of the Defence Storage and Distribution Agency to DSG, including receipt, inspect, store, maintain and issue at Ashchurch, and vehicles at Longmoor and Catterick; □ Tri-service engineering at Stafford; □ Crypto work managed by DSG's Electronics and Components Business Unit at Sealand: □ Land Supply **Business Unit's** Demeter contract, which has been annexed to the NCA until it expires next year at which point it will be subsumed within the agreement.

Marshall

# Innovation and Excellence in Engineering and Support Solutions.

Marshall Aerospace and Defence Group is one of the largest privately owned and independent aerospace and defence companies in the world, delivering innovation and excellence in engineering and support solutions in the air, on land and at sea.

Marshall Aerospace and Defence Group is part of the Marshall Group. Founded in 1909, the Marshall Group now has an annual turnover in excess of £1.1 billion and over 4,000 employees.



marshalladg.com

# Hellfire stocks mean Apache keeps up the attack

A NEW order of high-tech Hellfire missiles will ensure the UK's Apache Attack Helicopters remain fully equipped for operations.

DE&S has signed a £15million contract for a fresh batch of the 100lb missiles to replace those used on recent operations.

Hellfire has proved itself repeatedly in Afghanistan and was used extensively in the Libyan campaign, when Apaches flew from the deck of *HMS Ocean* against Colonel Gaddafi's forces.

Steve Ranyard, leader of DE&S' International Guns, Missiles and Rockets team, said: "The latest order of this precision weapon will maintain the UK's stockpile of Hellfire and ensure this capability remains in place for current and future operations.

"Hellfire has proved its value over the years on operations and the team has done a great job in maintaining this capability for the Armed Forces."

Apaches can carry up to 16 Hellfire, mounted in sets of four on pylons beneath the helicopter's wings. It is the helicopter's primary weapon.

Although originally intended as an anti-tank weapon, variants

of Hellfire are used to target buildings used by insurgents.

Each missile comes with its own guidance computer, steering control and propulsion system.

The air-to-ground missile leaves its launch rail and accelerates to a speed of Mach 1.3 – 425m every second or 950mph – meaning it takes fewer than 20 seconds to reach a target at its maximum range of five miles.

The Hellfires will be delivered to Joint Helicopter Command, which operates all UK Armed Forces helicopters, under a Foreign Military Sales order with the US Government.

Hellfire is manufactured on behalf of the US Government by Lockheed Martin in the US.



# Equipment Plan earns MPs' cautious welcome

PARLIAMENT has welcomed steps in setting out affordability of the MOD's Equipment Plan for 2012-2022.

But MPs on the Public Accounts Committee are concerned about over-optimistic assumptions, the completeness and robustness of support cost estimates, and risks to capability. They say they cannot yet have confidence that the Equipment Plan is affordable.

The committee said that the addition of a contingency provision of £4.8 billion is a positive step, but, at just three per cent of the budget, may not be sufficient to absorb cost growth.

Responding to the report, Minister for Defence Equipment, Support and Technology, Philip Dunne, said: "We now have a fully-funded and affordable Equipment Plan totalling £160 billion which includes risk



Philip Dunne

provision in each project and, for the first time, over £4 billion of contingency to guard against cost growth.

"There is also £8 billion of unallocated budget available for new equipment to meet emerging needs. None of this money will be used to fund the redeployment of equipment from Afghanistan, which is covered by the Treasury's Special Reserve. We've already balanced the budget and are pressing ahead with plans to radically reform the way the MOD procures equipment for our Armed Forces.

"The government is fully committed to increasing the equipment budget by one per cent a year in the next Spending Review and we are confident our Armed Forces will have what they need to deliver Future Force 2020 and defend the UK's interests both at home and abroad.

"It includes £12.1 billion of investment in helicopters that will see upgraded Pumas and new Chinooks provide capability once the Sea Kings retire from service in 2016, as well as new A400M aircraft which will be delivered from September 2014 to support our C-17 and Voyager fleets."



Safe and sound Wolf fleet takes on more protection

MORE THAN 6,500 Land Rovers can now boast greater passenger safety after a three-year DE&S-managed programme.

Safety enhancements include a Front Roll-Over Protection System to protect occupants from roll-overs and front end shunts.

Self-retracting rear seat belts have been fitted, along with acoustic matting to absorb sound and vibration, and anticorrosion paint to protect the chassis.

The programme for the Wolf fleet -



Above: Front Roll Over Protection System and acoustic matting fitted in the front compartment

Project Remus

will

eventually see around 7,000 vehicles modified at a cost of £39 million, including the last remaining vehicles returning from Afghanistan from next year. Modifications are on budget and on time.

The work has been managed by DE&S' former Specialist and Logistic Vehicle project team, now part of the Operational Support Vehicle Programme at Abbey Wood.

In the UK the programme was delivered by the Defence Support Group at a number of its sites. DSG also procured modification kits for vehicles in Brunei, Canada, the Falkland Islands, Germany, Gibraltar and Kenya.

Major Simon Powell. Remus Programme Manager, said: programme has been the most extensive safety upgrade to the Wolf fleet since it entered service in 1997 and will play a significant part in maintaining the fleet to the extended out of service date of 2030.

Left and below: roll-

in road accidents, thanks to Remus-fitted

protection (High Specification)

Truck

over protection in action personnel escaped serious injury after their vehicles were involved

"The fleet now benefits from much higher safety levels for users and this has clearly been demonstrated by the number of Wolf occupants who have walked away from complete roll-overs or front end collisions.

"The system works and, thankfully, while there have been injuries, there have been no fatalities of passengers in a Remus-modified Wolf despite the number of full roll-overs since 2009."

Specialist and Logistic Vehicle leader Phil Burton added: "On behalf of DE&S and the Front Line Commands, the project team would like to record a vote of thanks to DSG for delivering its part of the Remus programme."

> The Operational Support Vehicle Programme is to add more safety measures to further improve passenger safety and maintain capability of the fleet to 2030.

Left: Richard McIntyre from DSG and DE&S' Maj Simon Powell mark completion of the 5,477th Land Rover (High Specification) Wolf upgrade in the UK by DSG





Tel: +44 (0) 1223 373737 Email: contactus@loricasystemsuk.com

www.loricasystemsuk.com



DE&S' leading showcase for the land-based fighting forces of

de&s

the future











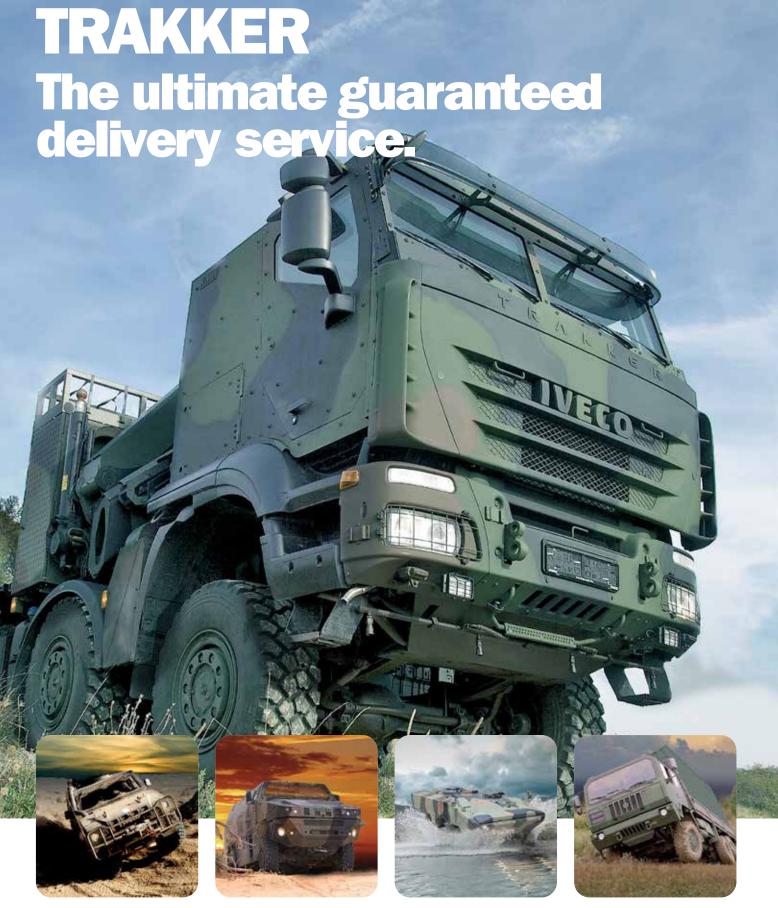


DVD 2013 DVD at Millbrook Proving Ground in Bedfordshire to develop ideas and generate an increased understanding of the dynamic defence environment.

The theme of this year's DVD event will be the shift towards support for contingent operations and the challenge of delivering Army 2020.

DVD2013 is the first to be jointly run by Army Headquarters and DE&S Land Equipment, recognising the new capability role taken on by the Army as part of defence transformation.

The event provides a clear opportunity to obtain feedback from military personnel who have used the equipment first hand in operations. In another first for DVD2013, this aspect will be stronger than ever as the Commanding Officer, key commanders and staff from a field army brigade will attend.



Iveco DV's range of Multirole Vehicles, Tactical and Logistic Trucks and Armoured Fighting Vehicles covers the full spectrum of on- and off-road military requirements. Together, they represent a considered, comprehensive and effective response to the needs of the military customer. Iveco recognises that such needs can evolve rapidly as they respond to the operational environment, doctrinal changes and altered threat. We therefore seek to identify or antici-

pate at an early stage how requirements are likely to develop, and shape our development accordingly.

The 8 x 8 Protected Trakker, now in service with four NATO armies, demonstrates the results of this process well: from a COTS chassis lveco has developed an adaptable logistic vehicle with class leading protection and mobility, capable of fulfilling support and resupply tasks right up to the front line.



# DVD 2013 is all ready to go

DVD2013 is a significant milestone in the history of DVD. The event is now in its tenth year and comes at a time of key change as we plan for Army 2020 and post withdrawal of Afghanistan, says Major General Carew Wilks, Director Land Equipment at DE&S

VD as an event is key in engagement with industry, to develop relations with stakeholders and suppliers and bring new technology to the forefront in a practical setting. The event helps us to shape requirements and drive innovation.

I was involved in setting up the first DVD in 2003 and have seen it grow and expand to become an established event in Land Equipment's and industry's calendar.

The importance of this year's event is that it is jointly managed for the first time by the Army and is focused on transforming support for land equipment to deliver Army 2020.

The focus will be on delivering Army 2020, how the Army moves into its new role and how we transform support for land equipment to enable this.

The priority will be sustaining and supporting land equipment, bringing urgent operational requirements and new platforms into core and preparing for contingent operations and maximising opportunities.

What you will see on display is a selection of the core vehicles





ArmourWorks International Ltd are widely known for supplying the UK's MoD Foxhound vehicle with their EA TECH™ Blast Attenuating Seats

ArmourWorks have also recently been awarded an order for Ballistic Rocket Pod Armour for the UK Apache Mk1 from DE&S.





Not only do they work closely with customers to gain an extensive understanding of their exact requirements but offer Integrated Logistic Support - supporting the customer and the programme throughout its life cycle.

As an ISO: 9001 UKAS Accredited company, ArmourWorks are proud of their ILS and quality procedures. Everything is manufactured in house in their facility in Gloucester, UK enabling them to guarantee quality and ensure all procedures are followed right through to completion.

## The flagship event for Land Equipment

Brigadier Peter Rafferty, head of Operational Support Programmes at DE&S, outlines why DVD2013 is a crucial event for industry, suppliers and stakeholders

**Q.** What are you most looking forward to about DVD2013?

A. The key change at this year's event is the ownership of DVD. While it has previously been managed solely by DE&S with Army attending, this year will be a joint venture, which I think will have a huge impact on the event. I am anticipating greater interest

from industry as Army HQ cement the triangle between stakeholders, industry and the front

**Q.** What do you hope to get out of this year's event?

A. Unlike previous years where the agenda has been dominated by new equipment, this year will focus on support and sustainability in the shift towards contingent operations and the challenge of enabling the delivery of Army 2020. This event is the ideal opportunity to engage industry in informal discussions about the upkeep and development of land equipment to ensure future sustainability.

**Q.** Who are you keen to speak to at DVD2013?

A. I am looking forward to seeing many suppliers at DVD2013 and I'll be keen to speak to support change specialists, as well as small to medium enterprises who supply to the defence industry. I hope to get a better insight into the innovation and solutions for support to front lines and it will be

useful to meet Army and industry in the same forum to engage in conversations about the dynamic defence environment.

**Q.** How do you think the new joint relationship with the Army at this year's DVD will help enhance the event?

**A.** In the past, Front Line Commands, as the end user of



Brigadier Rafferty, accepting the latest of around 7,000 MAN support vehicles. The vehicle will be on show at DVD

equipment, felt divorced from the decision-making process. With DE&S and industry engaging in discussions to decide on the equipment and infrastructure of choice on their behalf, front line officers have previously had very little input and therefore largely ended up with the equipment they were given.

By engaging the Army in these



discussions and seeking feedback from them, industry will be better placed to set realistic requirements that ensure delivery of the right products, to the right people, at the right price and at the right time. This year's DVD will have major emphasis on the Army's development in engaging feedback from the front line and I would commend Army HQ in recognising this and taking important steps forward to work with government and industry on sharing best practice and strengthening relationships.

Another key point to make about DVD2013 is the opportunity that

visitors will have to see and experience a broad range of land equipment, not just vehicles, but hand used equipment and camp infrastructure too. Seeing all the elements of land equipment in one setting helps increase understanding and synergies between them.

**Q.** How do you think the event has evolved over the last decade?

A. DVD has become the preeminent forum for discussions and decisions around land requirements, particularly for UK industry, but also for world-wide partners.

Although DVD is a much more niche event than bigger defence events, the level of intimacy and demonstration opportunities at DVD has seen it remain the flagship event for defence land equipment over the past ten years. The frank dialogue and coherent meetings with users which have continued to take place since the launch of the event in 2003 have been key drivers in its on-going

**Q.** Why does DVD remain such a crucial event for anyone involved in the defence land equipment and support sector?

A. DVD is held in a less sterile environment to that of traditional exhibitions. The event enables visitors to see equipment deployed in the environment it operates, and there is no substitute for the opportunity to drive, operate and handle equipment that is available at DVD.

Register your place now for DVD2013, 19th-20th June at Millbrook Proving Ground - www.theevent.co.uk.





# Terrier let loose

Terrier, the latest armoured engineer tractor which will go on show at DVD, will provide Royal Engineers with a multi purpose protected 'Swiss Army Knife earthmoving capability.

Replacing the Combat Engineer Tractor (CET), it is a unique, medium weight agile vehicle incorporating state of the art sub systems including electronic architecture, remote control and regenerative protection from nuclear, biological and chemical threats.

Delivery of the 20th production vehicle on 25th April along with the five year contractor logistic support contract and availability of 12 trained crews means Terrier has achieved its approved in service date while meeting performance parameters.

The vehicle is managed by the Terrier Section in Manoeuvre Support at DE&S and delivered by BAE Systems, Global Combat Systems in Newcastle.

DE&S Project Manager Heath Wardle said: "Delivery of this complex vehicle project in a rapidly changing industrial supplier base has been a challenge. But effective teamworking between DE&S, Royal Engineer end users and the prime contractor, BAE Systems has ultimately enabled project success."

The two speed final drive in the vehicle is coupled to an enhanced Warrior gearbox. This enables the low speed tractive effort required for digging protective pits for Warrior and AS90 vehicles and the higher speeds required to keep up with and support Warrior and Challenger.

The vehicle's equipment excavator arm can be fitted with a range of equipment which uses the vehicle's hydraulic power. These include an earth auger for drilling holes and a rock hammer and surface ripper for route denial. The versatile front loader system can be used to mount other ancillary equipment such as a forklift attachment, and the standard fitment – the five-tonne capacity front bucket. The vehicle has a route clearance capability, which, as with other activities, can be undertaken by (wireless) remote control.

Comprehensive trials have taken four years to make sure the Army gets the capability it needs.

capability it needs.

Terrier's reliability is key. Its predecessor CET suffered from poor reliability and initial problems encountered on the Terrier prototype led the MOD to implement and closely monitor a robust reliability growth programme for the vehicle. During reliability growth, demonstration and production vehicles covered around 80,000 km of road, track and cross-country driving, some of which were undertaken towing the heavy duty armoured vehicle Royal Engineers trailer. About 10,000 hours were undertaken on special role activities (digging, route clearance and denial) and a quarter of a million tonnes of soil were moved digging emplacements and obstacles.

Acceptance trials covered all the vehicle s system requirements. Trials were witnessed by the Terrier Section and results captured, reviewed and accepted in 135 acceptance reports. Comprehensive automotive testing was undertaken at various specialist sites including the MIRA test track where Terrier was sharing the road with high performance sports cars, and the climatic chamber, which verified the climatic operating envelope requirement for the vehicle.

To train crews on Terrier a dedicated training facility was built at Bovington.

The facility includes four full motion platform simulators – essentially replica Terrier cabs. Students can undertake the full range of Terrier activities and the simulator offers a degree of flexibility not possible with on vehicle training.

Eight Terrier vehicles are also allocated to the facility to enable 'real' driving and digging training on the dedicated training area as well as maintenance activities in the training workshop.

The training facility hosted a special ceremony on 20th May attended by Chief of the General Staff, General Sir Peter Wall.

Terrier will be on display at DVD2013 on 19th 20th June.



# Challenger 2 ready for another decade

When Challenger 2, the Army's versatile and proven main battle tank, takes its place as a centrepiece of DVD it will bring with it a proud history and an assured future. Lt Col lain Laver of Capabilities Directorate Combat at Andover looks at early moves to extend its life by another ten years.



acquisition terms, is in its concept phase with an Initial Gate planned for the middle of the decade.

While Challenger 2 has had a number of enhancements through the urgent operational requirement process in Iraq, previous initiatives to upgrade its firepower and mobility were not successful. So focus of the LEP is on managing obsolescence – replacing any components that will soon not be available.

The British Army invests in armoured fighting vehicles with an anticipated life to give a good return on value for money. Challenger 2 can continue to do so to 2035, but needs to address those component parts that industry can no longer support, primarily because technology has moved on. Such implementation may well also reduce whole life costs for the tank's remaining service.

To discuss the work ahead and identify any novel or innovative approaches for the project, a CR2 LEP stakeholders' day was held in Lulworth and Bovington in April. It was co-hosted by the Armoured Fighting Vehicles Gunnery School and the Armoured Trials and Development Unit.

The audience included representatives from armoured regiments who will use the tank on operations, Army HQ's key capability directorates and financial planners, the LEP project team from Abbey Wood, and the Armour Centre.

The day was successful and visits to routine live fire training, a mobility display and static line where the stakeholders could meet vehicle crews and discuss the issues surrounding them provided tangible reinforcement to what is required to keep this battle-winning capability on top of its game.

Among benefits of the day were valuable discussion of acquisition strategy and an unambiguous understanding that the LEP will address obsolescence.



Top: obsolescence on Challenger is being managed to 2035

> Middle: a theatre entry standard Challenger takes on Challenger 1998 vintage

Right: Life Extension Project stakeholders pictured at the Armoured Trials and Development Unit





Extreme Cases Polamco Ltd **Scott Cables** Gallay Ltd Cooneen Watts and Stone Ltd AeroGlow Kemtron Ltd Amphenol Ltd Aish Technologies Clark Masts Systems Ltd DMS technologies AWS Electronics Group Ltd **Total Mast Solutions** Glenair UK Ltd Peli Products (UK) Thomas Jacks Ltd Allan Webb Ltd Vitavox CamelBak Products LLC 7hendre Cablescan **Defence Support Group** IS-Rayfast Bose Military Headsets Blakley Electrics Ltd Phoenix Dynamics Group QinetiQ Fox Defense Suspension Iveco Defence Vehicles Knott-Avonride Ltd RTP UK amco Conway Packing Services Ltd Active Électronics Plc Macneillie Kidde Graviner **EKA Ltd** Oxley Developments Akzo Nobel Aerospace Coatings Marshall Group General Dynamics Uk Limited MTL Group Ltd Ginsbury Electronics Ultra Electronics Aerco Ltd

Fluid Transfer International Kaliber Ltd **PSJ Fabrications** AmSafe Bridport Dvtecna David Brown Hydraulic Systems Ltd TRaC Global Ltd Vortex Exhaust Technology Ltd CDG, a Boeing Company Thales UK Stuart Canvas Ltd **Hutchinson Defence & Security** BMT Group KTK Kommunikationstechnik GmbH CQC Ltd Line-X Protective Coatings Frazer-Nash Consultancy C2UK Ltd Hobson Industries 3M UK PLC Dover CMP Microlease LEO Asset Management Software Tek Military Seating Aeroflex CDS Defence Support Factair Ltd Wincanton TE Connectivity **ADS Group Limited** Fischer Panda Generators **Ergo Computing** Ferno UK Ltd Terberg DTS (UK) Ltd TMS Support Solutions Ltd Police Resources International. DMM International Elaflex Ltd Istec Services Ltd TVS Supply Chain Solutions Qioptiq Briggs Equipment UK Ltd Enhanced Protection Systems UK Ltd Alpha Armouring

### Exhibitors - 2013

WEW Westerwälder Eisenwerk GmbH Mission Motorsport SSI SCHAEFER G3 Systems Ltd Permex MilDef Ltd ArmourWorks Motorsport to Defence **BCB International Ltd** Polaris Britain Ltd MIRA Ltd Pearson Engineering Eberspacher UK Ltd Prestolite Electric Ltd FN Herstal LSC Group E-T-A Circuit Breakers Ltd Zero Cases (UK) Limited Cassidian Test and Services Ltd Techmodal **Burgess Consulting Ltd** Hitek Electronic Materials Ltd MAN Truck & Bus UK Ltd Cove Industries **BAE Systems** Beechwood Equipment Teledyne Reynolds ColPro(UK) Ltd **PPG Aerospace** Automotive Trim Developments Selex ES Saab Technologies UK Ltd Penman Engineering Ltd Jankel YDS

HDT Global

Ipeco Electronics

Chess Dynamics Ltd

Persides Antares (Europe) Ltd Jacobs Michelin Tyre Plc Odbury UK Ltd Cinch Connectors/Fibreco Merlin Power Systems NAR Group Ltd AES (Defence) Getac Supacat Ltd Lockheed Martin UK Revision Military Team Defence Ltd Babcock Firetrace Aerospace General Dynamics Land Systems -Force Protection Europe **PAB Coventry** Webasto The Royal British Legion Systems Consultants Services Ltd Level Peaks Associates Navistar Defense Oshkosh Defense Honeywell Safety Products Ashtree Vision and Safety Atkins NBC Group Ricardo **Shield Technologies Corporation** Raytheon Streit UK Limited Souriau **Emerson Connectivity Solutions Ltd** GRC Itd Cobham Heckler & Koch Roder UK Ltd Electrothermal Ltd Isoclima S.p.A. Seyntex NV Jaguar Land Rover WillBurt

■ List correct at time of going to press.

For attendance go to http://www.theevent.co.uk/Exhibitor/Register-Your-Interest



RACE CAR

"Where quality and reliability are paramount you can depend on us to deliver" Jon Simmonds, Chief Design Engineer





We bring extensive experience and innovation to engineering unique solutions to meet your specific criteria for armoured and defence applications.

We can provide brake kit solutions for armoured Toyota LC76, LC79, LC200 and Hilux models, to function effectively and reliably in harsh environments.

AP Racing for ultimate reliability.

T: +44 (0) 24 7663 9595 E: armoured@apracing.co.uk





#### Alpha Armouring® Panzerung Germany



- State of the art quality and finish
- Alpha Armouring® SUVs available ex stock or short time delivery
- fication (ISO 20071 / ISO 9001)
- Road safety: Fully certified (TÜV Ger- Service centre Palestine: Ramallah and many, Millbrook Proving Ground UK)
- (Beschussamt Germany / QinetiQ UK)

- Non-stepped glazing system avoids glass cracking on the edges
- Built to ensure maximum durability
- ISO quality management system certi- Service centre Afghanistan: Kabul and countrywide
  - countrywide
- Vehicle Ballistics / Blast test: Certified Alpha mobile service team: Service, repair and parts available worldwide

### **MORE THAN 30 YEARS OF EXPERIENCE** MANUFACTURING ARMOURED SUVS





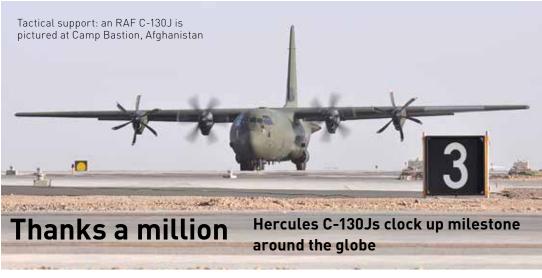








Phone: +49 (0)89 329 8816 3 - Fax: +49 (0)89 32988 168 www.alpha-armouring.com - sales@alpha-armouring.com



WORLDWIDE OPERATORS of C-130J Hercules transport aircraft have collectively passed one million flight hours.

Thirteen countries – led by the UK – operate C-130Js. Hours were tracked from the first flight on 5th April 1996 until the end of April this year.

Countries with C-130Js contributing to the milestone include, in order of delivery, the UK, US, Australia, Italy, Denmark, Norway, Canada, India, Qatar, Oman, Iraq, Tunisia and Israel.

Kuwait and the Republic of Korea will join the community with deliveries next year.

# Defensive armoury lands five years' more support

DE&S' AIR Platform Systems team has placed an £80 million contract with US defence contractor Northrop Grumman for a further five years of support for the Large Aircraft Infra Red Countermeasures (LAIRCM) system, which is fitted to C-17 and C-130 RAF transport

LAIRCM is an advanced system that protects RAF aircraft against the threat from the most advanced heat-seeking anti-aircraft missiles.

The same system is also used to protect Merlin Mk3 helicopters.

The system was first introduced into service on large RAF aircraft in 2004 and has proved an important and reliable part of the RAF's defensive armoury, according to Air Platform Systems team leader Ken Spreadborough.

He said: "We have contracted with Northrop Grumman Overseas Services Corporation in Chicago. There is also a UK support facility operated by Northrop Grumman in Chester and the laser turrets are maintained by Selex ES in Edinburgh.

"It's a hands-off automatic system and we understand that the RAF is pleased with it. It works through LAIRCM sensors detecting a missile launch, handing the target over to laser turrets fitted on the aircraft which track the missile and confuse the missile's guidance system, so that it is no longer a threat.

"Regular technical interchange with the company, Defence Science and Technology Laboratory and the MOD's Air Warfare Centre have led to further improvements to the system and they will be rolled out to our customer in due course to ensure the system continues to provide the best protection.

"The team worked hard with Northrop Grumman to develop and agree this contract and we are very pleased with the outcome."

Reliability of the equipment has also steadily improved, thanks to co-operation between DE&S and Northrop Grumman and application of a comprehensive Fault Reporting And Corrective Action System.

A previous support contract was awarded in 2010, also to Northrop Grumman, to support the current LAIRCM system for three years.

# Voyager takes a step forward

AIRTANKER HAS taken receipt of its first 'three-point' tanker, marking a significant step forward in the Voyager programme.

The first of seven 'three-point capable' tankers to be delivered to the RAF as part of the Future Strategic Tanker Aircraft programme, the aircraft is configured to include a centre-line fuselage refuelling unit capability, in addition to wing pods.

In all, 14 aircraft, plus the associated personnel and infrastructure to support them, will be delivered by the Voyager programme. To date the two military aircraft since the start of operational service in April last year, ZZ330 and ZZ331, have together clocked more than 1,700 hours, carrying more than 25,000 passengers and 2.000 tonnes of freight.







# DESider Upcoming SPECIAL Issues

July DSEI Supplement and Preview September DSEI Show issue (Copies also available at DSEI)



Want to complement your show presence?

Advertising opportunities available Contact Richard Stillman on 0207 657 1837 richard.stillman@tenalps.com

# 'You represent the best of what we do'

Individuals and teams from DE&S are honoured at Main Building with a host of commendations handed out by the Chief of Defence Materiel

Bernard Gray has described handing out his annual commendations as 'one of the joys' of his job. And he said the latest collection "underlines all of the good work that goes on in DE&S in support of the Armed Forces".

Opening the ceremony in MOD Main Building on 3rd May Mr Gray said: "We spend too much time focusing on what goes wrong and not enough time on what goes right. At this point in time, 90 per cent of the things we do are right and today is about celebrating the success of some of these.

"The awards today provide a

representative sample of the very best of what we do in DE&S. It showcases our contribution to defence, Afghanistan and the Olympics and also demonstrates the scale, volume and diversity of our business.

"I applaud all of you and by extension your teams and I sincerely appreciate all of the work you do. Without it, we would not deliver the support we provide to Afghanistan, most of which goes largely unsung, and also the resilience, courtesy and professionalism demonstrated in supporting a national goal, the Olympics.

"Thank you for all your hard work and

congratulations on your achievements."

Board members and senior staff from DE&S and elsewhere in MOD also attended the day.

Air Commodore Martin Sampson, Joint Force Air Component Commander (JFACC), paid tribute to Chief Technician Richard McClay from the Fast Air Support (Tornado) Team for his role in operational support. He used his unique technical knowledge and programming skills to develop Typhoon aircraft software.

Commodore Jonathan Pentreath, Director Joint Helicopter Command



Capability, thanked Warrant Officer Class 2 Darren Holyoake of DE&S' Gazelle Team, for his commitment in support of the Gazelle helicopter over a period where challenges in the management of safety and airworthiness coincided with severe gapping in the team and contributing to the continued deployment of the Gazelle capability on its UK operations.

Air Commodore Sampson again commended the work of the Flight Simulation and Synthetic Trainers project team for use of innovative and novel approaches to delivering the Distributed Synthetic Air Land Training capability. This turned a research facility into a world-leading operational pre-deployment training capability, delivering mission specific training to front line forces ensuring they are best prepared for the complexities of combat in Operation Herrick. He added: "This genuinely saves lives in Afghanistan."

Laurence Bryant, Director Weapons, was delighted with the efforts of the Defence General Munitions Disposal Team in achieving a challenging disposal target last year. The team reduced inventory value by more than £250 million and delivered a difficult urgent operational requirement for a small arms ammunition incinerator in Operation

Herrick within tight timescales

Carole Tolley, Director Resources, Head Office and Corporate Finance praised the DE&S Commercial Command and Centre Head Office and Corporate Services Team in providing a unique and innovative contractual solution for ground-breaking financial services to the MOD in support of financial risk management in the procurement of fuel commodities.

Tony Graham, Director Ships, congratulated the work of the Electrical Power and Propulsion Section for its role in displaying tenacity and determination to interrogate, isolate root causes, and then implement monitoring and recovery work programmes to halt the decline of the Type 23 propulsion motors. The team's work has been instrumental in ensuring the continued operational service of all Type 23 frigates, out until the now extended class life.

Les Mosco, MOD Director Commercial, was full of praise for the work of the Atomic Weapons Establishment Contract Renegotiation Team for successfully renegotiating a vital contract between the MOD and the Atomic Weapons Establishment. This included defining a five-year programme of work, negotiating significant cost reductions, redrafting major elements of the contract and gaining agreement from the highest

levels of government – all of which were delivered a year ahead of schedule. .

Major General Ian Copeland, Director Joint Support Chain, commended WO1 George Anderson from Logistics Network Enabled Capability for his role in managing sustainment of vital worldwide logistic information infrastructure, devoting time and energy to supporting the most significant increase and redeployment of logistic information systems on Operation Herrick for many years.

Mr Gray then presented Operational Service Medals to: Simon Brooke, Special Projects CISR Team, Fraser Fleming, Soldier Systems Programme Team, and Andy Weston, Materiel Strategy Team.

Mr Gray handed out certificates and posed for photographs with each of the winners. In his closing remarks, he acknowledged the fantastic contribution by all award winners. He said: "I hope you are all proud of what you have achieved. You represent the best of what we do. The presentations today demonstrate the huge range of our business and I am very proud of you, congratulations. Enjoy the rest of your day celebrating with friends and family."

■ Winners: pages 34 and 35



# Cenon

Flight Lieutenant Gareth Thomas – (FAST (Tornado) Team) – for ensuring the continued airworthiness and effectiveness of the Tornado Armament and Electrical Systems.



Gary McCall (Manoeuvre Support) – for the successful renegotiation of the Terrier Contractor Logistic Support arrangement.



Alan Sellars (Platform Group, Clyde) – as project manager for *HMS Astute's* Base Maintenance Period 6.



**Commendation Winners** 

#### **INDIVIDUALS**

- Chief Technician Richard McLay FAST (Tornado) Team) work undertaken in support of operations.
- Mike Hammond (Defence General Munitions Team) for his contribution in supporting and maintaining the Royal Navy's naval countermeasures capability.
- Warrant Officer Class 2 (AQMS) Darren Holyoake (Puma Gazelle Team) for his role in support of the Gazelle helicopter during a challenging period.
- Colin Leat (SPCISR Team) for devising an alternative procurement strategy to deliver a specialist capability.
- John Saxton (Force Protection Delivery Team) for maintaining DE&S' reputation for project management and engineering excellence, delivering equipment protection against challenging timelines for the Olympics.
- Merry Lutz (Systems Engineering and Integration Group (International) for shaping the work of the bilateral Interoperability Commission and the multinational Coalition Warfare programme.

#### **Operational Services Medals**

- Mr Simon Brooke Special Projects CISR Team
- Mr Fraser Fleming Soldier Systems Programme Team
- Mr Andy Weston Materiel Strategy Team



WO1 George Anderson (Logistics Network Enabled Capability) – for successfully managing the considerable demands of sustaining worldwide logistic information infrastructure.

#### **TEAMS**

- Personal Combat Equipment Team for driving forward design and development efforts with industry, science and academia for dismounted soldier survivability.
- Submarine Production Boat 4 Team for its role in the Astute Boat 4 negotiations with BAE Systems.
- Defence Quality Assurance (Policy) International for developing new guidance and tools to mitigate the risk to MOD of counterfeit materiel.
- Acquisition Safety and Environment Team for developing and delivering a comprehensive agenda to uplift and monitor competence standards for those undertaking safety activities within DE&S and the Front Line Commands.

Safety Critical Radome Replacement in Gibraltar Team – for the successful and rapid delivery of a replacement radome at Rock Gun, Gibraltar.

- Defence Munitions Gosport Apprentice Training Team for being awarded an 'outstanding' assessment by OFSTED.
- ALARM Team for delivering and deploying life-saving equipment to troops on the front line on Operation Herrick.
- United Kingdom Demonstration & Shakedown Operational Planning Team

   for demonstrating the readiness of a nuclear submarine for operational deployment following overhaul, culminating in the firing of a Trident test missile.
- Defence Information Infrastructure Implementation Team for the implementation of Defence Information Infrastructure to 60,000 users across 612 fixed sites.
- Surface Warship Upkeep Project Delivery Teams for successful delivery of Surface Warship Upkeep periods from 2007 to 2012.
- Information Systems and Services Operation Olympics Team for its role in procuring and deploying urgent command and control capabilities to enable cross-Government security objectives for the Olympics.
- Flight Simulation and Synthetic Trainers Project Team for using innovative and novel approaches to deliver the Distributed Synthetic Air Land Training capability.
- Bowman Combat Tactical Communication and Information Systems
   Urgent Operational Requirements Team for delivering three inter-related
   urgent operational requirements concurrently in support of operations in
   Afghanistan.
- PRIDE Computer Information System of Systems Team for delivering the Communications and Information Systems to the new Defence Geospatial Intelligence Fusion Centre at RAF Wyton.
- Defence General Munitions Disposal Team for achieving a very challenging munitions disposal target.
- DE&S Commercial Commands and Centre, Head Office and Corporate Services Team – for providing a unique and innovative contractual solution for ground-breaking financial services to the MOD.
- Aircrew Protective Equipment and Detection Team for successfully delivering the Aircrew Protective Equipment and Detection Minimum Operating Capability within cost and ahead of schedule for the Olympics.
- Tornado GR4 Safety Team for taking an incomplete safety management system and creating a complementary suite of safety management tools.
- Electrical Power and Propulsion Section for its role in isolating root causes and implementing monitoring and recovery work programmes to support Type 23 propulsion motors.
- Atomic Weapons Establishment Contract Renegotiation Team for successfully renegotiating a vital contract between MOD and AWE.
- Air Commodities Inventory Management Team for raising standards and providing essential support for which all MOD aircraft and airfields are critically dependant.

Lightning Project Team – for gathering evidence, designing and developing the safety argument to justify the issue of the Military Flight Test Permit for the first UK F 35 Lightning II aircraft.



Expeditionary Campaign Infrastructure Team – for successful delivery of military support to the London Olympics 2012.



Trident Re-entry System In Service Team – for preparing for the life extension of the UK nuclear weapon stockpile; incorporating vital new components to address obsolescence issues.



Paveway IV Replenishment Team – for replenishing UK contingent bombing capability at reduced cost and 18 months ahead of schedule.



onstruction of the Royal Navy's new aircraft carriers *HMS Queen Elizabeth* and *HMS Prince of Wales* is now reaching a peak of activity according to DE&S' Director Ships.

Blocks of *Queen Elizabeth* have been brought together from six shipyards around the UK, and in time the first blocks of *Prince of Wales* will take their place in the Rosyth dock.

"We're reaching the peak of activity now," said Tony Graham. "When you are building blocks of a ship, the focus is on the distributed shipyards. We are well into the structural assembly for HMS Queen Elizabeth, the welding it all together at Rosyth. There isn't a prototype for this to practise on, especially not on this scale. A huge number of specialist trades are on board all at once and trying to co-ordinate, with wiring, plumbing and all the things that are needed to connect the ship from bow to stern – the veins and arteries if you like"

Recent highlights in the assembly of *Queen Elizabeth* include:

• Structural completion of the after island superstructure – now

awaiting transport by sea from Glasgow to Rosyth;

- Fitting of the second of the ship's two main gas turbine generators;
- Lifting into place of the final main hull centre blocks at the stern of the ship, meaning more than 40,000 tonnes of ship are now in the dry dock;
- Start of painting the hull warship grey.

To de-risk this vital next stage as many systems as possible are being tested onshore to reduce ship time taken up during later sea trials. Addressing component issues and fixing software bugs in their hundreds is to be expected, but carrying out this process this early means bringing forward the 'unknown unknowns' to much earlier in the programme and de-risking the setting to work in the ship. Far from the interior of the ship being the finishing touches, it is one of the most complex stages to co-ordinate.

Mr Graham said: "One of the biggest surprises is the personality that the ship already has. Looking at an artist's impression is one thing but standing on the flight deck is quite another – the sense of size and space is now very real. There's a real sense of purpose."

Both carriers will be part of a wider carrier family stretching across the world, with HMS Queen Elizabeth twinned with USS Gerald Ford and HMS Prince of Wales paired up with USS John F Kennedy. Half a dozen special gavels and striking plates have been welded with steel from each pair of twinned carriers to highlight the strong relationship between the two countries. They will be used in various ceremonial occasions with a set to be kept in each wardroom.

Meanwhile, Prince of Wales is well into its construction phase, adding to the peak workload. Mr Graham admits that looking at Prince of Wales and Queen Elizabeth feels a bit like Blue Peter... here's one we made earlier!

Recent highlights on *Prince of Wales*:

- Progress onconstruction of the first major hull unit, Lower Block 3, in Glasgow continues, with cabins for the ship's company being fitted;
- Work is well advanced on Lower Block 2 in Portsmouth;
- Work on the ship is under way Appledore and on the Tyne.

Rear Admiral Steve Brunton, Director



Ship Acquisition, is also starting to feel the character of the ship. He said: "There's a real sense of pace across the project, not just in the dock at Rosyth, and the ship is starting to have a feel and an ambience of its own. A Royal Navy ship is never a cold collection of technology. Every ship has its own personality, its style if you like – an amalgam of ship, people and something in the DNA you just cannot define. Back in the dock it is impressive how well the assembly is progressing – the ultimate in Lego sets!

"If you look at the different sections of the ship, it is amazing how accurate they are at the joins; you wouldn't know that they were from different parts of the country."

There are now 20 members of *HMS Queen Elizabeth's'* crew which will grow rapidly in the next two years under the watchful eye of the Senior Naval Officer Captain Simon Petit. They are familiarising themselves with the ship layout and starting to establish processes for the ship. They have an important role in helping to set to work the many systems on board working alongside industry and the project team. They even have a shop where you can buy products like *Queen Elizabeth* and *Prince of Wales*, cufflinks.

Rear Admiral Brunton added: "It's now the Captain's role to make connections between the ship and affiliated cities and organisations and charities. Sponsors are being arranged for each ship who will take a keen interest in the carriers and the tasks they carry out."

Work has started in Portsmouth to get ready for the carriers to be based there, not least two new jetties to be built and significant dredging at the harbour entrance and in the harbour. "These are the things that people will be able to see, the construction and roadworks, new power distribution into the base and moving local phone lines, all necessary to accommodate the carriers in the longer term." he said.

It will mean a significant overhaul to the Naval Base to host these two giants.



Above: aft flightdeck section installed – one of the final three sections of flight deck (CB05b) was installed on *Queen Elizabeth* on 10th May

Far left: HMS Queen Elizabeth has now grown so large she is difficult to get into one photo – the latest Rosyth aerial picture in April shows her impressive size

Below: the aft island (Upper Block 14) of *Queen Elizabeth* leaves the construction hall at Scotstoun on the Clyde on its way to the RoRo quay and then Rosyth

# Helping to contain a ship of many parts

The Aircraft Carrier Alliance has come up with an ingenious way of dealing with the Scottish weather.

Photographs of the flight show a number of blue ISO containers spread out across the ship.

Rear Admiral Steve Brunton said: "The bad weather caused a few problems initially, as we had canvas covers protecting the workers and the welding of the flight deck sections.

"Then someone had the idea of cutting the bottom off ISO containers and placing them in a line all the way along the join being worked on.

"It protects the workers and the welding and means they can get the job done in a better environment which contributes the quality of the work."



Advertisement

Proud to support DE&S as a trusted partner



Supplier to

Government Procurement

Delivering critical tools for the MOD business space that span the scope of capability management

INTRODUCING:





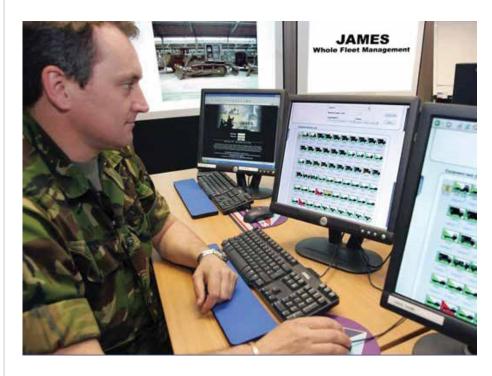
APPROVE®/
FORESIGHT®

Agile solutions for efficient through-life airworthiness, commercial and financial management

For more information visit: www.tlmnexus.com



# Hiring a C-Vehicle? Now JAMES ups the game



Control: JAMES now helps improve management of the MOD's C-Vehicle

MANAGEMENT OF the MOD's collection of engineering and construction vehicles and plant has become more accurate with the advent of a new system.

C-Vehicles, as they are known, are widely used by the military and operate on a hire basis. There are hundreds of demands every month, making fleet management by contractor ALC's system complex.

When the Private Finance Initiative contract began the idea was to develop an interface between ALC's system and the MOD's. In 2005 this was JAMES1 (Joint Asset Management and Engineering Solutions) but it is only with the recent upgrade to JAMES (Land) that development of an interface has become viable.

JAMES is very capable but can be let down by the quality of data loaded into it. DE&S' C-Vehicle team, part of the General Support Group, has ensured that data held on JAMES is accurate and reflects a consistent approach across each equipment type.

Ben Musty, C-Vehicle senior project manager, said the new JAMES interface will allow accurate fleet management for more than 1,000 pieces of equipment that constantly change hands.

"The advent of JAMES offers considerable scope for process and data quality improvements, not least of which is the opportunity to remove the need for all the on-demand paperwork that is currently supplied," he said.

"Recording of maintenance and usage of spare parts will also be easier on JAMES and will result in a saving for the MOD for every fair-wear-and-tear spare part that is recorded as used."

#### How it works

- ☐ Every time a unit receives the C-Vehicles it has demanded it will also receive them on JAMES.
- ☐ The JAMES records will be up to date with the latest usage readings, maintenance data, modifications and safety
- ☐ It is then the unit's responsibility to maintain the vehicle records in JAMES until it comes back off demand.
- ☐ At this point the data will be extracted and entered into the contractor's fleet management system, ensuring it remains the primary source of data for C-Vehicles.
- ☐ Even where units request ALC assistance for maintenance activity, it will still be a unit responsibility to update JAMES.
- □ JAMES offers the facility to include the fact that ALC carried out the work by entering the name of the attending engineer maintaining accountability for work completed.

#### Rolls-Royce latest to sign up to Bloodhound

ROLLS-ROYCE is the latest company to back the Bloodhound Project which is focused on a 1,000 mph world land speed record attempt.

The project, to which a number of DE&S apprentices have applied their skills, will use a Rolls-Royce EJ200 jet engine and a hybrid rocket to propel the car. Rolls-Royce will provide financial and technical support.

Richard Noble, Bloodhound Project Director said: "Rolls-Royce's support is invaluable, their highly motivated ambassadors will help us reach many more schools and youth groups across the country. Their experience of working within a first class aerospace company makes them perfect role models for aspiring engineers."



THE FUTURE operating model of Information Systems and Services (ISS) is now moving to the detailed design stage.

The ISS Change Board endorsed work done on the in-house design at its meeting on 9th May.

Since January, experts from across ISS have been developing the model to support ISS' move to service-based delivery. The model will enable ISS to respond to customers in an agile and joined-up manner, exploiting emergent/ disruptive technology faster than it has done so far.

The 'Blue' team adapted recognised industry best practice, methodologies and models, to create an operating model that works for ISS. The 'Red' team tested the model by running real-life scenarios against it, providing assurance that the model is 'fit for purpose'.

Adrian Wolstenholme from Microsoft Consulting Services, who analysed the model against public/private sector comparators, said: "The MOD is further ahead in its definition of the model than other Government departments seeking to implement a service-based approach."

## Navy tries out new e-mail management

PRIME – QinetiQ's new on-board e-mail management tool – has been successfully tested by the Royal Navy as part of a project focused on improving email management capabilities and bandwidth.

The Royal Navy's vessel-toshore, shore-to-vessel bandwidth, has historically had limited capacity and this has been put under further pressure in recent years with the rapid growth in volumes of information exchange.

QinetiQ has developed a management tool to maximise network availability and prioritise e-mail communications received.

Prime helps maximise Maritime Wide Area Network availability for deployed ships and submarines by enabling users to determine what e-mail they access over the network prior to downloading it, ensuring the available bandwidth is used more efficiently.

Prime was successfully trialled on *HMS Illustrious*.

Lt Cdr James Holgate of Navy Command Information Support said: "We went from initial concept to software integration and successful on-board testing all within the defined time-scales. This is the type of technology we need and being able to test and demonstrate its capabilities in live operations is key."



#### Advertisement



How can you best embed social value in to your service commissioning? Can the services you procure make a positive difference to the economic, social and environmental wellbeing of the local communities you serve?

The Social Value Act became live at the beginning of 2013 and places a duty on public bodies such as the MoD to consider social value ahead of a procurement.

At Interserve, we have always been committed to the defence communities in which we work and know that the successful delivery of our contracts must be measured on more than a standard set of performance indicators.

But it is not just about being an ethical, responsible business partner. By working with the MoD, we are delivering services that add value at a local level. From the rehabilitation of wounded service personnel, to training and apprenticeships, to the creation of local, sustainable supply chains and supporting rural communities. Interserve is proud to support the MoD to achieve meaningful social value.





# Scott set for five years of through-life support

INCREASED VALUE for money and improved availability will be targets of an engineering support contract for *HMS Scott*.

The five-year contract for the Royal Navy's ocean survey vessel has gone to Babcock, with an option to extend in 2018 for another five years.

The company, which already has experience of working with the ship, will provide all aspects of through-life support, working with DE&S and specialist contractors.

Key aims will be to ensure effective targeting of funding to increase value for money to DE&S.

The contract includes all repair of operational defects,

planning and delivery of Fleet Time Support Periods, equipment spares management, design services, management of all maintenance, provision of an electronic shared working environment for exchanging technical information and spares supply and logistics information, and undertaking all work required to keep the vessel operational.

An extensive refit is also earmarked for this year.

Commodore Dave Preston,
Head of Commercially
Supported Shipping at
DE&S, said: "Following open
competition I am pleased to
confirm that Babcock has been
awarded the five-year contract

for the through-life support of *HMS Scott*, maintaining the vital ocean survey capability.

"This is a new approach to the support for *HMS Scott* and we look forward to developing new ways of working with them."

Babcock Managing Director Warships Mike Whalley added: "This builds on Babcock's extensive experience and expertise in warship support as the Royal Navy's strategic support partner carrying out the majority of through life support to the UK's warship and submarine fleet, including having provided support to HMS Scott from Devonport over many years."



#### Tristram ready to go back to work

ROYAL MARINES training vessel *TV Tristram* is back at her moorings in Portland harbour, left, after completion of her makenyer

The maintenance period was completed on time and within budget and the ship is ready to continue her training programme.

She will remain available for training until her next maintenance period in 2016.

Work was carried out under a £1 million contract with UK Docks, as reported in earlier editions of *desider*.

TV Tristram is the former RFA Sir Tristram, de-commissioned in 2005.



### Your invite to RIAT

INVITATIONS are now out for this year's Royal International Air Tattoo – the world's largest military airshow.

The event is at RAF Fairford on 19th-21st July and will be host to defence chiefs and senior industry representatives from across the globe, presenting a unique stage for the UK military to exhibit and network. The operational theme of RIAT 2013 is SkyGuardian.

Organisers
will be providing
a complimentary
coach shuttle service
from Abbey Wood to
Fairford on Friday
19th July.

For more information, or to use this service, contact the RIAT Guest Management department via david. winstone@rafcte.com



www.tvsscs.com



#### Staff back principles of partnering

DE&S STAFF have debated the future of partnering – and given it convincing backing.

The MOD's Chartered Institute of Purchasing and Supply (CIPS) Special Interest Group held its latest 'lunch bite' meeting to give Abbey Wood staff a different perspective and flavour on current procurement issues.

The event on 29th April saw Paul
Davis from Sigma present on the topic 'Is
Partnering Dead?' to debate whether or not a
partnering approach has a positive effect on
the way DE&S contracts or is too wasteful of
resources.

Mr Davis has extensive experience of working in defence and with the MOD and had input into development of the MOD's

partnering handbook for acquisition teams. After the presentation and discussion an

After the presentation and discussion an overwhelming majority of the audience voted for partnering `when appropriate'.

The Group will continue to organise events in the SI Suites at Abbey Wood throughout the year. All DE&S staff are welcome to attend, ask questions and test assumptions. It also counts towards continuing professional development.

Andrew Douglas of the University of the West of England is the next speaker on 24th June on the CIPS Sustainability Index.

For more information visit the Defence Intranet or e-mail DES Comrcl-CIPS-SIG (Multiuser) mailbox.



Debate: Paul Davis





Building information management capability: the spring conference panel listen to the debate while, left, Simon Marsh delivers his keynote speech



## Forthcoming Events

#### Engine As A Weapon V International Symposium (EAAW V)

Delivering Military Effect: A holistic approach to combat and platform system integration

TUESDAY 16 - WEDNESDAY 17 JULY 2013 WILLS HALL, UNIVERSITY OF BRISTOL, UK

WILLS HALL, UNIVERSITY OF BRISTOL, UK

#### Marine Electrical and Control Systems Safety Conference (MECSS 2013)

Delivering integrated, dependable, safe and reliable systems

WEDNESDAY 2 – THURSDAY 3 OCTOBER 2013

AMSTERDAM. THE NETHERLANDS

12th International Naval Engineering Conference and Exhibition (INEC 2014)

TUESDAY 20 – THURSDAY 22 MAY 2014 **AMSTERDAM, THE NETHERLANDS** 

For more information please visit: www.imarest.org/events

Email: conferences@imarest.org

# Building strong information management

INFORMATION MANAGEMENT specialists from across DE&S gathered for the spring Information Professional Conference hosted by DE&S Chief Information Office.

The 9th May event focused on promoting professionalism in Knowledge and Information Management (KIM) job roles to encourage take up of professional development activities to enhance capability and further careers.

The keynote speech was delivered by Simon Marsh, MOD's Knowledge and Info Management Head of Profession, who is leading work to build a strong and relevant KIM capability within Government.

Tiffany Pemberton Jewitt, Head of Skills and Exploitation in DES CIO, presented the DE&S position on roles and skills development, dispelling myths about lack of training and funding.

She introduced the comprehensive IM training curriculum and launched a new IM professional role profile framework specifically tailored to DE&S key IM roles to assist staff in plotting their career paths and development activities.

For more information on any knowledge and information management issues contact the DES CIO-Front Door (multiuser) mail box.

DE&S' go-between with a foot in both

camps

MEETINGS AT DE&S headquarters between management and staff representatives will be missing a familiar face this year.

Alan Clark, secretary for the Non-Industrial Trades Unions (NITU) in DE&S over the last seven years, has moved to a transformation role in the Weapons Operating Centre.

It leaves a hole which DE&S management and the three constituent trades unions – Prospect, PCS and the First Division Association – are anxious to fill.

"It's been the most interesting time of my working life," said Alan. "No two days are the same. Every day brings a new challenge and the people I have met while doing this job have tended to be more interesting than those you might find in Civy Street because of the nature of the work they are engaged in."

The role is to act as joint secretary at formal meetings between the unions, the Chief of Defence Materiel and his two-star operating centres – known as the annual formal Whitley meetings.

Further, more informal meetings are also held with DE&S senior managers, while there are also regular sessions with Chief of Staff and Director Human Resources to discuss details of impending change programmes or to make sure current change programmes stay on track.

Alan has also been the focal point for consultation, providing the NITUs with a précis on the people impact of formal consultation documents so the unions can focus their resources when constructing their formal response to management proposals. It could be said he has a foot in both camps.

"You act as the conduit in the engagement process," Alan said.

Alan Clark, secretary for the Non-Industrial Trades Unions, reflects on a busy seven years in his post

"Whenever management
has a new major change
proposal which needs to
be discussed with the
unions, the first point
of contact would be the
Non-Industrial Trades
Unions secretary to ask
him for advice on who
the right individuals
are to engage with
and how quickly that
engagement process can be set
in motion

"And in DE&S we have a larger change programme than most of the other TLBs because of the nature of our work. So there's lots to do."

Industrial relations at DE&S, thinks Alan, are on the whole reasonably good. "There's a willingness and desire in DE&S to engage with the unions," he said. "However, it is understood that it is management's job to manage and the unions are sometimes disappointed with the results of that engagement. That's because decisions have often already been taken in principle by the department and the unions' ability to influence the outcomes is limited by this."

Alan's 20 years in the MOD has seen him as a deputy chief clerk for the Army, in various finance posts at St Athan, involved in transformation at RAF Strike Command, along with an operational deployment to the Balkans as a finance officer. It has given him an insight into dealing with people at all levels.

"If you are an individual who is

young and looking to develop your career in the department it's an extremely good post to have," he said. "There isn't another C2 grade in the department who has this level of exposure, who can sit down on a regular basis with two, three and four-star officers and even the Permanent Under-secretary to help the unions in representing their position in relation to change projects. That doesn't happen anywhere else. No other C2 will have that level of exposure on a regular basis.

"If you have anything about you and you want to progress your career then what better way than meeting regularly with major change sponsors who will be able to see close up how you perform? It is a role which demands to be done professionally, not only because you are a member of the Civil Service, but because you have to remember you are also there representing the trades unions."

DE&S is hoping a suitable candidate comes forward to fill Alan's shoes



DIRECTOR DE&S Ships Tony Graham has presented a Ships' people award to a team for its work in extending support contracts.

The Royal Fleet Auxiliary (RAF) Through Life Support Strategy team won the award for extending the existing RFA Through Life Support Strategy cluster contracts for another five years to 2018.

The RFA Through Life Support Strategy has improved availability of the RFA flotilla while demonstrating value for money in delivering global support.

Moving on: Alan Clark

Picture: Andrew Linnett

Teamwork and members' individual skills proved invaluable in securing contract approval.

Mr Graham presented the award to team leader Capt Gilbert Parsley of the RFA, pictured left. Support contract work earns team members their reward

# Spot-kick heartbreak sink



MOD A – back row (from left): Kevin Sydenham (UKHO), Mark Plummer (DE&S), Chris Misir (Debut), Scott Drayton (UKHO), Lee Pendrey (DE&S), Joe Neale (DSRA), Dave Cooper (DBS), Wayne Shill (DSG), Dave Appleyard (DE&S), James Gray (DBS) Front: Ben Reed (DE&S) Thomas Bond (UKHO), Jack Fillingham (DE&S), Andrew Lakey (DE&S), Dan Jarman (DE&S).









The MOD's soccer players – the majority of them from DE&S – endured heartbreak as their dreams of lifting the Civil Service's annual cup were shattered in penalty shootout drama.

The MOD side, managed and supported by the Defence Sports and Recreation Association, battled through three qualifying rounds at Loughborough University against several government departments including Land Registry and Revenue and Customs.

It earned the players a place in the final at Highbury Stadium, home of League Two club Fleetwood Town, on 10th May.

There they faced HASSRA North East – the association supporting the Departments of Health, and Work and Pensions – in a topsy-turvy final which went to extra time with the scores at 4-4.

Chris Misir, hospitality manager with Debut, struck twice, the second with a stunning half volley from outside the penalty area, to put the MOD into a 2-0 lead.

Dave Cooper of Defence Bills restored the MOD lead after HASSRA had hit back to equalise.

And Defence Support Group's Wayne Shill edged the MOD ahead again after HASSRA had levelled the scores. Yet another HASSRA equaliser took the match into another 30 minutes at 4-4.

But it took another Misir strike in the second half of extra time to complete his hat trick to pull the scores back to 5-5.

HASSRA won the shoot-out 4-3 to capture the Lewis Cup, which has been competed for by Civil Service teams since 1923.

There was consolation in the plate final, where the MOD team, again bolstered by a strong DE&S contingent, defeated HASSRA North West 2-0. DE&S' Neil Ashman put the MOD into the lead with a 30-yard strike and victory was clinched by Joe Goss, also of DE&S.

"It was a great experience for all in what was a hugely successful campaign," said first team goalkeeper Joe Neale,

The two MOD teams were chosen from a series of trials which ended with 19 players from DE&S making up the bulk of the squad.



# s the MOD

# Title hopes slip away but there's consolation in Plate contest as players lift the prize





MOD B – back row: Kevin Sydenham (UKHO), Nick Moore (DE&S), Chris Stock (DE&S), Kevin Wade (DE&S), Rich Cope-Evans (MGS), Graham Plume (SG), Tom Ford (DE&S), Neil Ashman (DE&S), James Gray (DBS). Front: Nick Pope (DE&S), Joe Goss (DE&S), Tom Williams (DE&S), Andy Sykes (DE&S), Calum Simpson (DE&S), Jason Piper (DE&S), Dan Berry (DE&S), Josh Macey (DE&S)











From left: Dave Appleyard, Sqn Ldr Mike Brydon and Cpl Dave Price

#### Golfers line up for their longest day

A TRIO from Corsham's Golf Society are raising funds for Marie Curie Cancer Care.

Sqn Ldr Mike Brydon and RAF Corporal Dave Price along with Dave Appleyard, a civil servant at Abbey Wood, are taking on a 100-holes in a day challenge on 24th June at Cumberwell Park, near Bradford on Avon.

The team will make the most of long daylight hours with a start at 4am and a 10pm finish with minimal breaks.

All holes will be played out in full (no 'gimmees'), they will be hauling their own

equipment and will, as much as possible, eat 'on the hoof'. They expect to cover well over 30 miles on the day.

The team hopes to raise £3,000 for Marie Curie Cancer Care. To help them they plan to auction off their fourth playing space, with eleven nine-hole slots up for grabs from the highest bidders.

Sponsorship for the team should be made to www.justgiving.com/100HoleInADayChallenge while anyone wanting to be an additional player on the day, contact mikebrydon@hotmail.com.

#### Signals staff show the way

ROYAL SIGNALS personnel working in DE&S have continued the organisation's proud orienteering record at the Corps' championships in Hampshire.

Braving the marshes of Elstead Common SSgt Andy McNally (DE&S Henlow) won the 35-

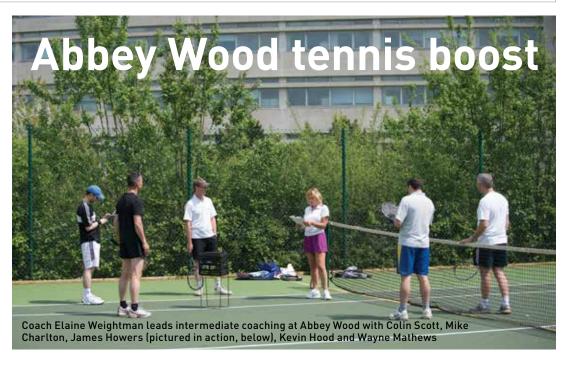


40 year old category by 15 seconds from W02 Steve Read of Corsham.

The pair then drafted in Corsham's orienteering champion Flt Lt Geoff Ellis for the team event, the trio winning the minor unit competition by a clear margin.

The prizes were presented by Brigadier Dave Hargreaves, President of Royal Signals Orienteering.

Andy McNally is pictured above, left, with Brigadier Hargreaves



REFURBISHMENT OF courts and formation of the Laurels Affiliated Tennis Club have given players at Abbey Wood a lift.

The club, formed in February, already has 26 members with club sessions held on Fridays.

Laurels is providing coaching sessions for beginners and intermediates which began last month. Teams are entered into the MOD sports day doubles tournament on 28th June.

The courts at Abbey Wood have weathered and suffered from heavy use by tennis players, football matches and rugby training resulting in a worn surface and faded markings.

Facilities management company Debut FM has laid a slip-resistant multi-use coloured surface, marked for tennis and five-a-side football. A large shed for storing nets has been provided.

"We have been delighted by the support provided by Laurels and Debut FM, which enabled the club to form and created excellent facilities." said tennis club chairman Mark Neves.

"Colleagues now have everything they need to enjoy playing tennis at Abbey Wood."

Members of Laurels are welcome to join the club - e-mail: mark.neves525@mod.uk

#### DSRA LOTTERY WINNERS March

£10,000: Joanne Pidgeon (Chetwynd Barracks). £5,000: Jane Shrigley (RAF Leuchars). £2,000: Norman Benson (RAF Boulmer). £1,000: Peter Brockies (Abbey Wood). £500: Christopher Taylor (Stonehouse Barracks). £300: Daniel Ferriday (Abbey Wood), John Pugh (Abbey Wood), Audra Thompson (Croydon), Bradley Down (Shorncliffe Camp). £200: Kenneth Pick (York), Susan Cameron (Corsham), Karen Dawes (York), Helen Singleton (Cheadle Hulme), Wayne Kinsman (RAF Lakenheath), Alexander Gardiner (Leconfield), Robin McCleary (Abbey Wood), John McCue (Portsmouth), Iris Waldron (Warminster), Peter Spiller (Abbey Wood), Jaqueline Mitchell (Crombie). £100: Andrew Carine (Corsham), Timothy Gosse (Rosyth), Roy Bartram (Hereford), Judith Bridges (Aldershot), Rebecca Joyner (Abbey Wood), Catherine Stuart (Bovington), Marion Mosley (Feltham), Stephen Moor (Foxhill), Stephen Moore (Southampton), Gareth Ames (Liverpool), Sarah Fletcher (Portsmouth), Trevor Seaman (RAF Lakenheath), Jon Chisholm (Babcock), Andrew Blackie (York), Kevin Crowther (Abbey Wood).





Gosport duo hammer out new award TWO GOSPORT apprentices have bridged the substantial gap of the Atlantic Ocean with their latest engineering project.

Jake Briscoe and Elliot Rogers were put to work to craft a special hammer and gavel for the president of the town council of Gosport's namesake community in the US state of Indiana.

The gift, and the task set for the Defence Munitions apprentices, came after a viait to Gosport, Indiana by the Hampshire town's mayor Richard Dickson. The hammer and gavel was to help the US town's president Donald Hall keep order in council meetings. Three impressive money banks, in the form of Classic American vehicles, were sent back to Hampshire as a thank you, one each for the apprentices, and one for Mayor Dickson.

Mayor Dickson's bank, in the form of a 1948 Ford pickup truck, is now the latest trophy to be competed for by DM Gosport's apprentices. The first winners? Jake and Elliot of course, for services to the community.

# 5 - released this month

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

**2013DIN04-068:** The Bowman Management Laptop is now obsolete and support for the laptop with regards to repair, procurement of spares, support for publications and training is being terminated.

**2013DIN04-067:** Edition 2 of the Defence Biosecurity Policy has been issued to update and clarify conditions within current policy and to ensure biosecurity measures are implemented for the safe movement of vehicles, equipment and personnel worldwide. It is essential all commanders ensure all MOD vehicles and equipment fully comply with biosecurity requirements during deployment and recovery.

**2013DIN04-059:** This DIN gives guidance on mandatory requirements that all consignors must follow when preparing and consigning material and equipment using air, surface and multi-modal strategic lines of communication. This instruction is to be followed whether consignor is a British Forces unit, MOD (including DE&S unit) or contractor.

**2013DIN04-051:** BOC has launched a pioneering tracking system, with all gas cylinders now carrying a unique barcode which will help tracking of cylinders. Tracking is now operational in Scotland and the Carlisle area and will be fully up and running by July.

Further information and more details on the latest DINs see: http://defenceintranet.diif.r.mil.uk/Reference/DINsJSPs/Pages/DINsindex2013.aspx



By incorporating the strengths of Vizada into Astrium Services, we are the world's number one commercial MilSatCom service provider. Our powerful government satellite communication services that connect, inform and protect can now give you more. More solutions. More global reach. More reliability. More innovation. Now more than ever, you can count on us to support your critical missions. www.astriumservices.com

VIZADA AND PARADIGM
UNITING FORCES FOR A STRONGER ASTRIUM SERVICES

