des defence equipment and support



MINISTRY OF DEFENCE

A400M back on track

4400M

DE&S' future starts to take shape See inside









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cover image

The programme to deliver a new transport aircraft to the RAF continues on course for 2014 after completion of contract negotiations. Earlier A400M made a first visit to Filton, where its wings are made, and performed a fly-past at Abbey Wood to give staff a glimpse into the future of RAF airlift.

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22 A400M comes 'home' to impress staff

Staff at Abbey Wood were treated to a spectacular fly-past as the A400M – the RAF's next generation transport aircraft – made a historic first visit to Filton, near Bristol, where the wings are made.

25 Corsham's new environment opens for business Defence Secretary Dr Liam Fox officially opened the new purpose-built accommodation at Corsham on 7 April and

purpose-built accommodation at Corsham on 7 April and said the buildings showed how DE&S was capable of 'top end delivery'.

28 Meteor enters the home straight

Development of Meteor, the Beyond Visual Range Air-to-Air Missile, is entering its final year, a testament to the work of six European nations – UK, France, Germany, Italy, Spain and Sweden – who will jointly acquire the weapon.

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The Surveillance and Target Acquisition element of FIST has achieved its in-service date and is set to deliver a range of electro-optic sights to troops over the next four years. The £150 million programme will involve nearly 11,000 troops across the three services.







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desider

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Bernard Gray

Chief of Defence Materiel

'We are seen as being creative and innovative across a wide range of fields and, in many cases, others are seeking to follow our model. All want to learn from our experience'

SINCE I last wrote for *desider*, I have been travelling a great deal. Close to home, I have spent time with the Submarines Operating Centre, the Joint Strike Fighter team in Combat Air, and the logistics team DSCOM.

Further afield, I have seen tremendous work going on at Ensleigh and at Devonport, I have been representing the UK at the CNAD meeting in Brussels, and I have been meeting with US colleagues in Washington, Fort Worth, and Los Alamos. Whether discussing (and eating!) **Operational Ration Packs**, or viewing submarine refits, or debating the future of international acquisition, there is a common thread. The quality of the work going on within DE&S is high. and that effort is respected around the world.

Both my US and Australian counterparts paid tribute to the work which has been done in the UK in recent years on improving value for money in the support of in-service equipment. The flexibility we have shown in finding new ways to do business, from food to fighters, has sparked interest from many of our international peers. We are seen as being creative and innovative across a wide range of fields and, in many cases, others are seeking to follow our model. All want to learn from our experience.

We can learn from them too. I am interested to study the experience of my Canadian opposite number, who has a good track record



in delivering programmes to time and cost. The level of detailed planning that goes into many US programmes is also a benchmark we should aspire to, and I have agreed to swap benchmarking data on programme performance with our counterparts in Australia.

This broadening of debate and sharing of experience among a wider group can only be a good thing as we take DE&S into its next phase of development. As you will have heard by now, Dr Andrew Tyler has chosen to return to the private sector. While I understand and respect Andrew's decision, his departure is a loss to us, and I have looked at the best way to bring together talent at Board level to fill that gap. As most of you will by now have seen, I have decided to create four Chief of Materiel roles, one for each environment and one joint, to harness talent from all areas of defence. There is a new DG Resources role. which will act as a 3* Finance Director for DE&S, and we have a new Chief of Staff, selected from a very strong and competitive field.

I believe that this diverse team can work with the Materiel Strategy team, the rest of the DE&S management, our workforce, industry and our international partners to bring best practice to these challenging times.

We have much to teach, and much to learn. Times may be challenging, but they are also exciting. There is much to do

Forums continue the change dialogue

INTENSE ANALYSIS by civilian, military and external experts has begun on the next phase towards a new change programme for DE&S.

This was outlined by Rachel Baguley, Head of Business Development at DE&S, in the latest business development open forum.

Engagement at all levels remains a firm commitment for those running the changes. The forums underline the point and are part of Chief of Defence Materiel Bernard Gray's 'Conversation on Change'.

Brigadier Martin Smith and Ben Merrick from the Defence Reform team presented on the latest progress of reform. Brig Smith outlined why reform of the MOD was important, dealing with an unaffordable equipment programme, the 'conspiracy of optimism' surrounding decision making and moves towards clarifying relationships between the services and MOD.

He said reform work is now part of Defence Transformation which covers all change programmes across the MOD, including in DE&S. He confirmed that the final recommendations from Defence Reform will be passed to Defence Secretary Dr Liam Fox in July but there would still be time for consultation before final decisions were made.

Current key reform issues include composition and responsibilities of the Defence Board, acquisition and DE&S, and people and behaviours.

On acquisition, Ben Merrick said reform will build on Mr Gray's acquisition recommendations in 2009 to make the equipment programme more affordable. This would require substantial improvement of both management information and skills.

Details of future open forums will be on the Business Development section on the DE&S area of the Defence Intranet.

DE&S unveils the future

ON 20 APRIL Bernard Gray, Chief of Defence Materiel (CDM), announced a restructuring of DE&S. From 3 May four Chiefs of Materiel were made responsible for delivery of outputs.

It was also announced that CDM has now taken on the lead for the commercial function within the Department.

Work on identifying the high level design principles for DE&S is continuing, being taken forward by Major General Chris Deverell (Director Materiel Strategy) together with Simon Cholerton (Chief of Staff).

The work will then identify a high level design and future operating model for DE&S.

Early work, together with Andrew Tyler's decision to return to the private sector, has already established a new top level structure.

This will balance m a n a g e m e n t responsibilities more equally across the organisation and allow greater oversight of financial and p r o g r a m m e activity.

The main changes are:

• Management of DE&S equipment and support outputs will be split across the existing Single Service Chiefs of Materiel (COMs) and a new post, a civilian COM (Joint Enablers). The New top structure is first stage in future operating model

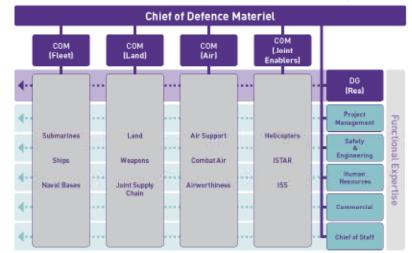
Single Service COMs will stay in post and Andrew Tyler will stay on to manage the Joint Enablers portfolio on a temporary basis while a competition is run to find a permanent incumbent.

A diagram showing the new structure is below.

• The post of Chief of Corporate Performance has lapsed and been replaced by Director General Resources to improve the focus on financial management in DE&S. Trevor Woolley has been appointed DG Resources on a temporary basis, acting as the Finance Director of DE&S, pending a competition.

• The cross-cutting functions of Human Resources, Project Management, Safety & Engineering and the Chief of Staff will report to CDM;

The Departmental leadership commercial for advice has transferred to CDM. The 3 Star DGDC post has been disestablished and the MOD commercial function will be reorganised with one of the 2 stars as lead Director and with DE&S acting as the lead TLB for commercial activities. Andrew Tyler will take on the temporary role of leading the commercial function until the new 2 star structure is implemented.



DE&S TOP LEVEL STRUCTURE from 3 May 2011

New structure is the way forward – CDM

BERNARD GRAY has explained that moving to this new structure at this time offers a number of advantages including:

• A continuing senior level focus on delivery to operations as we go through this period of change;

• Removal of uncertainty about organisation change when we need to make important decisions on strategy;

• A greater balance of responsibilities across senior managers and a robust basis for them all to engage in developing the future purpose and operating model of DE&S;

• Finally it improves the strength of the enabling functions by making them more focused, visible and accountable to CDM as we look to strengthen elements of commonality across DE&S.

Nations sign up as A400M project is back on track

THE PROGRAMME to deliver a new transport aircraft to the RAF continues on course for 2014 after the completion of contract negotiations.

The UK, along with six other launch customer nations of the A400M, has signed a new agreement with EADS and Airbus Military which sees the programme continuing.

Defence Secretary Dr Liam Fox said: "The signing of the agreement signifies a major step forward for the programme. We can now look forward to receiving initial deliveries of the 22 aircraft in late 2014 which will provide a key element of the UK's long term airlift capability as set out in the Strategic Defence and Security Review."

DE&S' Director Air Support Tim Rowntree paid tribute to the part MOD teamwork had played.

"This contract amendment finally puts the A400M back onto a firm footing following the major delays and cost overruns declared by Airbus Military in 2008," he said.

"During the long journey since then, there have been many times that the programme, and UK participation, looked to be seriously in doubt, and the task of brokering, negotiating and delivering this recovery package between the seven participating nations and industry has been a real team effort on all sides.

"Within the MOD it has involved our own staff within DE&S and also our Capability Sponsor, Cap Expeditionary Logistics Support and others up to and including our ministers."

He added: "As we have worked up this new programme baseline, the aircraft has A400M on its latest testing



performed brilliantly during its flight test programme and now, more than ever, with its unique mix of rough-strip tactical and long-range strategic lift capability, it looks set to become a truly world-leading airlifter.

"I have no doubt that it will deliver a key component of the UK's military capability well into the 21st century."

The agreement was signed in Seville by Patrick Bellouard, Director of OCCAR (the Organisation for Joint Armament Co-operation) and Airbus Military chief executive Domingo Ureña.

Louis Gallois, chief executive of parent company EADS, said: "This is a major milestone, and EADS is particularly proud to have the support of all governments involved in this cooperation."

With four aircraft flying, the A400M has achieved more than 1,400 test flight hours and close to 450 flights. First delivery to the first operator – the French air

force – is scheduled to be by early 2013.

Airbus Military holds 174 firm orders from eight nations, the seven launch nations (Belgium, France, Germany, Luxemburg, Spain, Turkey and the UK) for 170, plus four for Malaysia.

■ The first RAF pilots flew the aircraft for four hours last month after an Airbus invitation.

Sqn Ldr David Catlow said: "My first impression of the A400M was its sheer size; it sits between the C-17 and C-130, with a commensurately-sized freight bay.

"For an aircraft that weighs up to 140 tonnes it is very responsive, much more so than other transport aircraft I have flown.

"Its rate of climb and turn is just awesome, with a truly stateof-the-art glass cockpit that is more advanced than the A380. Our pilots will just love this aircraft."

■ A400M in Bristol: pages 22, 23



Aircraft earns a Royal seal

THE PRINCE of Wales has become the latest VIP to take a look at the capabilities of A400M during a visit to Seville.

After being welcomed by Richard Thompson, Head of Airbus Military UK, Prince Charles was briefed about the main features of the transport aircraft by Airbus Chief Test Pilot Military, Ed Strongman, on the right of the picture.

Meanwhile testing to determine the lowest speed at which the aircraft can take-off – known as minimum unstick speed or Vmu – has finished.

During the tests, performed at Istres in France, the aircraft's nose was raised until a special 'bumper' fitted to the rear fuselage struck the ground at the maximum pitch-up angle of 13 degrees.

NEWSREEL

Chinooks reach new heights

IN the financial year 2010/11 the RAF's fleet of Chinook helicopters exceeded last year's annual flying task by 900 hours, a testament to air and groundcrew skills but also logistics and engineering support from DE&S. Aircraft with the Chinook force flew for 16,384 hours, with one Mk3 aircraft – ZH897 – flying a remarkable 117 hours in March.

Caroline nears her D-day

TRAINING ship HMS Caroline is to be gifted to the National Museum of the Royal Navy, subject to a viable heritage business plan for the ship and parliamentary approval, Armed Forces Minister Nick Harvey has announced. The ship, a World War One vessel, has been berthed in Belfast and was decommissioned on

31 March.

R1 extended

A Nimrod R1 reconaissance aircraft – due out of service earlier this year - will be kept in the Libya region for up to three months in support of UN resolutions, Defence Secretary Dr Liam Fox has announced.

Speaker Chris

DR Chris Mace, formerly Chief of Staff at DE&S, joins senior military figures from the

- UK, Germany and the US at ITEC. the
- European conference for military
- training, education
- and simulation
- technology in
- Koelnmesse, Cologne from 10-12 May.

FSTA flie<mark>s in</mark> Spanish skies

THE FIRST A330 Future Strategic Tanker Aircraft (FSTA) for the RAF is seen, right, with both its underwing pods and fuselage refuelling unit deployed simultaneously.

The photo was taken from a Spanish Air Force F-18 during a handling qualities flight as the FSTA nears civil and military certification.

Two FSTAs are currently flying and the first is on schedule to transfer to the UK in the summer to begin qualification flights with the specified receiver aircraft types, leading to first delivery towards the end of the year.

Brize opens up its new RAF tanking hub

PERSONNEL FROM AirTanker – who will run the new Future Strategic Tanker Aircraft (FSTA) – are set to move into their new headquarters at RAF Brize Norton this month. The new AirTanker hub of a hangar and

support buildings, was opened on 31 March.

The hub will be the main base for all maintenance, technical support, flight operations and business activity for the service of 14 aircraft based on the Airbus A330. The aircraft will be called Voyager.

AirTanker staff will be joined by DE&S personnel along with AirTanker's sub-contractors.

These groups will play a key role in the service, ensuring AirTanker provides a service tailored to meet the RAF's needs.

The first of two RAF squadrons involved in the service will stand up in July and the first aircraft is now at Boscombe Down for testing.

The AirTanker training building is ahead of schedule and will include communications and information systems, with a full mission simulator due to be installed in 2012, again on schedule. AirTanker expect to be able to use this facility towards the end of the year.

DE&S' Strategic Tanker and Air-to-Air-Refuelling leader Chris Dell said: "This is the first major step in a busy and significant year for the FSTA project, and is a testament to the close working relationship developed throughout the supply chain and between AirTanker and the MOD. It is gratifying to see this major PFI project deliver."

Dave Mitchard, AirTanker's managing director, said: "This is an important milestone in a unique programme, which continues to run on schedule three years after contract signature. It marks our imminent move onto RAF Brize Norton and the final countdown towards the arrival of the first aircraft there later in the year.

"We have already established some very good working relationships with personnel at RAF Brize Norton and we look forward to developing these further when we become

part of the station in May."

At the opening Tim Rowntree DE&S' Director Air Support said: "I am grateful for this opportunity say thank you to Phil (Blundell, to Chief Executive of AirTanker) and both of our teams for turning this into the reality we see before us. I am delighted to be able to join you today in celebrating the opening of this impressive hub facility."



Above from left: Phil Blundell (Chief Executive of AirTanker), Air Commodore Jon Ager, Dave Mitchard (Managing Director, AirTanker Services), Tim Rowntree (Director Air Support, DE&S)

□ The hangar has two bays, one for line maintenance, one for base maintenance.

□ The base maintenance bay has been fitted with nose docking and in time will incorporate a fully docked solution. There are also two overhead cranes integrated into the steelwork of the building to provide heavy lift capability, as well as a mezzanine floor, which allows immediate cockpit access via the nose docking.

□ A number of engineering support areas surround the hangar bays, providing bespoke storage and workshop capabilities.

□ The hub also incorporates a fourstorey support building for personnel involved in the day-to-day running of the service.

□ The hub will be a 24-hour operation governing all FSTA tasking. There will be a variety of 'real time' live data feeds and a media wall, which will allow the teams to react appropriately to rapidly changing situations.

□ The hub has a separate motor transport and ground support equipment building.



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NEWSREEL

DE&S racks up the UORs

MORE than £4.9 billion has been approved through the urgent operational requirement (UOR) process on equipment to meet emerging threats and requirements for Afghanistan since Operation Herrick began, Minister for Defence Equipment, Support and Technology Peter Luff has told Parliament, Last year, there were 71 modifications under UOR arrangements to existing fixed wing aircraft, helicopters, armoured vehicles, protected patrol vehicles and support vehicle platforms, in support of Forces deployed in Afghanistan. Of these, 63 were supported by a maintenance contract.

Shadow play

A STORM Shadow missile is valued at around £790,000, Minister for Defence Equipment, Support and Technology Peter Luff has told Parliament. The precision strike missile, used in current operations over Libya, was procured with France and contracted for in 1997. The figure includes costs of producing an integrated weapon system and not just the purchase cost of the missile. A further £160 million was incurred by the UK in development costs

Libya costs

NET additional costs of operations over Libya will be met from the reserve, the Chancellor of the Exchequer has confirmed. Armed Forces Minister Nick Harvey has told the House of Commons it is too early to give a robust estimate of costs for the imposition of the nofly zone.

Simon moves in as new Chief of Staff

DE&S' new Chief of Staff has spoken of his pride at joining the organisation.

Simon Cholerton has taken over from Steve McCarthy following a period as Head of Secretariat (Equipment Capability) in Main Building.

"As the head of Equipment Secretariat I have got to know DE&S well over the past few years as part of a career which has mixed acquisition with financial and operational roles," he said.

"I am proud to be joining an organisation which in recent years has delivered so much to our Forces in Afghanistan.

"I am very conscious of the challenges DE&S faces at a time of change and considerable financial pressure. I am looking forward to playing my part in meeting those challenges."

Simon's previous roles include Director of Corporate Support in the Science, Innovation and Technology TLB and a period in Baghdad as a policy advisor.

Meanwhile Tony Graham, Head of Capital Ships, takes over as DE&S Director Ships on 27 May from Rear Admiral Bob Love.

Tony, who joined the MOD as an apprentice in 1980, said: "During my career I have delivered many challenging projects and worked alongside people of great dedication, talent and character.

"Nothing that happens in the next few years will alter those two fundamental aspects of our business, namely good quality work and great people to work with.

"I hope to invest real effort in building a sustainable business model to deliver a strong performance for our customers and to ensure our careers remain memorable and personally fulfilling."

Tornado cleared to take ASRAAM on Libya sorties



TORNADO GR4 aircraft flying missions over Libya are now cleared to use the Advanced Short Range Air-to-Air Missile (ASRAAM).

The missile is a high-speed, high agility infra-red guided missile which improves the selfdefence capability of the aircraft against the more advanced hostile air threats.

The Tornado GR1 was originally introduced into service with a capability to carry a pair of AIM-9 Sidewinder missiles.

More capable versions of the missile have kept pace with the air threat up to the 9L variant.

But 9L is being withdrawn from Tornado so ASRAAM is a direct replacement with greater self-defence capability against current fourth generation threats.

DE&S teams (Fast Air Support and Short Range Air Defence) had planned a phased introduction with support from the aircraft design authority (BAE Systems), the ASRAAM design authority (MBDA), QinetiQ, the RAF's 41 Test and Evaluation Squadron and RAF Marham.

Release to service recommendations were planned for July but, with the beginning of Operation Ellamy, the requirement became more urgent.

Personnel from the stakeholder organisations worked extended hours to bring the in-service date for the operational missile forward to support the Operation Ellamy deployment.

In addition, QinetiQ provided release to service recommendations on the employment of ASRAAM with ALARM anti-radar missiles on a limited number of Operation Herrick weapons configurations, which further enhances the aircraft's capability.

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NEWSREEL

Support UK Armed Forces

ARMED Forces Day - the annual chance for the nation to show support for UK Forces - will be on Saturday 25 June. This year's national event will be in Edinburgh with numerous other events across the country. The day is an annual opportunity for the nation to show support for the men and women of the Armed Forces community: from currently serving troops to service families, veterans to cadets. Across the country communities hold local events and businesses show their support. More information from www. armedforcesday. org.uk

Coulport in big decisions

A decision is expected later this year on how best to sustain elements of strategic weapons system support at Coulport on the Clyde. Minister for Defence Equipment, Support and Technology Peter Luff told Parliament Coulport would remain under ownership of the MOD, irrespective of any decision on possible contractor management.

Review ends

ENGINEERING consultancy Frazer-Nash has completed an independent review of the corrosion protection system used on current naval ships. They are now working on the design of systems for the next generation of Royal Navy vessels.

Software to improve weapon targeting

THE FIRST element of a new software suite to improve targeting for Army, Royal Navy and RAF weaponry is on the way to the front line.

Development of the Defence Targeting Toolset by DE&S' Artillery Systems team will produce a coherent, interoperable set of software tools to support all targeting processes and battlespace management.

The first increment is an urgent operational requirement to be fielded on operations in Afghanistan.

It will bring an increase in the tempo of operations and make decision-making even more robust.

Aimed at Brigade level targeting it will include key software tools to help nominate and authorise targets and present target information appropriately.

The second will enable increased functionality for the land environment and will be loaded onto the Defence Infrastructure in early 2014.

The final increment will focus on operational and strategic targeting across all three services and will be



delivered by 2016.

"DTT Increment 1.1 is the first step to deliver a more coherent targeting solution," said Lt Col Chris Stock of the Artillery Systems team.

"The incremental approach will gradually increase the functionality resulting in coordinated, synchronised and integrated targeting across all services and all levels of command, from the strategic to the tactical."

DTT will complete factory and system acceptance testing later this year along with a training package.

Skysiren is in service – early and within budget

PROJECT SKYSIREN has successfully achieved its inservice date within budget and ahead of schedule.

The project, delivered by DE&S' Intelligence Information Solutions (IIS) team, is the UK component of the US-led collaborative Integrated Broadcast Service transformational programme.

Using advanced satellite and computer technology Skysiren is a communications infrastructure and data dissemination system to support Royal Navy, Army and RAF personnel on operations on a global scale.

It will also contribute to greater interoperability with coalition forces (Australia, Canada, New Zealand and the USA).

Approved in August 2007, and with contract award in

Praise for system to support Forces on operations round the globe

November the same year, inservice was defined as the ability to disseminate data to users via defence networks at two separate security classifications. Skysiren was accepted into service in March, two months earlier than the approved date.

Prime delivery contractor is L-3 Communications - Stratis, based in Reston, Virginia. Subcontractors are Babcock Intec (Devonport) and L3 Com-ASA (Fleet, Hampshire)

IIS leader Adrian Bailey

said: "The MOD and industry team worked hard to deliver the kit, and also overcome some tricky interface problems to ensure the capability was fit for purpose."

DE&S Chief Operating Officer Andrew Tyler was also pleased. "I add my thanks and congratulations for beating the 50 per cent in-service date," he said.

"We delivered capability to the user early, but also made an important contribution to the DE&S project performance targets this year."

Steve Cummings, L3 Stratis vice-president, added: "L-3 Communications are very pleased with the partnership with IIS and our UK-based delivery team. Meeting this major milestone early is evidence of our shared commitment and close communications."

ISS Bastion work is a towering success

WORK TO install information and communication services to Camp Bastion's new air traffic control tower has finished in record time.

The Engineering Operations team (Eng Ops), part of DE&S' Information Systems and Services' (ISS) Internal Services Provider completed the work in just five weeks when it would normally have taken months.

Operation Maintop is the project to build and commission the new tower as the airfield at Camp Bastion ramps up its capability to take over from Kandahar airfield and become the key strategic logistics hub for UK operations in Afghanistan.

With a big increase in flights going direct to Camp Bastion, the new tower needs high quality communications networks and sophisticated airfield management systems in place to manage the large number of aircraft using Bastion airfield.

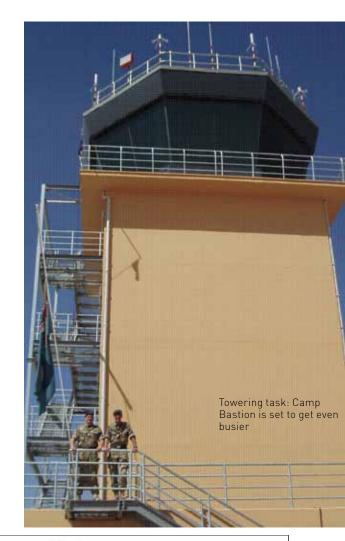
Communications and information systems are now successfully in place, enabled by the rapid work of the Eng Ops team. It only requires final building infrastructure work to be completed for the tower to be declared operational.

Work was finished quickly thanks to excellent collaborative working between ISS' Networks Delivery Team and Eng Ops.

The teams worked with other ISS teams to borrow essential equipment from projects with later delivery dates to meet Operation Maintop deadlines.

With Brian Lawson directing activity from RAF Henlow, where Eng Ops is based, a civilian surge team – Julian Cooper, John Rathbone and Mike Kelly – deployed to Camp Bastion to install, test and commission the systems and services required.

Their enthusiasm, professionalism, initiative and rapid delivery has won them and the Eng Ops team much respect from Commander Joint Forces (Communications and Information Systems), Permanent Joint Headquarters and colleagues in ISS supporting Operation Herrick.





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NEWSREEL

Airbus invests in Filton

AIRBUS has announced plans to build a new £70 million aerospace business park to become part of its plant in Filton. The project will bring together 2,500 Airbus engineering, design, customer support and other employees in one area. The firm is hoping to start construction work on the 12-acre site early next year. The UK division makes the wings of Airbus aircraft.

Seminar date

SIMON Jewell of BAE Systems is next to host a Defence Academy seminar on Leading Through Change at Abbey Wood on Wednesday 18 May in the CFB lecture theatre from 1pm. All staff welcome but spaces are limited. Bookings to admin.cmt@ defenceacademy. mod.uk or tel: 96161 4828.

Culdrose day

ROYAL Naval Air Station Culdrose holds its annual air day on Wednesday 20 July. All of the Naval air squadrons and units and their kit will be on display.

GDUK visit

LORD Stephen Green, Minister for Trade and Investment, has visited Wales-based defence and security company General Dynamics UK. He saw the facility in Newbridge where GDUK helps small and medium-sized enterprises develop new technology and bring it to the attention of customers like DE&S.

2nd PUS visits Abbey Wood to praise staff as . . .



'Professional, successful, dedicated'

Team celebrates successful first year of Apache in-service support

SUPPORT TO the UK's fleet of Apache attack helicopters has met all its key targets in the first year of a new contract.

The Apache Integrated Operational Support (IOS) Contract – signed in September 2009 and which started on 1 April 2010 – guarantees levels of technical information, spares and logistics output so the helicopters can meet front line requirements.

During the first year in-service support was managed by prime contractor AgustaWestland and supported by key suppliers Boeing, Lockheed Martin and LongBow International, along with a range of other suppliers.

AgustaWestland has met its key performance indicators and support, particularly on operations, has been sustained.

Apache team leader Jon Haiselden said: "With a short period between signing the contract and the service going live, it was always going to be a challenge to start delivering the support services and meet the targets quickly.

"However, through hard work by all parties involved in the project team and industry this first year has seen support to Apache meet its key deliverable objectives.

"And we can look forward to improvements in support in the next year, such as the introduction of further enhancements to front line and depth servicing intervals.

"In addition, we are now heading rapidly towards achieving 100,000 flying hours for the fleet with over a quarter of those flying hours being achieved on operations."



THE SECOND Permanent Under-Secretary for Defence, Jon Day, has expressed his pride in working with 'some of the most professional and successful people in the country'.

His comments came on 4 April during his first visit to Abbey Wood since his appointment as he addressed staff from across DE&S at a town hall seminar.

During his speech the 2nd PUS addressed the challenges facing the MOD and praised staff for their professionalism and dedication during this difficult period.

"The work that we are doing in defence is as relevant now as it has been during and since the Cold War, and the tasks facing all of us are as demanding and as satisfying.

"Some of the most professional and successful people in the country work in MOD and I believe that a career in defence is still one of the most worthwhile careers you can have," he said.

Mr Day, whose own career in the MOD spans more than 30-years, added: "What we are going through now is a very real and radical change to the way we operate. The plans outlined in the SDSR are ambitious.

"But we could not carry on as we were and these changes have to be made. This will be the biggest change programme in defence for decades."

During his visit Mr Day also met Chief of Defence Materiel Bernard Gray (above), Major General Chris Deverell and Rachel Baguley, DE&S Business Development Head, as well as a number of project teams including the CIED Office which provided an update on measures being taken against the ongoing threat of improvised explosive devices in theatre, and teams in the Helicopters Operating Centre.

Proud ships' final farewells

TYPE-42 DESTROYER HMS Gloucester, above, sails into Portsmouth from her sevenmonth South Atlantic deployment to end her 25 years' commissioned service. The ship, known as the Fighting G, leaves Royal Navy service next month. She earned the Fleet Efficiency Award from the Royal Navy last year for being its most effective destroyer, attaining the highest standards in both training and on

operations.

Also leaving service is HMS Campbeltown after 22 years' hard work.

The Type 22 frigate, right, flew a very long de-commissioning pennant as she sailed from Plymouth Sound into the naval base at Devonport to mark her final entry under the White Ensign.

No decisions have been made yet on the futures of either ship. Turkey-bound: Invincible departs from Portsmouth, page 33



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Air traffic project launched

THE FIRST formal stage of replacing air traffic management at airfields and ranges in the UK and overseas has been launched.

Project Marshall will replace the core equipment – surveillance radars, communications equipment etc – and make sure the equipment is compliant with airspace management regulation. It was also transform the capability into a

managed service resulting in savings for defence. The project will provide the service to around 60 airfields and ranges over 22 years in a public

private partnership worth around £1.5 billion. At least three bidders will be chosen after a pre-qualification competition.

Invitations will be issued in the summer with contract award planned for late 2013.

New deal sees lightweight missile closer



LMM will be integrated onto Wildcat under a parallel programme

□ The multi-role aspects of LMM mean the UK will have the ability to use a single family of weapons to take on a variety of roles, including:

□ maritime role – LMM will be integrated as the Future Anti-Surface Guided Weapon Light FASGW(L) missile on the new Lynx Wildcat helicopter platform under a parallel programme with the MOD.

□ ground-to-ground role – the dual-effect warhead of LMM (blast fragmention and shaped charge) make it suitable for a wide range of ground targets including light/medium armour;

air-launched role – modular design of the missile permits future development and introduction of alternative warheads. costs by having one weapon family with a highly cost-effective associated logistic support.

"We have already conducted preliminary marketing of LMM and I can confirm that there is a very high level of interest in this new family of missiles. The main interest is coming from land, sea and air platform suppliers who are keen to have the lightweight, low cost and operational versatility that LMM can deliver. This contract shows Thales delivering the innovation intended by Team CW."

The TCW initiative is being taken forward by DE&S with MBDA (UK), Thales UK, Roxel (UK Rocket Motors) and QinetiQ. Team CW embraces this new approach towards complex weapons delivery and the participants involved.

PRODUCTION OF the Lightweight Multi-role Missile (LMM) for UK Forces is on the horizon after a new deal between DE&S and Thales UK.

The partners have announced an innovative approach to contracting under the principles of Team Complex Weapons (Team CW), agreeing to 're-role' previously contracted budgets to bring about full-scale development, series production and introduction of the LMM.

Activities under the contract amendment include:-

■ design, development and qualification of the laser beam rider version of LMM

■ production of an initial delivery quantity of 1,000 LMM

■ precision guidance system that will deliver a highly accurate performance against static and mobile targets and with low-

collateral damage.

The new deal has been hailed by Alan Nicholl, Director Weapons at DE&S. "This is an excellent example of the objectives of Team CW at work.

"Such an innovative approach taken by Thales and the MOD to lightweight modular weapons will enhance the UK complex weapons industrial capability with a family of products designed to

> meet the requirements of both the UK and this dynamic export market sector.

"It is an excellent example of the UK's export led industrial policy in action."

David Beatty, managing director of Thales UK's Belfast facility, where LMM will be manufactured, said: "LMM is unique in that it's the first lightweight weapon family to be specially designed to have a wide range of operational roles.

"We firmly believe that this is what the Armed Forces require now and in the future as it can provide adaptability in the battlefield and also major benefits in whole life **Reaper passes milestone**

20,000 hours of Afghanistan operations support

Reaper pictured in Afghanistan

REAPER, THE RAF's remotely piloted aircraft, has reached a landmark 20,000 operational flying hours over Afghanistan.

The Reapers, operated by pilots from a base in the US, have proved themselves as the eyes in the sky for front line troops.

Delivery of the equipment and support for Reaper is managed by DE&S' Unmanned Air Systems (UAS) team whose leader Jonathan Barratt said: "This is an impressive achievement since Reaper's initial entry to operational service in only late 2007.

"The feedback we receive from the front line on the performance of Reaper is excellent, and is the result of a wider team effort with essential contributions from 2 Group RAF, the US project office and a number of DE&S project teams including those drawn from D ISS, D Weapons and DSCOM.

"As the Prime Minister announced before just Christmas, given the demand intelligence/surveillance/ for

reconnaissance in theatre. the UAS team has submitted a further request to the US Government to acquire more Reaper aircraft and other equipment to double the UK Reaper capability in a phased delivery from the second half of 2012 onwards."

Reaper was introduced in October 2007 and with its array of high tech sensors and precision-guided weapons, it can carry out a wide range of missions to support forces in Afghanistan.

It can gather preraid intelligence on target compounds, assist in countering improvised explosive devices and provide surveillance for routine patrols and supply convovs.

Reaper can use its sensors day and night to spy on insurgent activity for hours at a time and at a range where they are undetected from the ground.

Images are complemented by radar, mounted in the nose of the aircraft, gathering another dimension of detailed imagery that is analysed by a team of intelligence specialists in military bases around the world.

If necessary, Reaper can also strike at insurgents with a range of precision guided weapons.

REAPER at a glance

Span: 20.1m (66 feet) Length: 11m (36 feetl Height: 3.8m (12.5 feet) Powerplant: Honeywell TPE 331-10T Weight (empty): 2,223kg Max Take off weight: 4,772kg Fuel capacity: 1,814 kg Payload capacity: 368kg (internal), 1,364kg (external)

Ceiling: up to 50,000 ft max (typical mission altitude 20,000 ft) Endurance: typical sortie length around 13 hours when armed Max air speed: 250 knts

"When you're assisting troops on the ground and insurgents are trying to take shots at them we can be called to use Reaper's precision weapons. As with fast jets, you're still speaking to the troops on the ground and feel immersed in the operational environment.

What the pilot says

'In many ways, you actually feel better connected to the situation on the ground than you do in a fast jet - the detailed computer systems that we've got with Reaper make it easier to get better intelligence pictures."

A Typhoon at Gioia Del Colle on an Operation Ellamy sortie



Typhoon spare parts back on track

DE&S AND industry have worked hard to resolve spare parts issues for the Typhoon fleet. Performance targets are also now being met.

Defence Secretary Dr Liam Fox was replying to a report by MPs into the Typhoon project which pointed to delays and a shortage of spares for the aircraft.

Dr Fox said: "Typhoon is a world beating air-to-air fighter and is fast developing a ground attack capability being demonstrated in Libya. We have sufficient numbers of qualified ground attack pilots to meet our operational tasks and this number is increasing all the time.

The House of Commons Public Accounts Committee had pointed to a lack of spares which had forced cannibalisation of some aircraft to keep others in the air. Lack of availability of aircraft meant pilots weren't properly trained to fly the planes, the report said.

PERFORMANCE



Contract clinched on navigation systems

ANOTHER MILESTONE has been achieved by the Aircraft Carrier Alliance with the signing of the Integrated Navigation and Bridge System production contract at Northrop Grumman Sperry Marine's facility in New Malden.

This contract starts the production phase for various navigation related equipments for the ships including bridge consoles, navigation and ship handling displays and the navigation lights, shapes and sound systems.

The company is maximising use of commercial off-the-shelf technology and the systems are based on their VisionMaster FT technology which is widely used in commercial and military units.

Northrop Grumman Sperry Marine will also deliver a modified version of their successful ECDIS-N navigation system used by the US Navy.

The contract was signed by David Bass, Mission System Head of Procurement, and David Perry, vice president and general manager of Northrop Grumman Naval and Marine Systems Division, pictured below.

To celebrate contract award during the signing ceremony, Lt Cdr David Wright from the *Queen Elizabeth* class client team and Dave Bass witnessed the progress made to date inside the facility.



HOT ON the heels of sections of the first of the UK's new aircraft carriers coming together in Scotland, workers in Portsmouth have brought more sections together for the first time.

The first two sections, known as rings, of Lower Block 02 were joined together on 1 April.

Rings G and F were brought together in a sixhour operation at BAE System's facility in Portsmouth.

Once finished, the block will weigh more than 6,000 tonnes, just under ten per cent of the full displacement of first carrier *Queen Elizabeth.*

Further moves took place on 6 April – two

days ahead of schedule – when the smallest of the rings, Ring C, forming the forward hull section was moved using two trains of lifting trucks with 96 wheels 15 metres across the hall to mate with Ring D.

The next stage is to weld the two sets of rings together, a process that will take ten weeks.

Paul Bowsher, BAES' project leader for the *Queen Elizabeth* class at Portsmouth, said: "This event demonstrates the huge progress being made on the nation's new carriers. I'm extremely proud of the team's achievements here in Portsmouth and am looking forward to seeing the remaining sections of this block joined together over the coming months.

"The sheer scale of the hull as it takes shape in six shipyards across

the country is a reminder that this is truly a once in a generation engineering project and we are all extremely proud to be a part of it."

The building programme for the two carriers is the second largest engineering project in the UK after the London 2012 Olympics

More than $\pounds 1.2$ billion worth of sub contracts for work on the ships have now been placed with companies across most regions in the UK.



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- W02 British Infantry serving with U.S. Forces



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- D.C. Special Operations Command (not pictured)



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MOD continues campaign to drive down travel costs

TRAVEL ON MOD business was cut by £55 million in 2009/10, the latest figures show.

Money spent on travel has been reduced by £100 million from a baseline of £297 million per year in 2003/4. More than half of that was last year, a big saving by the MOD in stringent financial times.

The MOD's successful weapon in this economy drive has been Defence Travel, the online booking service operated by travel management company HRG and IT services firm Capgemini, using a booking tool provided by supplier KDS.

Defence Travel was launched in December 2007, since when all MOD business travel has had to be channelled through it. It has surpassed its minimum ten per cent savings by a distance.

Major General Ian Copeland, DE&S Director Joint Support Chain, said: "Defence Travel has revolutionised the way we source travel. We are delivering a sustainable solution that meets the demands of the financial and environmental pressures we are all facing.

"It is everyone's responsibility to source the most economical means of travel. Buying smarter will make sure that we make our money go further."

Defence minister Andrew Robathan added: "We constantly seek to get the best value for money out of our travel arrangements and maximise the MOD's corporate leverage in the business travel market.

"Recent changes to our travel rules will give better value for money. These include the removal of first-class travel for most rail and air journeys and constraints on non-operational travel overseas."

Mr Robathan said that MOD staff are "avoiding travel where the business need can be met in other ways, such as by e-mail and video or audio conferencing.

"This saves cost and increases the productivity of staff by reducing time spent travelling.

"By whatever means staff decide to travel, they must do

so in a way that is the most economical in both money and official time."

There are no specific targets for expanding video conferencing, but use is increasing.

Further measures to encourage this are expected to form part of the MOD's response to last autumn's budget constraints, which is also likely to see further restrictions in entitlements to travel.



TRIBUTES HAVE been paid to the Tornado F3, officially retired from service on 22 March.

The replacement of the F3 by the Typhoon saw the RAF say farewell to one of its oldest units after 111 Squadron, the last operator of the F3, took a bow after 94 years.

Crews from the squadron have been policing the skies over the northern UK using F3 since 1990.

Air Officer Scotland Air Commodore Harry Atkinson said: "This disbandment is part of our successful transition to the future as the Tornado F3 is retired from service and the Typhoons of Number 6 Squadron take post. The retirement of the Tornado F3 was planned before the SDSR."

The Tornado F3 was selected for development from the original Tornado GR1 attack aircraft in the late 1970s as the RAF's dedicated fighter. A total of 170 were ordered.

Business joins defence reform agenda

THE DEFENCE Business Services organisation will stand up on 1 July as part of the next phase of MOD reform.

The organisation will deliver a range of corporate services initially by 1,200 civilian HR staff, including everyone in the People Pay and Pensions Agency, 900 finance staff, 70 information services staff and a small number of commercial staff.

It is part of a wider move to

transform corporate services by strengthening the role of the key corporate service process owners (eg finance, commercial, civilian HR) to give them greater control over and accountability for their functions.

"This new single organisation will allow us to provide highquality professional services more efficiently," said Defence Secretary Dr Liam Fox.

"We are exploring options to

strengthen our ability to manage this change, including the possibility of bringing in outside professional management expertise to lead and direct the new organisation."

Around 2,000 posts should be reduced by 2014 with a net saving of £73 million a year.

Proposals, which are subject to Trades Union consultation, can be accessed via the Transforming Defence intranet portal.

DE&S team to advise on air safety

DE&S' 20-strong Airworthiness Team (DAT) has been formed to provide teams and operating centres with timely airworthiness advice and support.

It will also provide a DE&S interface with the newly-formed Military Aviation Authority.

DAT fills an airworthiness capability gap in DE&S, following transfer of key airworthinessexperienced personnel from the air systems groups to the Authority.

DAT will provide:

■ a one-stop DE&S shop for co-ordinated airworthiness advice and support.

■ advice, support or co-ordination of the pan-air elements of the airworthiness project.

■ technical help to deliver airworthy systems.

■ a community of airworthiness practitioners and engineers to share best practice and provide mutual support.

DAT consists of governance, technical and aerospace community teams. The governance team will help set up and develop DE&S teams' airworthiness/air safety management activities while the technical team advises about on-aircraft matters (propulsion, software etc), on enabling and integration (ship/ air interface, ground support, airspace management etc), and pan-air domain issues such as synthetic fuel and volcanic ash.

The aerospace community team guides on skills and competences and will organise events to keep teams abreast of best practice.

Further information from DAT on the Defence intranet or see them in NH1 Walnut 3a at Abbey Wood.

20 LIBYA

An RAF Tornado GR4 ready for action at Gioia Del Colle, Italy. The aircraft are accompanied by teams of engineers and support staff

The UK's Operation Ellamy – policing the no-fly zone over Libya supporting the UN Security Council Resolution – has seen DE&S supporting operations in a new arena. At its heart has been the Joint Support Chain (JSC) working around the clock to provide bombs, blueys, body armour and bed spaces for personnel deployed to the Mediterranean.

As Operation Deference (the evacuation of entitled British personnel from Libya) developed into Operation Ellamy, the delivery of 'kinetic effect' by RAF jets and Royal Navy submarines has been supported throughout by the efforts of DE&S personnel in the UK and deployed to Italy with Front Line Command units.

Much of the DE&S co-ordination has been done by the Customer Support Team (Air) – providing technical assurance – in conjunction with the increasingly invaluable DE&S Operations Centre construct, based in the Defence Supply Chain Operations and Movements (DSCOM) Operations Room.

Colonel Justin Stanhope-White said: "Large organisations can find it difficult to access relevant and timely information in a rapidly changing situation. The key thing for an operational headquarters is to have the single point of contact. The DE&S Ops Room, manned 24/7, has provided this portal – channelling the

Bombs, blueys, body armour and bed spaces

DE&S' Joint Support Chain leaps into action to provide vital backing to Operation Ellamy's part in policing the UN no-fly zone over Libya

information to where it needs to go."

In addition, the embedded Customer Support Team (Fleet) organisation in the Ops Room has exploited their collocation to ensure that the support to UK submarines and ships has been timely, accurate and linking Navy Command, PJHQ and the Submarines and Ships Operating Centres.



As a demonstration of the breadth of support being provided by the JSC, the Defence Travel Team was instrumental in working around the clock to source accommodation at short notice and, using an Italian speaking member of staff, arrange hire cars direct with various suppliers to ensure value for money.

British Forces Post Office has already deployed personnel to establish a postal service to the UK operating base at Gioia del Colle in Italy, using traditional means and the increasingly ubiquitous eBluey system.

This service, which qualifies for the Enduring Free Mail Service, is likely to be expanded to other locations in the area being used by British forces.

The Director of the JSC, Major General Ian Copeland, expressed his satisfaction at seeing all the constituent parts of the JSC pulling together to support Operation Ellamy.

"I have been very impressed with the work conducted across DE&S – in very short order – to provide necessary support across a panoply of areas to all the UK assets and personnel now deployed on Operation Ellamy.

"It is a timely reminder of the shortnotice challenges that defence, and therefore DE&S, must always be able to respond to, so I am delighted with the response from all those involved."

LIBYA 21

THE JSC has been providing a wide range of commodities to support operations.

The Defence Fuels Group has played a fundamental role, deploying personnel to provide (and pay for) aviation and maritime fuels for both UK and Allied forces in Gioia del Colle, Trapani and Souda Bay.

This has been backed up with the rescheduling of ocean tankers to ensure that operations, including the deploying Operation Cougar ships (ready to support evacuation from countries experiencing 'unrest') can continue apace.

Elsewhere in the Commodities area, the provision of 1,000 sets of body armour and helmets was facilitated through the Joint Support Chain (Services) while DSCOM arranged for transportation.

Commodities Defence Food Services and the Medical and General Supplies teams have been busy establishing routes and plans for supporting the large cast of personnel already deployed and the additional numbers heading into the same region by sea as part of Operation Cougar.

WITH THE MOD's main

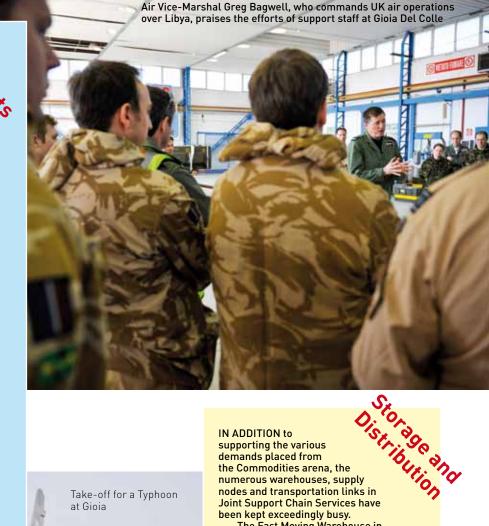
Movements effort remaining Operation Herrick, the Relief in Place of the personnel in Afghanistan has been the focus.

It is credit to all involved from DSCOM, RAF 2 Group, PJHQ, and all those in Akrotiri, Minhad and Afghanistan - that the rapid deployment and sustainment of personnel and equipment for Operation Ellamy has been achieved without impacting on Herrick.

Key in this has been the Air Lift Operations and Air Charter teams who have been able to develop the routine provision of airlift for operations and exercises to support the rapidly changing requirements as Operation Ellamy began.

About 726 tonnes of freight and 848 personnel were moved by air in the deployment phase, and this is now being developed by DSCOM's Movements Operations team into a sustainable, regular operation using military and commercial aircraft.

With a considerably easier destination than Afghanistan to reach, DSCOM has also been exploiting both the Global Freight Transportation Service contract that they manage and the military assets of the RAF's 2 Mechanical Transport Squadron to take essential stores and munitions overland to Italy.



Take-off for a Typhoon at Gioia

IN ADDITION to

supporting the various demands placed from the Commodities arena, the numerous warehouses, supply nodes and transportation links in Joint Support Chain Services have been kept exceedingly busy.

The Fast Moving Warehouse in Donnington in particular has had to keep pace with the rapid deployment and build up of several different aircraft types, while also ensuring that camp beds and insect nets were deployed.

With the move of the Explosives Business Stream from the JSC to the Weapons Operating Centre, the synergies between the two have been fully exploited to ensure that the overall picture maintained by DSCOM and reported into PJHQ has kept on top of the significant demands on Brimstone, Paveway, Tomahawk and other weapons.

The Logistics NEC (Forward) team has also deployed IS applications in support - providing an MJDI (Management of Joint Deployed Inventory) server in Gioia del Colle in addition to a VITAL node, to ensure that there is good visibility and accountability of stores both in transit and in theatre.



22 AIR SUPPORT

Abbey Wood is treated to a first look at the RAF's next transport aircraft

A400M come

S taff at Abbey Wood were treated to a spectacular fly-past as the A400M – the RAF's next generation transport plane – made its first visit to Filton where its wings are manufactured.

Assembled in Seville, Spain, it was the first time the aircraft could be seen by the DE&S project team and its engineering design and manufacturing partners at Filton in north Bristol.

The aircraft, an Airbus Military test aircraft, is one of four A400Ms currently flying.

Graham Wood, head of the Airbus Filton plant, said: "I am sure the people of Bristol are as proud as I am of the A400M. It's a fabulous aircraft, and it's flying with wings made right here in Bristol. It's a timely reminder of what Airbus, including its UK facilities do – design and build great aircraft."

Staff at DE&S agree. DE&S' Director Air Support Tim Rowntree joined Chief Operating Officer Dr Andrew Tyler and Chief of Materiel (Land) Lt Gen Gary Coward on the flight over Abbey Wood.

"Everything about it is truly world class, 21st century capability," said Mr Rowntree.

"With its huge turboprop engines and massive propellers, many had feared that the aircraft would suffer from noise and vibration. Not at all! As the engines ranup, it was so quiet and smooth I found it hard to believe that the props were actually turning.

"But then it eased forward to the runway and it lifted effortlessly into the sky. In the air it handled with the agility and precision of an aircraft a fraction of its size, and the flight-test crew demonstrated the cargo door in operation." Pictures: Kevin Slade and Airbus

Mr Rowntree added: "And on the spacious flight-deck, we were able to see how easily and confidently the crew were able to handle this huge aircraft through its state-of-the-art glass cockpit with its head-up displays and side-stick control.

"After landing, we were all struck by the feeling that this was one of those classic machines that looks right, feels right and is right."

The A400M is an all-new military airlifter designed to meet the needs of the world's Armed Forces in the 21st century. Thanks to its advanced technologies, it is able to fly higher, faster and further, while retaining high manoeuvrability, low speed, and short, soft and rough airfield capabilities. It combines tactical/ strategic and logistic missions and can also be used for aerial refuelling.

With its cargo hold specifically designed to carry the outsize equipment needed for military and humanitarian disaster relief missions, it can bring this material quickly and directly to where it is most needed.

Importantly, it can carry the new IED-resistant 30-tonne class of armoured vehicle directly to theatre.

Conceived to be highly reliable,

AIR SUPPORT 23

s 'home' to impress DE&S

Above: A400M is pictured during its flypast at Abbey Wood

Below: touchdown at Filton for A400M's first visit to north Bristol

> Main picture: A400M cuts a dash at last year's Farnborough Air Show



dependable, and with a great survivability, the multipurpose A400M can do more with less, implying smaller fleets and less investment from the operator.

The wings are the first for an Airbus-built aircraft constructed largely from composite materials (carbon fibre reinforced plastic, CFRP) and is the largest composite wing ever made for a military aircraft.

The A400M will ultimately replace the RAF's C-130 Hercules fleet and more than 170 have already been ordered by a range of global customers, 22 for the UK.

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Corsham – the new environment is open for business

Defence Secretary is on hand to officially open ISS' new home – see pages 26 and 27

2262





Defence Secretary cuts the ribbon on new buildings in Corsham and praises the vital global role of DE&S' Information Systems and Services

Report: Steve Sims Pictures: Phillip Handforth and DE&S Photographic



Top: six spurs of Corsham's new Building 405 Above: Dr Liam Fox performs the ribbon cutting to declare ISS' new home open Below: one of Building 405's 18 floorplates



The Secretary of State for Defence Dr Liam Fox officially opened the new purpose-built accommodation at MOD Corsham on 7 April. Dr Fox said the new facilities 'demonstrated that the MOD is capable of truly top-end delivery' before unveiling the commemorative plaque, cutting the purple ribbon and officially declaring the buildings open.

"It is an absolute pleasure to come and open so successful a project," he said.

The Defence Secretary was taken on a tour of the main MOD Corsham office accommodation, incorporating the Global Operations Security Control Centre (GOSCC) and the office spurs housing the majority of DE&S' Information Systems and Services (ISS) Operating Centre personnel.

Dr Fox was briefed fully on ISS' ongoing support to operations being provided by ISS delivery teams and industry partners.

He paid tribute to the work done, saying: "If you don't have communications you don't have front-line capability. Without your support and expertise we can't deliver the necessary effect."

MOD Corsham is being delivered as part of a 25-year Private Finance Initiative between Defence Estates (now the Defence Infrastructure Organisation) and the Inteq Consortium – created specifically for this programme, comprising John Laing and Interserve Defence.

A key theme throughout the redevelopment project has been collaborative working, with the project characterised by the positive, multidirectional relationships that have developed between the MOD and its suppliers and also between the suppliers

CORSHAM

CORSHAM 27

themselves. The relationships between the principal players – MOD (Defence Estates and ISS), Atlas, British Telecom and the Inteq Consortium – have all contributed to the successful delivery of this project.

In addition to the new GOSCC and office accommodation the redevelopment incorporates new single living accommodation for 180 service personnel, conference and sports facilities, plus refurbishment of the remaining buildings on the site. Once complete, the refurbished buildings will be occupied by 2nd Signal Brigade, 10th Signal Regiment and 600 Signal Troop, as well as housing medical, dental and welfare facilities for service personnel.

The redevelopment sits within a wider programme of work called the Corsham New Environment (CNE), which is run by ISS who, together with some of their industry partners, are the primary occupier of the new office accommodation.

CNE is a key enabler that will allow ISS to deliver efficient and effective services in support of current and future defence needs. This will be achieved by centralising office-based and operational system assurance staff at the Corsham site, bringing together existing teams from across the Corsham estate and releasing the old Copenacre and Rudloe sites for disposal.

The initial building phase of the project has been delivered to performance, cost and time having taken more than 1.1 million construction man-hours and

excavated 155,000 cubic metres of earth, enough to fill 62 Olympic-sized swimming pools. The final phase of the project – the refurbishment of the remaining buildings and the landscaping of the external areas of the site – is due to be completed this autumn.

Director ISS, Major General Tim Inshaw is enthusiastic about working in CNE, and paid tribute to the many individuals and teams involved. "I give huge thanks and congratulations to all who've worked so hard and with great skill to deliver such a successful project," he said. "This has been a remarkable team effort."







Left: invited guests pictured at the official opening performed by Dr Liam Fox, pictured below right with Major General Tim Inshaw, Director ISS







28 METEOR



evelopment of Meteor – the Beyond Visual Range Air-to-Air Missile – is entering its final year, a testament to the work of six European nations who will jointly acquire the weapon.

The programme involving the UK, France, Germany, Italy, Spain and Sweden is approaching its tenth anniversary. In UK service Meteor will replace the AIM-12 AMRAAM (Advanced Medium Range Air-to-Air Missile)

Meteor though differs from many other collaborative programmes. Julian Knight, leader of DE&S' BVRAAM team, said: "Meteor is the only collaborative programme that is run by an International Joint Project Office (IJPO) based at Abbey Wood. This comprises military and civilian staff seconded from the six partner nations, but with the UK as the formal lead nation, providing two thirds of the staff and effectively underwriting the programme and the IJPO.

"We also have a single prime contractor – MBDA-UK – and thus are not subject to some of the constraints that come from having project-specific

Meteor enters the home straight

Co-operation between six European nations at Abbey Wood sees air-to-air missile project entering final year of air and ground trials



pan-European industrial consortia where multiple parent companies need to be satisfied, which can slow progress.

"Finally, we are genuinely working to a single missile design that will be applicable to every platform and environment. Avoiding national variants makes the task easier and will aid the minimisation of through-life costs."

Meteor will be fielded initially on the Typhoon, the Saab Gripen and the Dassault Rafale – the latter both on land and at sea. It is also possible that it will eventually also see service on the F-35 Joint Combat Aircraft.

Julian added: "The IJPO answers to a steering committee, made up of senior representatives from each of the partner nations, supported by a network of working groups who report to the IJPO.

"The IJPO's day-to-day interfaces are with small national project offices in Koblenz, Madrid, Paris, Rome and Stockholm, which act as the conduits to their own communities of users, governments and parliaments. These national offices rely on their own national representatives within the IJPO to support their aims and this means that the IJPO's formal reporting burden

METEOR 29

'The ability of six nations to work together to get Meteor to the threshold of full production shows that collaboration can indeed work, even on this wide scale' – Alan Nicholl, DE&S Director Weapons

Main picture: Meteor seen beneath a two-seat Typhoon on a test flight Picture: Geoff Lee www.planefocus.com

Right: testing has been conducted by other air forces, including the Swedes from a Saab Gripen Picture: MBDA

is reduced allowing the team to focus most effort on supporting the six-nation objectives.

"It also means that where there are potential conflicts between national interests and the shared aims, these can often be dealt with at team level in an environment where the wider context is fully understood, with compromises often achieved over a coffee or a weissbier."

Development work is now entering its final year of air and ground trials, leading up to Meteor receiving its Certificate of Design next year. Production deliveries will then begin, with a gradual build-up of stocks to allow it to enter RAF (and the other Eurofighter nations) service on Typhoon from 2015. Sweden will field Meteor at around the same time on Gripen, and France on Rafale a little later in the decade.

Meteor represents a significant advance over existing weapons, and has already been the subject of numerous export enquiries from around the world, with some nations considering the possibility of making an order.

Alan Nicholl, DE&S' Director Weapons, within whose Operating Centre the IJPO is based, said: "The ability of six nations to work together to get Meteor to the threshold of full production shows that collaboration can indeed work, even on this wide scale.

"There have of course been ups and downs, but we have always managed to work through them, with the knowledge that Meteor will provide the participating nations with a world-beating capability.



It combines the best technology from around Europe to produce something that no one partner nation, working alone, could develop.

"There is always a 'collaboration overhead' with such things, but I think the Meteor model, with a true joint team, with a single aim and a single prime contractor is a hugely effective way of carrying out such a programme."

On target – latest sights see infantry take on extra firepower

The Surveillance and Target Acquisition (STA) element of FIST – DE&S' Future Integrated Soldier Technology – has achieved its in-service date and is set to deliver a range of electro-optic sights to troops over the next four years.

The £150 million programme – which will involve nearly 11,000 troops across all three services – has been run by the Dismounted Soldier Systems (DSS) team along with prime contractor Thales UK.

Some elements of the system have already seen service in Afghanistan as an urgent operational requirement and form the basis of the new STA system.

The equipment, a series of sights, target locators, periscopes and digital cameras, have been trialled in different conditions by the Infantry Trials and Development Unit (ITDU) in Warminster.

System acceptance was approved last September and initial batches of equipment have been manufactured and fielded, and 'train the trainer' courses completed. Training has been co-ordinated by HQ Land working closely with DE&S.

"The achievement of the in-service date for FIST Increment 1A represents the outcome of much hard work and determination by a very effective team that encompasses the DSS team, Thales UK, the ITDU, HQ Infantry, HQ Land Forces, Infantry Battle School and 4 Rifles," said Colonel Bill Pointing, leader of the DSS team.

"We know the equipment we are delivering will make a real difference on current and future operations and is already shaping the next increment of the FIST programme to deliver further increases in dismounted close combat capability.

"FIST builds on the rapid delivery of helmet mounted night vision systems, Surveillance System and Range Finder (SSARF) and thermal weapons sights that are changing the UK's ability to conduct effective night operations."

Ten people from DSS worked on the project with more expertise provided by Thales. "In-service date could only have been achieved through close co-operation and teamwork between the DSS, Thales and the suppliers," said Thales' project director Phil Cubbon. "Trust, flexibility, innovation and delivering to schedule have all contributed to achieving this challenging milestone."

For the infantryman STA improves his ability to close with and defeat the enemy. Col Mike Thornton, Assistant Director Capability at HQ Infantry, said: "By







Above: the Maxikite Mk3 night sight augmented with Close Quarter Battlesight, enabling engagement in night and day

Above right: the Underslung Grenade Launcher Sighting System, provides a more accurate method of engaging targets with the launcher

Left: members of the Dismounted Soldier Systems team and prime contractor Thales UK accompanied by a fire team from 4 Rifles Main picture: the combination of Close Quarter Battlesight and Lightweight Daysight allow the user to engage targets rapidly and accurately in a variety of scenarios, saving ammunition while maintaining situational awareness

introducing into service the Close Quarter Battlesight (which is fitted to all day and night sights) the soldier can acquire and prosecute fleeting targets far quicker than has been possible to date, greatly increasing his accuracy and lethality when fighting at close quarters with the enemy.

"However, it is the combination of image intensifiers and thermal imaging sights at section level that really delivers a step change. Co-ordinated employment of these systems allows the observation and engagement of targets in all light and weather so that the firepower of the company can be brought to bear in complete darkness and under 'black light' with greater precision, lethality, agility and safety than ever before."

As the first unit to receive FIST STA, 4 Rifles is now starting training as the first element of their preparation for the next planned operational tour in 2013. This is to allow the unit to 'train as it fights', ensuring that when the troops begin operations, they are fully au fait with their equipment.

Lt Col Nick Thornton, commanding officer of the battalion, said: "We were delighted to be the first to receive FIST and all the early indications are that it is a real game-changer. The results from the ranges have seen a significant improvement in accuracy and ease of use, while live firing in the Falklands has demonstrated the overmatch created at night by the suite of night vision devices.

"We are now looking forward to taking FIST to Kenya, both to test the best distribution of each piece of

equipment across the battalion and to engage in force-on-force training. I am confident that the results from this will reinforce our first impressions on the value of FIST to the rifleman."

Work is also underway, in conjunction with another DE&S team – Joint and Battlefield Trainers, Simulation and Synthetic Environments – to integrate the STA equipment into the Dismounted Close Combat Trainer to allow users to conduct some of their training in a simulated environment.

night

A gunner on the Light Machine Gun demonstrates the Commander's Target Locator (CTL), used for accurate observation and location of targets day and

'Firepower can be brought to bear in complete darkness with greater precision, lethality, agility and safety than ever before' – Col Mike Thornton, HQ Infantry



STA – a programme of many parts

□ Close Quarter Battlesight (CQB): made by Shield in Weymouth and attached to each of the weapon sights (LDS, FTS, CMC below), this is a x1 red dot sight that allows users to quickly and accurately engage targets closer than 75 metres – ideal for urban operations as currently encountered in theatre;

□ Lightweight Day Sight (LDS): made by Elcan in Canada, this x4 optical day sight replaces the SUSAT, is lighter, and offers greater peripheral vision due to better eye relief;

□ FIST Thermal Sight (FTS): made by Qioptiq in north Wales, this is a step change to the existing Lightweight Thermal Imager (LWTI) due to an improved thermal sensor offering much better detection and recognition ranges;

CWS-Maxikite Conversion (CMC): this

conversion takes the existing section level night sights (Common Weapon Sight (CWS) and Maxikite Mk II) and upgrades them for use with the FIST system, adding a Picatinny rail bracket and CQB;

Underslung Grenade Launcher Sighting System (UGLS): made by Istec in Hertfordshire, this combines a holographic weapon sight with a quadrant range mechanism that allows more accurate firing of the UGL;

Commander's Target Locator (CTL): made by Vectronix in Switzerland, this device combines day and night optics, a laser range finder and digital magnetic compass to enable users to pinpoint targets to 4km and then relay details to other users for the control of fire;

Lightweight Infantry Periscope (LIP): made by Uniscope in Israel, this is a three-part folding periscope to allow troops to conduct surveillance from cover;

□ Rugged Digital Camera (RDC): made by Olympus, this is an off-the-shelf digital camera that can withstand knocks, drops and immersion, and will provide the user with a capability to gather intelligence for further use in briefings, etc.

Lancaster latest to land a new lease of life

A TARGET of a return to the Fleet next March has been set as HMS Lancaster undergoes an extensive refit at Portsmouth.

The work is part of a £17.9 million contract with BAE Systems.

And all parties have been praised for their work so far in focussing on the Type 23 frigate's return to front line service.

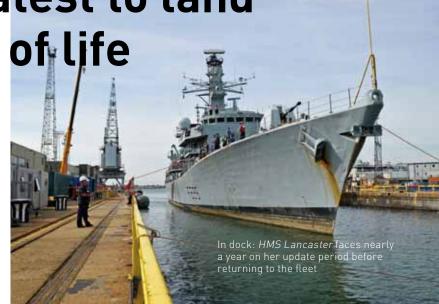
Captain Tim Chidley, Superintendent Fleet Maintenance at Portsmouth, said: "HMS Lancaster's refit shows how even well-founded relationships can learn and be strengthened.

"Novel integrated approaches to planning the project, adopting a more structured approach to partnering and challenging ourselves to improve through innovation have given this project added momentum.

"Getting all parties to look beyond 'the contract' to the ship's return to operations has fostered real focused enthusiasm at all levels around a common aim."

The mid-life upkeep will significantly upgrade the capability of the 20-year old frigate to ensure she is ready to fulfil future operational commitments.

Work includes upgrades to the ship's



Seawolf guided missile system, command system, communications and the installation of a small calibre 30mm gun system, which can be remotely operated.

A new coating of underwater paint will deliver greater operational efficiency and reduced fuel consumption alongside refurbishment of her diesel generators and replacement of shafts and propellers.

Barry Woolley of BAE Systems added: "The work that we are now undertaking in partnership with the Royal Navy here in Portsmouth will boost the war fighting capability of HMS Lancaster to ensure that she returns to the fleet in 12 months, fighting fit and continues to deliver exceptional capability to the Royal Navy for years to come."

The project team conducted extensive surveys of the ship and her systems prior to the start of work in order to optimise planning and preparations for the refit.

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QinetiQ

Suppliers gear up for Type 26

COMPANIES LARGE and small across the maritime industries suppliers' network will have a chance to find out how to get involved in the UK's latest warship procurement programme on Tuesday 5 July at a dedicated Type 26 Global Combat Ship supplier day.

Organised by the Society of Maritime Industries (SMI) on behalf of the Joint Type 26 team, the event will take place at the Marriott Royal Hotel, College Green, Bristol, and provides an opportunity to engage with the joint DE&S and BAE Systems team responsible for developing Type 26, and peers across the industry.

Registration fee for the event is £125+VAT, with discounted rates of £99+VAT for SMI members and £55+VAT for UK government employees and members of the UK armed forces. Applications should be submitted by Friday, 24 June.

Further information http://www.maritimeindustries.org/ events/view.jsp?id=1302>; .



THE FORMER *HMS Invincible* has left the UK for a Turkish recycling company.

The aircraft carrier, out of service since 2006, left Portsmouth at the end of March on a month-long journey to Leyal Ship Recycling, who will spend eight months dismantling her.

Leyal have already recycled former Type 42 destroyers *Cardiff, Newcastle* and *Glasgow* as well as the former *RFA Oakleaf.*

The company's combination of a solid commercial bid, coupled with a high standard of responsible treatment resulted in the Disposal Services Authority's (DSA) decision to award them the contract.

The disposal of *Invincible* is in line with the UK Ship Recycling Strategy and future disposals will be conducted in a similar fashion, to prevent uncontrolled and unregulated recycling of Royal Navy vessels in other parts of the world.

The DSA has successfully recycled 10 ships in the past five years.

It is hoped that the lead the UK Government has taken in ensuring that its ships are recycled in a responsible way will continue to force standards around the world to be improved.



www.LTPA.co.uk is designed to be the starting point for all MOD teams who have a T&E requirement. It aims to give you all the information you need about the Long Term Partnering Agreement (LTPA) between QinetiQ and MOD for test, evaluation and training support.



www.LTPA.co.uk is a QinetiQ registered domain name.

Workshop time cut as Portsmouth goes high-tech

THE LATEST high-tech equipment is transforming work at Portsmouth's Multi-Functional Workshop.

In the past 18-months up to £400,000 has been invested in new equipment as part of the Support Workshop Improvement Programme (SWIP).

Manufacturing Manager Martin Cains explained the new equipment has improved production efficiency.

"Investment in new equipment will give us the tools required to improve timeliness and quality of manufacturing output and reduce load, burden and cost of through-life maintenance," he said.

Installation of the new Mazak lathe means production of a scupper (a drain cover) from a Hunt Class minehunter has been cut from a couple of hours on two different machines, to just nine minutes.

"The new equipment provides the tooling to improve our production efficiencies. Our aim is to create a single roof support complex that provides a blend of support capabilities under one roof and recently have moved the hose manufacturing equipment into the Multi Functional Workshop," he said.

Mr Cains added that planning is underway to ensure they had the right skill set, modern tooling and plant to support the *Queen Elizabeth* class carriers and Type 26 frigates.



Chief of Materiel (Fleet) Rear Admiral Andy Mathews witnesses high-tech working

DE&S hosts another explosive industry day!

DE&S' COUNTER-IED (improvised explosive device) Office hosted its second industry day which built on initial success last year and attracted more than 200 delegates drawn from around 80 companies.

Fronted and supported by Director Battlespace Manoeuvre (General Bill Moore), Director Information Superiority (Air Vice-Marshal Stephen Hillier) and DE&S Director ISTAR (Mr Vic Jenkins), the event focused on expanding industry's awareness of the UK involvement in countering the IED threat.

The C-IED Office also explained to industry the systems approach being taken to 'getting left of the bang', highlighting opportunities to get involved.

This was summarised perfectly by Mitchell Howell from JIEDDO (a US partner). He said: "Bottom line, if we can't find a solution, we're going to invent one," asking industry to help him to help our warfighters come home. More information contact C-IED Office on 030679 81298 or DESCIEDOffice-

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DE&S' vital link to the labs

Defence Science and Technology Laboratory (Dstl) provides scientific input to DE&S projects, a link which should be enhanced, argues DE&S' Rob Eason

MAINTAINING A technological edge, with the necessary underpinning science and facilities, is vital to keep one step ahead of opponents on the battlefield and in the wider security domain.

Rob Eason has a dual role as the Head of Technology Delivery in DE&S' Programmes and Technology Group as well as Programme Director Technology Exploitation with Dstl.

Part of his role is to improve exploitation of science and technology in DE&S programmes.

He said: "Having a position of influence in both organisations allows me to align plans and encourage the organisations to work in harmony.

"DE&S and Dstl have agreed a strategy for closer working. Essentially it's an agreement between the executive boards of DE&S and Dstl who share a vision for a more symbiotic relationship. "We are trying to improve the business processes between the organisations and streamline the tasking arrangements. A good example of this at the moment is the Weapons Operating Centre which has set up an overarching tasking

which allows them to call on specialist advice when they need it."

DE&S is a key customer for Dstl who also support many

• supply specialist science and technology (S&T) services for MOD and Government.

• provide expert advice, analysis and assurance to aid decision-making and to support MOD and wider Government to be an intelligent customer.

• lead the formulation, design and delivery of a coherent and integrated MOD S&T programme using industrial, academic and Government resources.



Above: C-Shield offers more protection on ships. Left: Rob Eason

others across Government. "I would like to see DE&S make more use of the capabilities that Dstl can provide," said Mr Eason. exists to do work that is best done in Government." He added: "A good example of this is the C-Shield which has improved ballistic

■ More information from DE&S' Science Gateways. There are Dstl scientists or engineers embedded in each Operating Centre to provide direct support and advice.

■ Dstl Air and S&T Roadshow, Wed 11 May, Abbey Wood. More information: http://collab.dstl.r.mil.uk

"Dstl should be used to support DE&S in its role as an intelligent customer, identifying the most appropriate solutions and suppliers to meet DE&S requirements, and ensuring delivery against them.

"All Dstl employees are civil servants and are an internal source of critical expertise. Dstl does not compete with industry and protection of small-calibre gunners on the upper decks of ships.

"Dstl supported DE&S during the development of the C-Shield with Dytecna Engineering.

"Dstl assessed the commercial-off-the-shelf system proposed by industry, helped DE&S select the C-Shield and then helped Dytecna to develop it."

• manage and exploit knowledge across the wider defence and security community, and understand S&T risks and opportunities through horizon scanning.

• act as a trusted interface between MOD, wider Government, the private sector, academia and allies to support military co-operation, capability delivery, diplomacy and economic policy.

• Develop S&T skills across MOD, including managing the career of MOD scientists.

Dstl's role is to...

Staff polish up their carbon thinking

Staff get to grips with carbon emission reduction at Abbey Wood



STAFF AT Abbey Wood have been finding out about DE&S measures to reduce carbon emissions.

The event in Neighbourhood Two was staged during Climate Week, a new national initiative to encourage people to take action on climate change.

DE&S' Sustainable Procurement and Sustainable Development teams demonstrated a range of current initiatives including solar technology being used to achieve important reductions in energy consumption on forward operating bases.

Outside organisations supported the event including the Energy Saving Trust, who invited staff to try their driving simulator. This showed people how driving more efficiently reduces car emissions and saves money on fuel.

There were also stands and displays from South Gloucestershire Council, Sustainability South West together with waste management companies Sita and Severnside Recycling, focusing on the importance of saving energy and recycling at home and at work.

Steve Croome, Abbey Wood environmental advisor, said: "It is important that avoiding unnecessary use of energy is taken seriously. Showing people practical examples of what is being achieved will encourage more people to act.

"Even small changes to daily routine through car sharing or switching off IT while it is not being used can make an important difference."

Contract still turning in the results

SAVINGS FROM using DE&S' Single Source Maintenance IT contract by an Abbey Wood team have topped £100,000 since the start of the year.

The contract has been delivering IT support to the SPCISR team. The savings are a good example of a DE&S team using an existing in-house initiative.

Single Source Maintenance (SSM) aims to deliver cost effective IT support pan MOD. With 200,000 assets worldwide on contract the MOD has created the in-house IT support structure that uses 'in-house' for significant financial, manpower and efficiency savings.

Project teams who engage with the SSM can expect savings of up to 50 per cent in comparison with other alternatives.

All who manage a contract with IT support elements are encouraged to refer to SSM.

Further advice from Mark Taylor (SSM Business Manager), 01225 468927/9355 68927, E-mail: mark. taylor930@mod.uk

Biodiesel – Devonport cooks up more savings

TURNING COOKING oil into biodiesel is the latest initiative at Devonport to help achieve tough targets on energy reduction.

Oil from on-site canteens has been converted to biodiesel by production plant supplier Green Fuels.

It is anticipated that 50 litres a week will be produced, though the on-site biodiesel plant is capable of generating 50 litres a day, at a cost of 28 pence per litre (duty exempt at the levels being produced); a cost reduction of nearly 60 per cent over the commercial (red) diesel currently used.

Biodiesel can power diesel equipment without requiring modification, such as portable plant equipment, generators, fork-lift trucks and work vans. While 100 per cent biodiesel can be used, a 50-50 blend with commercial diesel is to be used during early trials.

Babcock's Energy and Utilities Operations Manager Chris Piper said: "The project is in its infancy, but presents a real opportunity for sustainable development for the dockyard.

"At the anticipated production rate of 50 litres a week savings will be in the region of \pounds 1,000 over the year,



Energy reduction in the main factory, above with production of biodiesel, right

but the sustainability and environmental benefits are considerable."

A second initiative is to replace 736 lights in the main dockyard factory with more energy efficient lighting expected to save more than £50,000 per year.

The initiatives will help achieve energy reduction targets under DE&S' Warship Support Modernisation Initiative with Babcock at Devonport.

The MOD's Nuclear Site Services Manager John Meaken said: "The MOD is working towards the Sustainable Development in Government targets to reduce carbon emissions. This is supported at Devonport by working closely with Babcock, installing metering to measure energy use, and developing renewable energy projects to reduce reliance on fossil fuels."

All-rounder walks away with top prize

LEADING CHEF Richard Tame is the Armed Forces caterer of the year.

Richard, who spent nine months at sea last year, demonstrated his high calibre catering ability and culinary skill in the small galley of *HMS Mersey*.

He was presented with his award by Captain Jeremy Rigby, leader of DE&S' Defence Food Services team, at the Cost Sector catering awards.

The contest showcases the best of Forces' catering, which uses food provided through DE&S' catering contracts.

Richard was described by judges as an inspirational leader, coach and mentor to the young team of chefs under his charge.

He also doubles up as an assistant fisheries protection boarding officer which involved more than 100 boardings in all weather. And he has another duty to manage and train the ship's first aid party.



Leading Chef Richard Tame is presented with his award by comedienne Helen Lederer, left, with Captain Jeremy Rigby, leader of DE&S' Defence Food Serices team

Management takes steps after Your Say findings

THE RESULTS released last December of the 2010 MOD Your Say survey are helping to inform management thinking in DE&S.

The survey measured the emotional attachment to our jobs, colleagues and the organisation, and indicated our willingness to learn and perform.

Given the Defence Transformation programme, and the fact the survey was conducted in the wake of SDSR, it was understandable many respondents highlighted that they felt uncertain about the future.

Concerns were also expressed about how change was managed and whether the changes made were necessarily for the better. A great deal of these issues had their basis in how change was communicated.

CDM and senior leaders have renewed efforts to make themselves more visible and engage with staff on the future of DE&S. People are also being encouraged to raise concerns through a Defence Intranet page, the Change Exchange, run by the DE&S Business Development team.

The Main Board strongly agrees that feedback on performance must be delivered honestly. The new reporting process addresses this by encouraging more regular dialogue and a greater focus on how outputs are delivered, by introducing the Super 7 behaviours. Information about the new e-PADR (Performance Appraisal and Development Review) and the Super 7 behaviours is contained in the April/May edition of Defence People.

The Main Board has highlighted the need for all line managers to have a greater awareness of diversity and make more effort to understand people's different needs.

DE&S has recently supported some DCP-sponsored research into gender issues and this will be communicated when the outcome is known. Staff are encouraged to keep up to date with their equality and diversity training and continue to report all incidences of bullying, harassment and discrimination.



Paul Foster is presented with his double award by DE&S Director Ships, Rear Admiral Bob Love

Paul celebrates at the double in weapons course success

WO(2) PAUL Foster of DE&S Ships has clocked up a unique double on his weapons engineering course at *MWS Collingwood*.

Paul won the WO(2) Career Course prize (best student on course) as well as the commanding officer's termly training prize – awarded to the best student across all Weapon Engineering Training Group courses for the term.

Achieving a Highly Commended overall course result of 82 per cent, he showed drive, enthusiasm and high levels of commitment throughout.

During his training time he approached every challenge with a typically innate professionalism and high levels of vigour, utilising every possible opportunity to gain maximum benefit for the course.



DE&S duo receives a formal send-off A TRADITIONAL top-table lunch was held in the Sergeants' Mess at RAF Wyton on 17 March to mark the retirement of two DE&S colleagues after a lifetime of service in the RAF.

Warrant Officer Andy Whittle has served as a photographer for 36 years and Flight Sergeant Mel Chase as an airframes technician for 27. After careers serving all over the world, both

specialists brought their experience to DE&S for

their final tour working in the Air Platform Systems team.

Andy (seated left of centre) has been the project manager for RAF photographic support at Abbey Wood and Mel (seated right of centre) has been an electronic warfare desk officer working in the same team but based at Wyton. Sixty-five colleagues past and present gathered from all over the UK to mark the occasion in style with a formal send-off.

Care for the carers

THE CIVIL Service Benevolent Fund is launching a Carer's Passport for civil servants in August.

The Fund wants to help employees with caring responsibilities outside work, and which affect their ability to do their 'day' jobs.

The Passport will provide them and their line managers with information about their needs in the workplace and to identify solutions, financial or otherwise.

Jill Rundle of the Fund said: "While the Fund is extremely good at finding solutions for people who need care, we haven't previously been able to offer the same level of attention to civil servants who themselves are carers.

"Research shows that more than six million people in the UK are carers, of which half will be juggling their work with caring responsibilities.

"That suggests there are more than 30,000 people in the Civil Service in that position.

"It's a massive unmet need; and it's one that we are determined to address."

For more information e-mail carers.passport@ csbf.org.uk.

Three go fourth in an orienteering success



The DE&S trio of, from left, Lt Col Chris Sanderson, Capt Mark Bentley and Flt Lt Geoff Ellis whose efforts helped boost the Combined Services' challenge in Scotland

THREE ORIENTEERS from DE&S led the Combined Services to their best result for years in their annual fixture against the British Students in Scotland.

Reigning inter-services champion Flt Lt Geoff Ellis of Corsham spearheaded the Combined Services' challenge into fourth place with support from Capt Mark Bentley, also of Corsham, and the Ensleighbased Lt Col Chris Sanderson.

In the individual race at Balkelle near Dundee new Combined Services cap Lt Col Chris Huthwaite (Redford Barracks) set the pace with 87 minutes over the nine kilometre course. It was only bettered by Larkhill's Col Paul Lane and the DE&S duo of Bentley and Ellis.

Over the relay race at the sand dunes of Gullane, 20 miles east of Edinburgh Geoff ran strongly to hand over to Mark in eighth place behind some very strong student teams while Chris ran well to close the gap on Mark, using his superior orienteering skills in the sand dunes.

The CS team finished 4th, equalling their best performance in recent years.

THE LATEST Abbey Woodbased apprentices to achieve all, or elements of, their Level 2 or 3 apprenticeships have been presented with their certificates.

Within DE&S there are a number of apprenticeships available. Traditional apprenticeships exist with three-year advanced engineering schemes being offered at Abbey Wood and Devonport for Band D technicians and a craft scheme at Gosport for skill zone staff.

These schemes recruit annually and provide the skilled staff of the future. Modern business apprenticeships are also available to existing staff including business administration, management, team leading and customer service and are delivered by a pan-Government contract with JHP Training.

DE&S' Director HR David Ball said: "I have long been an advocate of external qualifications to recognise the range of skills we have in defence.

"The apprenticeships provide a deserved mark of success for staff in developing their skills to externally recognised standards. This benefits both the department and the individual."

DE&S is demonstrating continued support to apprenticeships for existing staff with JHP Training and for future skills through recruitment into the engineering schemes this year.

More information from the DCP intranet site or e-mai DESHRPLANS-AMTmailbox.

Jack engineers his apprenticeship future



JACK PAYNE, above left, a second year apprentice completing an advanced engineering apprenticeship in mechanical engineering shadowed Director Safety and Engineering Howard Mathers.

Jack met a number of DE&S' senior management, including Director Commercial Les Mosco, Quality Assurance Assistant Head Kevin Thomas, Tim Rowntree (Director Air Support) and Fred Edwards (Weapons principal engineer) as well as attending a Safety Board committee meeting.

He said: "I am excited about the prospect of reaching such levels during my career. Shadowing Howard was a unique opportunity which I would recommend to any apprentice."



Above: apprentices pictured with David Ball at an Abbey Wood event earlier this year

DNS - 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:

2011DIN04-051: This DIN details the specific dates when *RFA Fort George* will no longer be able to receive or transmit signals, e-mails, mail and use mobile phones.

2011DIN04-049: JSP 456 Defence Catering Manual Volume 1 (Edition 5) catering management will be issued directly to all units from Bicester. Previous editions of this manual are to be destroyed. Electronic copies are also available on the internet and Defence Intranet.

2011DIN04-046: This DIN details the road freight services provided within the UK and Europe for moving ammunition, explosives, other dangerous goods, protectively marked material, containers (including ISOs), vehicles, weapons, equipment and general stores.

2011DIN04-040: This DIN contains guidance on the electrical safety testing of medical, dental and veterinary equipment for medical and dental technicians, practice managers and hospital staff.

It's a right Royal occasion!

Bases go on VIP alert as Prince and Princess hand out the honours

TWO SHIPS' companies and the Battle Staff from Clyde's First Mine Countermeasures Squadron (MCM1) were honoured when Prince Harry presented them with the Telic operational medals, pictured right.

Travelling to Portsmouth on 18 March, the sailors joined mine warfare colleagues to receive the medal for their work in the Gulf last year. The Prince handed out the medals in his role as Commodore Small Ships and Diving and afterwards met some of the sailors'

families before being given a tour of mine hunter HMS Cattistock.

Commander David Bence Royal Navy, the UK's On Call Force MCM Commander during the qualifying period of operations, said: "Without doubt the Royal Navy is the best in the world at mine countermeasures and for the sailors to receive their Telic medals from Prince

honour, a day not to forget." MCM1's staff headquarters are at Clyde and forms part of the Commodore Faslane Flotilla organisation.

Harry is an absolute

DEVONPORT PLAYED host to The Princess Royal, pictured left, as she honoured the crew of *HMS Albion* on the tenth anniversary of the ship's launch. The Princess is sponsor of *HMS Albion* and her visit allowed her an update on the busy life of the ship since her last visit.

She also awarded two Long Service and Good Conduct Medals to Petty Officer Rob Ellis and Leading Airman Aaron Eynon. The medals acknowledge 15 years of Royal Naval conduct at the highest standards.

Every Royal Navy warship has a noncommercial sponsor who has personal ties with the ship throughout its commission.

While the ship's crew may change every few years, a ship's sponsor is the one constant in the life of a ship. The Princess Royal launched *HMS Albion* in March 2001.

ALAN NICHOLL, Director Weapons, has presented a new category of awards to DE&S and MBDA staff at the company's Business Recognition ceremony.

Around 350 people attended the annual event at Stevenage to recognise innovation and contribution to business and the community.

The new award category – covering contributions to Complex Weapons – was created after achieving the first anniversary of the Team Complex Weapons interim Portfolio Management Agreement (PMA-I) between the MOD and MBDA UK.

Representatives of the Weapons Operating Centre received the awards on behalf of the three winning entries, chosen for highlighting achievement against one or more of the PMA-I's principles.

These recognised the creation of the FLAADS (Future Local Area Air Defence System) Affordable System Architecture; the enabling of Fire Shadow Rapid Development and Deployment through MOD/industry joint working, and the development of Complex Weapons joint planning.

Alan Nicholl told winners: "I am delighted to share in recognition of your successes this evening. Our ability to undertake joint planning, and project management, and to measure our performance against a single set of numbers, is critical to delivering our hugely innovative Portfolio Management Agreement. Over the past 12 months we have really tested the PMA and it has proved to be robust and highly effective."

DE&S teams also received awards for contributions in areas from development of innovative technologies for future systems, through the agreement and approval of the PMA-I last year, to the in-service support of existing weapons.

Staff earn their reward in new series of weapons awards



Alan Nicholl, centre with Col Mike Ross and MBDA's Chris Procter of the Fire Shadow Rapid Development and Deployment team



Winners: Gp Capt Linc Taylor, left, Chief of Staff of British Forces in the South Atlantic, presents the trophy to Major Paul Williams of the Royal Signals, commander of the ISS provider team

ISS the top performers in South Atlantic 'battle'

DE&S staff on the Falklands are the sporting aces after winning the British Forces South Atlantic Islands Cup.

And to show it was no fluke the team lead the way in 2011 after the first two of the dozen events.

The annual event, competed for by all 12 units in theatre, sees a dozen sporting challenges throughout the year.

A brilliant effort saw Information Systems and Services' Internal Service Provider (South Atlantic Islands) team emerge victorious.

The team needed strength in depth as the events ranged from racket sports, volleyball, swimming and five-a-side football to cross-country running and a series of sprint events.

There is an element of fun to proceedings also, with threelegged and sack-races included, along with welly throwing.

The ISS team has 63 members and provides the communications support to the Forces in the Falkland Islands.

The team covers a range of services from satellite comms and JOCS to Comcen messaging and to telephony and intraisland comms networks between the Force HQ at Mount Pleasant complex and the mountain-top remote radar heads in West Falkland, which provide the radar warning coverage of the Falklands airspace.

The tri-service team, led by a Royal Signals major, have a differing workload in challenging geographic and climatic conditions, especially considering that the predominant source of power generation in the Falklands is from wind turbines.

Commander British Forces SAI, Commodore Phil Thicknesse, is a big supporter of the cup.

He said: "It offers personnel the opportunity to participate in a variety of sporting events throughout the year, some of which they will not have tried before, and to make use of the excellent facilities that we have in this theatre.

"It also introduces a healthy degree of competition between the units, while fostering service ethos, cohesion and team spirit within the competing teams.

"Perhaps most importantly, it is great fun for spectators and participants alike."

Catch up on a host of free offers

MOD CIVIL servants can save money on a range of purchases including discounts at supermarkets, on holidays and visits to top UK attractions.

The offers come through CSSC Sports and Leisure, and the Civil Service in the English Regions (CSER).

Offers include a four per cent discount at Asda and savings of up to 50 per cent on attractions including Alton Towers.

CSSC is a membership organisation for civil servants and related bodies. It promotes health and wellbeing and encourages activity through a huge range of leisure pursuits.

CSER is a national initiative, supported by Cabinet Secretary Sir Gus O'Donnell. Its philosophy is that by creating opportunities for departments to work together locally and nationally, staff, departments and the public will benefit. Membership of CSSC

is £3.50 a month. Further information on www.cssc. co.uk



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Clyde experts enjoy a busy day

BOMB DISPOSAL experts from Clyde naval base's Northern Diving Group had a busy time when they were called out to three tasks in a single day.

Among the call outs last month was a trip close to home – the nearby Kirkmichael Estate in Helensburgh – where a smoke grenade was found in a play park.

Strathclyde Police called in the MOD Police who looked after the device until the Diving Group arrived.

Petty Officer Buster Brown, who attended the incident, said: "It turned out that the smoke grenade was a spent charge.

"There are a few military ranges dotted around the area where it could have been picked up and there's the possibility that it could have been washed up somewhere.

"We took the object back to Faslane where we will store it until we can dispose of it safely." But there's a warning for the public who find unexploded bombs

Then the team headed to Irvine where a submarine smoke marker was found washed up on a beach.

The object was blown up in a controlled explosion.

To top the day off, the divers then whizzed off to Airdrie where a nine-year-old schoolboy had found a World War Two bomb in nearby woods.

"The object turned out to be a 10lb practice bomb," said Buster. "It was badly corroded and we could see it did not contain any explosives. We took the object back to Clyde and disposed of it."

Buster added: "It was



a busy day for the Group and highlights the need for the public to know what to do if they find wartime ordnance. Don't move it, alert the police and leave it to the professionals!" Experts have a range of equipment at their disposal when tackling devices – everything from protective bomb suits to the Mark 8 Wheelbarrow, a remotely controlled disposal robot.

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Tony waves to the crowds in Bath in front of proud granddaughter Madison, below

Tony's marathon stint pays his hospital debt

TONY RIDEN of DE&S' Type 45 destroyers team completed the Bath half marathon for the hospital that helped him beat a brain tumour.

Tony completed the 13.2 miles in two hours six minutes and raised £635 for the neurosurgery department at Bristol's Frenchay Hospital.

He had been sent to Frenchay in January last year after a period of headaches, nausea and vomiting, followed by lethargy and slow responsiveness.

An MRI scan showed a sizeable brain tumour which was removed successfully in an operation three weeks later. He then spent six months on sick leave.

"In the beginning, I had difficulty with

my co-ordination, moving quickly, doing the simple things I had done all my life," he recalled.

"While convalescing I decided it would be good to do something for Frenchay Hospital to show my appreciation for the fantastic care and attention I received from the doctors and nurses.

"The hospital recommended brain training to help recover my short-term memory which I started while in hospital. I started physical training four weeks after my operation, walking, and then using the gym equipment at home – cross trainer and rowing machine – but only for a few minutes at a time."

Within a month he was joining his wife – his chauffeur for 15 months – for short runs and he returned to work on reduced hours last July. His driving licence was returned to him this March. "My co-ordination and memory have recovered to about 95 per cent," he said. "Which is probably as good as it gets for me but I have been told my sense of smell will not return."

He raises cash for the staff who helped him beat brain tumour

Alan Lewis

MANY READERS will be aware that Alan Lewis died on 13 March after a short illness in hospital, writes Les Mosco, DE&S Director Commercial. Alan was well known to

many in DE&S, and the wider MOD, through his most recent time as Head of Commercial in Submarines, prior to that as Commercial Director in DSG, and before that many years in MOD in a wide variety of posts.

His funeral on 28 March was attended by a large number of past and present colleagues, and Phil Jones (Fleet Assistant Command Secretary and a close friend) and Rear Admiral Simon Lister each gave powerful and heartfelt eulogies.

Alan's devotion to his family, the MOD, his hard work and long hours, and the twinkle in his eye (and even Leeds United) were fondly remembered.

Alan will be sadly missed, and our thoughts are with his wife Julie and children Gemma and Richard.



CLYDE BASE workers, service personnel, pupils and staff from Parklands School in nearby Helensburgh enjoyed a charity concert from *HMS Neptune's* volunteer band in Clyde's Supermess.

The evening raised more than $\pounds450$ for Royal Navy and Royal Marines' charities and Parklands School.

Band Colour Sergeant Ann Miller, Bandmaster for *Neptune* Volunteer Band, said: "The evening was full of musical variation and featured performances by the concert band and big band, plus instrumental soloists, a swing band singer, the Corps of Drums and a piper."

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