

desider

the magazine for defence equipment and support

Jan 10 Issue 21



MINISTRY OF DEFENCE



Equipment – simply the best



Armour saves more lives



Maiden flight



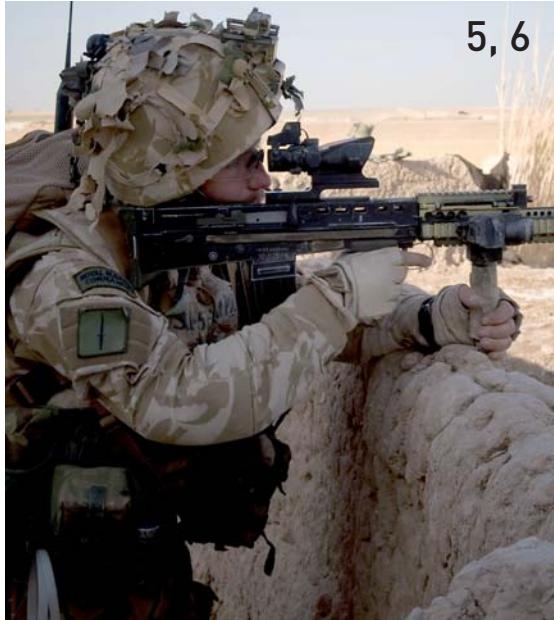
Command and control



Javelin right on target



DE&S top gunners



cover image

A Royal Marine in Helmand Province, Afghanistan, above. As more UK personnel are committed to theatre Air Chief Marshal Sir Jock Stirrup, Chief of the Defence Staff, says UK forces have the equipment they need and it is of excellent quality. Sir Jock confirmed last month that conditions for extra deployment of British forces – that military commanders must have the equipment they need for their tasks – had been met.

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this magazine

General Sir Kevin O'Donoghue Chief of Defence Materiel



I'M SURE that most of you are well aware of the US President's hugely significant announcement towards the end of last year that 30,000 extra US troops are to be sent to Afghanistan and the Prime Minister's decision to increase the total force of British troops in Afghanistan by 500. The conditions set by the British Government for this further deployment were met and those 500 troops, drawn from 1st Battalion The Royal Welsh, deployed in December, bringing the number of British troops in Afghanistan to 9,500.

Chief of the Defence Staff (CDS) Air Chief Marshal Sir Jock Stirrup has reinforced the MOD's message that Afghanistan remains our main effort. I know he recognises the effort made to make sure all those fighting in this theatre are equipped to the best possible standard and has effectively defended the MOD's position with the media on several occasions.

Your activities remain at the forefront of the MOD's drive to get more and better equipment to our Forces in Afghanistan. The quality and versatility of the personal equipment our soldiers in Afghanistan are receiving is far higher than it's ever been, and am proud of the excellent work going on right across DE&S and our partners in the defence industries to further improve the range.

Improvised Explosive Devices (IEDs) remain one of the most serious threats encountered in Afghanistan and we're doing all we can to counter these threats at source. I'm pleased that the latest tranche of urgent operational funding from the Treasury will include an extra £10 million for hand-held mine detectors to follow the £12 million set aside earlier this year for new explosive disposal robots, over 30 of which are now in operation. And the £150 million package of longer-term investment in our counter-IED capability, including new facilities for training and for intelligence is also extremely welcome. The Prime Minister also announced increased funding for our intelligence, surveillance, target acquisition and reconnaissance (ISTAR) capabilities, doubling Reaper capability, which will also be essential in our fight against the Taliban.

There has been a lot of talk about helicopters in Afghanistan, and we're significantly increasing their numbers, together with associated flying hours. In particular the arrival of the first deployment of Merlins late last year has boosted our capacity. In the three years up to the end of 2009 we will have actually trebled the number of flying hours available from helicopters in theatre, including from civilian contracts, and we will continue to increase those over the course of this year.

We also have almost twice as many Mastiff vehicles in Afghanistan as we had a few months ago, which is excellent. This is a fantastic vehicle, and also Ridgback and some of the vehicles from the protected vehicle package we bought some time ago are beginning arriving in theatre, which is hugely beneficial to the front line. We have delivered nearly 100 new Protected Patrol Vehicles to the user every month in the last quarter and this will rise to an average of over 160 a month from December 2009.

As you may have seen, the substantive response to the report by Mr Charles Haddon-Cave QC into the loss of Nimrod XV230 was published just before Christmas. In a statement to Parliament the Secretary of State confirmed the MOD is clearly accepting most of Mr Haddon-Cave's recommendations and intentions.

The main changes will be twofold. First, the creation of a new military airworthiness

regime centred around an independent body to lead airworthiness governance and assurance. The Director General of this new organisation, to be known as the Military Aviation Authority (MAA), will be appointed early in 2010 so that the MAA can stand up by 1 April 2010. Second, we will also fundamentally overhaul the current airworthiness system by introducing Duty Holder levels within each Service; these will bear the authority and legal responsibility for the operation of military equipment.

Where the report has ramifications for wider safety policy and activities across the MOD, including DE&S, steps are being taken to ensure the implementation of the recommendations are consistent with other safety policies, standards, regulation and work practices across the Department. I have directed the setting up of Safety Improvement Group, reporting to ECMB to pursue the lessons from the report and ensure DE&S aligns with similar work in the rest of MOD. The aim of this work is to help embed a culture of continuous improvement across defence for which strong leadership will be the key to success and I continue to have every confidence in those of you responsible for airworthiness duties.

The media coverage of civil servants' performance pay rumbled on through December but I can't stress strongly enough the vital role civil servants play in DE&S, working as one body with military colleagues to support the front line. Good project management, coupled with innovative approaches and close working with our industry colleagues, has contributed to the continuing success of many DE&S projects. For Lynx Wildcat, I have seen the project team and AgustaWestland develop positive working relationships underpinned by open communication, a common understanding of motivations, and emphasis on improving personal behaviours, which has greatly contributed to the project's success.

Similarly, a clear vision for the Merlin programme, shared across stakeholders, has led to strong and close working relationships including Front Line Command personnel embedded within the industry development team. Key project milestones have been achieved on schedule and it remains within budget. And on the Falcon project the team helped minimise the impact of an in-year delay caused by technical issues by continuing to manage the project within the bounds of its Main Gate business case. In particular, a robust change control process contributes to a well-managed project. Similar good practice can be found across all operating centres and I'm very pleased to see these and many other projects within DE&S working so well. I also fully recognise and applaud the effort required to make sure this happens.

Finally I must highlight the success of those in the Joint Support Chain and BFPO in getting mail made it to those deployed around the world. From 1 Nov to mid-Dec BFPO sent 30,926 bags of mail to Afghanistan alone, which is an increase of around 60 per cent in volume over the same period last year.

I know receiving mail from home is an enormous morale boost, particularly over the Christmas period, and gives a welcome lift to those working in a difficult and demanding environment such as Afghanistan. As we move into 2010 we must continue to keep those at the front line in our thoughts and do the very best we can to make sure they are well supported with all they need to do their jobs in these austere and challenging conditions.

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We currently work with a network of more than 10,000 UK companies who provide everything from the paper clips for our 32,000 UK employees to specialist components for the Type 45 destroyer. With investment like this generating wealth throughout our supply chain, it's not just these companies that benefit, it's all of us.



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More Chinooks to be bought for the front line



TWENTY-TWO new Chinook helicopters will be bought to increase support to front line operations in Afghanistan.

The first ten will roll off the production line by 2013 with the new helicopters increasing the RAF Chinook fleet from 48 to 70, a total which includes eight Mk3 Chinooks due in service later this year, and replacements for two lost on operations.

The announcement by Defence Secretary Bob Ainsworth on 15 December is part of a new Future Helicopter Strategy to increase the number of aircraft able to operate in extreme conditions, such as Afghanistan.

"Our forces repeatedly tell me that Chinooks are indispensable on operations," he said. "I am delighted to announce plans to deliver more of these robust, effective and proven battle-winning helicopters."

Future strategy sees Sea King fleet to retire early

"Helicopter capability has already doubled in the last three years and this future strategy builds on this, ensuring that our Armed Forces have the very best resources at their disposal."

The news was welcomed by Rear Admiral Tony Johnstone-

Burt, commander of the Joint Helicopter Command.

"The superior lift performance of the Chinook has proved invaluable. This new strategy will dramatically increase our military capability on the battlefield for many years to come," he said.

Future helicopter requirements will be met by Chinook, Merlin, the new Lynx Wildcat and the Army's Apache aircraft.

Sea Kings will be taken out of service by the end of 2016 while the Pumas will be retired in 2022.

The announcement builds on the substantial progress made last year to improve helicopter capability. Improvements include:

- an increase in helicopter flying hours (which is what commanders use to plan) by 95 per cent
 - an upgrade to Lynx helicopters engines
 - the first Merlin helicopters deployed to Afghanistan
 - a £408 million upgrade to the existing Chinook fleet with new engines and part-digitised cockpits
 - a £300 million upgrade to the Puma fleet to extend its service until at least 2022
 - the first of eight converted Chinook MK3 aircraft made ready for service.
- This is part of a £6 billion programme of investment over the next decade.

MOD answers the call on military air safety

A NEW military air safety body has been set up.

The Military Aviation Authority (MAA) will ensure the highest aviation safety standards at all times.

It is part of the MOD's response to the Nimrod Review by Charles Haddon-Cave QC following the deaths of 14 personnel onboard Nimrod XV230 on 2 September 2006.

The MAA will include an independent body to audit and scrutinise air safety activity,

and will be in place by 5 April this year.

The second key recommendation by Mr Haddon-Cave are revised safety responsibilities for personnel charged with ensuring safe operation of military aircraft.

Air Marshal Kevin Leeson, Chief of Materiel (Air) at DE&S, said: "Mr Haddon-Cave proposed a number of improvements to safety processes that we had already

made in our own immediate response to the crash, a number of which he recognises in his report.

"However, he goes further with the need for greater independence of regulation and audit from those who deliver aircraft day to day to operations.

"I believe these are sound recommendations and we already have a team working to bring the new Military Aviation Authority into effect."

PR10 – the detail

A £900 MILLION package, of which the new Chinook helicopters is a part, has been announced from the core defence budget to balance the MOD's books.

Enhancements include:

- an additional C-17 aircraft;
- further improvements to Counter IED capabilities, particularly intelligence and analytical capability;
- increased funding for intelligence, surveillance, target acquisition and reconnaissance capabilities, doubling Reaper capability;
- an improved Dismounted Close Combat equipment package making equipment such as body armour and night vision goggles available to 50 per cent more troops so they can train with them before deploying to Afghanistan;
- more Bowman tactical radios and patrol satellite systems to improve communications between troops and commanders;
- improvements to defensive aids suites and support arrangements for the Hercules C-130J fleet.

Extra funding

THE TREASURY will also provide a further £280 million from the reserve for additional vehicles, weapons, communications and surveillance assets. This Treasury funding will deliver:

- more new vehicles such as a 31 per cent increase in Husky tactical support vehicles to be deployed to Afghanistan;
- a 40 per cent increase in Jackal vehicles deployed to Afghanistan;
- additional equipment to combat the IED threat including more than 400 hand-held detectors, robots, and other kit.

To deliver these vital resources for Afghanistan, the MOD has had to take difficult decisions about areas of defence not linked directly to operations.

The number of service personnel, not critical to current operations, will be reduced by 2,500. This will be achieved by slowing recruitment and preventing extensions to service rather than through redundancies. Training for some Army units who do not contribute to current operations will be reduced.

The number of Harriers will be reduced and the remainder will be moved to RAF Wittering, resulting in the closure of RAF Cottesmore. The Nimrod MR2 will be taken out of service this March, 12 months earlier than planned and the introduction of the Nimrod MRA4 will be delayed until 2012.

One survey ship and one minehunter will be withdrawn early. The Navy's older Lynx and Merlin MK1 helicopters will be retired sooner than planned before the transition to the Wildcat and Merlin MK2 as part of the new helicopter strategy.

Yes, our troops do have the right equipment



Merlins start to kick up a storm

THE FIRST Merlin helicopters passed pre-flight checks and took to the skies of Afghanistan one month ahead of schedule.

This declaration of an Initial Operating Capability last month means that, following transportation to Afghanistan, re-assembly and pre-flight checks, Merlins are now available for operational flying on the front line.

They are transporting troops to and from the Forward Operating Bases and are re-supplying them with ammunition, food and equipment.

The full Merlin deployment to Afghanistan provides a significant increase in UK military helicopters. Merlins can carry up to 20 personnel and will provide an additional capability to the Chinook, Sea King and Lynx.

Commander Joint Helicopter Command, Rear Admiral Tony Johnstone-Burt, said: "This is a tremendous achievement by the Merlin Helicopter Force. Having left Iraq in the summer, they have retrained the aircrew and reconfigured the aircraft for Afghanistan in double-quick time."

"This marks a tangible enhancement of helicopter capability in theatre, and is a major step forward in supporting our troops."

"The whole Joint Helicopter Force's morale is very high, the first Merlins are now operating on the front line, and more will follow."

Above: the first of the deployment of Merlin helicopters to Afghanistan gets to work after achieving its initial operating capability

THE UK military has all the equipment it needs to commit extra troops to Afghanistan.

Chief of the Defence Staff, Air Chief Marshal Sir Jock Stirrup, confirmed last month that conditions for extra deployment of British forces – that military commanders must have the equipment they need for their tasks – had been met.

"If you look at what we have done with our equipment between August and December, then you'll see that we have increased our levels of equipment holdings by far more than the proposed increase in ground forces. So absolutely in terms of quantity we've more than met the remit," he said.

"The equipment that our people are using is frankly the best that they've ever had in any of my 40 years of service and it's getting better all the time, so in terms of numbers, in terms of quality, both are increasing."

Sir Jock's view was based on the substantial increases in the numbers of armoured vehicles and helicopters available in

Sir Jock says kit is 'the best ever in any of my 40 years of service'

theatre since British troop numbers were increased to 9,000 in August.

Defence Secretary Bob Ainsworth said: "Our forces in Afghanistan are risking their lives daily and they deserve our support."

"The mission there is vital for our national and international security and we must not lose our resolve."

"There has been a very substantial improvement over the last few months in helicopter numbers and in protective vehicles."

"The ratio – even with the increase in troops – has improved quite considerably in both of those areas which are of vital importance to the safety and ability for our people in Afghanistan to operate."

Front line improvements

- Newly arrived Merlin helicopters given the 'green light' for operations in Afghanistan a month ahead of schedule;
- Doubled helicopter flying hours since November 2006 through increases in numbers and improvements in availability of Chinook, Sea King and Lynx. This will increase further in the coming months with more Merlin helicopters available for front line operations;
- By the end of 2009 the number of heavily armoured, mine-resistant Mastiff vehicles had almost doubled (a 93 per cent increase);
- A 77 per cent increase in the number of Ridgback, a smaller, more agile version of Mastiff, since August 2009;
- Introduction of two brand new tactical support vehicles – the Coyote and the Husky which carry troops, kit and supplies to the front line;
- 5,000 sets of the brand new Osprey assault body armour covers and Mark 7 helmets have been sent to theatre, and 5,000 more on the way;
- As well as body armour and personal weapons, troops who deploy on operations are issued with a 'black bag' containing more than £3,000 of equipment that a soldier needs from boots and sleeping bags to camel back water packs and binoculars;
- By May last year, the number of available hours provided by the Hermes 450, Desert Hawk and Reaper Unmanned Air Vehicles will have increased by around 33 per, 50 per cent and 80 per cent respectively;
- Since 2006, DE&S has delivered equipment valued at more than £10 billion.

New contracts set to move Army 'priorities' another step forward

Warrior and FRES projects all ready to forge ahead

CONTRACTS FOR two of the Army's highest priority vehicle programmes look set to be signed early this year.

DE&S' Medium Armoured Tracks team has received bids from BAE Systems' Global Combat Systems and General Dynamics UK for the Future Rapid Effect System (FRES) reconnaissance vehicles, the first in a planned series of medium weight armoured vehicles.

At the same time Global Combat Systems are also competing with Lockheed Martin for the upgrade of hundreds of Warrior infantry fighting vehicles to take them through another 25 years' service.

The FRES programme will deliver a series of vehicles in a range of roles; the first includes the scout vehicle to replace Scimitar. Further FRES Specialist Vehicles, as they are termed, will be based on a similar platform as the first series.

BAES have offered the Hagglund CV90 vehicle as the basis of its bid, with General Dynamics offering its ASCOD vehicle, both of which are already in service.

The Warrior Capability Support Programme will extend its out of service date to 2035 with new turrets and main armament, better crew conditions, new electronic architecture and modular protection equipping the vehicle for a range of operational circumstances.

"These are the two top equipment programmes for the Army at the moment," said Terry Baldwin, leader of the DE&S team.

"We are working against an aggressive schedule to deliver the capability as soon as we can. The Invitations to Tender were issued in the summer and we are now assessing the tenders. We are hoping to place contracts for both programmes in 2010."

The first FRES vehicles and the upgraded Warriors are expected to be in service by the middle of the decade.



Contenders:
BAE's CV90,
above, will vie
with General
Dynamics
(UK)'s ASCOD
vehicle,
right, for the
first stage
of the FRES
programme

Pictures:
BAES and
GD(UK)

Warrior and FRES to take new cannon

A NEW cannon with innovative ammunition is on the way for Warrior and the first FRES vehicles.

DE&S has signed a contract for the supply of hardware for the 40mm Cased Telescoped Cannon and Ammunition System to support demonstration trials for both vehicles.

The new design sees the projectile packed inside a small case, halving its length. The reduced size, along with a rotating breech, means the cannon can fit in a smaller space while providing the firepower of a much larger shell. Shells will include armour piercing, a general purpose round with a high explosive warhead and two kinds of training rounds.

The contract has been signed with CTA International, a French-based joint venture between BAE Systems and Nexter Systems.

The UK and French MODs will jointly conduct a qualification programme over the next year or so in one of the most significant co-operative land equipment project between the two countries for many years.



The new cannon system pictured during early trials at Lulworth

NEWSREEL

Forces are on the up

UK Armed Forces are just under 98 per cent of their full time trained strength requirement. This is up from 96.8 per cent a year ago and shows a continued upward trend in recruitment and retention.

The number of people leaving the Forces in the 12 months to 30 September 2009 fell by 21.9 per cent, the lowest in five years.

Site to close

Up to 339 jobs are set to be lost at the Defence Support Group maintenance facility in St Athan, Defence Equipment and Support Minister Quentin Davies has said. The site could close by June 2013 at the latest as the VC10 aircraft are phased out.

Electric boost

THE new Rigel Medical 288 field service kit has been specified for electrical safety testing of devices at dozens of MOD medical, veterinary and dental servicing centres.

Rigel will provide support to MOD trainers instructing army, navy and airforce technicians to use the testers properly in military theatres of operation.

Typhoon numbers

EUROFIGHTER GmbH has delivered 195 aircraft, with 707 units currently on the order book. Tranche 2 aircraft are in full production and a production order for Tranche 3A will sustain activities until 2016, according to the project's chief executive Enzo Casolini.



Dragon gets her gun

The medium calibre gun is lowered onto the deck of Dragon

DRAGON, the fourth of the six Type 45 destroyers, has been fitted with her medium calibre gun as she continues to take on the equipment to turn her into a potent fighting ship.

The gun was installed in mid-November, with further internal installations continuing through to Christmas.

Although the gun is physically sitting on the ship and bolted down, work has continued inside the turret and gunbay to install all its components before it will be tested.

Harbour trials are likely early this year with firing planned for *Dragon*'s first sea trials in June.

Keith Dickie, who is BAE's ship manager of *Dragon*, said: "The installation of the 4.5 inch medium calibre gun is important in preparing the ship for sea trials in 2010."

"As expected on a ship of this kind, combat system integration to the platform is fundamental for delivery and this installation marks another major milestone in our build process."

The 4.5in calibre Mk 8 Mod 1 gun will be used primarily for air and shore targets

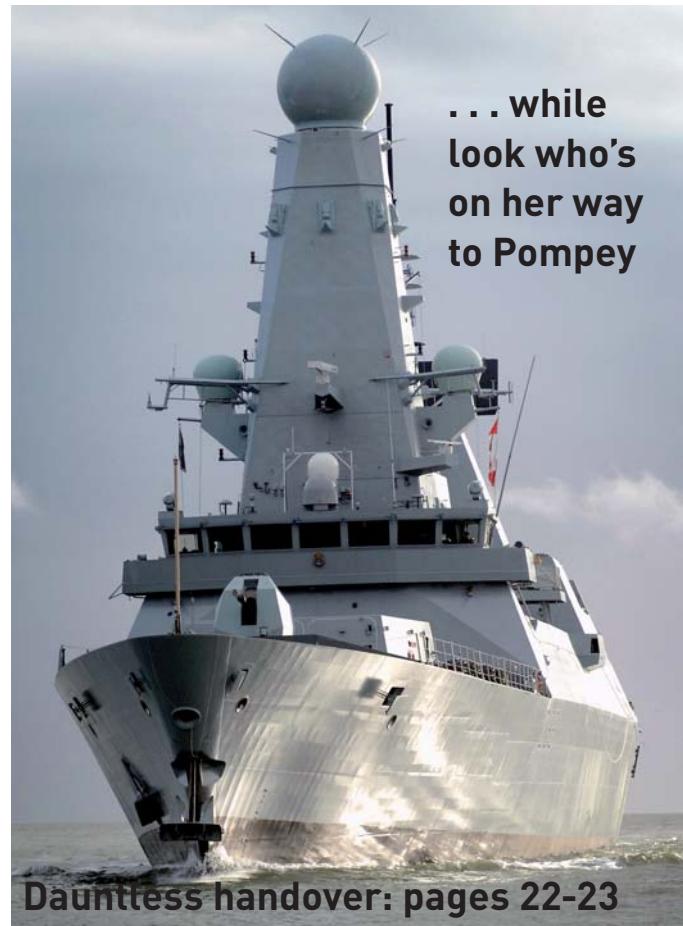
It has a rate of fire of 25 rounds per minute, a range of 12 nautical miles and is linked to a sophisticated targeting system onboard

Installation of the gun

is linked to combat systems integration, which will be completed and tested before the ship is handed over to the Royal Navy.

Fourth Type 45 takes on her Mk8 weapon

... while look who's on her way to Pompey



Dauntless handover: pages 22-23

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NEWSREEL**Millbrook ray of light**

MILLBROOK, the vehicle test and development facility, has invested in new equipment to simulate the effects of the sun's rays on vehicles. The new solar radiation simulation equipment enhances the existing solar capability of the site's Variable Temperature Emissions Chamber (VTEC). The VTEC has a temperature range of minus 40 degrees Centigrade to plus 50 and the solar simulation equipment will now provide full control over cycles replicating the sun's intensity over one complete day.

Alliance four

FOUR firms have launched a new alliance. AxiaMetrics, Christopher Lewis Associates, DigitalMeeting and Precision Leadership will offer end to end support to help procurement and programme delivery teams identify where, what and when critical issues need to be addressed.

10:10 backing

THE MOD has pledged its support for the 10:10 energy campaign, a nationwide initiative that hopes to cut UK emissions by 10 per cent by the end of 2010. The Defence Secretary is encouraging all DE&S staff and individual defence sites to take part in the campaign. A ten per cent reduction over the next year would represent a significant step on the road towards a low-carbon Britain.

Carrier 'island' is up and running

A REPLICA of the aft island for the Queen Elizabeth class aircraft carriers – the Coronet Building – has been opened at Cowes on the Isle of Wight.

Head of DE&S Capital Ships, Tony Graham, and Commander Owen McDermott, lead for the ships' mission system, performed the ceremony.

The replica from 05 deck upwards will be used to allow early electromagnetic interference de-risking of the array of radar, satellite and communications systems that will be mounted on the island.

"Computer modelling has provided part of the answer, but has also raised some questions we need to answer now," said Cdr McDermott.

"Given the importance of getting this essential part of the ship right, we have built this facility so that we can test real ship systems in the configuration they will be fitted on the ships.

"By testing now we can locate and solve any problems early rather than at the significantly more expensive later stages of the ship build."



The structure represents the top 40 per cent of the aft island and will include the 18m pole mast which will house tactical communications, data link and direction finding equipment and the future medium range radar. BAE Systems Insysy's integration team are now fitting the communication and radar antennas to begin live transmissions.



RFA Cardigan Bay in ASRY's dock undergoing her contractor support period

The 16-vessel RFA flotilla is in six ship clusters for long-term maintenance requirements. A&P Group is responsible for Cluster 1 (Argus) and Cluster 2 (the four Bay-class vessels). Cluster 3 (tankers Bayleaf, Orangeleaf, Black Rover and Gold Rover), Cluster 4 (Forward Repair Ship Diligence and tankers Wave Knight and Wave Ruler), Cluster 5 (stores ships Fort Austin and Fort Rosalie) and Cluster 6 (stores ships Fort George and Fort Victoria) are handled by Birkenhead-based Cammell Laird.

Auxiliaries land support when operating in Gulf

SHIPS OF the Royal Fleet Auxiliary will have support in the Arabian Gulf after an agreement between a Middle East company and a UK ship repairer.

Bahrain's ASRY has signed a 'heads of agreement' with the UK's A&P Group to become the repair yard of choice in the Gulf for five RFA ships.

A&P Group was recently awarded a £53 million contract for through-life support to the Primary Casualty Reception Ship/Aviation Training Ship RFA Argus, and the four Bay-class Landing Ship Dock (Auxiliary) ships RFAs Cardigan Bay, Largs Bay, Lyme Bay and Mounts Bay.

As part of its agreement with DE&S A&P Group has to provide global repair and maintenance for the five ships and not just repair facilities at its yards in Falmouth and on Tyneside.

Commodore David Preston, Head of Afloat Support at DE&S, said: "It is vitally important the RFA has access to repair facilities in all its areas of operation.

"I am particularly pleased that the A&P Group and ASRY have developed a business arrangement that assures the availability of support in the Arabian Gulf. I look forward to working with the team over the coming years."

The agreement is a rolling 12-month contract for work on the five vessels when they are in the Gulf area.

One of the major jobs undertaken by ASRY last year was the cooling water system upgrade to *Lyme Bay* to improve the vessel's operational capability in hot climates.

At the same time the vessel was fitted with a Chloropac system, a device which stops the growth of marine weed in seawater pipes. The same system was fitted by ASRY last year on board *Cardigan Bay*.

■ **RFA Argus:** pages 26-27

■ **Afloat Support reward:** page 28

A400M takes to the air



A400M – the new transport aircraft for the RAF – has completed its maiden flight.

The aircraft took off from Seville Airport in Spain in front of 2,000 people on 11 December with 15 tonnes of flight-test equipment on board, including two tonnes of water ballast.

The crew explored the aircraft's handling characteristics, checked the powerplant operation and made initial evaluations of the aircraft's systems.

Its four Europrop International TP400D turboprop powerplants producing 11,000shp (8,200kW) each are the most powerful propeller engines fitted to a Western aircraft.

"The first flight of the A400M is an important

programme milestone, and we are encouraged by the hard work and efforts of all involved in achieving this," said a DE&S spokesman.

The A400M is a key element of the RAF's future air transport capability. It will provide tactical and strategic airlift capabilities and a greater range and payload than the C-130K it replaces.

Its carrying capacity will lie between that of the C-130J and the C-17, but will provide a tactical capability not delivered by C-17.

The complex A400M programme has proved challenging for Airbus Military and its parent company EADS.

The UK joined partner nations in a 'standstill' agreement with Airbus Military last year to cover

negotiations on the way ahead after delays in the programme.

"The UK remains committed to A400M, but not at any cost," said the spokesman. "We regard the contract renegotiation as the best means by which to determine a more deliverable programme."

"During the period of the 'standstill' agreement, the UK has been working closely to determine a way ahead for the A400M programme."

Early production aircraft are due to be delivered to other partners before the RAF. The UK is expecting to receive its first aircraft in 2014.

A total of 184 aircraft have been ordered by Belgium, France, Germany, Luxembourg, Malaysia, Spain, Turkey and UK.

NEWSREEL

Carriers are still on track

PLANNED in-service dates for HMS Queen Elizabeth and HMS Prince of Wales remain towards the end of 2015 and 2018. "The Government remains fully committed to the manufacture of the carriers. They are a core component of the overall carrier strike programme and a cornerstone of future defence policy," Minister for Defence Equipment and Support Quentin Davies told Parliament.

Puma upgrade

THE first Puma Mk2 helicopter will enter squadron service in 2012 with the upgrade of the fleet planned to complete in 2014, Defence Under-Secretary Kevan Jones has told Parliament. The demonstration and manufacture phase is expected to cost £300 million, with each aircraft costing around £10 million to upgrade.

Afghan freight

BETWEEN 1 November 2008 and 31 October 2009 7,726 tonnes of freight were airlifted to Afghanistan by RAF transport aircraft, Defence Under-Secretary Kevan Jones told Parliament. In the same time period 2,460 tonnes were delivered using aircraft chartered under the NATO Strategic Airlift Interim Solution.

E2E part 2

THE second edition of E2E, the quarterly magazine for Joint Support Chain users, is due out this month with useful tips for logisticians on how to do their jobs better. Copies can be obtained from DES JSC-E2EEEditor@mod.uk



Pictured, from left: Tim Flesher, DE&S chief of corporate services, Air Vice-Marshal Bob Allan, director ISS, Vice Admiral Tim Laurence, chief executive of Defence Estates, and Nick Featherstone, Laing O'Rourke project director.

Corsham hits new heights

WORK ON new buildings at Corsham has reached a key milestone with the completion of the highest point of the structure.

An official 'topping out' ceremony was held on 15 December at Basil Hill, attended by stakeholders from DE&S and Information Systems and Services (ISS), Inteq and Laing O'Rourke, and Corsham Town Council.

Despite poor weather contractors Laing O'Rourke are on schedule to complete the Corsham New Environment project which collocates ISS key functions to a single site at Basil Hill next year.

This will see the population of Basil Hill rise to approximately 2,200 and will include staff from DE&S ISS, industry partners, and 2 (National Communications) Signal Brigade.

The 25-year Private Finance Initiative contract, which has a value of around £690 million, will provide modern working and living accommodation for staff at the Wiltshire site.

NEWSREEL**Brockdale charters**

A total of 62 commercial passenger aircraft flights were chartered to help withdrawal of British forces from Iraq – Operation Brockdale – between 19 April and 31 August 2009, Defence Secretary Bob Ainsworth said. The cost of these flights was £6.11 million. At the same time 29 commercial freight aircraft flights were chartered at £1.77 million. No ships were hired specifically for the task, the majority of equipment, vehicles and stores being withdrawn from Iraq on five sailings using the ro-ro ships operated by Foreland on behalf of the MOD under the 25-year private finance initiative arrangement entered into in 1999.

E-3D training

PLEXSYS, which specializes in modeling and simulation systems for aircraft and airspace control, has been selected by QinetiQ to provide an airborne early warning simulator for RAF E-3D mission crews. The contract is valued at \$5.3 million for 55 months.

Name change

DSEI, the London-based exhibition for land, sea and air defence and security industries, is to be renamed. The event, formerly Defence Systems and Equipment International, will now be Defence and Security Equipment International. This is to reflect the importance of security capabilities to armed forces. DSEI 2011 takes place from 13-16 September at ExCel.

Main Building develops a taste for multi-climate rations

DE&S' DEFENCE Food Services Team demonstrated the new 24-hour Multi Climate Rations (MCR) in MOD Main Building.

Selected staff sampled the new hot-weather MCR being trialled by troops in Afghanistan. In-theatre trials began last May and includes 20 new trial menus for general use plus six new menus for Halal, Vegetarian and Sikh/Hindu ranges.

Defence Food Services team leader Captain Jeremy Rigby

□ "All menus I had while visiting my soldiers in Afghanistan were excellent. From soldiers in Helmand, they all agree they are excellent and taste superb." (W01, 40th RRA)

□ "Please carry the trial forward; the rations are a 100 per cent improvement and a significant morale boost." (127 Bty RA)

□ "Greater variety makes meal times a pleasure." (127 Dragon Bty)

said: "Feedback from theatre has been extremely positive; the new MCR has doubled the amount of available menus and removed the need for supplements."

"My team are due to conduct face-to-face research in January in conjunction with the Surgeon General's Armed Forces Feeding Project. We will use this information to ensure the continued utility and acceptability of the MCR."

■ Families' verdict: page 30



Defence Secretary Bob Ainsworth is joined by Captain Jeremy Rigby at Main Building

'MOD decisions improve support to the front line'

THE MOD has been praised for improving cost and time performance in management of individual projects.

And as a result of releasing resources for higher priorities, hundreds of millions of pounds have helped improve infantry combat equipment – one of a series of decisions to improve support for operations.

But the National Audit Office, the Government's spending watchdog, has criticised

But short-term cuts mean long-term costs, says report

reductions in equipment numbers being bought on some projects and short-term decisions to slip others, such as the Queen Elizabeth aircraft

carriers. This will lead to long-term cost increases, its latest report says.

Minister for Defence Equipment and Support, Quentin Davies, said: "The report focuses on the top 30 of almost 2,000 projects managed by the MoD in the last financial year. During that time our priority has been – and continues to be – operations in Afghanistan and ensuring that our forces on the front line have the equipment they need and that is one reason why some projects that are not essential for current operations have been delayed.

"We fully accept the need to address shortcomings in our long-term equipment planning and that is why we are working on a Strategy for Acquisition Reform, which will be published in the New Year."

The MOD has already reduced the deficit between the defence budget and planned expenditure by £15 billion, but a shortfall of between £6 billion and £36 billion remains, the report says.

Amyas Morse, head of the National Audit Office, said: "Bold action will be required to prioritise defence spending as part of the planned Strategic Defence Review after the General Election."

The RAF takes 'delivery' of its first Joint Combat Aircraft

THE RAF and Royal Navy are due to receive the first Joint Combat Aircraft (JCA) in 2011.

But the first – a 1/10th scale model – has 'landed' at RAF Air Command, along with a brief on the programme's progress from Lockheed Martin's vice-president for F-35 business development, Stephen O'Bryan.

Once in service, the aircraft will be the key to the UK's precision strike capability and its ability to make contributions to future coalition operations.

Approval for the UK to purchase three short take off vertical landing (STOVL) Joint Strike Fighters to conduct in initial operational and test evaluation, underlines UK commitment to this programme.

Mr O'Bryan is pictured, above right, with Air Chief Marshal Sir Chris Moran, Commander-in-Chief Air Command.

Edinburgh in dock for the final Type 42 destroyer refit



On your marks:
HMS Edinburgh
is pictured in
Portsmouth Naval
Base where staff
get set for work on
her last major refit

THE LAST of the Type 42 destroyers to undergo a refit will be returned to the fleet in October.

HMS Edinburgh entered dry dock in Portsmouth last November for a major overhaul under a £17.5 million contract with BAE Systems.

The refit will include a full hull survey and a lick of new super-efficient Sigma 990 paint.

An environmentally friendly fuel saving transom flap will be fitted, while weapons and communications will be revamped and upgraded. Main machinery will also be overhauled and two engines will be restored and the other two will be replaced.

Most of the crew have left the ship to allow for the current refit work, but they will see planned improvements to living quarters when they move back on board midway through this year.

Malcolm Fudge, BAE project manager for the refit, said: "The Type 42s have changed substantially over their lifetime and so has the way we look after them."

"Today we have a more intelligent approach to upkeep. We work with DE&S to analyse trends as well as systems and equipment on board ahead of each refit so we only do the work that really needs doing."

"This minimises the length of time ships spend in dock and ensures maximum value for the Royal Navy."

The ship's support programme comes on the back of recent successes to refit *HMS York*, *HMS Liverpool* and *HMS Ark Royal*.

Although technically challenging, the company has already demonstrated its ability to schedule and deliver complex refit packages, culminating in the successful completion of systems, machinery and weapons tests and trials.

Close partnership between DE&S, BAE Systems and the Royal Navy, combined with lessons learned from earlier programmes will deliver efficiencies to *HMS Edinburgh*'s programme. The ship will be returned to service with enhanced capability and in significantly improved state.

HMS Edinburgh will sail on until 2013.

SANDOWN CLASS minehunter *HMS Ramsey*, pictured right, has left Rosyth for sea trials on time and within budget after a Support Docking Period undertaken by Babcock.

Capability upgrades and modifications included installation of the Seafox Mine Disposal System, magazine ammunition protection modifications, installation of a new upgraded high pressure air system, application of the new foul-release paint system (improving the vessel's speed and fuel efficiency), and improvements to living quarters, within a taut programme of planned maintenance, renewal and repair.

A significant challenge was the inclusion of an additional work package to renew all liners and pistons on both main engines into an already tight schedule.

This was successfully met, and completion was still achieved in-line with the original schedule; a demonstration of the skill and determination of the project

Ramsey back at sea – on time and on budget



team involving all stakeholders including DE&S working together. Lessons learned from the first-of-class fit by Babcock on *HMS Bangor* helped in

completion of the project. *HMS Ramsey* has been in sea trials pre- and post-Christmas before the support period is complete.



Picture: Andrew Linnett

For Air Commodore Sue Armitage-Maddox, being a part of DE&S' Joint Support Chain (JSC) means "living and breathing" safety.

As safety continues to be a hot topic for DE&S, Air Cdre Maddox's appointment as JSC Safety Champion sees her making sure it becomes part of everyday life for everyone who works in the Operating Centre. It is her job to make sure that the JSC complies with safety and environmental protection guidelines, and that every team has a joined-up approach to it.

"The JSC needs someone to coordinate safety, champion safety, monitor performance and show best practice across the disparate JSC business units," Air Cdre Maddox explained. "This central focus allows the Board to take a considered view on how the JSC is actually performing in terms of safety and environmental protection."

Air Cdre Maddox aims to put in place a safety and environmental framework that everyone in the JSC can work to, "right down to grass-roots level".

"We need to define a governance framework, and a performance regime to help us improve. We also need to have a strong communications strategy in place," she said.

"I'm aiming to introduce this framework, making sure we've covered a number of key elements including training, communications and incident reporting."

"In my previous post I managed the Safety, Health, Environment and



Getting serious about safety

Report: Pauline Boardman

DE&S' Joint Support Chain has made sure that safety stays top of the agenda with the appointment of a safety champion, Air Commodore Sue Armitage-Maddox.

Fire ground safety environment in Air Command where we worked to the four key principles from the Institute of Directors – making sure we have clear direction, clear delivery, a good way of monitoring and effectively reviewing our performance. That is how I intend to take this task forward here."

The proposed safety framework in JSC falls against a challenging backdrop for DE&S – not only is safety a high-profile topic on the agenda for both DE&S and the wider MOD following the Haddon-Cave report, the organisation is also tackling issues like PACE and Strategic Resource Rebalancing.

While Air Cdre Maddox appreciates the pressures these matters place on staff and resources, she is resolute about the continuing importance of safety.

"It needs to be made clear that we are serious about safety," she said. "The message I am trying to put out is that safety is paramount and that we will aim to focus our limited resources in this important area to assure delivery."

Air Cdre Maddox is not alone in her task. She works closely with Tim Percy, her Business Partner from the Safety & Environment Group. They both started in post in the spring, and both immediately recognised the scale of the task.

"The bottom line for us is making sure our people are kept safe, we don't have any incidents of environmental pollution, and that we continue to meet JSC operational requirements," Air Cdre Maddox said.

"When we started on this path, there were a number of pieces of the jigsaw

that weren't in place; our aim is to join them up so everyone has a clear picture of what good safety looks like.

"One of the biggest things to tackle is the culture of the organisation, and that links into the DE&S Attitude and Behaviour Campaign (ABC). The question for me is 'how do I improve the culture within the JSC'."

Changing the culture of an organisation is always a big undertaking, and Air Cdre Maddox plans to start with a series of workshops, using the ABC tool

and environmental protection should look, Air Cdre Maddox is clear: "Reduction in accidents, reduce time off work due to accidents and, importantly, an increase in the well-being and morale of our employees."

To get to this stage, Air Cdre Maddox and her team have taken a good look at how they are reporting against different safety aspects, like fire, occupational health and radiation.

They've started to track performance quarterly with a traffic-light system

'It needs to be made clear that we are serious about safety. The message I am trying to put out is that safety is paramount and that, we will aim to focus our limited resources in this important area to assure delivery.'

kit to look at how the JSC scores itself against a maturity model.

"This means examining how we and our people see safety, as well as understanding management commitment to it," she explained.

"From that we'll identify a number of work strands that we need to take forward to inculcate a culture of safety within JSC. We'll need to provide all of our people with a tool set which they can use to help in changing behaviours, so people understand that safety isn't an add-on, but something that we do every day of our lives."

Asked how she thinks good safety

and to make sure those accidents and incidents are reducing in number across the year.

"We need to make sure we have people that are trained, with the right skill set to be able to do their jobs properly," Air Cdre Maddox continued.

"While, as JSC Safety Champion, I can certainly have oversight of the issues in this Operating Centre, my aim is to impress on the business unit heads that safety is their responsibility, that everybody needs to see it as part of normal business – that we need to be living and breathing it every day of our working lives."



Front line angels shoulder the bunker busting burden

JIt's known as the angel on the shoulders of UK servicemen and DE&S is sending more of the bunker-busting Javelin missiles to troops in Afghanistan.

An extra 1,300 of the lightweight, shoulder-launched guided missiles will be going to the front line to top up stocks of the combat-proven weapon which has seen extensive service.

"Javelin has been a tremendous asset for UK forces since its introduction in 2005," said Nick Hunt, leader of DE&S' International Guns, Missiles and Rockets team.

"It has been extremely effective in operations in Afghanistan."

Troops are using Javelin to blow up fortified enemy positions and mortar compounds. The system also provides an excellent 24-hour surveillance, target and acquisition capability to the troops. The missile identifies targets using thermal-imaging technology to deliver an explosive and precise punch.

It is operated by a crew of two and has a range of up to 4km. The missile can be fired from enclosed spaces, providing enhanced flexibility and protection for its crew.

Javelin's power was demonstrated by troops on Salisbury Plain who were training with the weapon. Sgt Ross Jones RM, from 42 Commando, who was on the exercise, said the weapon was "awesome". He added: "For the people

that we support, they know that we have got their back and we are their angel on their shoulders watching their every move. This gives them peace of mind when they move on the ground below us.

"If we are going to invest in these missiles it's definitely a good idea – the amount that are being used and fired in theatre is phenomenal. They do save lives and anything that can do that is a good idea."

Speaking from Afghanistan, Capt Warren Marginson, second-in-command of B Company, 3 Rifles, said: "Javelin is an invaluable asset to troops on the

ground. Its accuracy and firepower mean we are now able to handle many more situations on the ground ourselves and reduce the need to call in close air support.

"The weapon is versatile and has the ability to deliver the warhead accurately on target. We now have the ability to strike in day or night and in all weather conditions but more importantly Javelin gives us the ability to identify insurgent activity in all conditions."

Announcing the contract award to the company Javelin Joint Venture, Minister for Defence Equipment and





A popular and effective weapon, in use across the theatre of operations. Top left: Royal Marines of 40 Commando use Javelin from a commanding position in Helmand Province, while, below left, Javelin is fired by troops of 2nd Battalion, the Parachute Regiment and below, Royal Marines of 42 Commando. Above right: Javelin is demonstrated on Salisbury Plain

Support, Quentin Davies, said: "The Javelin weapon system gives our troops the battle-winning edge in Afghanistan and the fire-and-forget missile is proving its worth on the front line.

"Topping up the supplies of this very effective weapon will give our Armed Forces the firepower they need to ensure they have the upper hand against the Taliban."

Javelin's command launch unit and missile has a combined weight of 25.6kg. The missile alone weighs 15.5kg.

Javelin Joint Venture (JJV) is a company owned by Raytheon and Lockheed Martin. UK-based Selex produces seeker components and assemblies, with QinetiQ providing testing facilities.





As a consequence
of Dstl's science
and technology
provision, MOD
can make
informed
decisions

Science and technology solutions from Dstl (the Defence Science and Technology Laboratory)

Future Mine Countermeasures pilot Capability Investigation

Dstl played a pivotal role in one of four pilot MOD-Industry Capability Investigations (CIs), the Future Mine Countermeasures (MCM) CI, which developed a routemap for delivering MCM capability in a more agile and flexible manner. Between April and October 2008, regular facilitated workshop sessions and working groups brought together MOD and Industry stakeholders to explore key issues. The CI highlighted the viability of moving to a significantly different way of undertaking MCM, focusing on unmanned systems and the consequential opportunities and threats across the Defence Lines of Development (DLODs). Acting as the 'glue' that holds the stakeholder community together, Dstl demonstrated the real value it brings to MOD's strategic business; utilising its advisory role plus niche systems skills, Dstl generated a forum in which both MOD and Industry have engaged in free-flowing, open and honest discussions on a range of technological, financial, commercial and industrial topics.

More effective resuscitation on the battlefield

Building on work carried out over a number of years, Dstl has recently provided scientific evidence to support changes to clinical guidelines for the resuscitation of injured personnel. Resuscitation of casualties on the battlefield is more difficult than in the civilian arena, as injuries are often severe and complex and hospital facilities may be some hours away from the point of injury. In the event of prolonged evacuation times, it is essential that resuscitation strategies offer survival benefits and reduced deterioration. Dstl's experimental work has shown that the new resuscitation protocol has clear survival advantages over the civilian-based protocol when evacuation is prolonged.



The Defence Science and Technology
Laboratory is part of the Ministry of Defence

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Picture: Andrew Linnett



'Thanks to you, I can see my wife and child'

What an Army engineer told manufacturers when his digger was blown up by a roadside bomb in Afghanistan

See pages 20 and 21

'I walked away unharmed but with shock and one hell of a war story'

Sappers praise their armoured diggers after roadside bombs explode during engineering tasks in Helmand Province

Two Royal Engineers who walked away unscathed when their armoured diggers hit roadside bombs in Afghanistan have met the people who built the vehicles.

Sappers Craig Cook and Daniel Boden were operating Caterpillar armoured diggers when they drove over improvised explosive devices (IEDs) in two separate incidents last year.

The equipment operated by Sappers Cook and Boden was bought under an £8 million urgent operational requirement (UOR), which provides the Royal Engineers with protected diggers and tractors

Sapper Boden, serving with 28 Engineer Regiment, emailed Caterpillar from Helmand after the IED blast to thank them for saving his life while maintaining routes in Afghanistan in September.

Sapper Boden, from Portsmouth, said: "From what I have been told it was quite a large blast – I was sat in the cab and felt it. There was a flash and lots of dust everywhere – although I didn't realise at first that it was my vehicle that had been hit."

"I got out of the vehicle and my legs were shaking and I didn't know what to think at first. After I got back to base I phoned my family and told them initially that I had been in an accident but when I admitted I had been blown up they were really shocked."

Sapper Cook, of 38 Engineer Regiment, whose family is from County Durham, was so moved by the experience he wrote to Caterpillar – the company which made the diggers – thanking them for saving his life and allowing him to go home safely to see the birth of his baby daughter.

"I walked away unharmed but with shock and one hell of a war story," he said.

He was involved in building work which involved driving along a road notorious for IED attacks. "Unfortunately I drove over one, and it went off," he said. "But the wagon saved my life and I owe the people at Caterpillar many thanks."

Spr Cook said in his letter to the company: "I need to remind everyone that people like yourselves with an MOD contract are the unsung heroes making our lives out here that much safer," he said.

"The people at CAT have given me future faith to go out on patrols in the machines, knowing that if it



Tractors, part of the urgent operational requirement programme, go through their paces in a less threatening environment in the UK.

Picture:
Andrew Linnell



■ Sapper Daniel Boden of 28 Engineer Regiment was using the Finning Caterpillar 434E Backhoe Loader when he drove over the improvised explosive device.

■ Sapper Craig Cook of 38 Engineer Regiment, based in Northern Ireland, was driving the protected 938G Wheel Loader, when he drove over the IED.

■ The Royal Engineers carry out a range of duties to support troops on the frontline, including:

- clearing and constructing routes;
- overcoming obstacles using plant equipment, explosives, bridges and other improvised solutions;
- building compounds and forward operating bases;
- providing troops with power and water.

■ The protected plant equipment bought for troops includes:

- an Ultra Light Tractor Protected ULWT(P) Caterpillar 257 shovel with ballistic and blast protection with the capability of being delivered to forward operating bases by helicopter. This equipment is utilised with a variety of ancillary attachments to fulfil construction tasks.
- a Light Wheeled Tractor Protected LWT(P) Caterpillar 434 back hoe loader with ballistic and blast protection. This equipment is used to fulfil construction tasks and route clearing roles.
- a Medium Wheeled Tractor Protected MWT(P) Caterpillar 938 loading shovel with ballistic and blast protection. This equipment is used to fulfil construction tasks and route clearing roles.

Report: Lisa Murphy

were to happen again your machines are the safest place to be.

"I thank you from the bottom of my heart. Because of your hard work I can go home to see my wife and the birth of my first child. I can't thank you enough."

Spr Cook's wife Michelle has written her own letter of thanks. "I would like to say a big thank you to Caterpillar for the kit supplied to the army," she wrote. "If it wasn't for you, me and my unborn baby would have lost a husband and a dad."

Spr Cook's praise for the kit was welcomed by Paul Bailey, project manager for the C Vehicle capability management cell at DE&S.

He said: "The letters have made the C Vehicle team and our suppliers of this equipment, Caterpillar and Penman, proud of a job well done. To coin a phrase from industry 'it does what is says on the tin' springs to mind.

"However we continue with current work to provide further UOR protected engineer capabilities along with our industry partners with the best protection available within the bounds of current technology available."

Minister for Defence Equipment and Support, Quentin Davies, said: "It's great to hear these two brave soldiers escaped unscathed from well-protected equipment bought specifically for the Afghanistan front line."

"The Royal Engineers have a vital role to play in Afghanistan ensuring the mobility of our troops and constructing bases on the front line, often under dangerous conditions, so it is essential that they can do their jobs safely."

I am a serving soldier with 38 Engineer Regiment in Afghanistan, with 20 other blokes. My trade is a plant operator mechanic. Whilst out here I have been using the CAT 938(P), CAT 434(P) and the CAT 257. I was recently tasked with a construction job using the 938. This task involved driving 2km along a well-known IED route. Unfortunately I drove over one and it went off. Luckily I walked away unharmed but with shock and one hell of a war story. That was all down to the wagon. It saved my life, which I owe you at Caterpillar, many thanks.
People like yourselves with an MOD contract are the unsung heroes making our lives out here that much safer. The people at CAT have given me future faith to go out on further patrols in the machines, knowing that, if it were to happen again, your machines are the safest place to be.
To finish off I would like to thank you from the bottom of my heart. Because of your hard work I can go home to see my wife and the birth of my first child. I really can't thank you enough.
Yours Faithfully,
Spr Craig Cook

I have enclosed a letter from my husband who is serving in Afghanistan and he asked me to send it to you to pass it onto a manager/director in Caterpillar. I hope you enjoy this letter and, as his wife, I would like to say a BIG thank you to Caterpillar for the kit you supply to the army. If it wasn't for you, me and my baby would have lost a husband/dad. So thank you from the bottom of my heart.
Yours Thankfully,
Michelle Cook

Dauntless and



the Royal Navy will prove 'a winning combination'



The Royal Navy has congratulated DE&S and its industrial partners after the second Type 45 destroyer was delivered by the contractors in a ceremony at Portsmouth Naval Base.

BAE Systems, building the fleet of six vessels, handed over *Dauntless* to the Navy's Deputy Commander-in-Chief Fleet, Vice Admiral Richard Ibbotson, in the first week of December.

"The Royal Navy is looking forward to *Dauntless* taking her place in the Fleet with much anticipation and congratulates everyone involved in delivering her this far," said Vice Admiral Ibbotson.

"*Dauntless* and her sister ships are world beaters and the people of the Royal Navy are second to none. This is a winning combination, and the ship provides us with the tools to do the job, whatever the

country requires of us, for years to come. It is therefore with great excitement that we welcome the cutting edge capability that the new T45 displays.

"With the ability to integrate both land and air forces, *Dauntless* truly is a joint asset and will carry out a wide range of operations, while remaining a highly effective air defence ship."

The acceptance off contract of the ship is a major milestone for DE&S' Destroyers team. "We are well on the way to an outstanding class of ships," said the team's deputy leader Captain Stephen Braham. "Everyone involved in creating this ship should take great satisfaction from all that we have achieved to date. Stage 2 Trials will be challenging but we have the right people working together to achieve success."

Pompey ahoy! *Dauntless* makes her first entry into Portsmouth, which will be her base port. The second Type 45 destroyer to be delivered is due to be commissioned into the Royal Navy later this year

Pictures: LA[Phot] Dave Jenkins and LA[Phot] Christopher Browne

Minister for Defence Equipment and Support, Quentin Davies, added: "*Dauntless* has gone through several stages of sea trials in which she has truly impressed the ship's company. She will now embark on a final set of trials that will really put her to the test before she is commissioned into the Navy in the summer."

The first steel was cut on *Dauntless* in 2004 and she was launched from BAE Systems' Govan shipyard in Glasgow in January 2007. After extensive sea trials she set sail from the Clyde under the BAE

Systems flag, with a combined crew of BAE Systems and Royal Navy personnel, and made her first entry into her home port of Portsmouth for the handover. She follows *HMS Daring*, the Royal Navy's first Type 45 destroyer, which arrived in Portsmouth last January.

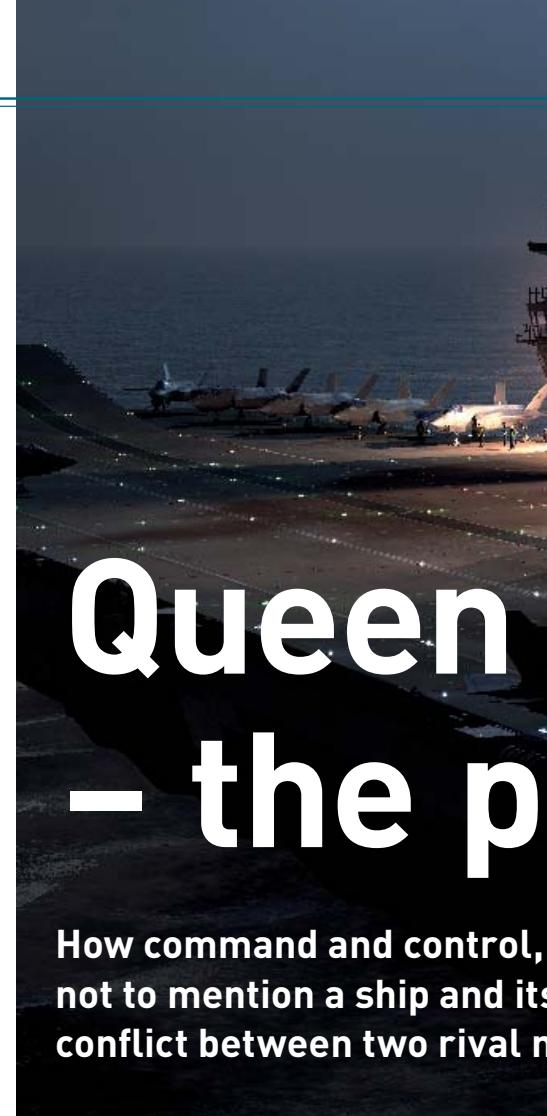
The prime role of the Type 45 destroyer will be air defence – protecting UK national and allied and coalition forces against enemy aircraft and missiles.

The technology onboard the Type 45 will set new standards in air defence, capable of defending the Type 45 and ships in its company from multiple attacks from even the most sophisticated anti-ship missiles and aircraft.

Angus Holt, UK Programmes Director at BAE Systems' Surface Ships business, said: "Today is the culmination of hard work, commitment and a fantastic partnership between BAE Systems, the Royal Navy and our suppliers to produce one of the finest ships in the world."

"Everyone involved in creating this ship should be extremely proud of their achievements. *Dauntless* is a magnificent feat of engineering and I am delighted to hand her over to the Royal Navy on behalf of BAE Systems."





Hard at work in the virtual battlespace: operators are hard at work de-risking joint air operations aboard the Queen Elizabeth class carriers (above) in the carrier intelligence centre; the environmental data fusion centre (left), exercise control (below left), during the Joint Combat Aircraft planners' exercise (below), and the flying control centre, (below right)

It's known to locals as 'the ship on the hill' because of its uncanny resemblance to a Type 45 complete with radar on top.

BAE Systems Insyte's Maritime Integration and Support Centre, near Cosham, is where many of the systems for the Daring class were developed.

But don't be fooled, for these days the facility is playing host to the next generation of ship's development, with trials of the systems to be installed on the Queen Elizabeth (QE) Class aircraft carriers.

Here the company of *HMS Illustrious*, well used to operating a carrier from a wind lashed bridge if not from the top of a hill in Portsmouth, are testing the carriers' Mission System, the brain of the ships, in sea-going scenarios long before



Report: Sally May
Pictures: BAE Systems

Elizabeth facekeeper

**computer systems, intelligence –
s aircraft – can contain a territorial
nations**

the QE Class are due to take to the water.

To make the simulations as realistic as possible, the key operational compartments are mocked up and equipped with many of the real systems that will be used on board and some others in prototype form.

In the latest two-day exercise, which both DE&S' Capital Ships and Joint Combat Aircraft project teams worked with BAE to develop, RAF personnel brought their expertise alongside the Royal Navy for a simulated engagement between 'Dragon' and 'Caledonia'.

The trial even attracted international interest with the US Navy, which has a close relationship with the QE Carrier project that sees them share information on the respective build programmes, also participating.

"We're working more closely with the US on this project than we ever have before," said Squadron Leader Bob Arber from the Joint Combat Aircraft team.

The goal of the process, which BAE dub 'visualisation and experimentation', is to identify any problems during the design and integration phase. Issues can then be rectified far more easily and cheaply than if it were left until further down the process.

The process has the added advantage of demonstrating to the end user – the

Royal Navy and Royal Air Force – that the systems work and match their requirement, long before they would normally be able to test them out on board.

All the compartments that the mission system co-ordinates are laid-out, using desks and screens, as they will be on the carrier, roughly to scale here – except, said

Insys's mission system Director Steve Dowdell, for the distance between the FLYCO and bridge "which would be difficult to recreate given they will be a 20-minute walk apart!"

Across the nerve centre of the operations room, the bridge which is responsible for navigating the ship into position for aircraft launch and recovery and for safe operation at sea, and the flying control or FLYCO – the ship's 'traffic control tower' – 'Illustrious' crew are taking note of any wrinkles in the systems or quirks to the layout that can be ironed out before they are reproduced in construction.

The most striking of the simulations is the FLYCO, where the computer-generated display that covers most of the wall shows aircraft taking off and landing and the movement of the ship.

From here, the Air Traffic Control Officers have a realistic field of vision of the flight deck and surrounding skies as it will be from the tower onboard when the Queen Elizabeth carriers take to the seas.

Commander Owen McDermott, DE&S' Mission Systems lead, said: "The synthetic environment allows scenarios to represent the dynamics of ship-board operations and combat activity, and can be used to create stressing situations and interaction

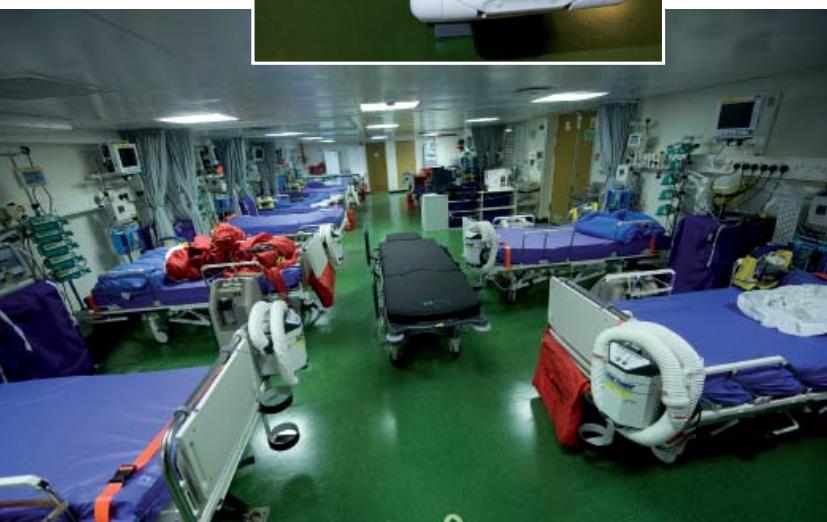
between ship and air support groups and operations staff."

But it's not the end of the road for the ship on the hill. As the QE Class programme gathers pace towards delivery of the ships, the facility will evolve to integrating the delivered systems before they are shipped to Rosyth to be installed on the ships.

Argus – the hospital ship that really makes a difference



RFA Argus can boast the most up-to-date facilities, including its intensive care ward, above and below, and a CT scanner, right, along with more homely comforts such as the wardroom and galley, far right



Hospital ship *RFA Argus* has been in Portland putting the latest medical technology on show after her £37 million refit.

As a Primary Casualty Receiving Facility, *Argus* can be deployed anywhere in the world providing treatment for up to 100 casualties. From medication to major surgery, the ship can ensure wounded troops or civilians receive rapid medical care from a highly-trained military surgical team in hospital facilities as advanced as many found on land.

The ship's hospital has been overhauled over the last ten months with new kit including a new CT scanner (3D x-ray machine) and sterilisation unit for surgical equipment; the same equipment as that being used to help save lives in field hospitals in Afghanistan. A new oxygen concentrator plant ensures staff have medical-grade oxygen supplies on tap. Instead of volatile liquid oxygen these machines use molecular 'sieve' technology to separate air into pure oxygen piped to the hospital beds.

The former aircraft lift has been transformed into a new casualty reception area where triage takes place before the casualty is transferred to the hospital in a new lift that can operate up to a sea state 7 or via the new ramp.

Kevin Murray, leader of DE&S' Cluster Support team, said: "The medical support *Argus* can provide to troops on operations is a crucial capability that can make all the

difference when time is of the essence; having the highest standard of medical kit onboard gives the edge in the effective treatment of casualties.

"The CT scanner is taking particular prominence in the treatment of modern war casualties and the new one we have installed is the latest technology. It's at the entrance of the hospital, alongside the X-ray room, for a logical flow through the treatment facilities; from assessment of the injury through to intensive care, to the High Dependency Unit and finally to the general ward."

To accommodate casualties safely, *Argus* needs proven evacuation procedures in the event of damage to the ship and a Marine Evacuation System has been installed in the refit. Similar to the inflatable slides used to evacuate commercial aircraft, the system must be able to evacuate the ship in 80 minutes. In the Portland harbour trial 100 volunteers, including project staff from Abbey Wood, braved December weather to abandon ship via the chutes into liferafts below, including some simulating casualties on stretchers. Once full, the rafts were marshalled away while some were airlifted to safety by a Merlin helicopter.

RFA Argus Commanding Officer Captain Paul Kehoe said: "With the help of the Royal National Lifeboat Institute and the Maritime Coastguard Agency, who also used the exercise to test their own response procedures, the trial was an important test that we can safely complete an evacuation in the required timescales.

"However, it is just one part of passing our readiness for sea tests, and the ship's company and I are just looking forward to getting back to sea with this fantastically equipped ship and returning to our duties."

The refit, which was carried out by A&P in Falmouth began last January under their five-year contract for the



hat

Report: Sally May
Pictures: Andrew Linnett
and A&P



upkeep of *RFA Argus* and the four Bay Class LSD(A) vessels. The contract has helped secure the 150-strong workforce and also saves the MOD money.

Kevin Murray said: "The refit has been a major success for our through-life management strategy. By working closely with A&P Falmouth and Trimline, we have delivered a high quality and complex project ensuring the timely return of this valuable asset to our Fleet customers. The achievement of bringing a project of this scale in on time and on budget really shouldn't be underestimated."

Max Sothcott of A&P Group added: "This has been the largest project undertaken by A&P and it was completed on time and on budget. We are proud of our achievement which could not have been possible without the professionalism and dedication of all the partners, DE&S Afloat Support, wider MOD and our workforce in Falmouth."



A Merlin comes to the rescue during an evacuation exercise involving around 100 volunteers, including DE&S staff



A welcome increase for those on the front line

CHRISTMAS AND New Year saw front line personnel get 60 minutes free WelComE (Welfare Communications Everywhere) time talking to friends and family back home, courtesy of MOD and Paradigm Secure Communications.

As well as the normal weekly 30 minutes welfare entitlement provided by MOD, an additional 30 was added for Christmas on 20 December, and on 27 December a further 30 were provided by Paradigm, who last year celebrated ten years of service provision.

Flight Lieutenant Andy Wilson, who is responsible for assisting the delivery of service to troops in Afghanistan, said: "Christmas can be a difficult time for the troops and their families, and we hope that this went some way to making this separation a little easier. This extra hour allowed families to share their news over the festive period, for mothers and fathers to have that extra bit of time to chat with their children and for the troops to feel as much a part of the celebrations as possible."

"Communication is vital to the morale of our personnel and the wellbeing of their loved ones at home, especially around that time of year. I have served away from home and the knowledge that you are able to call and receive messages from loved ones is a huge reassurance. I hope that this extra time over Christmas helped to bring troops and their families and friends closer."

In September 1999 voice-only facilities were provided to entitled personnel serving in Bosnia, and this service has now grown to include access to internet services that allow use of web-based e-mail, shopping, news, chat and Armed Forces web sites.



Pictures: Darren Setter

Top: Just some of the equipment used by those on the front line to keep in touch. Right: The range of cards supplied by Paradigm to suit all pockets. Left: the Paradigm call centre at Corsham. Pictures: Darren Setter

These services are delivered using telephones and personal computers housed in self-contained air-conditioned cabins at the main operating bases. Paradigm also provide a lightweight portable system for use in remote or austere locations, or Forward Operating Bases. Known as Textlink II, the service provides email, short messaging, postal and daily newsletter services.

Kevin Snape from Paradigm said: "We provide the troops with the ability to communicate home even in the most hostile of situations, and we have engineers in theatre to support this vital service 24/7."

Paradigm are also implementing a Wi-Fi service, which will allow personnel to get online using compliant laptop computers from their own bed-space.

Users can supplement their free entitlement by purchasing top-ups directly onto their Paradigm account cards, or by buying disposable phone cards from certain outlets.

Friends and family are able to leave up to ten two-minute voicemails on an account, which can be picked up the next time the user logs on.

They can also supplement call time by contacting the WelComE customer care centre.

RFA support earns team members just reward

A DE&S team has been rewarded for its through-life support of Royal Fleet Auxiliary ships.

Commodore Dave Preston, Head of Afloat Support, and Andy Osborne, Afloat Support quality manager, (pictured right) display their new ISO 9001 certificate, approved by Lloyds Register.

The certification recognises the efficiency and effectiveness of the team's key business processes achieving customer satisfaction by ensuring the job is done right first time.

The certificate was awarded for the 'Provision of through life support for the Royal Fleet Auxiliary flotilla and the acquisition of new ships'.

Commodore Preston said: "The award of this certificate is a result of the hard work of my team and emphasises the effort we have invested in the provision of the through life element of support given to the RFA."

"I am proud that Afloat Support is the first team in the MOD to achieve certification in this scope. Afloat Support have in place a quality management system robust enough to cope with new ship acquisition, which we will be putting to good use on the MARS tankers project."



Hawk trainer tops the bill

DE&S-managed facility earns excellence award

INCREASED QUALITY of training for the RAF's future fast-jet pilots has been recognised by a national award.

The Hawk Synthetic Training Facility has increased student performance during live flying at No 4 Flying Training School at RAF Valley in north Wales at no extra cost in flying or simulator training hours.

Operators have won the CFS Guild Trophy, an award from the Guild of Air Pilots and Air Navigators awarded periodically to an individual, group or organisation that has made an outstanding contribution to excellence in delivery of flying training or instructional standards.

The 18-year private finance initiative contract to train future fast jet pilots, signed in 1997, is managed by DE&S, with the simulators run by BAE Systems Hawk Synthetic Training. The contract is worth around £39 million.

"The award is well-deserved. We are very pleased with the service we get from the training facility," said project manager Richard Morgan of DE&S' Flight Simulation and Synthetic

Trainers team. "It is a critical part of delivering front line pilots and the majority of the staff who operate the facility are ex-RAF so they understand the user needs very well and they strive to deliver what we require on a day-to-day basis.

"That's borne out by the users' high level of satisfaction.

"It is quite proper they have been recognised for the efforts they have been making to deliver this service for 4FTS and the Forces as a whole."

Synthetic training is provided for all future fast jet pilots who train in weapons, tactics and close air support on the Hawk aircraft before joining a fast jet operational conversion unit to fly Typhoon, Tornado or Harrier.

The facility consists of two weapons and tactics simulators, an instrumentation flight simulator and a cockpit procedures trainer.

The award citation said: "The staff of the facility are playing a key role in improving student performance in the tactical environment through innovative use of their synthetic training equipment."



Above: pilot's eye view from the cockpit of a Hawk on RAF Valley's synthetic trainer

Company takes lead on FSC

FUTURE SURFACE COMBATANT (FSC), the next generation of Royal Navy ships, is the focus of a £3.4 million contract awarded to BAE Systems.

The contract reduces risk in the FSC programme by enabling the joint project team to develop a better view of costs, schedules and design at an earlier stage than any previous programme. Designed with potential export sales in mind, the new vessels will replace Type 22 and Type 23 class frigates when they reach the end of their service.

BAE Systems will be lead contractor and systems integrator for the programme. The company will work with DE&S and industry partners to develop the business case, concept design and a cost model for the whole life of the programme.

The first of the fleet is due in service around the end of the decade.

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'If he complains about food out there I will know he is talking rubbish – the food they are providing is brilliant'

- a service wife's verdict on DE&S' operational ration packs

FAMILIES OF front line forces can have no worries that loved ones are well-fed – thanks to a contest based on the 10-man operational ration packs.

Ration food was on the menu for wives and families from three RAF Regiment squadrons who took part in a Christmas-themed Ready Steady Cook competition.

Three teams of forces families, helped by a military chef, were challenged to prepare and cook a two-course meal fit for our troops with ration packs used by military chefs in Afghanistan.

It was organised to show families of troops serving in the RAF Regiment's 2 Squadron, 15 Squadron and 27 Squadron the ingredients used by skilled military chefs and to get a flavour of the food that troops eat in Afghanistan.

Captain Jeremy Rigby, leader of DE&S' Defence Food Services team, said:



Winners, from left: Michael Spink, SAC Nathan Spink, Dawn Heeslip

"It is our priority to ensure that our servicemen and women are given fresh, tasty food and that they are able to enjoy a traditional dinner over the festive period.

"We wanted to give these families an opportunity to see how we go about cooking the food that their loved ones eat while they are away from

home. I think that they will have left feeling reassured that they are being well looked after."

Yvonne Hamilton and her children Scott, aged 10, and Shannon, 13, took part in the event. Yvonne's husband Dave is with 27 Squadron on operational duty in Afghanistan since July.

She said: "This isn't the first time my husband has been away on duty over Christmas but it is still

- Team 1 – Yvonne Hamilton and her son Scott, led by chef SAC Max Baldwin. Menu – naan bread, curry and a fruit slice.

- Team 2 – Shannon Hamilton led by SAC Christopher Beavis. Menu – beef, onion and mushroom pie with dauphinoise potatoes, currant ribbons, sautéed cabbage and chocolate sponge with a basil cream and praline.

- Team 3 – led by SAC Nathan Spink who was joined by his grandfather Michael Spink and Dawn Heeslip. Menu – spicy chicken supreme with noodles, Danish hotpot and rice, apple and pineapple crumble.



SAC Chris Beavis, Karen Battersby and Shannon Hamilton, 13, preparing their menu



10-year-old Scott Hamilton



Report: Hannah Swingler
Pictures: Andrew Linnell

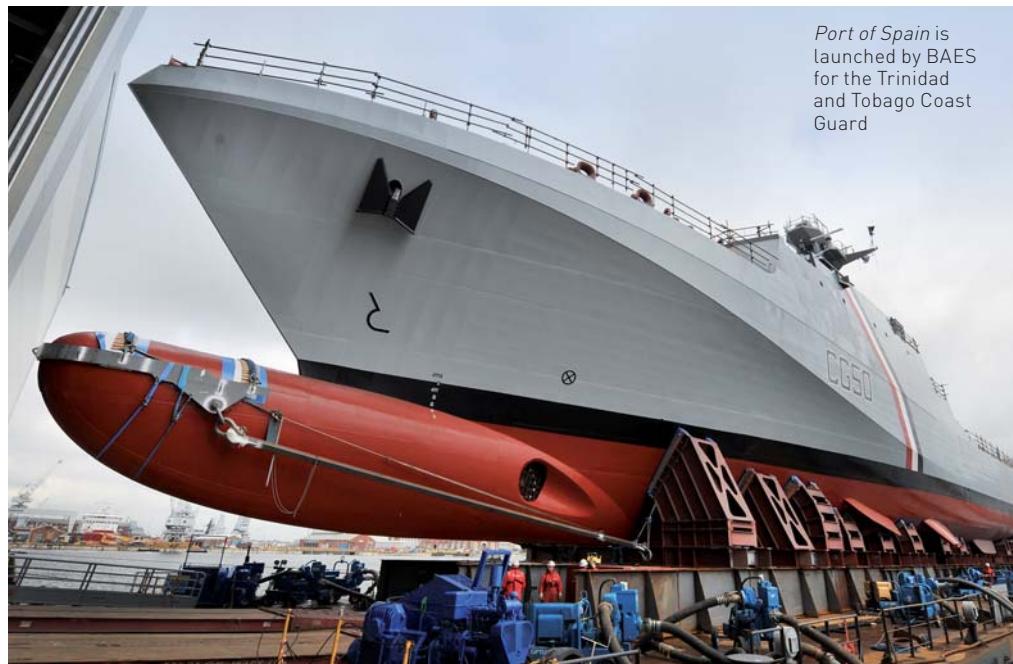
important to know that he is being fed well. It has been great for the kids to see what their dad is eating when he is away.

"It provides us with reassurance that he is having a hot meal at the end of the day when he is at back at camp – if he ever tries to complain about food when he is there I will know he is talking rubbish as the food they are providing is brilliant."

The winning team was led by Senior Aircraftman Nathan Spink, recently returned from Afghanistan. His team produced a chicken dish and apple and pineapple crumble.

He said: "I am delighted with the result especially as I was quite nervous beforehand. Cooking on operations is always very challenging because of the conditions we face, but it's what we are trained for, to keep morale up during the tough times."

Portsmouth to Trinidad – with help from DE&S



THE FIRST two of three patrol vessels for Trinidad and Tobago – a project boosted by key advice from a DE&S team – reached milestones in their development when they were launched in late November.

Port of Spain, was built by BAE Systems and named in Portsmouth at the end of November.

Scarborough was built at Scotstoun on the Clyde and launched a day later. The third ship will be launched next year.

The 90m vessels for the Trinidad and Tobago Coast Guard are part of a £150-plus million contract between BAE Systems and the Trinidad and Tobago government.

The Royal Navy is providing operational sea training to the crews and a team from DE&S Surface Combatants is providing procurement advice to the coast guard's UK project office.

A small Royal Navy team is also in-country providing military advice on crew training and operation of the ships in a government to government deal worth more than £4 million.

Allan Tyler, Trinidad and Tobago group leader with DE&S' Surface Combatants,

said: "We recognise that the procurement of these vessels is a significant acquisition for Trinidad and Tobago that will present the coast guard with massive upgrade in maritime capability.

"We are very proud to be involved in the project and, in addition to providing procurement advice during the build phase, we are also trying to help Trinidad develop the supporting infrastructure and processes that will be necessary to manage the contractor logistic support contract once the vessels have been delivered," he added.

The ships will be involved in patrolling economic exclusion zones, anti-smuggling and other law enforcement tasks.

They will also enable the Coast Guard to deliver rapid disaster relief across the region.

Lord Davies, Government Minister for Trade, Investment and Small Business, said: "I am delighted the UK is able to provide Trinidad with these highly capable ships."

"The UK Government will work with BAE and the Coast Guard to make sure the crew get the most out of their new vessels."

First training aircraft land in the UK

FOUR KingAir 350ER aircraft have arrived in the UK as part of the UK Military Flying Training System's Rear Crew Stage 1 Programme.

The programme, which is being led by Ascent Flight Training, includes replacement of the current Jetstream fleet with the new, advanced KingAir 350ER. Ascent is a joint venture between Lockheed Martin UK and VT Group.

The aircraft arrived at Bournemouth International Airport from the Hawker Beechcraft facility in Wichita, Kansas after a two-legged transit including a non-stop transatlantic flight.

"The arrival of the KingAir 350ER aircraft is another milestone in the UKMFTS programme," said Ascent managing director Sir Barry Thornton.

"Once in service the aircraft will deliver a step change training Royal Navy Observer aircrew."



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Users get enhanced view of defence inventory

DE&S TEAMS are taking advantage of significant improvements to the Management of the Joint Deployed Inventory Management Information System (MJDI MIS), getting a comprehensive view of the entire defence inventory.

MJDI MIS harnesses the power of MJDI inventory data hourly to present the user with information on the inventory, wherever it is managed and across all service environments.

This information is invaluable for all managers of stock and those who rely on their expertise. Commanders in the field can base operational decisions on information that is accurate up to the hour about what stock is available and where it is. Stock managers can get consumption data, up to a limit of seven years, and the data is consistent because it's managed centrally.

Users can also see what demands are outstanding against equipment and amend demand progression details remotely.

Chris Rogers, a Senior Logistics Manager in DE&S' Defence General Munitions team, said: "By going straight to the source of the demand, I can inform customers of progress on their demand and any other relevant information. The unit can see when a demand is received and actioned and we can confirm that the demand is being progressed. The immediate impact is a reduction in phone calls and fewer faxes and emails."

Further improvements will allow users to query all the information held in MJDI and the length of time information is stored in MJDI MIS will increase to nine years' worth.

For more information, including how to get access to the system, search for "MJDI MIS" on the defence intranet, or contact Kate Appleton on 01980 664250.

DE&S STAFF at Wyton have been given a sneak preview of the Watchkeeper Unmanned Aerial Vehicle as part of an Unmanned Air Systems (UAS) team briefing day.

Members of the team gave a series of presentations in Skyways Conference Centre, giving an insight into what the team does and the projects and programmes it is involved in.

The Watchkeeper was displayed at the pavilion's helipad and subject experts were on hand to answer any questions.

It is due to enter service in 2010 and will deliver day/night, all weather, expeditionary Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) capability.

Farewell HMS Trafalgar



The crew of HMS Trafalgar say goodbye at the decommissioning ceremony



Devonport Flotilla organisations in Devonport Naval Base.

The nuclear-powered submarine, launched in 1981 and commissioned into Royal Navy service in 1983. She sailed into HM Naval Base Devonport in November flying the traditional long decommissioning pennant.

THE COMMANDING officer of *HMS Trafalgar*, which has left the Royal Navy after 26 years' distinguished service, has paid tribute to the submariners who have manned her.

The submarine, the first of the Trafalgar Class hunter killer boats, officially left the Royal Navy following a service at Devonport Naval Base.

HMS Trafalgar's commanding officer Commander Charlie Shepherd addressed the ceremonial guard: "This is not just about a steel hull but about the people who served on her," he said.

"It is about the resilience, cheerfulness and teamwork of her people who were always ready to help each other. It was an enormously special time for me as the commanding officer."

Cdr Shepherd said *HMS Trafalgar* regularly blazed the trail for her sister vessels and the submarine service as a whole, but none of this would have been possible without the support of Devonport Naval Base Commander and Commander

HMS Trafalgar facts

- Although unlucky for some, *HMS Trafalgar* and the number 13 have had a special relationship. The submarine is designated SSN-13, has had 13 Commanding Officers and has had two Commissions of 13 years each.
- She travelled nearly 200,000 miles surfaced and a further 500,000 miles dived since her launch in 1981.
- In her 26-year service, close to 3,000 submariners have been proud to call *HMS Trafalgar* their home.
- More than two and a half million meals have been cooked in the galley. More than 700,000 sausages and nearly 300 tonnes of potatoes have been eaten onboard and five million cups of tea drunk.



DE&S focuses on reputation

A 'MANAGING DE&S's Reputation Paper' has been published, detailing the organisation's key reputation activities and areas of focus for the next year.

These include risk assessment and mitigation of key risks to reputation, considering reputation as part of business plan activities and building better relationships with key stakeholders.

Reputation activity over the next year will largely be focused on DE&S's own people, Front Line Commands and MOD Head Office.

The DE&S Board recognises the importance of effectively managing reputation, with Chief of Materiel (Land) Lieutenant General Gary Coward nominated as the organisation's lead on the subject. He champions reputation at Board and senior management level, working closely with Non Executive Director Wendy Barnes.

A reputation working group was formed last year to help initiate discussion at business area level, with representation from across all business areas. The group plays an important role in influencing DE&S reputation-related activities.

There are usually three workshops a year in which working group members play a major part, looking at current key reputational challenges.

A steering group has also been established to provide further focus and direction. It comprises corporate and business area representation and is responsible for taking forward agreed reputation activities identified by the working group.

Ultimately, all DE&S staff are responsible for the reputation of DE&S and can individually contribute, for example by achieving objectives and improving skills level and professional knowledge.

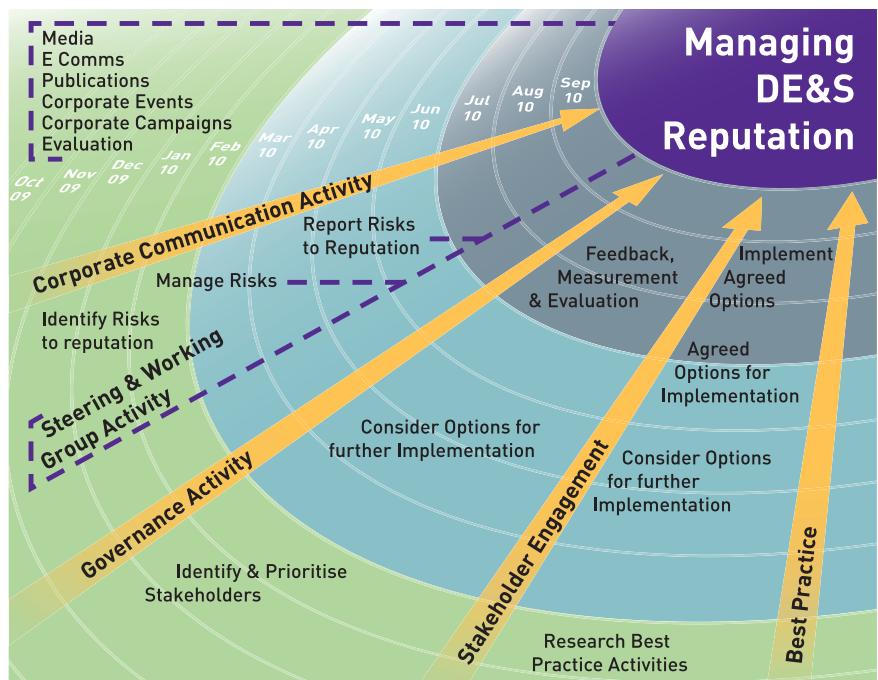
For more information contact Katrina McCabe on 07775406171.

Acquisition Framework meets targets for accessibility

IMPROVEMENTS TO the Acquisition Operating Framework have improved the site's accessibility, meeting a major government deadline, and seeing it awarded the status of a 'Royal National Institute of Blind People Surf Right Accessible Website'.

The Disability Discrimination Act 2005 places a duty on the public sector to promote disability equality and all central government department websites had to meet the standard by December 2009.

More information is available from Simon Greaves on 01225 883406 or the AOF website at <http://www.aof.dii.r.mil.uk/aofcontent/accessibility.htm>



Feast of learning on show at Devonport



A FESTIVAL of lifelong learning has taken place at Devonport Naval Base, for staff to see a range of development opportunities available to them.

Hosted by Lieutenant Commander Ian Taylor and Tania Milburn, the

event attracted 30 internal and external training providers, colleges and service support organisations from all over the south west of England who demonstrated what is on offer both in the Naval Base and beyond.

Chiller project tackles environment and efficiency

A PROJECT run by DE&S' Submarines Operating Centre has tackled government energy efficiency targets, as well as installing an up-to-date efficient chilled water system.

The four month project at the underground Corsham Computer Centre, which processes data in support of the Royal Navy, saw the team replace a major part of the facility's chilled water system.

The work was essential due to the

age and running hours of the chillers and because of the directive to phase out the refrigerant (R22) as per the Montreal Protocol.

The new chillers at the heart of the system operate using high speed centrifugal compressors and a gas refrigerant which will not affect the ozone layer. It is predicted to be around 40-50 per cent more efficient than the outgoing system, meaning electricity savings of 15-18 per cent.



Delivering the Blueprint



Steve McCarthy, DE&S Director Change, looks back at two years of the DE&S Blueprint and considers what the future holds

Two years ago we published the DE&S Blueprint which described how DE&S would operate, and what it would look and feel like, in March 2012. The PACE programme, designed to deliver the Blueprint, was formally launched a couple of months later. So two years on – or nearly half way through, if you prefer – what difference has all this made?

Honestly? Quite a lot. And in some important ways. For example, the Blueprint proposed that the basic management of DE&S would be focused not on teams, but on “Operating Centres”. I recall that it took quite an effort to explain what that meant to people at the time. But now the phrase “Operating Centre” is part of our language.

We said that we would have more flexible means to deploy staff within and, as appropriate across, the Operating Centres. Well, Flexible Resourcing achieved its formal in-service date in November and today more than 9,000

‘PACE has shown an ability to be flexible itself and to encompass big new ideas’

DE&S staff are on the flexible resourcing system.

The Blueprint also foresaw a changed boundary between DE&S and industry, with more joint working, long-term partnering, service procurement and alliance.

Major strides have been made in that direction as Operating Centres have been implementing new commercial

approaches and delivering the Defence Industrial Strategy.

We said we wanted more highly skilled people and good opportunities for them to continue to develop. And we have that, with increasing numbers of people holding professional qualifications for the professional jobs that they do.

The Blueprint also declared that DE&S staff would, to the maximum extent possible, be consolidated within the Bristol/Bath acquisition hub.

The Collocation project has already moved more than 1,000 staff to Abbey Wood, the new Oak building is nearing completion (and today looks more like a building than a building site).

The Corsham New Environment is making similarly rapid progress. As part of what we saw as a lighter but more effective governance framework, we have a new integrated business planning system in place and working.

PACE has also shown an ability to be flexible itself and to encompass big new ideas.

Capability Delivery isn’t mentioned

in the Blueprint but, when the idea arose later in 2008, the new programme approach it entailed was clearly compatible with the Operating Centre concept. And so Capability Delivery became a core PACE project and today the capability programmes are established, maturing and making a difference.

Now, if you are only at the half-way point there is obviously still further to go. None of the things mentioned above are yet fully complete. We have a lot more to do if we are to deliver the Blueprint in full by 2012. That includes work on resourcing and tasking our corporate services on a demand-led basis, on simplifying processes, and on improving management information and knowledge management systems. All of this is underway.

Overall PACE is on track to deliver the improved organisation that the DE&S Blueprint describes.

Last year a number of people from outside DE&S told me they had not realised the scale of what we are trying to achieve through this programme. Of course, I am keenly aware that it is people across DE&S who are actually delivering

'PACE is on track to deliver the improved organisation that the DE&S Blueprint describes'

priorities alter will be more important than ever. And that is what the Blueprint and PACE are all about.

PACE is now a key part of the MOD's new Defence Acquisition Reform Project (DARP). The flexibility the programme has already shown will become important again as we incorporate into PACE the further changes that DARP is examining.

That matters because DARP is looking to improve acquisition across the entire Department and DE&S needs to play a full role in both shaping and implementing that work.

Getting better at equipping and supporting our Armed Forces has always been important. The Blueprint hoped that DE&S would be an organisation with an enhanced reputation amongst its stakeholders, respected for its role in delivering effective equipment and support to the Armed Forces, where people feel proud of what they contribute to front line capability.

Despite what we read in the newspapers, I think that there is plenty of evidence – including in this very magazine – to show that we are getting there too.

The PACE 'button' shows the key elements of the programme that will deliver the Blueprint taking DE&S through to March 2012



DE&S apprentices take top honours at annual awards

APPRENTICES WORKING for DE&S made an impact at this year's MOD Apprentice Awards, taking ten awards.

The winners were from the Defence Storage and Distribution Agency at Gosport and the DE&S Technician Team

at Abbey Wood.

The awards recognise the achievements of civilian engineering apprentices in a number of competitions that test a range of skills.

The apprentices were presented with

their awards by The Princess Royal in a ceremony at Main Building in December.

The event was hosted by General Sir Kevin O'Donoghue, Chief of Defence Materiel, and winners were drawn from establishments around the UK.



Picture: Harland Quarrington

The MOD Apprentice Award winners with the Princess Royal and General Sir Kevin O'Donoghue

The winners:

Apprentice of the Year

Gold medal winner and Apprentice of the Year: Aiden Johnson, DSG Donnington

Silver Medal Winner: Louis Woods, DSDA Gosport

Bronze Medal Winner: Chris Parkins, DSDA Gosport

Sir David Cardwell Memorial Prize

Winner: Michael North, DSG Donnington

Sir Henry Royce Memorial Foundation Medal

Joint Winners: Stuart Braddock and Alexander Williams, DSG Donnington

Ely and Coast Charity Award

Winner: Louisa Griffiths, DSG Donnington

Tom Nevard Memorial Competition

1st Phase Mechanical Machining and General Fitting Section

Winner: David Martin, Vector Aerospace Almondbank
Runner-up: Ian Baker, DSG Bovington

2nd Phase Mechanical Machining and General Fitting Section

Winner: Samuel Holland, DSDA Gosport
Runner-up: Iain Nicolson, Vector Aerospace Almondbank

1st Phase Electronic Section

Winner: Aaron Savidis, DE&S Technician Apprenticeship Team Abbey Wood
Runner-up: Alexander Watts, DE&S Technician Apprenticeship Team Abbey Wood

2nd Phase Electronic Section

Winner: Peter New, DSDA Gosport

Runner-up: Andrew Ager, DSDA Gosport

1st Phase Mechanical Hand Skills and General Fitting

Winner: Craig Taylor, DE&S Technician Apprenticeship Team Abbey Wood
Runner-up: Wallace Hubbard, Vector Aerospace Almondbank

2nd Phase Mechanical Hand Skills and General Fitting

Winner: Iain Mathieson, Vector Aerospace Almondbank
Runner-up: Andrew Cotmore, DSDA Gosport

Engineering Project Management Team Event

Winners: Jamie Booth, Chris Parkins, Nick Readings, Louis Woods, DSDA Gosport

Travel team celebrates double victory at national awards

DE&S' DEFENCE Travel (DT) team and the travel booking tool supplier, KDS, are celebrating a double victory at the UK's National Outsourcing Association's 2009 Awards.

The Capgemini-led team, including KDS, won best public sector outsourcing project and best IT outsourcing project for implementing the MOD's Defence Travel Online.

Defence Travel provides online booking for around 300,000 Royal Navy, Army, RAF and MOD civilian personnel worldwide. The solution provides users with immediate price comparisons to enable access to the cheapest travel options and reduced administrative costs. It also allows the MOD to negotiate improved financial deals with its travel suppliers.



High praise for Ships teams

REAR ADMIRAL Bob Love has presented five of his teams and one individual with commendations, marking the achievements they have made.

Team awards went to the *RFA Black Rover* Ship Life Extension Team, the Afloat Support Commercial and Commercial Ship Maintenance

Team, D Ships Financial Controllers, the Fleet Wide Combat Management Systems Team, and the Ships Maintenance Management Team.

An individual commendation was also presented to Jonathan Nicholson for his work on *HMS Ark Royal* Upkeep.

Finance staff take home prestigious awards

THE VITAL contribution of DE&S Finance staff was recognised at the Government Finance Profession Conference in November when they won two prestigious awards, a first for the MOD, against stiff competition from other departments.

DE&S' Unmanned Air Systems (UAS) team won the Finance Team of the Year award, and Thomas Burnell, currently on the Trainee Accountant Development Scheme, won Part Qualified of the Year Award. The awards were presented by BBC News presenter Kate Silverton.

Rob Young, DE&S' Finance Skills Director was elated by the success: "It's fantastic that our finance staff are being recognised for their often unsung hard-work and dedication to supporting our Armed Forces. I am very proud of the winners, and this also reflects well on the whole finance community



Above, from left: Charles Tilley, Chief Executive of CIMA, May Smith, Job Centre plus, Les Campbell, Kate Silverton

who have embraced the vision for finance and the need to gain professional qualifications and upskill."

Les Campbell, UAS Financial Controller, picked up his team's award on behalf of his colleagues – David Bailey, Sue Langley, Ian Gowinowski,



Above, from left: Graham Hambly, Editor of PQ Magazine, Thomas Burnell, Kate Silverton

Annette Savage, Terry Fenton and Rob Grounds. The judging panel praised the effort made by the team in working closely with UAS to ensure they met the pressure of responding to increased operational requirements.

Thomas Burnell was also present to pick up his Part Qualified of the Year award. He has already achieved outstanding results with two CIMA Top Ten worldwide exam results.

Kim strikes lucky at Civil Service Awards

DE&S' Kim Hancock was highly commended by Sir Gus O'Donnell, Cabinet Secretary and Head of the Home Civil Service at this year's Civil Service Awards, for her work on the Electronic Warfare Risk Reduction Project.

The Cabinet Secretary described Kim as someone who demonstrates Civil Service core values and thanked her for her hard work and commitment in driving through such a difficult project and saving millions of pounds.

Kim was nominated for the Operational Delivery Award for her work on extending the Tornado ATTAC service to encompass the Electronic Warfare Risk Reduction Measure.

She reduced the bid price by £37 million and the Department's risk exposure by a further £10 million.

The 'Oscars' for the civil service also saw DE&S' Defence Storage and Distribution Agency Operation Anvil Team nominated for the Public Value Award.

NEWSREEL

Test exhibition

A Defence Test Equipment exhibition is to be held at the Academy, Holiday Inn, Filton Road, Bristol on 18 February. Attendees will be able to see demonstrations by major suppliers of the latest test and measurement technology, company exhibits and how current and future general purpose test equipment, managed by DE&S' Deployable Support & Test Equipment team, can meet test requirements. The event is open to all MOD staff. For more information visit www.tmr.mil.uk/Events/Details/18

Changing times

A new monthly PACE Update called 'Changing Times' is being published. Available on the defence intranet, the aim is to provide bite-sized chunks of information on the PACE programme, including what's happened so far, what's new, forthcoming events and the view from Operating Centres. It responds directly to requests the PACE team have had from staff for more regular and digestible updates.

Compensation scheme

FINAL details of the changes to the Civil Service Compensation Scheme have been announced. The implementation date for these changes will be 1 April 2010, allowing a number of detailed issues around implementation to be finalised. All the details about the proposed changes are available at www.civilservice.gov.uk/my-civil-service/pensions.

Engineers look to the future

ENGINEERS AND scientists from across DE&S have gathered at a forum aimed at bringing cohesiveness to the profession.

Hosted by Howard Mathers, Director Safety and Engineering, 150 attendees at the Professional Engineers Forum heard presentations on the Haddon-Cave review, systems engineering in action and emerging technologies from Dstl.

Representatives from engineering institutions and Technical Development Partner teams were on hand to provide advice and guidance about skills, development opportunities and professional registration during the event. Key training providers were also available to offer training and skills guidance.

During his introduction, Mr Mathers outlined his aim for the forum, saying he plans to "build on the event to create a much more cohesive professional grouping at the core of DE&S business."

The next Professional Engineers Forum is scheduled for 11 June 2010.



Picture: Darren Setter

Attendees at the Engineers Forum discuss training opportunities

Picture: Andrew Linnett



Delegates from the Anglo French Exchange Programme

UK and France join up to improve research

DE&S AND Dstl engineers and scientists have been working with their French counterparts from the DGA in a bid to initiate and contribute to targeted co-operative research programmes.

The Anglo French Exchange Programme, which began last year as part of the MOD/DGA technical benchmarking exercise, also looks to co-ordinate other mutually beneficial activity.

Attendees at this year's programme, hosted by the MOD, visited Concorde at Filton in Bristol – itself being a recognised example of a successful Anglo-French co-operation.

During other meetings the group discussed lessons learned from recent co-operative actions.

The event provided an excellent opportunity to improve communications between both countries, increasing mutual confidence, sharing ideas with people from a different culture. Both DGA and UK staff from DE&S and DSTL were able to network with their counterparts and gain a better understanding of each others' roles.

For more information contact Rachel Dyer on 9352 36769.

'Talk to the Board' at any time

You can email your questions or comments to the DE&S Board whenever you like.

Board members will aim to respond within a week.

Questions and answers will be posted on the Talk to the Board page on the defence intranet.

de&s



Email: dessec-talktotheboard@mod.uk
Phone: 01225 472101
Write to: 'Talk to the Board', Maple 1, #2120, MOD Abbey Wood, Bristol, BS34 8JH

Defence Equipment & Support



'Open all hours' online communications proving a hit

PEOPLE FROM across DE&S have continued to 'Talk to the Board' over the past month, submitting a range of questions on topics including car parking at Abbey Wood, Strategic Resource Rebalancing, media coverage on civilian bonuses, DII performance, promotion and recruitment issues, and the closure of the railway gate at Abbey Wood.

The 'open all hours' facility is proving popular, with an average of three questions submitted per day and around 1,000 hits each

day on the Talk to the Board web page.

DE&S Board Members have also found it a useful communication tool and, after its initial three-month trial period, have endorsed it remaining open permanently.

You can see current questions and answers on the Talk to the Board page on the defence intranet, available via the DE&S home page. If you would like to submit a question or comment, please email DESSEC-talktotheboard@mod.uk.

Field Gun crew storms the International Military Tattoo



Picture: Claire Rossiter

The Abbey Wood Field Gun crew flex their muscles and break records at the International Military Tattoo in Birmingham

FLYING THE flag for DE&S, the Abbey Wood Field Gun Crew celebrated a blistering victory in a Field Gun Challenge held at the International Military Tattoo in Birmingham.

The Field Gun Crew needed to move and fire a field gun and carriage – the weight equivalent to a small car, as well as tackle a number of precision moves.

The crew is predominantly made up of Royal Navy and Army personnel, with support from civil servants and the Royal Air Force. It is a truly joint team, making it unique in the MOD.

With the origins of Field Gun historically resting back in the Boer War where members of the Naval Brigade had

to find a way to traverse difficult terrain in relief of besieged British forces, the display in its present form was started in 1912.

Following two days of arduous training, the crew put on the display in front of crowds of up to 10,000. The Abbey Wood crew managed to storm a one minute 22.2 second run, the fastest time of the Tattoo and a crew record.

Field Gun Officer Sub Lieutenant Nancy Porter said: "Field Gun champions the key military and DE&S principles of leadership and teamwork and because of the truly joint nature of the team, it is a great example of how we can achieve anything with hard work and dedication to a common goal."

"The crew and support team put in a

tremendous amount of hard work to pull off events such as this, and it is a brilliant way of improving our reputation with the public as it is very high-profile.

"Completely independently funded, events like this would not be possible without the key support from our sponsors Debut, Rolls-Royce and Lowa for which we are all truly grateful."

The Abbey Wood Field Gun Crew will start training early in 2010 for the Annual Brickwoods competition held at HMS Collingwood in June and hope to build on their successes from last year.

If you would like to get involved with Field Gun, contact SLT Nancy Porter on 9352 32894.

DE&S does its bit for Children in Need

Staff at Andover, including members of the Defence Fire Service, 'cycled' the distance of the Three Peaks Challenge, up and down the mountains and in between, covering more than 500 miles. The team completed it in about six and a half hours, using four static bikes. They raised more than £300.



CLYDE NAVAL Base hosted a Children in Need coffee morning, with staff providing a selection of mouth-watering goodies. Leslie Stevens, who was involved in organising the coffee morning, said: "We raised £155 from the sale of coffee and cakes. It was a great turnout on the morning and we would like to thank everyone who came along."





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