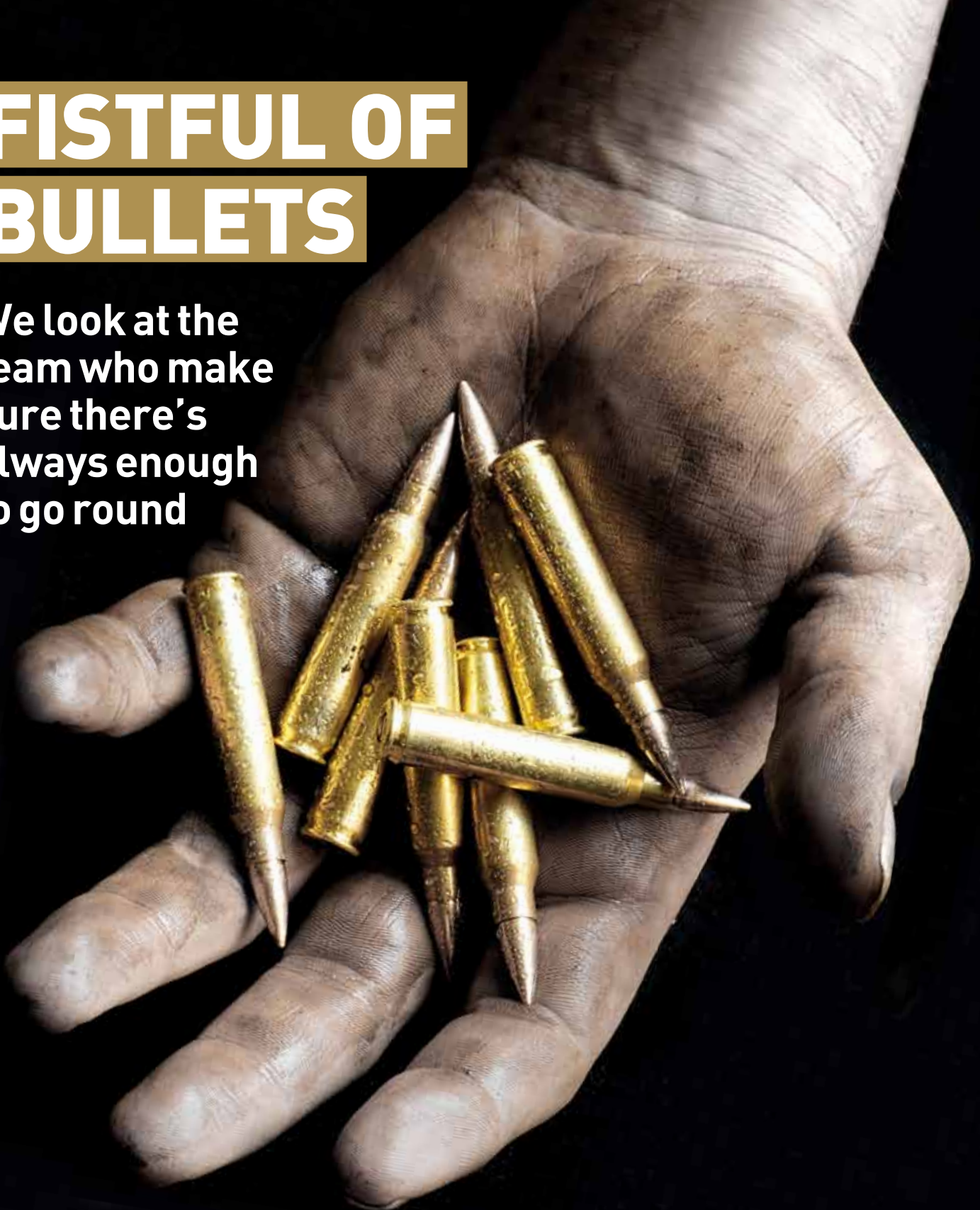



Defence**Focus**

Royal Navy | Army | Royal Air Force | Ministry of Defence | ISSUE #272 JULY/13

FISTFUL OF BULLETS

We look at the team who make sure there's always enough to go round





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to ensure smooth passage
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**FLYING THE FLAG:
CELEBRATING ARMED
FORCES DAY P6-7**



Picture: Mark Dwens

Regulars

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Armed Forces Day proved a huge hit in Nottingham and across the UK

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EDITOR'S NOTE

DefenceFocus

For everyone in defence
Published by the Ministry of Defence

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Advertising
Advertising sales are handled by Richard Stillman at Ten Alps Media. Tel: 020 7657 1837
email: richard.stillman@tenalps.com

Distribution
The magazine is distributed through major military bases, depots and MOD offices.



Produced by Williams Lea Ltd on 100% recycled paper.
MOD Helpline 01603 696329.

FIONA SIMPSON



You may have noticed by now that I always try to pick out a theme for my editorial columns, loosely cobbled together from the contents of the month's magazine.

Well this month I have no theme. No common thread which binds the publication together. No overarching narrative of defence communications (yes, that is a real phrase that I hear people using in my day-to-day working life).

But instead of agonising over the lack of a thread I'll just say that there's plenty of interesting things in this month's magazine to whet the appetite of the Department. It's like a fabulous pick and mix of all things defence.

You can peel back the wrapper on Ian Carr's exclusive first peek

at a fascinating new exhibition that opens this month at the National Army Museum looking at improvised explosive devices. As well as looking at the history of the device and how it has changed modern conflict, the exhibit looks at the men and women who deal with them.

Providing practical and emotional support for Service personnel and their families is also in the mix this month. Leigh Hamilton met some of the people who work for the Defence Medical Welfare Service and found out why their support, both in theatre and back at home, is so invaluable.

Last month we treated you to a four-page photo feature about the Chief of the Defence Staff. Following that up this month we have his letter to all MOD staff bidding farewell to the Department after 42 years.

So sit down, put your feet up and enjoy the well-crafted eclectic mix. It's like a packet of Revels without the gross coffee ones.

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CDS LETTER TO MOD STAFF

GENERAL SIR DAVID RICHARDS, CHIEF OF THE DEFENCE STAFF, LEAVES THIS MONTH AFTER 42 YEARS IN THE ARMY




**General Sir David Richards,
Chief of the Defence Staff**

The past three years have been challenging. We have worked on the fall of Gaddafi in Libya, the reform of the UK's military strategic headquarters, and throughout, the maintenance of our operations in Afghanistan. Even as this has happened, we have been shrinking the Armed Forces and the Civil Service in line with the Strategic Defence and Security Review and transforming the single Services. I have no doubt that, while the pressures have been clear from my office, they have been keenly felt at every level in the department. For that I would like to thank you.

Over the past 42 years in the Army, including three years as Chief of the Defence Staff, I have had the most interesting career I could possibly have wished for. The challenges at every level have been both personal and professional, whether on operations or working in Main Building. Over the last few years this has never been more true.

The pressures on everyone have increased as we have shrunk numbers and I am aware of the work this has pushed onto each of your shoulders. All have taken on more responsibility and delivered more than anyone hoped. So I would like to thank each of you for your contributions. In Defence no one is more important than any other and the contributions of all are what make this vital team work.

I know I am leaving you with much more to do at a time when the world is no more safe or more predictable. But I leave it confident Defence is ready for the future. Everyone here has never ceased to impress me with their industry, skill and imagination; for that I will be eternally grateful. That you have been so well supported by patient and understanding families goes too often without saying. I know what each of your families has given up so that you have the opportunities to prosper and commit your all to the vital work of national defence. I would like to take this opportunity to thank them too.

It is with pride and gratitude that I leave you and take this opportunity to wish you all every good fortune for the future. 

ARMED FORCES DAY



Picture: Senior Aircraftman Ben Lees

**Rock solid support:
RAF photographers
at RAF Akrotiri in Cyprus**



Picture: Sergeant Tom Robinson RLC

**Crowds enjoying the spectacle
at the national event in Nottingham**



Picture: Senior Aircraftman Craig Marshall

**David Cameron meets
members of 1 Mechanized
Brigade in Lashkar Gah**



**The Red Arrows took part
in a flypast over Nottingham**



Picture: Royal Naval Reserve

**Sailors from HMS President hold
the Armed Forces Day flag**



Picture: Royal Navy

**The crew of HMS Triumph
show their support**

TENS OF THOUSANDS OF PEOPLE UNITED ACROSS GREAT BRITAIN TO CELEBRATE ARMED FORCES DAY

Tri-Service personnel on parade at the national event in Nottingham



Picture: LA[Photo] Dan Rosenbaum

The Irish Guards regimental mascot Domhnall



Picture: Sergeant Adrian Harten

The Memphis Belles taking part in what proved to be London's biggest Armed Forces Day parade and celebration



Picture: Sergeant Adrian Harten

The Armed Forces Day flag is flown out of a Griffin helicopter over RAF Akrotiri



Picture: Senior Aircraftman Ben Lees

CHANGING PRIORITIES

AS REDEPLOYMENT OF EQUIPMENT FROM THE FRONT LINE BEGINS, ALL EYES ARE ON THE FUTURE OF THE UK'S KIT: REPORT BY LEIGH HAMILTON



The Husky vehicle tackles deep water at Millbrook

Picture: Kathryn Stewart



Philip Dunne seated in a Foxhound vehicle

Picture: Andrew Linnett

As the UK's Armed Forces begin to withdraw equipment from Afghanistan, the switch from using kit on operations to using it in a contingent capacity is becoming increasingly apparent. This year's Defence Vehicle Dynamics (DVD) event brought industry representatives and Army personnel together to look ahead to the future equipment requirements of the Service post-Afghanistan.

The event is designed to bring industry, military stakeholders and the acquisition community in the land equipment sector together to develop ideas and generate an increased understanding of the defence environment.

Held over two days - 19 and 20 June - DVD13 saw informal discussions, engagement with military personnel, demonstrations and live displays. The focus of discussions was on innovative and efficient solutions for the support, upkeep and development of land equipment for

contingent operations to ensure future sustainability.

On show was a range of vehicles, from the heavily armoured Mastiff troop carrier to the protected, yet agile, Foxhound. Support vehicles like the brand new remote-controlled Terrier also featured alongside Warrior, the Army's workhorse.

Director Land Equipment at Defence Equipment and Support (DE&S), Major General Carew Wilks, explained the importance of DVD13: "Attendance at DVD is crucial for industry in helping them to understand how changes in the Defence Strategy could affect their business.

"Suppliers will also benefit from essential feedback from end-users and will want to make the most of this effective medium for testing ideas and solutions with the stakeholders attending."

There were plenty of opportunities for industry to gain feedback from military personnel at this year's event as the commanding officer, key commanders and

staff from 12 Mechanized Brigade were in attendance. With their recent experience of Afghanistan and a key role in developing contingent capability for the future, the officers were uniquely placed to provide the input that suppliers have consistently sought from DVD.

Major General Wilks has been involved with DVD for several years and has seen the benefit it has had on building relationships and developing equipment required by the UK's Armed Forces. He said: "This is the tenth DVD at Millbrook Proving Ground in Bedfordshire. I think it's delivered real benefits to our campaigns in Iraq and Afghanistan, helping to ensure that the innovation, technology and capability that has gone into protecting mobility vehicles particularly has been thought through and integrated effectively, and DVD has had a huge part in delivering that."

Over the last decade, the Army's vehicles have changed dramatically, not only to counter the threats posed by

operations in Iraq and Afghanistan but also to incorporate the latest technology.

Launching the event, Minister for Defence Equipment, Support and Technology, Philip Dunne, said: "Operations over the last 10 years have demanded that our vehicles were created or adapted to suit the challenges our Armed Forces faced in two very different campaigns. Through the ingenuity and dexterity of UK industry our troops have been provided with the high-quality, battle-winning equipment they needed.

"My challenge to industry for the next decade is maintain the drum-beat of innovation that has underpinned the delivery of capability we're celebrating today as we transform our support to deliver the Army of the future under Army 2020."

For the first time, DVD13, the UK's biggest military vehicle demonstration, was hosted jointly by Army headquarters and DE&S Land Equipment.

The partnership highlights the new capability role taken on by the Army as part of Defence Transformation and the challenge of enabling the delivery of Army 2020.

Director Logistics, Support and Equipment for the Army, Major General Paul Jaques, explained: "We've always been involved, but the difference this year is this is the first year that the Army formally has received the responsibility



Picture: Andrew Linnett

**Director Land
Equipment, Major
General Carew Wilks**



Picture: Andrew Linnett

**DVD showcases the best
land equipment available**

for budgeting and looking after its own equipment programme. That's a key change to our responsibilities. We've always been involved as users, but this year we've become the 'customer' with money."

Philip Dunne touched on another aspect of the Army's future: bringing private sector expertise into the Defence Support Group (DSG).

"We've made it clear that we intend to introduce private sector expertise into the DSG and it will be part of the dispositions next year," he said. "We are intending to go through a process to find a private sector owner for that business and complete that transition in 2014.

"Both the Royal Navy and the Royal Air Force have their platforms maintained and supported by private sector

companies and we don't see any obstacle to that happening in the Land domain as well."

The future of the DSG was the subject of much discussion at DVD13 and, as Major General Jaques explained, discussions are the bedrock of the event.

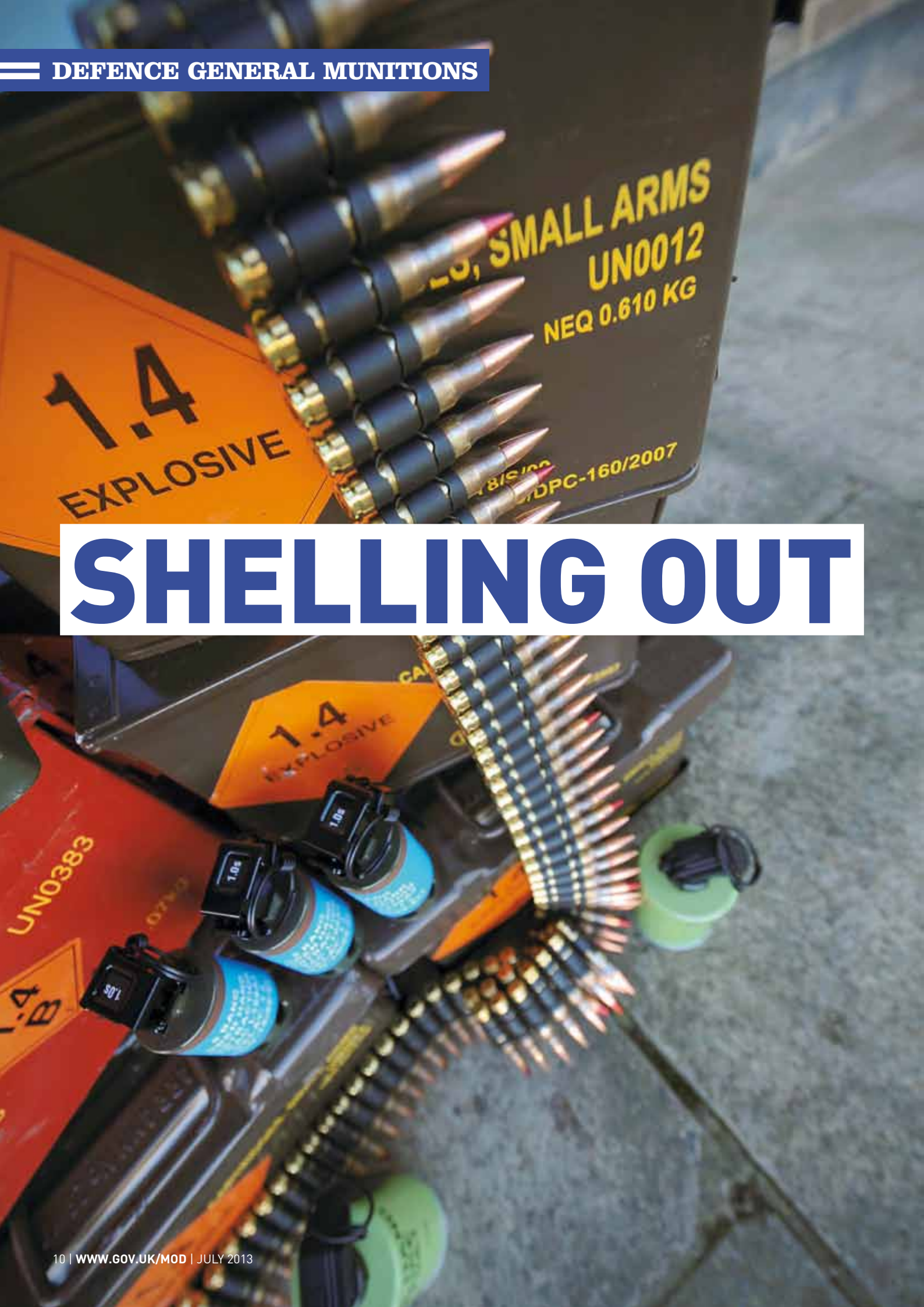
"I get to see more people in three days from industry than I do during the rest of the year put together. My team interface with industry and have discussions either about challenges we've got in service or new things we want to do.

"It gives us the opportunity to also talk with DE&S about how we're going to solve problems or how we're going to bring something in. For us this is a major event to discuss everything we need to with industry." **DP**

Picture: Andrew Linnett



**The new Terrier vehicle had its
first public outing at DVD13**



SHELLING OUT

KEEPING THE SHELVES STOCKED WITH JUST THE RIGHT AMOUNT OF BOMBS, BULLETS, GRENADES AND EXPLOSIVES IS A CONSTANT BATTLE, WRITES IAN CARR

It happens in every household. You get to the end of the week, and you are cursing yourself for buying all those yoghurts you haven't eaten. And despite being determined to keep the housekeeping costs under control, yet again you are pitching out products past their sell by date. Yet for some reason you're out of bread. Again.

Imagine then the housekeeping headaches for those charged with keeping MOD's £40bn inventory under control. Seven per cent of that mind-boggling amount resides in a single project team – Defence General Munitions (DGM), which is part of the Weapons Operating Centre.

Their portfolio includes small arms ammunition, grenades, mortars, demolition explosives, and artillery and tank ammunition. In fact, if it goes bang, whizz or fizz, on land, sea or in the air, the chances are DGM will have a good supply of it. A good supply means exactly the right amount, not too much, and not too little. One universal rule of thumb is that your soldier must never run out of reliable bullets.

"Supplying safe and suitable munitions to meet operational and training requirements while reducing your spend and using up your stockpile holdings means striking a very fine balance," said DGM's Colonel Richard Aspray. "Buy too much and your stockpile goes up, buy too little and you risk putting personnel in danger of running low at a critical moment."

Getting this balance right means working closely with front line commands to sort out requirements, and with key suppliers to ensure that delivery dates are right. Unlike running short of milk, you can't just pop to the shops for a box of bullets.

Starting this year, DGM will be following a simple strategy: saving on spending by, wherever possible, using up stockpile items before placing any new orders, keeping storage costs down by managing stock levels, and maintaining a sustainable supply chain so when ammunition does have to be ordered everything goes as smoothly as possible.

The strategy may be simple, putting it into practice is a little more complicated. For example, although the need to buy more bullets has reduced for 2013 – the drawdown of troops in Afghanistan means that orders for the next tour are down by 50 per cent compared to the two previous Herrick requirements, there are committed purchases in the system based on previous estimates. "Smoothing out that imbalance will mean renegotiating with the suppliers,

which will take between 12 and 18 months," said Colonel Aspray.

And it's not just a problem of controlling stock volume, the value on the books is also important. It is estimated that this year purchases will reduce by £170m, and the 10-year forecast will see a reduction of about £1.3bn. But accounting requirements demand that every year the whole stock must be revalued, to establish the cost of replacement. The result being that, irrespective of its age, the value has increased by several hundred million pounds over the last few years. "Even before any new stock has been added," said Colonel Aspray.

NEW THINKING

So the need to shrink the stockpile has led to DGM adopting the mantra 'Reduce, Reuse and Recycle'," said DGM's Major Stanford. "And with inventory returning from Afghanistan and from Germany, we've added rethinking conventional wisdom and redeployment to that mindset."

Rethinking requirements goes hand-in-glove with reducing the stockpile. Answering questions such as 'does defence really need 21 different types of smoke grenade' can have a significant impact. With the help of capability directorates, the range of requirements is being condensed. As a result, over the last year, 100 different types of ammunition have been removed, leaving around 800 explosive lines in the inventory.

During the last financial year, not only has DGM achieved a very challenging disposal target, reducing the inventory by £250m, but they have also delivered a difficult urgent operational requirement by installing at Camp Bastion a small arms ammunition incinerator to destroy a backlog of unserviceable bullets.

In fact the achievements of DGM have been so impressive that the team has won a commendation in the Chief of Defence Materiel's annual awards.

But surely shovelling batches of bullets into a fiery furnace is wasteful isn't it? Well, it may come as a surprise to some that ammunition, like any other perishable item, has a shelf-life. The propellant in them perishes. And the life of a bullet in theatre, even if it hasn't been fired, is a tough one. Rattling around in magazines, being loaded on and off helicopters and being exposed to the harsh environment takes its toll. So when a bullet goes past its use by date it has to be disposed of, as only the highest

levels of quality assurance and safety will do. When a soldier fires a bullet, he needs to know it's going to go where he is aiming.

Work is also underway to look at how that shelf-life can be increased, which could save MOD around £100m each year. And even when redundant ammunition is destroyed it is not a complete loss to MOD's coffers. The valuable elements are recovered from the incinerator based at Camp Bastion. Four hundred tons of brass ammo casings have been salvaged, reducing costs by around 35 per cent. Unserviceable ammo, which is disposed of at the Nammo facility in Sweden, is also processed, so that more than 95 per cent of the entire item is recycled, helping to further reduce MOD costs.

There are other reasons too that items might need to be taken off the shelves. "New international legislation prohibiting the use of extended range bomblet shells meant that stocks had to be destroyed," said Major Stanford. "And changes in the nature of threats facing the Armed Forces means that we no longer need large quantities of bar mines to ward off marauding Soviet tanks."


So, employing the new rationale of rethinking conventional wisdom meant, rather than destroying them, a new use was found for them. "Some of the bar mines are being used in Afghanistan to breach compound walls, or as a means of destroying unserviceable stocks in demolitions," said Major Stanford.

LIMITED OPTIONS

But in truth, there are limited outlets for reusing ammunition; after all, it does tend to be designed with a specific use in mind. "It's not often that you see explosives or munitions on eBay," said Major Stanford.

One avenue being explored by the Disposal Services Authority is selling surplus ammo back to the manufacturers.

And there has also been a good deal of success in recovering and refurbishing used metal ammunition boxes rather than buying new ones, which saved MOD an estimated £13m last year.


All of which proves that while DGM will continue to make sure that the Armed Forces' stockpile of ordnance and ammunition gives sufficient bang for the taxpayers' buck, this year has shown that they are also doing a fine job in getting plenty of bucks for the unwanted bangs as well. And if that isn't rethinking conventional wisdom, then what is? 

FUTURE RESERVES 2020

PLANS FOR THE FUTURE RESERVE FORCE 2020 ARE REVEALED

Better benefits, more security, and more support for reservists and their employers are key pillars of the Reserves White Paper, unveiled earlier this month by the Defence Secretary Philip Hammond.

The new relationship set out in the white paper 'Reserves in the Future Force 2020: Valuable and Valued' is intended to be a significant step forward in the plans to create a new, fully integrated Reserve Force that is well-trained, well-equipped and well-funded. The raft of measures are aimed at growing the UK's Reserves to around 35,000 across all three Services and giving crucial support and incentives to reservists, their families and employers.

The Territorial Army will change its name to the Army Reserve to better reflect its enhanced role and its full integration into the Whole Force. £80 million will be invested in the Army Reserve estate to accommodate the larger numbers, with £110 million invested across the tri-Service Reserve estate. 



FOR RESERVISTS, THE MEASURES UNVEILED INCLUDE:

- the introduction of paid annual leave when training as well as when on operations
- for the first time, generous Armed Forces pension entitlements, when training and on operations, under the Armed Forces Pension Scheme, are to be introduced in April 2015
- better training and access to the equipment used by their regular counterparts
- access to key defence health services when training and on operations
- transferable skills and academic qualifications
- an Army Reserve training commitment of around 40 days per year, up from a current average of 35
- legislation to ensure access to employment tribunals in unfair dismissal cases against reservists, without a qualifying employment period

EMPLOYERS WILL ALSO BENEFIT. THERE WILL BE:

- a £500 per month, per reservist, financial award to small and medium enterprises on top of the allowances that are already available when their reservist employees are mobilised
- more notice so employers are able to plan for the absences of their reservist employees
- greater recognition for leading supportive employers
- a national relationship management scheme to strengthen relationships with larger employers



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HELMAND'S GREAT BIG KIT INSPECTION

COMMANDER JOINT FORCE SUPPORT TALKS ABOUT SORTING OUT EQUIPMENT IN AFGHANISTAN. REPORT IAN CARR



Job done: a Royal Air Force Merlin helicopter being packed and secured in a C-17 Globemaster aircraft

Picture: Sergeant Barry Pope RLC

As UK bases close or are handed over to Afghan National Security Forces (ANSF) in Helmand province, and the number of British troops reduces, so the associated kit and equipment is being prepared either for removal from theatre, or for its next role.

A large proportion will return to UK units or specialised military storage, but not all of it. "Although this is the biggest physical task in Helmand, current operations are still the main effort," said Brigadier Duncan Capps, Commander Joint Force Support up until June.

Although the nature of the operation is changing quickly – of the 137 UK bases operating at the height of the conflict, now, in central Helmand, there are only 13 remaining – Brigadier Capps maintains that the logisticians in Helmand are coping very well. "The theatre is mature so we understand it. We know what people require. We are reducing the capacity, using

up the stocks, but we are doing that without reducing capability."

Achieving this stock reduction without weakening the necessary support to the operational effort has been challenging, and perhaps even unprecedented. But thanks to long term planning, things are going well. "Even when we were creating Camp Bastion we were designing it thinking about how we would eventually move out," said the Brigadier. An £11m infrastructure now exists to process equipment on an industrial scale, preparing it either to be returned to the UK in the best possible state, for re-issue or for sale, disposal or gifting to the ANSF.

The process is a painstakingly thorough one; vehicles are bio-washed to Defra standards, containers are repaired and unserviceable ammunition is incinerated, although 400 tons of brass ammo casings have been salvaged, along with 100 pallets of ammo boxes valued at £250,000.

With 99 per cent of the vehicles earmarked for return to the UK, it's a massive, but not overwhelming, task. During the period from 1 October last year to 1 June 2013, 625 vehicles were returned to the UK, with another 300 ready to make the trip. By the end, 2,720 vehicles will have been sent back to the UK.

"Only the white fleet, such as the land cruisers used as taxis inside main bases, will be left behind. At the the end of June we had sold about £250,000 worth of them," said the Brigadier.

"We are leaving the more simple kit that makes a huge difference to the ANSF and which will give them an edge over the insurgents, such as night-sights and Vallon mine detectors.

"The elegance with which we leave Afghanistan will be a measure of how good this operation has been, and I'm happy to say that, on that metric, we are in a very good place," said Brigadier Capps. **DP**

INFERNAL MACHINES



Next step: the Vallon man "sweeps" the ground and the walls making sure the route is clear of IEDs

Some call them the perfect soldier. They never sleep. They don't need feeding. Permanently on duty, they can wait patiently for years, until it is time for them to act. And when they do, in an instant they can change lives, causing confusion and destruction. Over the last decade the improvised explosive device (IED) has become the insurgents' weapon of choice and entered our lexicon of evil.

But beyond tabloid headlines, what do we really know about these devastating devices, which have in fact been around for more than a century?

This month the National Army Museum (NAM) launches a gritty and thought provoking exhibition, scraping away the surface to reveal the truth about the IED, its

history, the people who plant them and why, those who search for them, and those who must deal with their awful consequences.

Amy Cameron, the museum's education officer, whose idea it was to put on the exhibition, told *Defence Focus*: "The use of IEDs has created a legacy for today's generation of soldiers, and the impact will continue for many years to come. They have changed modern conflict, and their use will continue to spread throughout the world in the future. This exhibition highlights the experiences of the men and women who deal with these devices. The stories they tell reveal their dedication, resilience and courage in ways that are moving, humorous and inspiring."

With unprecedented help from military

and medical experts, "Unseen Enemy" bristles with fascinating, sometimes spine-chilling, things to look at and learn about.

Major Eamon Heakin, an ammunition and explosives disposals expert from the Royal Logistic Corps, was one of the advisers. "There are so many different stories to tell," he said, "everything from the search dog at the front of the road party to the EOD (explosive ordnance disposal) operator who finally advances to deal with a device. And there's logistics too, getting all the stuff into place can be just as big a headache as actually dealing with the IED. Really it's a story about teamwork. Without all the different people doing their jobs, you can't achieve anything."

The exhibition is very interactive. For

WHEN COLONEL VIVIEN MAJENDIE DISARMED A CLOCKWORK EXPLOSIVE DEVICE IN LUDGATE RAILWAY STATION IN 1884 HE DESCRIBED IT AS AN INFERNAL MACHINE. IT WAS THE BEGINNING OF A STORY NOW BEING TOLD IN A NEW EXHIBITION AT THE NATIONAL ARMY MUSEUM, WRITES IAN CARR



Picture: Sergeant Alison Baskerville

example, visitors will have the chance to put themselves in the boots of the troops by walking down a simulated Afghan street seeded with hidden devices. Having first learned a bit about what the troops call “ground sign”, those things that warn you that something is not quite right, you set off on your short patrol. Deciding what is innocent, and what is not, means that each adrenalin-filled step could be your last.

And although you won’t be doing it in 50-degree heat while carrying 50kg of kit, there is still a good chance that you will feel a trickle of sweat running down your spine.

“We have included enough elements to indicate that every step counts, you can’t switch off, and you can’t have a bad day,” said Amy. At the end you get to see all the

things you should have spotted. Anything less than 100 per cent is a fail. Which illustrates another aspect of the bomb maker’s trade. Why is he doing this?

When an insurgent lays an IED, his intention isn’t just to blow people up. He also wants to slow things down, create doubt and disrupt the normal pattern of local life. Planting IEDs in fields, ditches and paths means that civilians can’t farm, or go to market, or tend to their daily business. And if a soldier finds one he asks himself ‘why have they chosen this place?’

For the inexperienced, every pebble can become suspicious. “I think that’s one of the biggest challenges that soldiers face. Because, if you approach everything in that frame of mind, it means that you don’t get

your job done,” said Amy.

It is a grim game of cat and mouse where the insurgent and the soldier are constantly trying to stay one step ahead. “So we do take a good look at the complexity of the attacks, and we look at how the military develop their tactics and training to counter those developments,” said Amy.

This was another area where Major Heakin’s help was indispensable. He said: “We’ve spent hours listening to interviews, looking at equipment and videos and talking to capability staff officers right from the start to make sure we are being as open as we can be without compromising security.”

“What has been so amazing for me,” said Amy, “is just how young some of the troops are who do this job. They have

IED EXHIBITION



Picture: Sergeant Martin Downs RAF



Picture: LAI/Phot Dave Hillhouse



Picture: Sergeant Martin Downs RAF

to juggle all this information with such intelligence. They have to balance all these complexities and they do it with such grace. They tell me they are nervous at first especially if they are the Vallon man (the individual selected to go ahead with the mine detector). But their confidence soon builds and they are quick to point out that they get so much training, the quality of which is second-to-none."

The reality of IEDs is a gritty one, and it's one that the museum does not shrink from telling. "Our displays don't pull any punches," said Katy McMullen, NAM's marketing and communications officer.

"There is a medical section with some graphic things on show. We suggest to visitors that, if they are sensitive, then this is a display that they should approach with some caution. But you can't tell a story like this without telling all aspects of it."

It is Major James Salt from the Royal Army Medical Corps who gets the credit for doing all the running around to tell this side of the story. "Knowing what things to include from the initial point of wounding, throughout all the stages of the medical journey to recovery, was straightforward. It was getting hold of kit for the exhibition and rounding up willing but busy people to relate their stories to Amy that was time intensive," he said.


Thanks to Majors Salt and Heakin, it is the product of these interviews with personnel who have an IED story to tell that sets this exhibition apart. Over the last 12 months, Amy travelled to military bases all over the UK to talk to them. "It is the strongest way of getting it across. Yes we have to interpret objects and write captions in order to get a narrative going, but it's the soldiers' voices that really portray the experiences which people can relate to and get some understanding of the emotions, camaraderie and the brotherhood. Their voices are far more powerful than any words on a panel."

The displays range from technically advanced counter-IED equipment to the ingeniously simple and fiendish examples of devices that have been constructed from everyday items. "We have some personal objects too. And some really cool scientific gadgets where we talk about advances in technology and innovation. We have built a prosthetic man from artificial limbs, eyes, hearing aids, colostomy bags and even prosthetic testes to show the complexity of injuries caused by IEDs," said Amy.

And then there is combat monkey. On loan from Corporal Leigh Charlton, who operates the explosive ordnance disposal team's remotely-controlled vehicles, combat monkey is a team mascot who

has been on many deployments earning respect, and his own badge, combat jacket and helmet, from both British and American troops.

Like many of the individuals who have played a central role in the exhibition, Corporal Charlton won't be able to attend the opening party as he is on another tour. But this time he is in Camp Bastion, which is why combat monkey can continue his period of R&R at the museum.

"These guys are amazing and inspiring," said Amy. "To think that they come through the most challenging experiences that a human being can face, deal with it and then go out and do it again. That's pretty extraordinary." 

Unseen Enemy runs from 19 July to 31 March 2014. Entrance is free - www.nam.ac.uk/unseen-enemy

combat monkey



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FLYING VISIT

DEFENCE SECRETARY PHILIP HAMMOND'S 48-HOUR TRIP TO AFGHANISTAN COMBINED TOP TALKS WITH MINISTERS AND MEETING TROOPS WITH MAJOR ANNOUNCEMENTS, REPORTS LORRAINE MCBRIDE



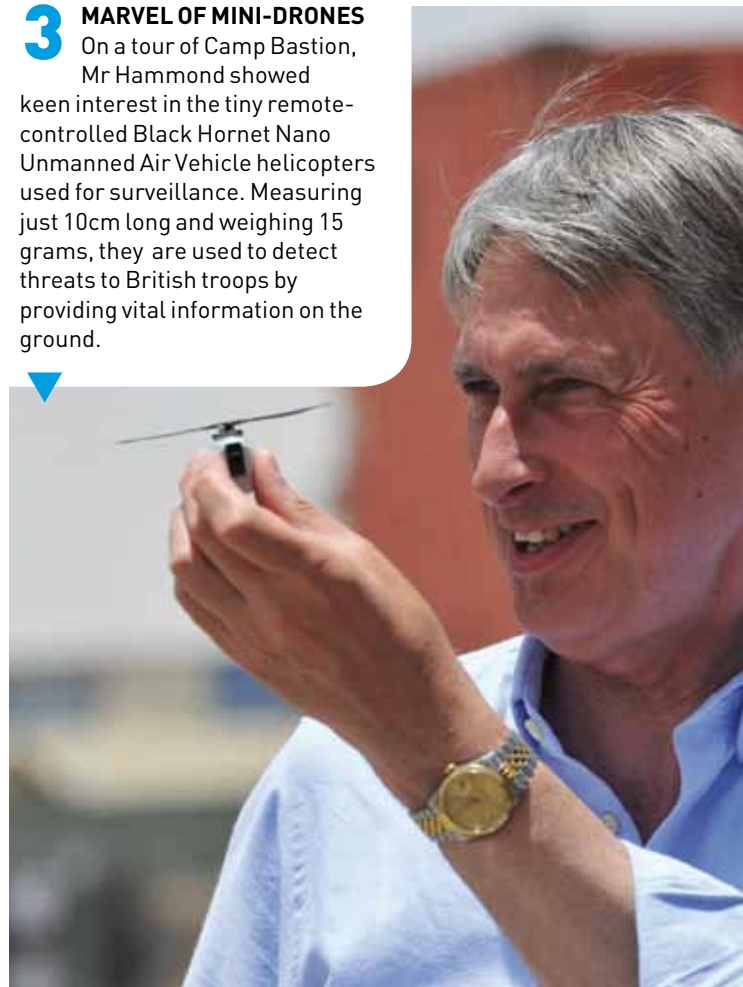
2 KIT AND CABOODLE
Mr Hammond visited the Headquarters of Joint Force Support (Afghanistan) where he was briefed by the Commander, Air Commodore John Bessell, as the redeployment of British vehicles and equipment from Afghanistan ramps up.

As UK bases close in Helmand province, or are handed over to the Afghan

National Security Forces, and the number of British troops fall, their equipment is prepared either for removal from theatre or made ready for their next role. It's a phenomenally complex planning exercise that tests even hardened 'loggies' but, speaking later, Mr Hammond said he was "encouraged" that progress is not just on track but ahead of schedule.

3 MARVEL OF MINI-DRONES

On a tour of Camp Bastion, Mr Hammond showed keen interest in the tiny remote-controlled Black Hornet Nano Unmanned Air Vehicle helicopters used for surveillance. Measuring just 10cm long and weighing 15 grams, they are used to detect threats to British troops by providing vital information on the ground.



Main picture: Paddy Jackson. Other pictures: Corporal Si Longworth RLC

1 AFGHAN ARRIVAL

After a marathon 3,691-mile journey, getting down to work on the plane, Philip Hammond touched down in Kabul. Wasting no time, he met Afghan President Karzai, Defence Minister Bismillah Khan Mohammadi (see left) at the Afghan MOD, as well as commanders and troops, to discuss the transition of security responsibility to Afghan forces. He also visited the site of the Afghan National Army Officer Academy. Verdict: "Very impressive!"



4 TRANSPORTING THE TRANSPORT

Behind SofS is the new \$11m "bio-wash" facility created to wash down military vehicles on an industrial scale, preparing them either to be returned to the UK, or made ready for reissue, sale or disposal. The redeployment of equipment is a painstakingly thorough process – vehicles are bio-washed, which can take up to 24 hours to rid them of any insects, containers are repaired, and redundant, low-value ammo incinerated.



5 MAN ON A MISSION

Mr Hammond met the Provincial Reconstruction Team's head of mission, Catriona Laing, in Lashkar Gah and Brigadier Rupert Jones, Commander of Task Force Helmand, to discuss progress of the mission. Here, SofS announced that the HQ of the Task Force will move from Lashkar Gah to Camp Bastion this summer. The relocation is in line with the drawdown of UK forces as the Afghan forces take on the operational lead for all security operations across Afghanistan.

6 AFGHAN ARRIVAL

The whistle-stop trip is Philip Hammond's fifth visit to Afghanistan. Below he meets Brigadier General Sherin Shah, Commander of the Afghan Army's 3/215 Corps. In their hour-long meeting the pair discussed security progress over Afghan tea.



7 TALKING TO TROOPS

Despite working a minimum 18-hour-day, SofS always makes time to squeeze in an informal lunch in the canteen in Camp Bastion to meet troops from across the ranks.



DISTANCE LEARNING

SERVICE CHILDREN'S EDUCATION TEACHERS ON THE CHALLENGES AND BENEFITS OF PROVIDING SCHOOLING IN THE FALKLAND ISLANDS

For Service families a tour of duty 8,000 miles from the UK on a windswept island in the South Atlantic might not be a first choice when it comes to their children's education. But as Zoe Jagelman and Sally Forrest of Service Children's Education have shown, distance and the scarce resources available on a remote island are no barrier to a stimulating and valuable educational experience for children as well as their parents.

Mount Pleasant School occupies purpose-built facilities in the heart of

the base. It offers primary education for Service personnel and civil servants' families, an increasing number of which are on continuity tours of a year or more in order to reduce loss of corporate knowledge through frequent changes.

But, the school is still very small compared to UK standards, with a total roll of just 50 pupils including the nursery and 30 from reception age and above.

For Zoe Jagelman, a Key Stage 2 teacher of seven to 11-year-olds this is nothing new as she trained in a small school in Cumbria prior to joining Service

Children's Education. Eighteen months into a three-year extended posting to the Falklands, Zoe can however see real benefits to school life here.

"It is a very well-resourced school and there is a very good teacher-to-pupil ratio down here," she explained. And of course the remote locations mean there's no ready stock of supply teachers so the team has to be well-resourced in terms of teachers to fill any potential gaps. "We have to be able to cover ourselves," said Zoe, "which is a big difference to schools I have worked in,

**An austral education: pupils
explore Bertha's Beach**



in the UK where it is just worked out on the number of children. It's good teaching with such small numbers; it provides a very high quality education."

Moving to such a small school can be something of a culture shock to some children who are used to having daily interaction with dozens of children.

"Children come and go every few weeks," explained Sally Forrest, deputy headteacher of the school.

"Someone will arrive or someone will leave. But they kind of get used to that – the children get very excited when a new child arrives. They tend to settle in really quickly. You notice that the children tend to get on and make friends rapidly."

Sally was herself educated at Service schools as a child so she's in a good place to understand the difference from "normal" school culture. "You come a week after a child arrives and it is very hard to tell that a child is the newest pupil – but of course often by then they are not!"

Technology helps the children keep in touch with old friends and family back home and also means the teachers don't miss out on the peer support network of other teachers.

"When I did my teacher training there was a network of other people locally doing their training and there was access to courses," Zoe said.

"Down here we have to be a bit more creative about how we manage to do that so we use video conferencing and things like that to partly overcome the problem of distance."

For the teachers the challenges largely revolve around the need to plan ahead. Mostly this is just practical things you take for granted living in the UK. "The fact that we are 8,000 miles away means you can't just nip into Tesco on the way to school and get something that you need," said Zoe.

"Stuff won't be delivered three days after you have ordered it so we have to plan quite a long way ahead for resourcing the school. And it is hard to predict how long stuff takes to arrive down here."

When it comes to being creative with teaching, the rich environment on hand in the Falklands certainly makes life easier for the teachers. The school recently embarked on completing a John Muir Trust award, a charity based in Scotland which sets the challenge to discover, explore, conserve and share a wild place.

"We took the whole school down to the beach to start on the topic and right on cue dolphins and sea lions turned up as well as a few penguins," said Zoe.



Penguin News: children study some local wildlife

"The kids loved it. They can become really quite expert on the wildlife here by the time they leave. The opportunities to get out and about with their families are brilliant."

The teachers also say that the close community both on base and within the Falklands as a whole really helps in creating opportunities for stimulating and unusual experiences for the children and regularly work with other schools on the islands.

"We have also been on trips down into Port Stanley to mark the 30th anniversary of the conflict last year," Zoe said. "We went to Government House to be shown around and spoke to people first-hand who had been children when the conflict had been going on."

The small tight-knit population means that those sorts of opportunities

are so easy to arrange and people are willing to help give the children the best experience of being in the Falklands. "We even had one of the previous search and rescue officers develop a whole maths day for the children and show them how they use maths up in rescue exercises."

"There are lots of opportunities that we can make use of and I think we get to do more even than military schools in other places such as Germany and the Netherlands because of the closer community and fewer numbers, people can just manage to do it."

Far from the remoteness being a barrier to education, the commitment of the teachers to find opportunities to enrich the curriculum more than make up for the fact that there isn't an art gallery around the corner to go to. **DF**



Beach buddies: pupils compare notes

FORMER YUGOSLAVIA

My first deployment was when I was still under training at Dartmouth in 1993. We spent four months on HMS *Ark Royal* in the Adriatic in support of the Yugoslavian conflict.

My main memory was the efficiency of the carrier team. The deck was always busy with Sea Harriers operating and troop-lifting helicopters coming and going. We saw what everybody did and it was my first exposure to the Sea King Mk4 team, which inspired me to go down that career route later when I qualified as an air engineer officer and pilot.

The Mk4s had an excellent reputation with troops and, if tasked, they did everything in their power to do what was asked of them. It was great seeing the aircraft, meeting the troops who used them, hearing them talk so highly and learning about the Junglies' [aka the *Commando Helicopter Force*] reputation.

SIERRA LEONE

In Sierra Leone, rebels hacked off children's limbs and we saw the evidence in the villages. Yet I'll never forget the trusting welcome that we received from children who had lost their arms or had their eyes burnt out. It said a lot about their character after everything they'd endured that they could be so warm and open with us.

We were based on HMS *Ocean* offshore and out of sight, in support of the Royal Marines. When it's time to do what we need to do, we load up with troops, carry them wherever they need to go, drop them off, bring in supplies and move them around the battlefield.

By then I was co-pilot of a Sea King. Although qualified, it was still very much a learning curve. On my first solo flight, my heartbeat quickened. It's true when people say that operations are what you've



Picture: PO [Phot] Mez Merrill

Multi-medallist: Lieutenant Commander Niall Whitehouse

MY MEDALS

Lieutenant Commander Niall Whitehouse joined the Royal Navy in 1992 aged 18 and has seven medals. Interview by Lorraine McBride.

trained for and really want to do. Otherwise, it's like a fireman never putting out a fire.

NORTHERN IRELAND

In 2002 I supported the police and Army operations during the marching season. On the ground, the marching season is fairly normal for the police but, for someone new, the atmosphere is tense. We'd see groups building up and wonder whether it would turn into riots or pass off peacefully. We'd patrol the skies for surveillance or carry out police and troop moves. By then the IRA violence had died down though there were still bombings.

I have good memories of Ireland. Staying in RAF Aldergrove, it was a small area and you got used to it quickly, so, when I got a call to extract troops or drop them in, I knew exactly where I was going

despite the worst weather conditions.

Based in RAF Aldergrove and Bessbrook it was my first operational job as an aircraft commander. On your first tour, everything sticks with you. It's so reaffirming hearing troops say how glad they are to see the Junglies because our reputation is so strong. I'm still passionate about the Sea King. Nowadays I work in the Sea King project team as an engineer, as the Sea King edges towards retirement in 2016. When that day comes, I'll have a lump in my throat because when you're losing such a capable aircraft, it's very sad.

IRAQ

On Op Telic in 2004 our role was a complete mix. We did all the troop moves, transport and surveillance, and we

also formed the immediate response team. Whenever there was a bomb blast, we'd get a call and be in the cab and off the ground in 10 minutes. My job was to get medics to casualties as quickly as I could so we planned on the hoof, which is always challenging.

All my medals evoke memories, but in Iraq I'll never forget the time a rock got hurled into my aircraft just after we'd taken off. It smashed a hole in the window and hit me on the head, leaving shattered glass on my lap. We couldn't work out whether it was a rock or grenade, which had wedged under my seat. It took several seconds to work out that it was a rock probably thrown by a child. We carried on flying because the conditions meant we couldn't land there and then. Meanwhile, I scabbled under my seat to identify it but my seatbelt locked – quite a comical few seconds!

AFGHANISTAN

In 2010, I was a flight commander based at Kandahar. Compared to Iraq, Afghanistan has a very dramatic landscape. You've got the mountains, the Kajaki Dam filled with turquoise water surrounded by lush vegetation in the green zone, then, a mile away, you're down to desert and sand dunes.

My standout memories are being shot at when we were flying. There were a few rocket-propelled grenades though luckily nothing hit me, but every house has an AK-47 so some shots were 'noise protests' for disrupting their lives. During an attack, we're too busy trying to protect the aircraft to get too worried.

Prince Charles presented my medal. We went to Clarence House as a squadron and the Prince was very friendly, taking time to chat to our families, which was nice. After all, the real worry goes on back home while we're out there doing what we're trained to do.



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 **BOEING**



Picture: Getty Images

SUPPORTING THE FORCES

THE DEFENCE MEDICAL WELFARE SERVICE PROVIDES SUPPORT TO MILITARY PERSONNEL AND THEIR FAMILIES WHEREVER THEY ARE. REPORT BY LEIGH HAMILTON

The word 'welfare' can mean many things. From a 'welfare state' to housing conditions, 'welfare' can be used in many guises.

One clear definition of the word is available from the Defence Medical

Welfare Service (DMWS). They cite welfare as providing practical and emotional support for Service personnel, their dependants and people who work for MOD. And as MOD's medical welfare service, they should know.

After their formation 70 years ago, DMWS developed from the St John and Red Cross funded organisation into a fully incorporated, partially MOD-funded, charity. A total of 44 DMWS welfare officers are now working in 15 locations worldwide, including Germany, Cyprus, the UK and, principally, Afghanistan. DMWS is the only civilian welfare organisation to deploy to theatre – wherever you find the military, you'll find DMWS welfare officers.

The welfare officers' role is to support Service personnel, their families and other entitled civilians when they are in hospital and rehabilitation or recovery centres. In Afghanistan, DMWS staff provide welfare support to those who are injured and in hospital, whereas in Cyprus they look after families and all military personnel.

The teams in the UK focus mostly on Service personnel who have been injured in Afghanistan, with the main team based at the Queen Elizabeth Hospital in Birmingham. This is where welfare officers come to the fore, as DMWS Chief Executive

Welfare Officer Michelle McLaughlin attends to a young girl at the British Army field hospital at Camp Bastion



Nicky Murdoch explains: "My people will be involved in briefing the families and accompanying them to the critical care unit and arranging accommodation in partnership with SSAFA (Soldiers, Sailors, Airmen and Families Association). We generally provide emotional support, physical support, any type of problem solving that is needed when people are at their most vulnerable.

"We've also got a team at the Defence Medical Rehabilitation Centre at Headley Court, so my deployed teams might see someone in theatre who is wounded, they come back to Birmingham, and they might meet up with them again in Headley Court."

The welfare support that the DMWS offers can come in many different guises, from being a listening ear and a shoulder to cry on to a source of information, even making sure that Service personnel have items of clothing to wear. Nicky explains: "We work very closely with an organisation called Troop Aid who provide us with grab bags that contain things like flip flops, a

pair of shorts, underpants, that kind of thing, shaving gear, a comb, so that you've got stuff. They're really little things, but it's important when you're vulnerable."

With over 50 per cent of DMWS's welfare officers coming from a military background, having people who understand the Armed Forces must also be a helpful factor when it comes to dealing with families and patients. Nicky Murdoch herself is a former Army Lieutenant Colonel. She explains: "There's quite a lot of ex-military expertise and I think that's important because we are so closely allied to defence. We've got the language of the medical world, the medical dimension, and we've got the language of the military; we understand the culture and I think the Armed Services is a culture and a lifestyle, it's not just a job."

Welfare Officer Chris Cadman also has military ties. He left the Army in 1998 as a Private and is now a Corporal in the Territorial Army. He says having experience of the Armed Forces is a definite plus: "When you're speaking to a young infanteer as a civilian some lads don't want to talk to you. I can drop in that I am ex-Army, ex-infantry, and then they will speak to me."

As a welfare officer, the most useful skill appears to be communication; when to comfort, when to stand back. Chris has recently returned from Afghanistan and believes that being able to read a situation in difficult circumstances is key to his role. "We do keep an eye on the families, especially the mums. They don't want to eat because they feel sick inside, especially after the first visit to the bedside, which is the hardest.

"We're there with the family and then we make that decision on when we can step back and then keep an eye on them from an arm's distance. If they're having a little bit of a wobble, we take them for a cup of tea,

sit them in our little quiet room, and have a chat. Every family's different and you just have to play it by ear."

Sue Hawkins can testify how useful the DMWS can be. After Sue's son Marine Edward Hawkins was injured in a bomb blast in Afghanistan in 2010, her life became a blur. She says: "The first thing I knew about my son was the knock on the door. It's the biggest shock of your life. You're immersed in this horrendous life nightmare and you're trying to work things out. Nothing is known. It's just a blank. An utter blank.

"I think the non-verbal communication was most effective; I would like to think that they would notice if you were falling downhill rapidly. I think they would and I think they would pick you up. They would notice because I think they're keeping an eye on you."

With perceptiveness, communication and empathy as key skills for a welfare officer, it must take a certain person to be able to do the job. Nicky Murdoch says: "Because you are dealing with people at their most vulnerable, you need to be able to read and interpret signs. You need to know whether to get involved quickly, whether to step back and take a slightly different approach, and communication is without question the biggest skill that you need.

"You can learn about welfare provision and signposting to other organisations that exist, but communication skills, compassion, and empathy are really important parts of a welfare officer's make-up."


With their definition of 'welfare', the DMWS has proved their emotional and practical support to military personnel and their families is invaluable. Sue says: "They always seem to crop up whenever you need them. Our family call them guardian angels on earth because they are just incredible." **DF**

Welfare Officer Chris Cadman (left) has recently returned from Afghanistan



ALL THE FUN OF THE FAIRFORD

WHAT BETTER WAY TO KICK-START THE SUMMER SEASON THAN AT ONE OF THE UK'S MOST EXCITING DAYS OUT?



Sky's the limit: a Polish Air Force MiG-29 will thrill spectators at RIAT on 20 to 21 July

Featuring more than 200 aircraft from around the globe and a massive seven-and-a-half-hour flying display, RIAT is a sheer jaw-dropping spectacle.

During an extraordinary flying display people will see multi-role demos courtesy of the Typhoon, MiG-29, Rafale, F-16 and Gripen, and historic warbirds such as the Vulcan bomber, the Lancaster and Spitfire, and much more.

This year's Air Tattoo event will salute the 70th anniversary of the Dambusters' raid, one of the Second World War's most daring bombing missions, which will be commemorated by a special flypast.

Eastern European airpower will also be on show when two of the world's most potent fighter aircraft take to the skies. A legendary Mikoyan MiG-29, from the Polish Air Force, and a Saab JAS-39 Gripen from the Hungarian Air Force have been added to the flying display programme.

The Russian-built MiG-29 is a giant among modern-day combat jets, combining supreme power and agility

with remarkable versatility. Developed in the mid-1970s, in response to a rapid stream of highly-capable new fighters emerging from the US and Europe, the MiG-29 made its first flight in 1977 and joined the then Soviet Air Force six years later. It has since been acquired by many other nations, several of them in eastern Europe, including Poland.

Other highlights include two iconic American warbirds rarely seen in the UK and some of the world's greatest aerobatic display teams including the Italian Frecce Tricolori, the barnstorming Breitling Wingwalkers and, of course, the legendary Red Arrows aerobatic team.

This summer will also see three exciting new zones unveiled on the showground – the Vintage Village, the Techno Zone and the Adrenalin Zone, each offering a range of dynamic, ground-based entertainment and hands-on activities for all the family. **DP**

The RIAT takes place at RAF Fairford on 20-21 July. RIAT offers discounted tickets to all members of MOD. Simply register at www.rewardsforforces.co.uk to access the unique discount code. Or visit www.airtattoo.com for details of the show.

The Royal International Air Tattoo (RIAT), the world's largest military air show, has rightly earned its world-famous reputation as one of the UK's premier outdoor family events.

Held on 20 to 21 July at RAF Fairford, Gloucestershire, few events can rival the intensity and drama on offer with an extravaganza of entertainment.

Alongside the dramatic flying action, visitors will be treated to non-stop entertainment on the ground – so, whether a wide-eyed first-timer or a seasoned air show veteran, the experience promises to be breathtaking.

Aviation history



The graceful Super Constellation dominated civil aviation in the 1950s

Dutch derring-do



The Royal Netherlands Air Force F-16 demo team will be performing

Dambusters commemoration



This year's Tattoo will salute the 70th anniversary of the legendary Dambusters Raid



AIR TATTOO FACTS

- A team of around 3,000 volunteers – ranging from air traffic controllers and aircraft engineers to medics and firefighters – provide the backbone of the Air Tattoo
- More than 15,000 packed meals are produced for volunteer staff during the air show
- More than four miles of fencing and barriers have to be erected, 31 miles of rope staked out, and 10,000 cones laid out on the airfield for routing vehicles and static aircraft
- 535 aircraft attended the Air Tattoo in 2003 leading to it being officially recognised as the "world's largest military air show" by the Guinness Book of World Records

Army Air Corps Apache AH1



Designed to hunt and destroy tanks, the Apache is currently deployed in Afghanistan

Aerobatic thrills and spills



One of the highlights of the event promises to be the Italian Frecce Tricolori

WHAT IS ANAEMIA?

IF YOU'RE PALE, LISTLESS OR SHORT OF BREATH, YOU COULD BE SUFFERING FROM ANAEMIA. BUT THE GOOD NEWS IS THAT IT'S TREATABLE



By Surgeon Commander Nick Imm, a GP at Navy Command HQ, HMS *Excellent*.

Hello from Whale Island in Portsmouth. Wherever you are, I hope you're having a good summer.

This month, I thought we'd talk about anaemia. First, some science: blood is made up of three types of cell – red blood cells, white blood cells and platelets. The red cells carry oxygen, the white ones fight infections and the platelets form a clot if you cut yourself.

Haemoglobin is the chemical inside red blood cells that actually carries the oxygen (and which makes the cells appear red when it's holding that oxygen). Someone is anaemic if they don't have enough red blood cells or if their red cells don't contain enough haemoglobin.

You've probably heard someone described as "looking a bit anaemic" if they're rather pale. They might also feel quite tired as their body isn't getting as much oxygen transported in the blood as usual. They may occasionally complain of feeling dizzy, short of breath or having palpitations and headaches – all due to a lack of oxygen-delivery by the blood.

So, why do people become anaemic? To make red blood cells and haemoglobin, you need a regular supply

of iron and certain vitamins. If you don't have enough of these, anaemia will follow. The average diet in the UK contains iron in lots of foods – it's present in leafy green vegetables (such as watercress), iron-fortified cereals, meat, beans and apricots.

In the UK, the commonest cause of anaemia is iron deficiency. This can occur if:

- there's not enough iron in your diet for your body's needs – especially if you're pregnant or growing fast
- your iron isn't absorbed properly from the gut
- you are female and have heavy periods – as you will lose iron in the blood
- you have any bleeding in your intestinal tract, for example from a stomach ulcer

Other causes of anaemia can be folate or vitamin B12 deficiency due to poor diet or poor absorption.

There are also inherited types of anaemia such as sickle cell or thalassaemia – these are due to problems with the formation of new red blood cells in the bone marrow. The cells are abnormally-shaped or carry faulty haemoglobin.


Some people who have serious,

chronic medical conditions, such as kidney failure, can become anaemic too.

If your medic or GP is concerned that you may be anaemic, a simple blood test is all that is required to start with. The result will be back from the lab in a couple of days and treatment of the condition will depend on finding out what's causing the anaemia. For example, if you're pregnant you may need to increase the iron in your diet with a supplement. In the case of a stomach ulcer, you may need an endoscopy (camera) examination of your stomach followed by treatment to heal the ulcer.

Sometimes, iron is poorly absorbed due to undiagnosed coeliac disease – and this will require a change to a gluten-free diet. Very occasionally, it can be due to a more serious condition requiring urgent investigation and treatment.

Anaemia is common and can usually be easily treated, rapidly returning patients to good health.

Stay healthy and I'll see you next month. 

■ This is general advice only. If you have any medical concerns please see your medic or GP.

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SUDOKU

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		4	2	3				
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Fill in the grid so that every row, every column and every 3x3 box contains the numbers 1 to 9

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6	1	3	7	4	8	9	2	5
7	5	9	2	6	1	4	8	3
9	2	7	6	3	5	1	4	8
8	3	5	1	2	4	6	7	9
4	6	1	9	8	7	3	5	2
1	7	8	5	9	6	2	3	4
5	9	2	4	7	3	8	1	6
3	4	6	8	1	2	5	9	7

Solution to the June 2013 puzzle

CHESS



Compiled by: Carl Portman

Military logistics is effectively the discipline of planning and carrying out the movement of military forces. Chess is allegedly the oldest war game known to us and is therefore viewed as two armies ready to engage in battle.

In war, troops need supplies, food, materiel, vehicles and other support such as medical. Without logistics no battle could be won. Without logistics no food would be on the shelves in your supermarket.

What of logistics in chess? Well let's talk pawns. All too often I see players pushing pawns into the midst of battle in the vain hope of making it to the queening square. These pawns need support. Not food, not armoury, but their colleagues!

They should not fight alone. Once a pawn is pushed it cannot retreat (unlike real soldiers) so you'd better be sure that pushing on is correct. Pawns are the soul of chess; they need to be nurtured.

Just as a real soldier is recognised for acts of bravery in battle so the pawn can become a queen (or other piece except a king) in recognition of a heroic deed, in this case making it to the eighth rank.



Study the position above where the d-pawn has been supported in its march. This was a game from Alexander Alekhine's exhibition in Trinidad in 1939. He is white to play.

There are a couple of ways to create a big advantage but which is the cleverest and most crushing? A chess book is the prize for the first correct answer drawn.

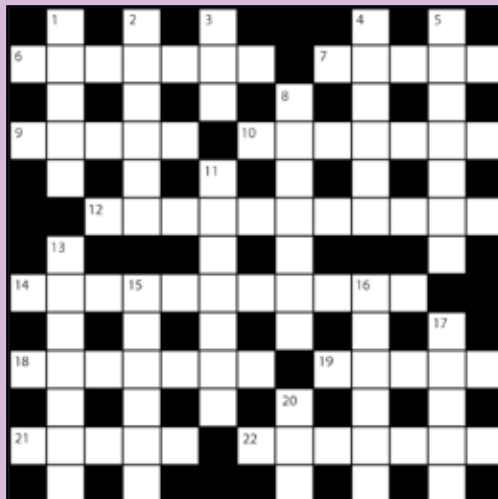
Send your answers to me at carl.portman@hotmail.co.uk please. The answer to June's problem was 1.Qg8+ Rxf8 (forced) and 2.Nf7 smothered mate.

It shows that assets are not as good as position! Winner to be announced. May's winner was Alan Pickles of DSG Land, Donnington.

TOPICAL CROSSWORD

ACROSS

- 6. Blockbuster movie starring Leonardo DiCaprio and Kate Winslet (7)
- 7. And 17 Down. He has replaced Sir Alex Ferguson as Manchester United manager (5,5)
- 9. And 19 Across. Sport played by the British and Irish Lions in Australia this year (5,5)
- 10. Jose Mourinho's new job with Chelsea (7)
- 12. Male tennis player who won the 2013 French Open (6,5)
- 14. He was pelted with eggs during the 2013 final of *Britain's Got Talent* (5,6)
- 18. *The Towering _____*, a disaster movie starring Steve McQueen and Paul Newman (7)
- 19. See 9 Across
- 21. Fruit of the oak tree (5)
- 22. Ronnie O'Sullivan is the dominant figure in this sport (7)



DOWN

- 1. Computer code designed to destroy information (5)
- 2. Surname of Rocky, Sylvester Stallone's film boxer (6)
- 3. _____ *Brother*, the long-running reality television show (3)
- 4. Singer Michael Buble's home country (6)
- 5. _____ *Sam*, the children's television show set in Wales (7)
- 8. *Harry Potter and the Deathly _____*, the

- last book in the series (7)
- 11. Flavia Cacace and Vincent Simone are good at this (7)
- 13. John Smith succeeded him as leader of the Labour Party (7)
- 15. Dermot, *The X Factor* presenter (6)
- 16. Its tourist attractions include Buckingham Palace and Big Ben (6)
- 17. See 7 Across
- 20. Declan Donnelly's presenting partner (3)

SOLUTION (NO PEEKING)

- 1. Titanic 7. David 9. Rugby
- 10. Manager 12. Rafael Nadal
- 14. Simon Cowell 18. Inferno
- 19. Union 21. Acorn
- 22. Snooker
- 1. Virus 2. Balboa
- 3. Big 4. Canada
- 5. Fireman 8. Hallows
- 11. Dancing 13. Kinnock
- 15. O'Leary 16. London
- 17. Moyes 20. Ant

PRIZE

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