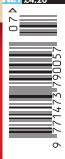
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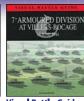
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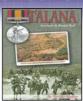
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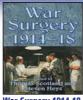
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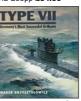
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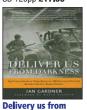


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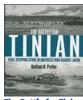
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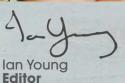
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elcome to the latest feature-packed issue of Military Machines International, and by way of a change the photo choice for my Editorial page this month has nothing to do with any of the articles within this issue, instead it reflects the so-called 'drought' the UK was experiencing at the time I was putting this issue together. The photo was actually taken at last year's Protected Mobility Display in June, but the coming weeks will see the start of the show season proper, and I'm sure we'll all be hoping that the April showers are replaced by blazing sunshine, not least the show organisers! A number of major UK and European shows will have already taken place by the time you're reading this issue, and we will of course be bringing you coverage of some of those shows in future issues,

and talking of future issues, the next issue (August cover date) will be another 100-Page special, following the theme of 'Wheels and Tracks', so I hope you'll join me again next month to read about yet another varied collection of military vehicle related features - Ed.

INTERNATIONAL

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MILITARY MACHINES INTERNATIONAL

(ISSN - 1473-7906), is published monthly by Key Publishing Ltd. PO Box 300, Stamford, Lincs, PE9 1NA, UK and distributed in the USA by Mail Right International Inc. 1637 Stelton Road B4, Piscataway NJ 08854 Periodicals Postage Paid at Piscataway, NJ and additional mailing offices

POSTMASTER:

Send address changes to: Military Machines Int., Key Publishing Ltd., C/o, Mail Right International Inc.1637 Stelton Road B4, Piscataway NJ 08854

DISTRIBUTED BY

Seymour Distribution Ltd., 2 Poultry Avenue, London, EC1A 9PP, UK Tel: +44 (0) 20 7429 4000 Fax: +44 (0) 20 7429 4001

PRINTED BY

Acorn Web, Printed in England ISSN - 1473-7906

www.militarymachinesintl.com

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PUBLISHED MONTHLY BY

Key Publishing Ltd. PO Box 100, Stamford, Lincs, PE9 1XQ, UK Tel: +44 (0) 1780 755131 Fax: +44 (0) 1780 757261



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the fourth of our centrefold photos for you to collect

COMBAT CAMERAMilitary vehicles captured on film by service photographers

MILITARY ROVERPHILE

James Taylor looks at a selection of Dutch military Land Rovers

ON THE SHELFThe latest military-related books and DVDs reviewed

MISSION BRIEFING
The latest military show dates for your diary

World War One BRITISH TRAINING TANKS













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NEWS and REVIEWS UP FRONT

Hello From Jimmy



www.thewarandpeaceshow.com

Skilled and sympathetic restorations are always a pleasure to see, so the work that has just been completed on this GMC or "Jimmy" is a delight to see. CCKW 353 was discovered near Bordeaux, France in the latter part of 2009. A 1943 long wheelbase steel bodied GMC with open cab and winch, it had been adopted by the French Army so had a lot of French modifications. It remained there in stores until the end of 2011 when it returned to the UK for refurbishment at the start of 2012. Now, after only two months of hard work this beautiful American workhorse has been brought back to life.

Owned by Rex Cadman, the GMC now features as part of the War and Peace Collection of historical military vehicles and armour. Rex bought it as: "we had a radio shack in our collection we found back in 1988 in Normandy that would originally have been in the rear of a GMC, so we had been on the look-out for a suitable vehicle for a while. Plus we already have three other GMCs of different types so this one complimented the collection perfectly."

On arrival back in England, the GMC went straight into the workshop to receive the magic touch from Rex's team — headed up by Steve Cobb, where they discovered that it was in fairly good condition with minimal rust. Steve is an expert when it comes to the restorations and has a gift for the amazing. Each of his projects results in a beautiful creation and, having been with Rex since the age of 16, they have built an amazing collection together.

The vehicle went into restoration starting with the basics – a good pressure wash! Having been in French ownership the GMC had lots of extras added that wouldn't have been on the original vehicle in American hands, which is quite common and what you'd expect from a 70-year old vehicle that has seen a fair amount of life, however these had to be removed. In addition the

Pioneer tool rack was sited in the wrong place on the GMC - through previous research Steve knew that it was only post war vehicles that had the tool rack in the back — so this was moved back to the front.

The engine was given a service and the original 6v converted to 12v to give it common voltage to other vehicles. The brakes were seized on mid and rear axles so these were released, before Steve then went over the cylinders, carburettor and air filter.

Once the engine and brakes were fixed, Steve had six of the wheels re-tubed due to punctures – one tube had 12 patches in it! He then gave the body a complete rub down and made repairs to the bodywork, before giving it a full re-spray on the rear body, chassis and cab. This gave it a whole new look and it immediately started looking much happier! A wooden steering wheel was then rubbed down, stained and waxed giving it a nice finishing touch.

The War and Peace Collection has an extensive stock of parts and it was here that Steve was delighted to discover a canvas cab roof and back, leaving him just to order doors from Allied Forces Supplies. He also found a spare .50 cal mount, cradle and ring and through his metal supplier found the correct tube to make the poles. As Steve later said: "I had a lot of pleasure raking through stores and finding parts for it - I was pleasantly surprised as to how much we had!"

The next task was to make Jerry can holders for the front bumper — one of the first GMCs they did had these and the team decided it looked good. Finally the vehicle had its finishing touches

and was stencilled to give a beautifully finished GMC. Now that the vehicle was finished, attention turned to the Radio Shack. This is a portable box with enough space inside for about 3 men to operate it, fully equipped with a complete radio installation that would allow commanders to keep in touch with their ground troops. It had some work done back in 1999 after the roof collapsed and Steve had to restore it. While the GMC was undergoing its work, Steve gave the shack a coat of paint and added markings, fitted some extra parts, then made two new locking brackets and slid it into the GMC, however, when this was done they found they were left with a troop seat, sides and front. Steve was going to use it on one of the next projects, a cab-over engine GMC, however, he found a photo that showed the sides fitted and a purpose-built canvas to hide the fact that it was a radio vehicle. This protected if from German eyes as if it had been identified as a radio device it would have made a prime target.

Now it's finished Steve is justifiably proud of the finished vehicle: "what started as a standard GMC is now quite a rare piece to have in our collection. We are now just rebuilding a Ben Hur trailer to go with it, which was also found down in southern France."

Rex is also delighted with not only the result but with having had another GMC in the workshop: "it is rather a return to the old days — we started by restoring GMCs back in 1988 and since then have always had a special affinity with them, so it was rather nice to have one back in the workshop. It's been around 15-20 years since we did the last one! "





"Restoring the GMC has given us the incentive to tackle one or two of our other soft-skins, we have a GMC cab over engine – a particularly rare vehicle that originally we were offered by a Luxembourg collector. This vehicle was a classic example of 'Buyer Beware' as the seller sent me some black and white photos of the vehicle and when I arrived there I discovered that they had been taken 20 years earlier in Paris and bore no resemblance to the vehicle we had expected to be able to drive home!"

So what's next for the restoration team with the War and Peace Collection? Well many years ago during the heyday of the Budge Collection, through Bob Fleming they purchased a Katyusha. These were often mounted on the back of a Studebaker US6, which had been supplied through the American Lend-Lease programme. Rex had always intended to find a Studebaker to marry the two together, then recently through friends they located one in Australia: "After

swapping some desperately needed Matilda parts, we acquired the Studebaker and with the help of James Shopland, a 40ft container was filled and the Studebaker came home as part of that package. The two pieces now sit in the yard some 100 yards apart, waiting for their marriage. If anyone has any photos of how the two fit together, we'd love to hear from you!"

The newly restored GMC and Radio Shack will be at The War and Peace Show in July - so don't forget to look out for it! The War and Peace Show celebrates its 30th anniversary this year, and is held from 18-22 July at The Hop Farm in Paddock Wood, Kent. Friday 20 July sees the commemoration of the 30th anniversary of the Falklands Conflict with a dedicated veterans' parade and drumhead service.

For more information either call

Tel: 01304 813945

email rex@warandpeace.uk.com or see www.thewarandpeaceshow.com



Military Manoeuvres Show Date Correction

We would like to alert readers to a correction regarding the date for the annual Military Manoeuvres show held at Conwy Touring Park, North Wales. The correct date for this popular military event is the weekend of June 30th & July 1st.

The Military Manoeuvres show features displays of historic military vehicles, various living history displays, battle re-enactments, trade stands, live music, food, drinks, fun fair and much more, making it a great day out for the family.

The gates open between 10.00am and 5.00pm on the Saturday and 10.00am to 4.00pm on the Sunday. For further details see their advert on page 25 of this issue, or visit the website at:

www.militarymanoeuvres.co.uk

Military Vehicle Trust 20,000th New Member

In 2013 the Military Vehicle Trust, Europe's oldest and largest Military Vehicle Club, will celebrate it's 45th Anniversary, but in 2012 it expects to sign up it's 20,000th new member! To commemorate this occasion the Trust will present the lucky new member with a few special items. The MVT's preferred insurance partner Premium Choice, who specialize in military vehicle insurance, has donated a £50

voucher off the first year's insurance. The voucher will have the member's special number and can be retained as a memento. The MVT will return the first year's enrolling fee of £30, and present the lucky person with a signed certificate to confirm their 20,000th membership number, plus a choice of a fleece, pullover or polo shirt with the MVT logo. To join the MVT see: www.mvt.org

Military & Flying Machines Show

The Military & Flying Machines Show held at Damyns Hall Aerodrome in Upminster, on the 4th & 5th August 2012 is the fastest growing military show in Essex and gaining the reputation of a great family day out for the whole family and at a great price. There are over 300 military and classic vehicles booked in, and what promises to be our biggest tank and armoured vehicle line up ever including the mighty "Dragon Wagon" and the "Sherman Ram Kangaroo". We're also very excited to be welcoming something very special from Imperial War Museum, Duxford. You will also be able to see a Schwimmwagen?, German half-tracks, D8 Bulldozer and a great collection of WW2 British heavies including Matadors and

Along with all this there are also 60 plus living history displays, depicting military life from many periods and nationalities and of course arena battles and firepower demonstrations with very loud bangs. We will also have an amazing line of up flying displays from the Flying Fortress B17 along with the fantastic BBMF Lancaster, Spitfire and Hurricane, with the Lancaster attending on both days. A Hurribomber, the Spirit of Kent Spitfire, The Sea Fury and much more, including no less than three WW2 German Luftwaffe aircraft some of whom will be performing an airfield attack on Damyns Hall Aerodrome!

Back by popular demand will be our wonderful live 'wartime' entertainment in our huge marquee all day, including a "Big Band", the "Polka Dot Girls" a salute to the 40's style all girl singing group and "Annie Andrews", our gorgeous 40's pin-up singer, and you can join in the swinging dancing lessons! Meet our Veterans and Chelsea pensioners, see the marching band, experience the flight simulator and wander around our massive militaria fair and family stalls! Attractions include helicopter and tank rides and activities for the kids including mini Jeep, Land Rover and tank rides and a vintage fun fair, in fact there's something for everyone!

For more information and further updates please visit: www.militaryandflyingmachines.org.uk



Studebaker **US6 Trucks**

Shane Hodby emailed us this photo taken on the way to the 33rd GPA swim in at Corowa, New South Wales, Australia in March. Shane sent in the photo to show UK readers how things are done down under and shows three Studebaker 6x6's restored and owned by Peter Gough, Micheal Bishop, Emiel Huizer and Shane Hodby, all members of the Military Jeep Club of Queensland.

The Studebakers are pictured on a 25-metre double trailer set up and towed by a 1987 Mack Superliner that Shane drives for a living. Incredibly the Mack, owned by Shane's boss John Geary,

has over three million kilometres on the speedometer and Shane tells us that it went like a dream during the 2,856 kilometre round trip to the show.

Shane added that the three trucks, which have a combined age of 210 years and have all been restored by their owners, didn't miss a beat while down at Corowa, where there were 187 vehicles in attendance, ranging from Jeeps to Kenworth wreckers.

relatively short 500-mile round trips to shows again! I guess that if you're a military vehicle owner and enthusiast in Australia you have no choice other than to live with the huge distances needed to attend shows around the country, so well done Shane and friends for making the effort - Ed.



Mystery Howitzer

MMI reader Alan Harrison recently returned from a trip through Bangladesh, Sikkim and Bhutan and while travelling to the hotel he spotted a couple of gun boat gate guardians and then caught a fleeting glance of a field howitzer, which he believed to be of WW2 German origin. Sadly he was unable to get any photos, but a few days later his tour bus passed through the town of Bogra where he came across an identical artillery piece. Having sneaked a quick photo from the back window of the bus (hence it's a little blurred), Alan is curious to know why there was an example of the elderly 15cm sFH 18 howitzer in Bangladesh in the first place?

I've done some searches on the Internet and in my various reference books, but can find nothing stating that any of these howitzers were bought or given to Bangladesh, although plenty of countries did use them after the war. Does anyone out there know how the guns came to be in Banaladesh? If so let us know via the usual channels - Ed.



ARMED FORCES WEEKEND 2012 MILLIARY WINGS & WHITELS

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This event aims to be the biggest gathering of Military vehicles and aircraft ever held in the West of London Home Counties, with Flypasts, Displays & Aerobatics alongside Marching Bands and Arena Events, plus, Living History Re-enactment Groups and Military Vehicles of every description.

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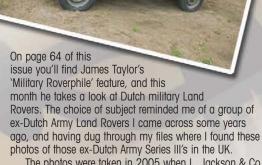
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The photos were taken in 2005 when L. Jackson & Co. held a tender sale, a rare event for the company and one that was well attended by potential buyers. During my visit I spotted the Land Rovers parked in a field alongside a number of British Army Series III Land Rovers, but note that some of the Dutch vehicles were fitted with the same roof racks described in James' article. Some of them were also fitted with a front brush guard, as shown in the one of the photos in James' article. As to whether they're still there I have no idea, but if they are it may prompt someone to try and rescue one or two of them for the future?



Russian Rarity Spotted in Red Square Parade

Regular contributor to Military Machines International, Jim Kinnear, emailed us this photo of an Italian Iveco LMV65 (essentially the same base vehicle as the British Army's Panther CLV) photographed in Russian service taking part in the 2012 Red Square Parade. Jim tells us that this is the first time in post-war history that a foreign AFV has participated in such a parade and therefore is something of a rarity. I noticed that the front winch looks to be different to anything I've seen previously, as is the Russian badge on the front grille. Our thanks to Jim for sending in the photo – Ed.

- Inside Out! Vimoutier Tige

MMI reader Steve Hill emailed in these photos he took while visiting the Vimoutier Tiger a couple of years ago, and thought readers may be interested in them by way of a follow up to our feature in the last issue. Steve tells us he managed to get his hand inside the vehicle to take these remarkable photos that show the state of the Tiger's interior, which is in a bit of a state, but remarkably complete. Our thanks to Steve for sending in the photos – Ed.





Krakow Collection

Regular contributor to Up Front, Des Penny, has sent in a selection of photos he took whilst visiting Krakow in Poland. Des tells us that the photos were taken at Oskar Schindler's factory, which is now a museum housing a number of vehicles and military artifacts, including a Polish-built tankette (shown below left), which Des tells us is nothing more than a shell, missing the engine and all the interior. Des thinks it's a Pz.1Az TK3 model, as produced by state-run engineering works in Warsaw during the early thirties.

Other vehicles found in the museum were a 4-ton Star 27 4x2 cargo truck, first introduced in 1962 (shown bottom right), and a 6x6 crane recovery truck built on a Star chassis (bottom centre), and a collection of artillery pieces and various weapons. Our thanks to Des for taking the trouble to send the photos in - Ed.





Revell New Releases

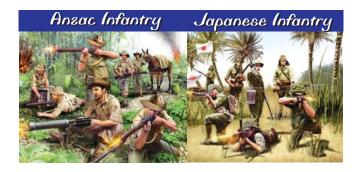
We have another three new releases from Revell this month and the first two are from their popular 1/76 figure range. The first is a set of moulded figures depicting Japanese Infantry from WW2 (Ref 02528) and includes a total of 45 figures shown in a variety of poses with a variety of weapons. The figures are moulded in tan coloured vinyl plastic and require painting, and in some cases require a little assembly too. Painting details are provided on the reverse of the carton, with paint numbers relating to Revell paints.

The second set of figures accompanies the Japanese Infantry being a set of Anzac Infantry (ref 02529). This time there are 42 figures, but a total of 50 parts due to some items requiring several parts. The figures are also moulded in the same tan-coloured vinyl plastic with painting instructions supplied on the reverse of the carton and a box top illustration to refer to on the front. Both sets of figures are available from all good toy and model retailers.

The final release this month is perhaps of more interest to readers in that it's vehicle-related, depicting the German WW2 Sd.Kfz.9 FAMO half-track with artillery piece in 1/72 scale. The Revell kit of the FAMO has been around for a little while, but having received universal praise for its quality of detail and build this is no bad thing, but this new, boxed set combines it with a towed howitzer and the kit allows the builder the choice of building either the 17cm or 21cm howitzer. Optional parts for the different barrels and wheels are provided, with both the FAMO and howitzer moulded in sand coloured plastic with a superb level of surface detailing, plus the gun can be depicted in travelling or firing mode. A small decal sheet and even a sheet of clear plastic (which is way too big) for the windscreen on the FAMO is also provided and alternative camouflage schemes are described at the end of the 20-page instruction booklet. All in all a great little model of a popular subject.

Revell model kits are available from all good toy and model retailers. For further information visit: www.revell.eu







ACE TRUMPS Cards



Cartamundi, manufacturers of Ace Trumps gaming cards recently released some new sets that will appeal to fans of military machines both young and old. Fans of these cards can play and collect, with the new releases covering 'Tanks', 'Military Vehicles' and 'War Ships'. Each full colour 33-card set features a variety of equipment within the particular theme, which in the case of the 'Tanks' set includes the likes of the British Challenger 2 MBT and many other modern battle tanks from around the world and each set comes complete with plastic storage case to keep the cards safe.

The sets cover modern military equipment rather than wartime equipment, and offer kids (and adults) a chance to learn all the key stats on their favourite bits of military kit while playing an enjoyable game that can keep them occupied for hours! Each set retails at £3.99 in the UK. Ace Trumps are available from all good retailers or for further information visit: www.cartamundi.co.uk











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Open DOUIRISH OPEN JALRY

Below: the collection's restored Rolls-Royce Armoured Car attracted a great deal of attention from visitors. We'll bring you more details on the Rolls in the next issue.

ach year the Irish Cavalry Corp holds what is know as 'Cavalry Day' to promote the Corp, its equipment, new purchases and perhaps more importantly, to celebrate its history. The new Chief of Staff of the Irish Defence Forces is also a Cavalry man who wears the Cavalry Man's headgear, the Glen Garry, with pride. The other thing that made this year's

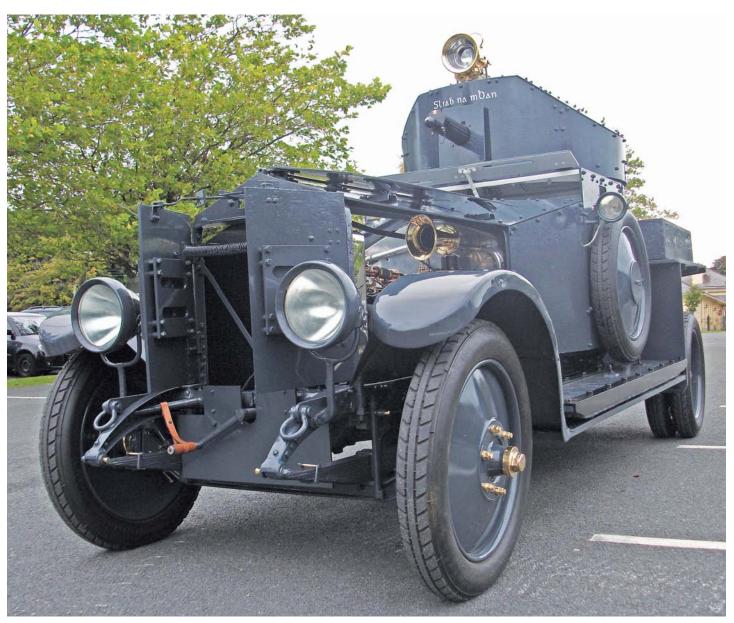
Cavalry Day so special was that the Rolls Royce armoured car that had been refurbished to the highest possible international standard, was to be unveiled.

The Rolls actually served with three different armies in three wars, and along with twelve others, were handed over to the Free State Army upon the defeat of the Crown Forces in Ireland.

The Rolls in Irish service gained the nickname 'Slieve na mBan' which refers to a mountain in Tipperary and when translated from Irish means "Mountain of the Women".

The armoured car is held in such a revered position because it was the vehicle most associated with General Michael Collins, the first Irish Chief of Staff. Collins' convoy, which included the Rolls Royce, was ambushed by anti-government forces that Collins had gone to try to make a peace with, but his convoy was ambushed on his return and he was the only casualty. Historians have been at loggerheads ever since as to who shot Collins.

Colin Stone attended the annual Open Day event staged by the Irish Cavalry Corp





Left: the BAE Systems' RG32M LTAV is one of the Irish Army's current in-service vehicles and a couple of examples put in an appearance at the Curragh Cavalry Day.

Below centre left: the Comet A34 tank is on permanent display outside. The Irish Army was one of the last to use the Comet tank, which was designed for use in WW2.

Below right: rear threequarter view of the BAE Systems' RG32M LTAV. The event gave visitors a chance to have a good look round. Note the remote weapon station.

Bottom left: sadly the Comet A34 tank is too big to store indoors and is on permanent display outside, but the weather will no doubt eventually have an effect.

Bottom right: the Irish Defence Forces have been using the CVR(T) Scorpion since the 1980s, and thirty years on the petrol engines are still running sweetly.

The Vickers in the turret of the Rolls jammed after just 200 rounds had been fired, and one possibility is that Collins was hit by a ricochet that glanced off the Rolls, but the other possibility is that the Scottish gunner, Jock McPeake who later deserted and changed sides with this very Rolls had played some part in the death of Collins. The Rolls was subsequently recaptured from the rebels in December 1922 by government forces and returned to service, thus ensuring that she had seen service with three armies!

The Rolls continued to be used up to WW2 or the 'Emergency' as it was to be known in neutral Ireland, even













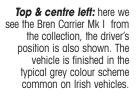
though a report in the late 1930's had stated that the Rolls fleet was suffering from a severe lack of parts. With gathering war clouds in Europe the Irish were caught on the hop with no armoured vehicles in the country other than the Rolls and a few imported Landsverks from Sweden.

After the Emergency the Rolls Royce armoured cars were eventually retired in 1947 with no fanfare and the cars languished for the next number of years until they were auctioned on the 28th of April 1954 minus their turrets and armour plate. Since then the Rolls Royce has been rescued and completely restored, but more of this in a future article.

OTHER VEHICLES

Two heavy tanks, the Comet and the Churchill oversaw the parade and ceremonies of the day from their plinths as both are non-runners, however, the Defence Forces do have a pristine and running Rolls Royce Meteor-engined Comet in their collection. Also on parade was one of a number of Alvis CVR(T) Scorpions that the Defence Forces have had on charge since the 80's, and their Jaguar petrol engines are still as sweet thirty years on.

Next on the active vehicle list was the BAE Systems RG32M mine resistant reconnaissance vehicle, which is one of the most recent purchases of



Top right: the Churchill MkVI tank also stands on permanent display outside at the Cavalry Museum Vehicle Collection due to a lack of space indoors. Note the unusual shape of the track guards, unlike the originals.

Above & right: one of the older armoured vehicles on display at the open day was this Peerless TC4 armoured car. The artillery wheels and solid tyres give away the age of this vehicle, which dates from around the time of the First World War.





the Defence Forces and is in service with UNIFIL in Lebanon. It is used in different versions, but on display was a version with an OWS, and believe me its optics are crystal clear and very easy to master.

Other current equipment on display included two versions of the Mowag Piranah IIIH, which again included the OWS version and the 30mm turreted version. Both have seen service overseas with the Defence Forces on service with the UN in some very hostile environments.

VINTAGE VEHICLES

And so on to the eclectic collection of vintage vehicles. The veteran of the collection was the Peerless armoured car, which has been restored to its current excellent condition over the past number of years. I first saw it as a bare chassis, and it is to the credit of



all involved as to how beautifully she was turned out.

The Swedish Lansverk L60 tankette is one of two Irish survivors purchased in the 30's and this one is actually a runner. As with any old vehicles, spare parts can be a nightmare to source and they are used sparingly to conserve them so this was a rare outing. The Bren Gun Carrier on display was a veteran of the vehicles delivered during and after WW2 and I remember my father telling me that some were buried in a bog as so many were delivered after the war, which were surplus to requirements! The story goes that they buried in their crates, which makes me wonder if it is an urban legend or indeed true?

The Panhard family of French armoured vehicles have given great service over the years, with the M3 APC and the Panhard 60mm mortar carrier being present at the open day.





Top left: like many other armies around the world, the Irish Army used the Daimler Ferret armoured car.

Top centre: the Willy's CJ3B Jeeps were delivered in 1953/53 and gave years of service having replaced the wartime Ford GPW.

Above right: two views of the French-built Panhard M3 VTT, an odd-looking vehicle, but well liked by those who used them.

Left: another French-built armoured car, and another Panhard, this time the Panhard AML 60-7 CS, which was widely used.

Above: front left view of the Timoney Mk VI APC (armoured personnel carrier) fitted with a TLi 127 turret. Right: cab interior on the Timoney Mk VI. Timoney are of course an Irish vehicle manufacturer, but the vehicle is based on a Belgian design.

Top right: the Irish Army used the particularly ugly Scania SKPF m/42 APC back in the 1960s. The fact that it had no roof made it popular with troops when operating in the heat of the Congo.

Below left & right: the Ford Mk VI armoured car was something of a makeshift homegrown armoured vehicle designed by Major J.V. Lawless based on a Ford chassis and built in Ireland. It's a great testament to their longevity that the Panhard 20mm and 90mm are still in service today having been re-engined with diesel engines in recent years.

What must be one of the ugliest vehicles ever conceived is the Scania SKPF m/42 APC, which saw service with the Irish in the Congo back in the 60's. It has an open roofed troop compartment, which was welcomed in the Congo due to the heat. The venerable American M113 was also used in conjunction with the Scania in the Congo.



The Willy's CJ3B Jeeps were delivered in 1953/53 and gave years of service having replaced the wartime Ford GPW. Again these were used in the heavy fighting in the Congo, and had Vickers machine guns mounted in the rear to patrol vast areas of the Congo.

HOME GROWN

When our backs were to the wall during World War II, we designed and built our own armoured cars based on Dodge and Ford chassis. They were designed by a gifted in-house engineer named Major J.V. Lawless, and with limited resources and equipment he designed and built armoured vehicles in Ireland's hour of need. On display was a Ford Mk. VI, which has a great history in regards to its design and service and will hopefully be a subject of future articles.

Moving right up to the 1970/80's, we have the homegrown Timoney Mk VI APC, which again was

designed and built in primitive conditions by today's standards. It was a huge improvement over it predecessors that had been trialed and purchased by the Defence Forces. It was also purchased by the Belgians, who also took up manufacturing rights and built numbers for the Belgian Air Force and Gendarmerie. Such was the success of the design it was also exported to Argentina and the Belgian vehicles passed to Mexico in 1994. It passed from Irish service in 1999 and were amongst the first vehicles to be given a painted camouflage scheme alongside the Scorpions in the late 1990's.

This was yet another fascinating open day, offering the lucky visitors to the event a chance to see a varied collection of Irish military vehicles at close quarters, with many rare and rarely seen vehicles amongst them. Hopefully these few short pages and photos will provide readers with a chance to sample the delights that were on display at the event.

Ford Armoured Car Mk V





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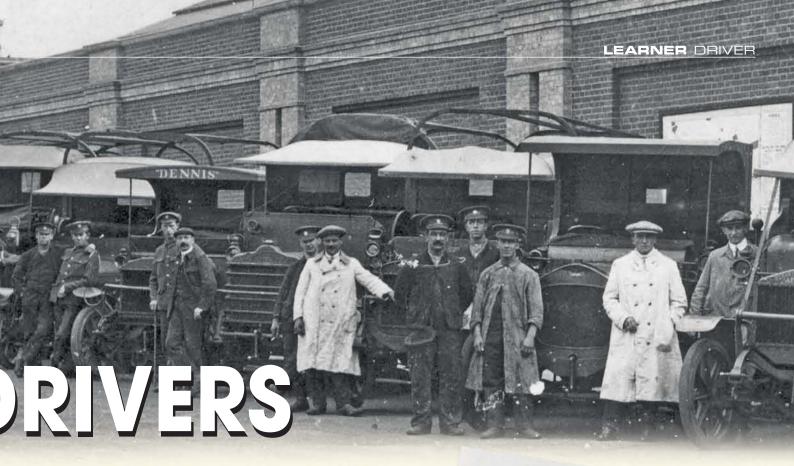
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how they were getting on. These surviving postcards give a fascinating insight into the training of drivers and the variety of vehicles they learned to drive on during the Great War.

ARMY SERVICE CORPS

In 1903 the ASC formed a mechanical transport company and received (amongst some steam traction engines) an internal combustion engined "Stirling" lorry and two small cars

(a Wolseley and a Brooke). With a driving school formed at Aldershot in 1904 and growing interest the ASC acquired a variety of different models of lorry, van, car and motorcycle. Just prior to the outbreak of war the mechanical transport held by the ASC comprised 80 motor lorries, 20 cars and vans and just 15 motorcycles, however, by the end of the war the number of motor lorries had increased to 56,659, cars and vans to 23,133 and motorcycles to 34,865.



Main photo top: lined up outside the bus depot in Hounslow is this incredibly diverse group of lorries. The "Duke of Cambridge" can be seen in the background.

Above right: this FWD Model B (cheerfully named "HMS Dugout") has been fitted with a crane and was used at Grove Park to recover breakdowns and wrecks.

Left: the driver of this Peerless has committed the unpardonable sin of mounting the pavement. This could cause tyre damage and it looks like he is being given a severe "talking too".

Far left: just visible on the lapel of the bus driver standing in front of this Daimler "Y" type truck is an "On War Service" badge.

Right: one of the most common vehicles to be used for driver training during the war was this Scottish built chain drive Halley.



Below: a rare photograph of a Belsize lorry. Very few of these were purchased by the War Department and were only used for home service.



Kingsley Road Hounslow is this line of Locomobile and Halley lorries being prepared for a day of driving instruction.

Below right: a London bus driver engaged in driver training pauses with trainees for a photo beside his Albion A10.

Right: photographed in

Such a significant increase in size, especially when driving was not a common skill necessitated the creation of a training programme, locating a large number of suitable driving instructors and selecting locations of where the driving schools would be established. Finding enough experienced drivers to undertake the tuition proved to be quite straightforward. In 1914 the LGOC was operating a fleet of 3,400 buses and with such a large fleet they required their own driving instructors. The ASC and LGOC came to an arrangement whereby LGOC driving instructors would be seconded to the ASC. They would wear their own LGOC uniforms with an ASC cap badge and in many cases an "On War service" badge in their lapel. This signified that the wearer was engaged in vital war work and was not a "shirker" or "slacker" and would fend off those women giving out the dreaded "white feather".

Driving Schools

The ASC already had a driving school at Aldershot, but that alone could not possibly cope with the anticipated massive increase in trainee drivers. In selecting suitable locations for their driving schools they had to consider the availability of accommodation for the trainees, suitable routes and room to park a large fleet of lorries used for instruction.

The Work House at Grove Park (Lewisham) was completed in 1902

Learner

- Instructors often wore LGOC uniforms with an ASC cap
- Trainees could complete training within 24 hours
- LGOC stands for **London General** Omnibus Company



buildings, stores, workshops, a large dining room, laundry and a chapel. A more suitable location would have been hard to find. New recruits were dispatched there and soon all of the barracks were fully occupied. As more troops arrived private houses nearby were taken over and the trainees were packed in like sardines.

Osterley Park, a large mansion with extensive grounds located in the borough of Hounslow, was being used as a country retreat by the Jersey family at the start of the war, the ASC commandeered the estate using the house for offices, classrooms and Officers accommodation while enlisted men were accommodated in tents within the park. Just two miles away from Osterley Park was the LGOC garage in Kingsley Road, Hounslow. This was an ideal training depot for the ASC as it provided a large covered facility for the maintenance and storage of vehicles with plenty of additional room for other vehicles to be parked outside on the surrounding roads. Although not selected for this reason the garage was right next door to the "Duke of Cambridge" pub which features in many period photographs and I am sure was much enjoyed by many a trainee driver.

TRAINING

The recruiting offices were desperately looking for skilled drivers and any new recruit who had any experience was quickly earmarked for the ASC. This was not always a good thing as one new recruit who had been rejected for the infantry due to his small size fearing he might miss the war altogether announced that he could

drive and was immediately dispatched to Grove Park. Shortly after arrival he and 19 others were tasked with delivering a batch of new Vauxhall cars to the docks at Avonmouth. Although he had never driven before he had a rough idea of what to do having observed other drivers and made the journey successfully. That was not the case with all of the other drivers as two of the Vauxhalls crashed on the way. When he did arrive in France he was given a driving test, which he promptly failed, but following some tuition from a sympathetic corporal he passed at the second attempt.

Some of the trainees who demonstrated a competent driving ability at their training centre were sent on to France sometimes within 24 hours of their arrival. Others who had little previous experience or were training to undertake vehicle maintenance might receive up to 12 weeks of instruction.

The new recruits would be given training in convoy driving procedure, routine maintenance, loading and then hands on experience driving a variety of vehicles. Groups of up to eight trainee drivers at a time would be taken out by a driving instructor and head off through the London suburbs. Once the trainee had demonstrated an element of proficiency (or as much as the instructor could stand) they would swap over the driver and the procedure would start again. When considered ready the trainees would take a driving test. The test wouldn't take very long but would necessitate them being able to demonstrate that they could change gear smoothly (both on the open road and in traffic), have good control of

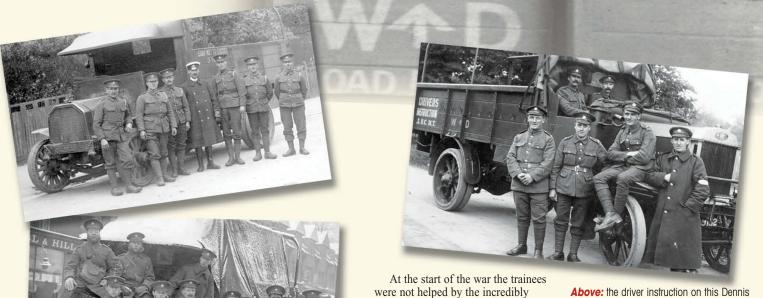






Top right: parked outside the "Duke of Cambridge" in Hounslow is this American built Pierce Arrow. Above centre: standing with this early Karrier is an LGOC instructor and eight trainees. **Above:** a rather "dapper" looking





provided for them to drive. To help reduce the problems maintaining vehicles on the Western Front the models taken overseas were limited to as few a number of as possible. The ones initially used for training were generally impressed civilian vehicles already well worn and not considered suitable for the rigours of the Western Front. As the war progressed and more vehicles became available there was far greater standardisation and the trainees would learn to drive on lorries similar to what they would drive in Europe. Another saw the instructors of the LGOC replaced by those from the ASC and the lorries were now clearly marked with the words "Drivers instruction ASC MT" to show that it was being driven by a learner driver.

the vehicle, reverse into side roads and

of course the much loathed hill start.

The instructor would then mark them

as "very good", "good", "fair", "indifferent", or "bad". Those who their officer thought might be worth

further training and a re-test received

lorry is being provided by a member of the ASC instead of the LGOC, which would indicate it is a late war photo.

THE LEGACY

In 1919 the depot at Grove Park closed and it was returned to the Asylums Board, Osterley Park returned to the Jersey family and the LGOC regained control of their garages. The Work House at Grove Park was demolished in 1992 although

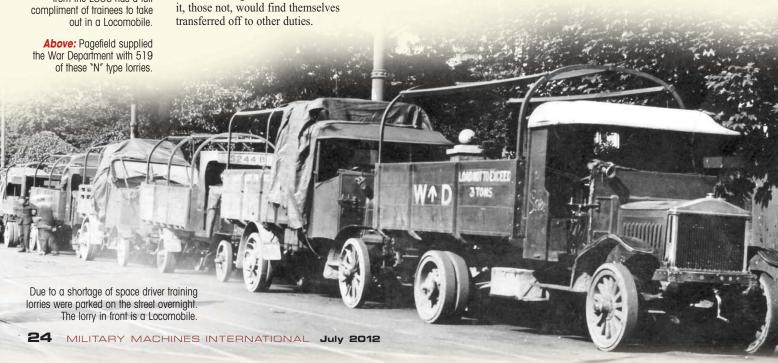
diverse range of vehicles that were

the entrance and the administrative block survive and look much as they did during the war. Osterley Park is now owned by the National Trust and is open to the public, although you will find little evidence of its Great War history. The once bustling Hounslow bus garage was demolished in the 1950's and rebuilt to a different design further back from the main road. The Duke of Cambridge pub still survives and looks pretty much as it did during the war.

Perhaps the most important legacy was the many soldiers who learned to drive there and who on being demobbed decided to put their new skills to good use, purchased a surplus lorry and set up in business on their own. These drivers brought a valuable and much needed skill to a war weary Britain. Many well known bus companies and haulage businesses owe their origins to the training once provided by the LGOC on the streets of Hounslow and Lewisham nearly 100 years ago.

Top left: a very serious looking group of trainees alongside their Peerless.

Above centre: on a very cold and snowy day the driver from the LGOC has a full compliment of trainees to take out in a Locomobile.



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Above: this Mk II was captured almost intact and used for tests involving stick grenades and other small explosive charges.

Below: a seemingly perfect Male Mk II, number 790, left for the Germans to recover. n the 15th September 1916, the face of land warfare changed forever when the first tanks went into battle at Flers and the Great Wars unstoppable arms race took on a terrifying new perspective. Unfortunately, the facts of the tanks first showing were a little more disappointing. Only a few of the 48 machines rounded up for the battle managed to make it into the fight and

although they and their crews did sterling and heroic work that day, their actual effect on the fighting was negligible. Many of the Military top brass saw the tanks as a mere gimmick and a huge drain on their resources, which were already stretched to breaking point.

The loss of men and machines at Flers meant that the Heavy Branch of the Machine Gun Corps, as they were known at the time, had to begin fighting again on a second front in Whitehall to prove their worth, if they lost this battle with narrow minds and red tape, the tank would be consigned to the history books before it had even had a chance to show its potential. It is often said that the failure of the tank to break through at Flers was due to mechanical problems, which had plagued the early machines, together with the awful ground conditions, but there is a third, perhaps more telling reason why Flers was such a disappointment - lack of knowledge

about tank tactics and new weapons abilities.

The crews had trained on the Mk I tank at Thetford in Norfolk and also to a limited degree at the manufacturer's facilities in Lincoln, but the differences between jollying around a field in Norfolk and the horror of the Western Front were huge. The tanks were also at the whim of the Generals who were overseeing the entire battle, and on the whole, these Generals either didn't want the tanks to be involved or didn't understand what their capabilities were. Many of the Officers commanding had been told that the tanks were the new 'Wonder Weapon' that could take shell holes in a single bound and ate barbed wire for breakfast, but the reality was very different.

There were also several little teething problems with the first tanks. For instance, the Mk I Male machines were armed with very long 6pdr cannon borrowed from the Navy and these had an annoying tendency to dig





Above: a rare and probably



Above: a rare and probably worn out Mk II photographed here while transporting stores in early 1918.

Left: a Male Mk I tank trundles past British infantry during its preparations for the Battle of Flers in September 1916.

Below: If this sort of thing happen for real in France, there would be a lot less to smile about for the crew of this Mk III photographed during training at Bovington.

into the side of shell holes and trenches. This would fill the barrel with mud and invariably knock the poor gunner inside unconscious when the gun swung around and the breach hit him squarely in the side of the head. The engine and transmissions had been taken from the Foster Daimler 105hp Tractor, which was an excellent drive train for steady work on flat ground, but had one huge weakness when trying to climb out of a shell hole at a 45-degree angle. The oil in the Daimler unit just sloshed about inside the engine and was not pumped circumferentially around the galleries, which meant that if the tank was at a 45 degree angle, the engine oil would all run up to the rear end of the sump pan leaving the front half of the engine running dry. As a consequence it would not take very long before an engine at full revs at such an angle would

develop problems.

All these issues and hundreds more besides could only be spotted and





Top left: Queen Mary inspects a very clean looking Mk III in early 1917.

Above left: the new Mk IV being evaluated at Fisters factory in Lincoln would soon come as something of a surprise to the Germans.

Far right: Male Mk II tank number 799 left shattered on the battlefield after the fighting.

Bottom right: this Female Mk II broke a track during the fighting around Bullecourt in 1917 and was captured.

Below: this Male Mk II was a frequently photographed sight in France for some time after the war, but must have eventually been scrapped. ironed out by constantly using and training on the tanks in as near to real life situations as possible. The men who crewed them needed to know everything about the machine and only then could they pass this knowledge on to the High Command, who would then begin to understand the tank and use it in a way that would help break the deadlock of the war. To this end a new tank was envisioned, a purpose built Training Tank on which the crews could learn their trade.

TRAINING MACHINES

Not surprisingly, the next tanks after the Mk I would be called the Mk II and III and were created as training machines, but there is actually an intriguing theory proposed by David



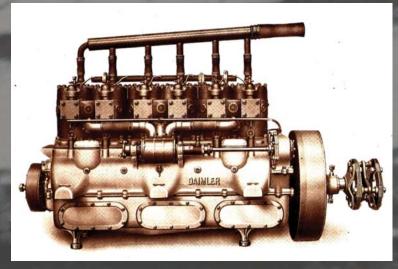




Fletcher at the Tank Museum in Bovington that these tanks were also ordered so as to keep the tank builders' hand in whilst the powers that be decided whether tanks had any future. If there had been a considerable gap in production, factories such as William Foster and Co Ltd and the Metropolitan Carriage, Wagon and Finance Co would have lost their War Producers status and along with it, their invaluable skilled workforce.

In their role as training machines, the new tanks would also be used to test various new ideas and refinements such as better escape hatches and redesigned sponsons. There are two other differences between the new tank and those that had gone before, one was very obvious and one would turn out to be absolutely crucial, but was quite invisible. The first most obvious difference was that the tanks had been docked of their tails. Up until this point, British tanks had carried a strange device at the rear of the





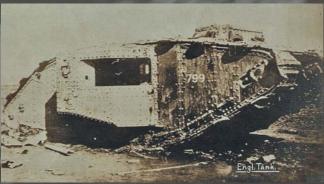
Above: The Daimler sleeve valve 105hp engine that powered most British Great War tanks.

Bottom right: this old Mk II has had its sponsons plated over and is being used to carry stores in its new role as a Supply Tank.

machine called the Steering Gear, but the experience gained at Flers had shown this to be an unnecessary extravagance that did little to alter the tanks forward direction. The Steering Gear had been deemed necessary due to the designers worries about undue strain on the clutch, brake bands and gearing if the 30-ton machine had been steered using the tracks, in fact the first drivers were specifically warned against using the tracks to steer the tanks. It soon became apparent that the steering gear had little effect on the tank and the crews realised that the mechanical components of the tanks were more than capable of taking the strain of steering. Despite this, it is a fact that at least one officer gave the order to abandon ship after his steering

gear was blown off at Flers as he thought the tank was no longer able to be driven.

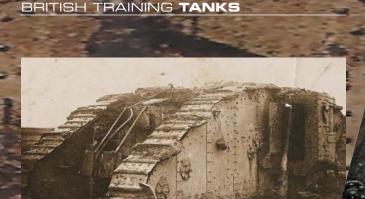
The second huge change for the Mk II and III machines was that they were created from standard 'unarmoured' plate. They were purely training machines and as such there was little point in going to all the trouble to treat the steel. In all there were fifty Mk II and fifty Mk III machines, half built at Fosters in Lincoln as Male machines with the six pound cannons and half built by Metropolitan in Birmingham as Females armed with machine guns only. The machines were greatly appreciated and much used on the specifically designed obstacle course at Bovington. Crews spent many a



Top right: the observer on the roof is shouting orders to the crew inside this Mk III during training whilst new recruits look on.

Above: tank number 799 was captured almost intact by the Germans who set about photographing it from every conceivable angle







Top left: another image showing Male Mk II number 799 near Bullecourt. It was eventually blown to pieces by Germany Army engineers.

Top right: a Male Mk III being used intentionally ditched during training at Bovington. Note the old MkI exhausts baffles and sponsons and the latest design of top escape hatch.

Above left: the Mk II tanks captured were evaluated and deemed to be a flash in the pan by the Germans.

Below right: a rare survivor of the war was this female Mk II training tank that ended its days on display on the seafront at Cleathorpes. happy hour intentionally getting their tanks stuck in ditches and trenches, just so that they could practice getting them out again.

After the battle of Flers, a serviceable tank was a very rare sight in France, so it was decided that a consignment of the new training tanks would be sent out to France immediately. Back in England the allnew and improved Mk IV was well on its way and the crews would need to get to grips with driving a tailless tank. The Mk IV was supposed to have been ready, tested and shipped in time for the fighting around Arras in the April of 1917, however, it was nowhere near being ready.

The HBMGC were committed to taking part in the pattle and so the inevitable happened and in addition to the rag tag handful of old Mk I tanks the unarmoured training machines were rounded up and thrown into the fray.

The fighting was ferocious and the tanks were very badly mauled. The German guns made short work of the lumbering monsters and after the battle several ruined, but almost intact Mk II tanks lay on the battlefield. At the time, this was looked on as a terrible loss, several complete examples of our newest and lost secret weapon had been captured by the Germans who were known to be working on designs for tracked fighting machines of their own. The German engineers went to work on the captured tanks and collected steel samples, took photographs from every angle and drew up plans of the tanks drive train and technical attributes. Their conclusion was one of astonishment, how could the British hope to gain any ground with these new machines? The hull is not even made of armoured steel and the petrol is carried in large reservoirs right at

the front of the machine that would run fuel by gravity feed to the carburettor. The Germans now knew that the plate of the British wonder weapon could easily be penetrated by fairly small calibre ordnance and if the gunners aimed at the front track frames, the petrol tanks would be ruptured and whole thing would explode. In short, the tanks looked impressive, but with a cool head and the right tools were no threat at all.

Unfortunately for the German army, their new information on the tank was based on a Mk II training machine and in the coming months the Tank Corps as they would soon be known, would take delivery of the fully armoured Mk IV that included as one of its new innovations, a fuel pump, so that the petrol tank could be placed in relative safety at the back of the vehicle. The Mk I, II and III tanks had been little more than prototypes and test beds, but with the introduction of the Mk IV, tank production and battle tactics started to come of age.





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Henri-Pierre C exercise involv

n February 2012, the French Army took part in Exercise Bold Alligator, off the East Coast of the USA.
Carried by amphibious warfare ship Mistral, an embarked tactical group trained with the US Marine Corps to test and demonstrate its latest tactics

test and demonstrate its latest tactics.

Over the years, the French Army has developed advanced tactics to secure a beach and attack key objectives deep inside a hostile territory.





Frolleau reports from a joint amphibious ving the French Army and US Marine Corps

Within the Armée de Terre, two brigades, the 6e Brigade Légère Blindée (6e BLB, or 6th light armoured brigade) and the 9e Brigade Légère Blindée de Marine (9e BLBMa, or 9th light armoured naval brigade) share the amphibious assault commitment. It is worth noting here that, in France, all 'Marine'-named units belong in fact to the Army. Amphibious operations are well-rehearsed events and each regiment within the 6e BLB and

9e BLBMa can expect to participate in one or two amphibious exercises every year to hone their beach assault skills. For instance, during Bold Alligator, two landings were carried out, the first being a technical rehearsal to check that everybody was up to speed, the second one being a tactical training phase along with US assets.

To carry Army specialised units, four amphibious ships are in service with the French Navy, including three



Top left: an empty US Navy LCAC leaves the Mistral well dock. The size of the load area is clear to see in this view.

Top centre: loaded with French vehicles, this US Navy LCAC has just reached the Fort Story beach.

Top right: a GBC180 equipped with a command shelter is seen stowed onboard Mistral.

Above: the AMX-10RC represented the heavy armour of the French tactical amphibious group during Bold Alligator 2012.

Left: a Légion Etrangère VBL disembarks from the EDAR. It is armed with a single 0.50 inch machine-gun.







Top: the troop of three AMX-10RCs take a well-deserved rest at Fort Story.

Above right: in a plume of spray, this VAB leaves the loading ramp of the EDAR.

Above left: a brand new PVP had been issued to the Beach Master, providing protection and additional radios.

Above: the Mistral in the Chesapeake Bay. The vessel is fitted with a very precise dynamic positioning system that proves decisive when the ship has to remain motionless, when landing craft leave or enter the well dock for instance.

Far right: thanks to a special gearbox mode, the VAB had no real difficulty driving in the very soft Fort Story sand.

Mistral-class (Mistral, Tonnerre and Dixmude) Landing Helicopter Docks (LHDs) and one Foudre-class (Sirrocco, Foudre having now been sold to Chile) Landing Platform Dock (LPD). For Bold Alligator 2012, the tactical amphibious group embarked on Mistral was built around the 21e Régiment d'Infanterie de Marine (21e RIMa, or 21st naval infantry regiment) which had deployed with 206 men spread into the 3e Compagnie de Combat (3rd combat company), the Compagnie d'Eclairage et d'Appui (reconnaissance and firesupport company) and the Compagnie de Commandement et de Logistique (the command and logistic support company) for medical, technical engineering and logistical support.

The 21e RIMa was reinforced with a troop of three AMX-10RC firesupport 6x6 vehicles and of three VBL light armoured reconnaissance vehicles belonging to the 1e Régiment Etranger de Cavalerie (1e REC, or 1st







Foreign Legion cavalry regiment), a section of 27 combat pioneers from the le Régiment Etranger du Génie (1e REG, or 1st Foreign Legion engineer regiment) and a 35 men-strong mortar fire support section from 3e Régiment d'Artillerie de Marine (3e RAMa, or 3rd naval artillery regiment) with two 120 mm towed mortars.

The 3e Régiment d'Hélicoptères de Combat (3e RHC, or 3rd combat helicopter regiment) had deployed on board Mistral with four Pumas, two Gazelles and 70 men who provided air mobility and fire support. All these units were fully digitalised, with the latest tactical radios and datalinks in service with the French Army, a crucial advantage that increased their combat efficiency and significantly

reduced the risk of blue-on-blue engagements thanks to a blue force tracking system. In all, 85 vehicles had been loaded onto Mistral, including twenty-three VABs, twenty VBLs, three AMX-10RCs, one EGAME, 23 TRM2000, TRM10000 and GBC180 trucks and 15 P4 and PVP light vehicles.

ENTER THE EDAR

The French Navy now has at its disposal a new generation of amphibious assault craft, the EDAR (Engin de Dé barquement Amphibie Rapide, or fast amphibious landing craft), a state-of-the-art, lightly armoured design which can cruise, fully loaded, at speeds exceeding



18-knots (and 25-knots empty) thanks to an innovative roll-on/roll-off catamaran layout. The EDAR, which can carry up to 80-tonnes of equipment, is fitted, between its two hulls, with an elevating platform, lowered for loading and unloading and raised for the high-speed dash between the amphibious warfare ship and the shore in order to minimise hydrodynamic drag.

Top left: the PVP is now entering service in increasing numbers to replace the unprotected P4.

Top right: the EGAME in action. Noteworthy are the dual, twinned wheels and the two mat layers at the front and rear.

Above: this VBL is armed with a single ANF1 7.62mm machine-gun.

Left: an aerial view of the landing beach at Fort Story. From left to right: the Beach Master's PVP, a TRM10000 wrecker ready to handle any mechanical breakdown, a TRM2000 coming out of the EDAR and the EGAME.



Below left: the menacing silhouette of the AMX-10RC, with its 105mm gun. This vehicle, like most French vehicles during Bold Alligator, is fully digitalised for enhanced situational awareness.

Below right: the VAB remains the workhorse of the French infantry light regiments.

Bottom: some of the French vehicles waiting to re-embark on the Mistral at Fort Story.

During Bold Alligator, some French vehicles were also carried from the Mistral to the beach in a US Navy LCAC (Landing-Craft Air Cushion) while an EDAR docked with a US amphibious ship, thus demonstrating total interoperability between French and US assets. Although the LCAC is much faster than an EDAR, this advantage is somewhat negated by the fact that all the vehicles carried on board the LCAC have to be restrained with chains, which can prove time consuming, whereas the vehicles onboard the EDAR do not need to be restrained in any way under normal operating weather conditions.

The EDAR was engaged in a massive, multi-national exercise for the first time during Bold Alligator, one craft being carried onboard Mistral along with two older and much slower CTMs (Chalands de Transport de Matériel, or equipment transport craft). When enough craft have been delivered, each Mistral-class ship will carry two EDARs

class ship will carry two EDARs.
For a massive, French-only
operation, we could easily imagine a
task force led by the Charles de
Gaulle nuclear-powered aircraft

carrier approaching a hostile shore. The carrier's air group, which could include up to 24 Rafale and Super Etendard fighters, would be tasked with achieving local air superiority and softening enemy defences. The assault group could be composed of the four French Navy amphibious warfare ships carrying up to 2,000 men and would be escorted by antisubmarine and air-defence frigates and destroyers, plus a squadron of minehunters and minesweepers that would ensure that the selected channel is free of obstructions and of mines.

"When a task force approaches a coast, surprise is always lost at some stage as the fleet will invariably be detected, explains Colonel Nicolas Jovanovic, the Officer Commanding 21e RIMa. We have to accept this and be ready to protect the 'amphibs'. The EDAR, with its inherent speed, offers us enhanced capabilities, however, allowing assaults to be carried out from beyond the horizon, over long distances, in a speedy manner."

For Bold Alligator, the Mistral cooperated with US Navy assets, and was 'protected' by fighters from the USS Enterprise, and escorted by US surface combatants.

BEACH ASSAULT

First to land during a live, full-scale operation would be French Navy commandos who, up to four days in advance, would be launched from a nuclear submarine to carry out a reconnaissance to make sure the beach is not mined or defended. They would then re-embark into their submarine and make a report on the situation. Depending on their findings, the location of the assault would be confirmed or changed.

The first wave of the assault party would be composed of French Army divers whose task is to secure the beach and wait for the reinforcements. Simultaneously, Army transport helicopters would launch from the LHD and fly in troops to secure key strong points a few kilometres behind the shore in order to stop any enemy reinforcement from reaching the beach. Attack helicopters - Gazelles during Bold Alligator, but much more modern Tigers for a real combat operation — would conduct reconnaissance and interdiction missions to stop any hostile force from closing in on friendlies.

An Army section of combat engineers would follow in EDARs and



"For Exercise Bold Alligator, the Mistral co-operated with US Navy assets..."



CTMs, who would liaise with divers and prepare the arrival of the vehicles, checking once again that the beach is mine-free. The first vehicle to land is usually the EGAME, a new generation, multirole, 4-wheel drive engineer vehicle whose mission is to prepare the beach for other wheeled vehicles. Produced by UNAC, the EGAME is powered by a 253-hp Caterpillar engine. It can be fitted with a wide range of role equipment for obstacle and route clearance, counter-mobility and mobility support, including a metallic trackway used to lay across the beach and prevent wheeled vehicles from becoming bogged down in soft sand. For operations in combat areas, the EGAME can be fitted with additional armour plates and glazing around the cab. According to 1e REG Légionnaires, its only real shortcoming appears when attempting to push back a landing craft stuck by the tide, when its wheels are then a disadvantage when forcing back the unwilling craft as they will not bite into the sand as effectively as tracks, reducing the available amount of pushing power. In the USA, French vehicles did not encounter real difficulties negotiating the soft beach.



WAVES AFTER WAVES

By the time the engineers finished preparing the beach, the third wave of landing craft arrive loaded with VABs, VBLs, AMX-10RCs and PVPs disgorge from the EDAR and/or CTM craft, immediately heading towards the beach exit before accelerating towards their respective targets. A Navy beach master would be in charge of checking that all assets arrive on the beach in the right order. This is the reason why the vehicles are carefully loaded into the LHD prior to departure, making sure that the first to enter the dock would be the last to land, and vice versa. Each vehicle is numbered, and the numbers

cross-checked prior to boarding EDARs and CTMs for the landing, and once again after reaching the shore.

Similarly, every man heading towards the shore is registered so that the command is able to check if anybody has gone missing before re-embarking. During the technical rehearsal of Bold Alligator, at Fort Story, at the entrance of the Chesapeake Bay (where, fittingly, a French fleet led by Comte de Grasse won the Battle of the Virginia Capes against a British fleet led by Admiral Sir Thomas Graves, in September 1781, during the American War of Independence), the Beach Master utilised PR4G fourth-generation, frequency hopping encrypted radios to stay in touch with the Mistral. His PVP armoured vehicle (on loan from the Army) remained on the beach for the duration of the operation. He could have used it as a shelter against the weather, or to protect himself against splinters of artillery or mortar fires, even though French doctrine dictates that amphibious assaults should avoid well defended areas.

Above: the Mistral flight deck with Gazelle and Puma helicopters about to take off. They will soon give way to Tiger and NH90 choppers.

Below left: the Milanequipped VBL provided additional antitank firepower.

Bottom left: for additional mobility on the beach, each VBL was equipped with lowpressure tyres.

Bottom right: the modernised AMX-10RC remains a potent asset against older MBTs. In the registration number, the '6' indicates Army, while the following '85' means that the vehicle would have entered service in 1985.







Top right: this logistics GBC180 is photographed in the well dock just before boarding a US Navy LCAC.

MOVING FORWARD

Once the beach is fully secure, the landing force will move forward as fast as feasible to seize its objectives. Spearheading the force during Bold Alligator were the VBLs and the AMX-10RCs of the 1e REC. Obviously, the AMX-10RC is no match for a late generation main battle tank. It is, however, fully capable of dealing with early MBTs such as T-55s or T-62s that are still in service in a large number of undeveloped countries thanks to its advanced firecontrol system, its powerful 105 mm armour-piercing kinetic rounds and its digital tactical datalink, which allows its crew to rise above the fog of war. If modern enemy MBTs were to be found on the battlefield, the Mistralclass ships are large enough to carry a full squadron of Leclerc MBTs.

"The beach assault is only a small part of the action, concludes Colonel Jovanovic. It is only a way to enter a theatre to carry out a mission on land. It is a tricky operation that requires close cooperation between the Navy and the Army. Equally tricky is the moment the responsibility of the operation switches from the HQ onboard the amphibious ship to the deployed HO on land. For Bold Alligator, we set up two mobile command posts, with a combined allocation of four VAB PCs equipped with the SIR. Depending on the situation, these vehicles were split 3/1 or 2/2 for redundancy, or when the

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command post had to move from one location to another to follow the combat manoeuvre. Our goal is to land the whole embarked tactical group, excluding the logistics support elements, in under three hours, a target that is always met."

On the 6th of February 2012, at the peak of Bold Alligator 2012, the French troops spearheaded the US Marines on the southern flank of the

assault front, at Camp Lejeune, in North Carolina. They duly seized their intended targets within the timeframe given by the US Command. They successfully practiced essential skills, such as beach reconnaissance, landing, firing, manoeuvring, raiding, resupplying and re-embarking, and bolstered their already strong relationship with the US Marine Corps.

ABBREVIATIONS

VAB: Véhicule de l'Avant Blindé, - Frontline Vehicle

VAB PC: Véhicule de l'Avant Blindé Poste de Commandement - Command Post

VBL: Véhicule Blindé Léger - Light Armoured Vehicle

EGAME: Engin du Génie d'AMEnagement - Engineer Vehicle

PVP: Petit Véhicule Protégé - Small, Protected Vehicle

TRM 2000: Toutes Roues Motrices
- All-Wheel-Drive with 2,000kg payload

TRM 10000: Toutes Roues Motrices
- All-Wheel-Drive with 10,000kg payload

EDAR: Engin de Débarquement Amphibie Rapide - Fast Amphibious Landing Craft

CTM: Chaland de Transport de Matériel - Equipment Transport Craft

SIR: Système d'Information Régimentaire - Regiment Information System

Inset below left to right: the Mistral with a Gazelle about to land, two 120mm towed mortars, the TRM10000 wrecker and a GBC180.

Main photo below: the incredible EDAR is a cleverly designed landing craft that surprised all observers, including Royal Marines exchange officers and NCOs serving in the USA or detached there for Bold Alligator.









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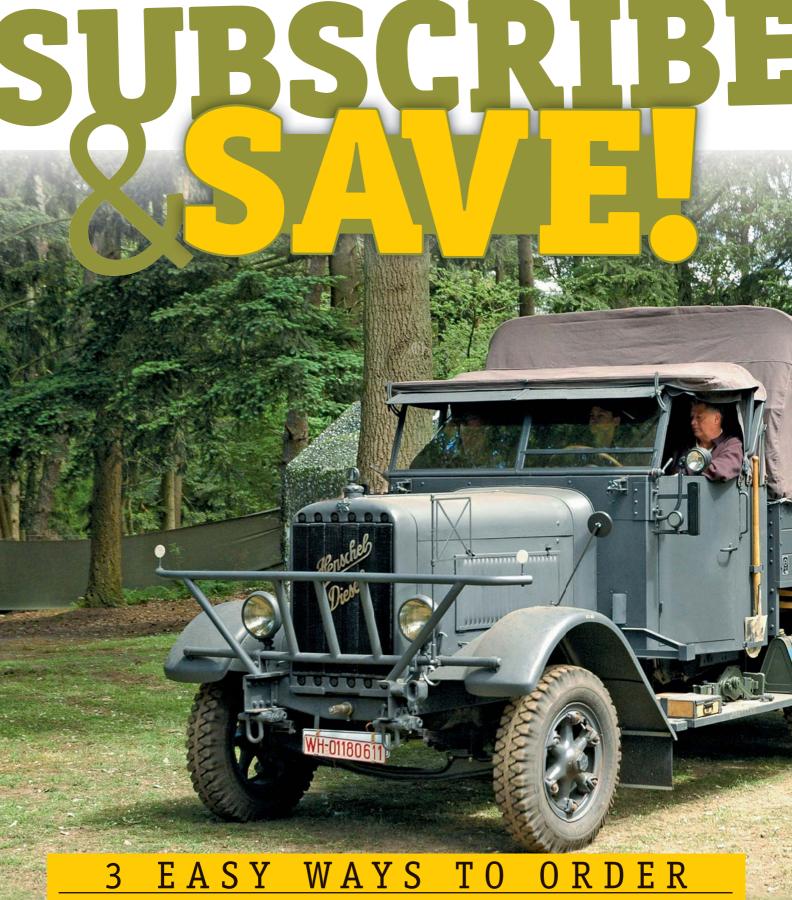
The HORCH Kfz.21

The German Horch Kfz.21 Kommandeurwagen featured here once belonged to one of the most famous high ranking German officers of World War Two, Field Marshall Erwin Rommel. The Horch, one of a small number built, was restored back in 2006 for Mike Gibb, founder of the Sdkfz Foundation, and since then has appeared at a number of military vehicle shows, including Tankfest, where it was displayed beside the museum's Tiger tank, providing us with another opportunity to photograph this rare vehicle.









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and the family of Stryker and LAV wheeled combat vehicles.

General Dynamics Land Systems -Force Protection specialises in the design and production of the MRAP family of vehicles and the Ocelot, and are manufacturers of the Buffalo 6x6 mine protected vehicle and Cougar, which in its 4x4 and 6x6 variants formed the basis of the British Army's Ridgback, Mastiff and Wolfhound Protected Patrol Vehicles, but a few years ago they exhibited a smaller Medium Mine Protected Vehicle at the Defence Vehicle Dynamics show called the Cheetah.

DESIGN PHILOSOPHY

The layout of the Force Protection Cheetah follows conventional design philosophy for many current mine protection vehicles in that it uses a 4x4 driveline and incorporates a 'V' shaped monocoque type hull with steel armour, internal spall liners and blast mitigation materials to protect the crew in the event of the vehicle being involved in an explosion. It was designed as a protected urban patrol and reconnaissance vehicle and is powered by a powerful Cummins ISB Series diesel engine mounted at the front of the vehicle, coupled to a Marmon-Herrington two-speed transfer case and Marmon-Herrington axles.

Top left: the Force Protection Cheetah Medium Mine Protected Vehicle was a rare visitor to UK shores, appearing just once in 2007.

Above & below: the Cheetah's fording ability was admirably demonstrated on the off-road course at Millbrook Proving Ground during DVD 2007.









Above: the heavy-duty rear bumper with inset rear step can be seen in this view.

Sheetah Fact File .

- The vehicle is designed to protect against up to 15kg of explosive
- Two vehicles can be transported in a C-130 Hercules
- At 65mph the Cheetah can travel for up to 700 miles



"A total of thirteen prototypes of the Cheetah were constructed for trials..."

The armoured body features a door either side for the driver and front seat passenger and a single rear door for the rear compartment occupants. A full width armoured glass windscreen offers good forward vision, and three windows are positioned down each side plus a single panel in the rear door. On the prototype vehicle exhibited at DVD no external armament or pistol ports were shown on the vehicle. The vehicle also features heavy-duty front and rear bumpers, with the front bumper incorporating a winch, while the rear bumper incorporates a step for access into the rear compartment.

The distinctive front bodywork of the prototype shown at DVD incorporated front and side cooling grilles, but unlike earlier prototypes, didn't feature any external armoured louvres to protect the radiator. The vehicle's headlights are mounted within each of the front wings, and a compartment to the rear of the left hand wing allows a spare jerry can to be carried, however, on earlier prototypes this carrier was incorporated into the right hand wing.

A total of thirteen prototypes of the Cheetah were constructed for trials and evaluation, but series production was never undertaken when the vehicle failed to attract a customer, however, the rare appearance of the Cheetah in the UK demonstrated the importance of the Defence Vehicle Dynamics event within the industry, and the importance with which American companies view the UK market. The photos featured within this article were taken at the Defence Vehicle Dynamics show in 2007, the one and only appearance of the vehicle in the UK.





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Snatch Restoration

Mark Stewart restored an ex-military CAV 100 Land Rover, but along the way he encountered a few problems!

Below: the relatively low prices of the Snatch Land Rovers makes them seem like a good buy, but you may be getting more than you bargained for, and it may take a lot more work than anticipated to restore, as Mark Stewart found out when completing the restoration of his Snatch Land Rover.

n the later years of the troubles in Northern Ireland, the British Army began using a new armoured vehicle on the streets of Belfast. It wasn't the familiar Land Rover Piglet, a crudely built, rudimentary armoured vehicles constructed from formed sheets of Macralon, nor the more conventional steel armoured Humber Pig or Alvis Saracen, this was something new, something purpose built, and not a CAV 100 Snatch either, but its

predecessor, the Glover Webb armoured Land Rover. The Glover Webb APC was designed and built as a result of the troubles, this heavy armoured Land Rover protected its crew against most things the locals could throw at it, from bottles, stones, paint bomb, petrol bomb and blast bombs, to coffee jar bombs, bullets and even grenade attack. Having "tested" a few stones on the side of this vehicle myself as a young lad, I can tell you

these vehicles stood up to any punishment, but it sparked off an interest in armoured Land Rovers and thus began my long time love affair with Land Rovers.

The development of the armoured Land Rover for use in Northern Ireland continued, seeing the development of the even heavier HVVPK Piglet and Glover Webb APC, now with added armour, before the CAV 100 Snatch eventually found its way on to the



streets of Northern Ireland. Not as aggressive looking as its predecessors, the CAV 100 (Composite Armoured Vehicle) incorporated new composite type armour, with the rear compartment constructed as a separate 'bolt-on' unit, together with more familiar armoured glass windscreen and door panels, composite doors and underbelly and all built on a heavy duty Land Rover chassis.

The Snatch, as it was now nicknamed, was a vast improvement over the much heavier Pig and Saracen, and even the now overweight Piglet in terms of speed and handling, and since being introduced to Northern Ireland has also been involved in every current modern theatre of war from Baghdad, Bosnia, Kosovo, and more recently Afghanistan, a true pedigree. Unfortunately the CAV 100 was built as a light armoured riot type vehicle and when faced with the blast from the heavy ordnance being employed by insurgents in Iraq and Afghanistan, it was only a matter of time before the Snatch Land Rover came off worse.

Following the sad loss of a number of soldiers to such IED attacks, and considerable media coverage that raised concerns over the use of such lightly armoured vehicles in dangerous combat situations such as these, the vehicle was withdrawn from frontline service and replaced by heavier armoured vehicles specifically designed and better suited to the type of IED attacks being encountered by troops on a daily basis. As a result the Snatch Land Rovers were eventually withdrawn from service and the surplus vehicles were sold off through Witham Specialist Vehicles, the official MoD disposal agents.

NEW PROJECT

Being a member of both the UMVC (Ulster Military Vehicle Club) and MVCI (Military Vehicle Club of Ireland), I owned and showed an armoured Piglet for many years. A heavily armoured vehicle of its time, heavy on the juice, noisy and a pig to drive, it was at least easily maintained and an affordable piece of armour, and what's more she never broke the bank or my back. She was an absolute delight to run, she was a total pleasure to own, and when the time came it was very hard to let her go, but go she went and it was time to look for a replacement.

With the Piglet gone I was on the look for something to replace her, something that was again easy to maintain and affordable and that's when a colleague had mentioned that Snatch Land Rovers were available on the Witham's web site. I soon found myself bidding on LOT 65 from a batch of five snatches and a couple of weeks later I discovered that I had won the bid.



As it turned out, winning that bid was to open up a whole can of worms and it started with trying to get the vehicle here to Belfast from Witham's yard in Lincolnshire, which wasn't easy, in fact with hindsight I made some very stupid and expensive mistakes, when I bid on a vehicle I hadn't mechanically inspected, had no transport prepared to pick her up, and as a result I could have potentially bought a £4000 piece of scrap, that could have cost me a £20 a day storage charge had I not picked it up within a week! On top of the price I bid was £700 worth of VAT charges, and the eventual transport to Belfast cost a further £600, all in all and expensive start to my new project.

The troubles didn't stop there, and

The troubles didn't stop there, and being taller than the Piglet I had to make a major adjustment, not to the vehicle, but to the garage! I had to raise the height of the garage door and replace the solid sliding door with a roller shutter door, an expense I hadn't even thought about when I bought the Snatch. Even with the modifications to the garage I still have to bungee down the observation hatch Perspex panels at the back of the vehicle so it will clear the roof!

Trying to remain positive about this expensive purchase, I did at least have the sheer excitement of actually having my very own composite armoured V8 Snatch Land Rover, now sat on my driveway, and for me life doesn't get any better than this, even if it did invite several "you need to get out more" comments, but I still had big grin on my face!

WORK BEGINS

My colleague Jim smith and I began work on our new 'Projects' (Jim had also bought a Snatch in the same sale), and sitting right in front of us was a pair of battered, rusting, oil leaking, smelly, sand filled, battle scarred snatches. While such a project may



Left: when the Snatch Land Rover first arrived it was fairly intact, but only a full strip down during the restoration would reveal any potential problems that lay ahead. I would strongly advise anyone considering the purchase of one of these Snatch Land Rovers to take a good look before buying!

Below left: the majority of the Snatch Land Rovers were powered by the powerful 3.5-litre V8 petrol engine so loved by Land Rover enthusiasts. Later refurbished models used the 300TDi diesel engine because they were based on Wolf chassis.

Below right: the whole vehicle was thoroughly jet washed inside and out before any work began. The washing process disloded an enormous amount of mud and sand being dislodged from the exterior and interior.

Bottom right: once the front bumper, bonnet and front inner and outer wings had been removed from the vehicle it provided plenty of room to work on the V8 petrol engine meaning you don't necessarily need to remove it from the vehicle.











have seemed daunting at the time, our goal was to return the vehicles back to the original Northern Ireland specification, which would see them being returned to an overall green camouflage scheme with the distinctive 'Confidential Telephone Number' markings carried by most British Army vehicles in Northern Ireland on the side.

After couple of days of tinkering we managed to get the engine running, a positive start to the restoration. Next the front wings and back quarter panels were removed, along with what seemed like two tons of sand caked behind panels, with a good jet wash helping to dislodge some of the more stubborn grime! Continuing the strip down, the partition zip curtain added later in life, front and rear seating, air

conditioning unit, dashboard and observation Perspex were all removed. Moving on to the mechanical side of the vehicle we removed the damaged steering rods, punctured fuel tank and bent drive shaft, which seems to be a common problem with these Snatch Land Rovers, caused by the vehicles being lifted by a fork lift.

The chassis needed a few weld patches to repair the rust, caused partly by the vehicle's age, and partly by the fact that the Snatches stood in Southampton docks for several years while the MoD decided what to do with them. Once repaired the chassis was given a good coating of waterproofing sealant. What we thought was going to be an easy job turned out to be one of the most difficult jobs during the restoration –





the removal of front armoured glass screens – which were sealed and bolted to tub, and to replace them with new armoured glass took us two days!

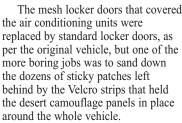
Because I wanted to return the vehicle back to original Northern Ireland specification I also removed the air conditioning units situated in the Jerry can compartments either side of the vehicle, together with the rubber tubing and AC unit inside the vehicle, but keeping the AC motor, air vents and button settings above the driver and passenger's head for air circulation around the cabin.

To be totally accurate we should have taken the whole of the air conditioning system out of the vehicle, but for crew comfort we relented, and we also kept the snorkel, just because it just looked so damned good.









The engine bay bulkhead had signs of rust, nothing new here for a Land Rover, but in the case of the Snatch it was full of water that seemed to be trapped either side of the tubing that runs along the windscreen and wings, so with carefully positioned drill holes to release the water, and with a bit of welding, we repaired and redesigned the bulkhead and finished off with a waterproofing seal to prevent the problem happening again in the future.



FINISHED

After many, many hours and a lot of money spent the Snatch Land Rover was finally finished and sitting proudly on my drive. In all I reckon I spent around a £1000 on new parts and panels, which included new back quarter panels, new front wings, drive shaft, bonnet, armoured windows, battery, Perspex for the back observation hatch, wire cutter, tyres, searchlight and cover, seating and dashboard, chassis welding, engine cleaning and exhaust pipe. Would I do it again given all the expense and heartache along the way? Of course I would, I just love armoured Land Rovers!

Top left: the Snatch is nearly complete, just missing the aluminium rear quarter panels. Note the shorter wire cutter to get it in the garage!

Far left: the removal of the rear quarter panels revealed plenty of surface corrosion on the chassis, but fortunately nothing too serious.

Bottom left: the shape of the moulded ballistic rear tub is clear to see in this view, which would normally be concealed by the rear quarter panel that's been removed.

CAY 100 SNATCH Fact File ...

- The name 'Snatch' was a nickname and was not officially given to the CAY 100 Land Rover
- The composite armour used on the Snatch was developed by Courtaulds of Coventry, now part of NP Aerospace
- CAY is an abbreviation for Composite Armoured Vehicle and comprises of a composite armoured body and doors

Canpe Validad in the Portland suburb military vehicles that are bein



Roy Stevenson pays a visit to an Army National Guard base with a difference

ituated in the Portland suburb of Clackamas, at the foot of Mount Talbert, Camp Withycombe provides the military vehicle aficionado a solid day of entertainment. This 77-acre working military camp offers a newly renovated military museum with thousands of military weapons and artifacts, including an outdoor tank display. While currently under renovation, the museum hopes to be reopened by December 2012. In addition, visitors can make an appointment to view the works in progress in the large restoration shed and see the modern

military vehicles that are being maintained and repaired at the works depot. It's an armoured enthusiast's and military vehicle restorer's dream, and best of all, easily accessible to the public. Camp Withycombe is an Army National Guard base that acts as a supply depot, training centre, logistics centre, warehousing centre, and vehicle and equipment repair and maintenance base for the US Army's Oregon operations. The base also has some history; it was established in 1909 and expanded further during World War I, to eventually become a supply depot in the 1930s.







pantheon of US armour from World is a nicely maintained WW2 M7B1 Priest. This self-propelled artillery vehicle got its name from the British church pulpit.

Next in the tank lineup is an M41A3 Walker Bulldog, a light US tank that replaced the M24 Chaffee, closely followed by an M42 Duster, a built for the US Army from 1952 onwards by General Motors. A surprisingly mobile gun with a top speed of 45 mph and a range of 100 miles, the Duster proved highly effective in the Vietnam War against the North Vietnam Army ground forces. It also did double duty as convoy escorts and for base perimeter defence. Over 3,700 M42s were December 1959 when their guns were fighters.

Patton tank, fitted with a 105 mm gun.

Above: the National Guard maintenance crew were a great bunch and very excited to have their photo taken for a UK magazine!

Head of restoration projects, Mark Stevens, stands atop the m4 Sherman and shows me what needs to be done to restore this bad boy.

Left: front view of the M41A3 Walker Bulldog, it needs some exterior restoration

Above left: an M60A3 Patton tank with 105mm main gun and with turret reversed for easier storage.

Left: an M1113 Hummer with communications shelter and finished in desert colour.

Top left: the M42 Duster, a 40mm self-propelled AA gun built from 1952 onwards by general motors.

War II through the Cold War. First up who likened the machine gun ring to a

40 mm Self-Propelled anti-aircraft gun, produced but they were discontinued in no longer viable against fast moving jet

Last in the line was an M60A3 Introduced in December 1960 as a first-generation main battle tank, this heavy hitter played an important role in the Cold War and was widely used by NATO forces. It has long since been superseded by the M1 Abrams, but the M60 can still be found in service around the world.

RESTORATIONS

On to the large warehouse-like restoration shed, where a beat up M4 Sherman tank stands outside. I was introduced to the chief of restoration operations, Mark Stevens, an amiable



I dropped by out of curiosity on an

autumn day and was amazed at the

my four-hour tour, ranging from a

World War I truck to World War II

modern vehicles in current use.

RENOVATIONS

to be missed.

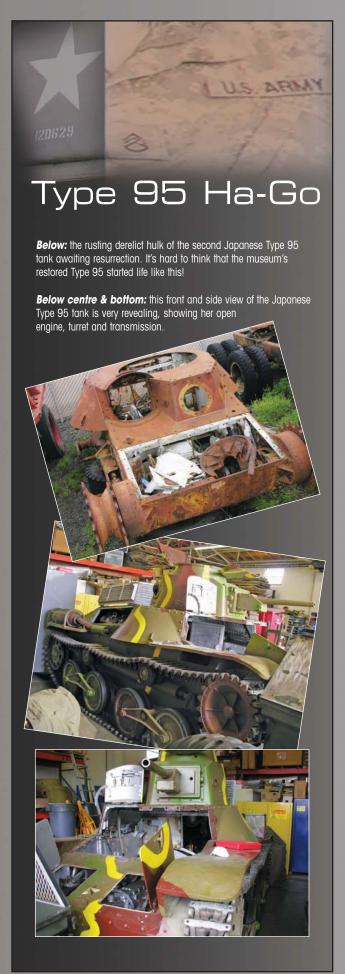
huge variety of vehicles I saw during

tanks, amphibious vehicles, guns, and

way. It hopes to be reopened in December 2012. With 32,000 square feet of display space, a collection of 14,000 artifacts that includes 50 ground vehicles and five aircraft, rare weapons, P.O.W. relics, flags, and colours and uniforms, the museum promises to be an outstanding and upto-date display of militaria, according to Curator Tracy Thoennes, and is not

armoured vehicle display; a series of tanks lined up on the gravel roadside, not far from the restoration shed. It's a

My first stop is the outdoor



and competent dressed in repair kit. Standing on the Sherman, he showed me what needed to be done to restore her, and it's a lot! The interior is gutted, a mass of rust, litter and loose pipes and fittings and while these guys have their work cut out for them, but Mark's volunteer restoration crew is a keen lot.

Mark told me that during a recent visit, the State Adjutant General was so impressed with the group's restoration work that he recommended the Sherman be placed in a position of honour outside Camp Withycombe's new armoury building, alongside a restored Japanese WW2 Type 95 Ha-Go light tank.

Mark proudly shows me the rare Type 95 Ha-Go light tank that they've been working on for four years. Only about 25 of these tanks survive today, mainly in museums around the world. This one's a beauty, looking like it's just rolled of the line. The exterior is painted a curious camouflage colour scheme with red, yellow, and green stripes on a khaki brown tank chassis. The interior is tiny, and I wouldn't have relished the idea of squeezing into this cramped turret with two other crewmen. The original engine has been fully restored and is fully operational.

This restoration is nothing short of miraculous when you consider that this tank, along with a second one, were captured by US forces in the Pacific, transported to the United States, and used as for target practice at Naval Air Station Fallon! Type 95 tanks like these were part of a tank battle on the Island of Biak. The 41st Infantry Division served throughout the South Pacific and fought a long and bloody battle there. Camp Withycombe is now home of the 41st Infantry Brigade Team, which honours its proud lineage and heritage.

Eventually in World War II, as happened with so many weapons, the Type 95 proved highly vulnerable against the M4 Sherman and M5 Stewart tanks. Hundreds of Type 95s were abandoned in China after WW2, and promptly used in the Chinese Civil War.

After admiring the Type 95, Mark and I tour the rest of the cavernous restoration shed. It's crammed with tools of all types and sizes, and several interesting vehicles, with slow but steady progress being made on their restoration. There's a DUKW six-wheel-drive amphibious truck, invented by a British deep-water sailor who lived in the US during World War Two. The DUKW passed the ultimate test of seaworthiness by crossing the English Channel. Another interesting WW2 amphibious vehicle that is on



loan to the museum is the GPA, a Jeep variant nicknamed the "Sea Jeep". Inspired by the DUKW, 13,000 of these Sea Jeeps were built by Ford Motor Company, however, they proved too heavy and tended to run low in the water.

An olive drab M20 Scout Car, looking fully restored, stood nearby in the shed. It is a variant of the M8 Light Armoured Car, or the Greyhound in the U.K. This 6x6 was produced by Ford Motor Company during WW2 and could go virtually anywhere, being widely used by British and US troops in Europe and the Far East and could reach the rollicking speed of 55 mph on the road, hence the nickname 'Greyhound'!

JUNK YARD

In another corner of the restoration warehouse was a WWI Standard B Liberty Truck, in reasonable condition, with its engine cowling open. The Liberty Trucks came off the production line in 1917, being used for motor transport of troops, supplies, and ammunition. Only 12 of these trucks survive today in the US! Other items up for restoration included a German 1899 75mm Howitzer, already looking in fine shape, and a handsome type 91 Japanese 105mm Howitzer.

Next Mark showed me the "junk yard", where old derelict rusting hulks lie around like fallen soldiers waiting their turn for resurrection. Here I spotted the remnants of the second Type 95 tank, it's a real mess and if I hadn't seen the restoration group's completed example, I wouldn't have believed it possible to remake anything out of this.

Nearby I saw the remains of an M114A1E1, one of the US Army's less-than-successful vehicles. This Vietnam era tracked Command and Reconnaissance vehicle, manufactured by the Cadillac Division of GM, was amphibious, but proved unsuitable for



use in Vietnam and was quickly replaced by the M551 Sheridan tank. The M114 was basically intact, but needs a lot of work, with bits and pieces piled on top and inside of its hull.

My tour continued and my hosts had the bit between their teeth as we moved on to view dozens of modern, but retired vehicles standing in a large field. Most are used for spare parts. It's a staggering display of military vehicles ranging from small excavators to M6 rough terrain forklifts, and from prime movers to tractors.

Finally, we walk along the long neat lines of current vehicles being

stored, restored and maintained. It's an impressive line up too, mainly of heavy lifters: M925A1 trucks, M978 Heavy expanded Mobility Tactical Trucks, M998 Humvees, M1078 Light Utility Trucks, M1083A1 General Utility Trucks, M1089 Wreckers, M1097A1 Heavy HMMWVs (Humvee), D7 Caterpillars, DV100 "Deuce" Bulldozers, FLU419 Tractors, and MW24 Bulldozers, to name a few!

Talking to some of the National Guard maintenance crew and I found them excited at the prospect of having their picture in a UK magazine article, and t hey pose for me in front of a D7 Caterpillar Dozer, with the typical



Left: the World War I Standard B Liberty truck with engine cowling open.

Top: this line up of M1083A1s, M1087A1s, and M1089 wreckers gives some idea of the scenic backdrop to Camp Withycombe.



Pacific Northwest evergreens interspersed with some deciduous trees changing colour as a scenic backdrop.

All in all, this was a great tour; it's not often that one is allowed unfettered access and a personal guide on a tour of a US Army National Guard base, but one of the most memorable aspects of the visit was the wide time span of the vehicles I saw here, from 1917 to today's upgraded vehicles. I must have seen 50 or more different military vehicles in my four-hour tour.

To visit Camp Withycombe from the UK you should first check the wesbite to see that it is open. You will need your UK Passport to enter the base, but should have no problems at the gate if you let the guards know you are visiting the museum. To visit the restoration centre and tank line up, you should contact Museum Curator Tracy Thoennes well in advance of your visit at: tracy.thoennes@us.army.mil

www.oregonmilitarymuseum.org

05mm Howitzer

Paul Gaujac describes the 105mm Howitzer M2A1, Carriage M2A2



Below: from left to right, 105mm Howitzer rounds: M1 high-power explosive with instant fuse M48A2; M60 for lethal and incapacitating gas with powerful fuse M57; M60 Smoke with white phosphorus, with fuse M57; and T16 flare.

he 105mm M2A1 Howitzer was by far the most widely manufactured and used artillery piece to have been produced by the USA during WW2. Following an initial order for 48 M2 Howitzers in 1939, which ran to March 1940, full production of the 105mm Howitzer M2A1 using the M2A2 carriage began in April 1941, with more than 8,500 pieces being produced by June 1945, however, the gun proved so successful that it remained in production until

1953 and saw another 1,666 Howitzers being built at the Rock Island Arsenal. The weapon continued to be modified and modernised after the war and the Howitzer continues to be used by various armies to this day, making it one of the longest serving weapons in modern history.

During the Second World War a typical infantry division would be equipped with 54 Howitzers. The same weapon was also used for vehiclemounted self-propelled artillery where

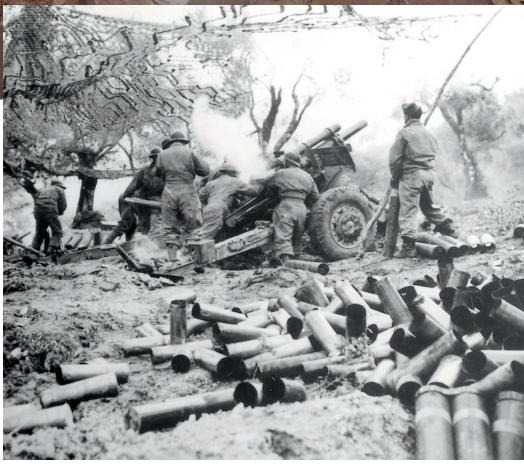


"During World War Two



o the M2A1 105mm Howitzer saw service with the US Army and US Marine Corps..."





Top right & above: in December 1943, in Abruzzo, Italy, a 105 HM2 of 63rd African Artillery Regiment, Moroccan 2nd Infantry Division, fire a shot from the Volturno valley. it was known as the 105mm M7 Howitzer, more commonly known as the 'Priest'. It was also mounted on the amphibious DUKW, the M3 halftrack, where it was known as the T19 105mm Howitzer Motor Carriage, and in the M4 and M4A3 Sherman tanks.

During World War Two it saw service with the US Army and US Marine Corps, and around 950 examples were supplied to France and other Allies under the Lend-Lease scheme. The M2A1 105mm Howitzer continued to see widespread use by more than forty nations after the end of WW2, and was used in various conflicts around the world, including the Indo-China, Korea and Algeria wars, equipping the French 11th Parachute and Amphibious Division right up to the 1970s.

The first trials of the 105mm Howitzer M2, at Fort Sill in 1932, were judged to be satisfactory, with some improvements being made to the recoil absorption system to enable the gun to be fired near vertically the need to dig a deep hole, and a carriage better suited to being towed. In April 1941, serial production of the M2A1 was launched, following some final improvements. Two other improvements were made during the course of the war; firstly the electric Warner brakes were removed, leaving just the handbrakes, which brought the

overall weight of the gun down to 4,475 lbs/2,032kg and, as a result of combat experience, a larger, more effective gun shield was adopted.

DESCRIPTION

The 105mm Howitzer M2A1 was designated as a light field artillery weapon, used as divisional field artillery, primarily for the direct support of infantry. The short-barrel 22.5 calibre weapon was capable of firing thirteen different types of ammunition, including a 33 lb high explosive round with a muzzle velocity of 1,550 feet per second to a maximum range of 12,205 yards. The 105mm Howitzer M2A1 could be used for both direct and indirect fire. Rate of fire was between two and four rounds per minute.

The recoil mechanism used on the M2/M2A1 carriage was of the hydropneumatic, constant recoil type. A counter-recoil system helps to restore the weapon to the original firing position and a spring equilibrator reduced the physical effort required to elevate or depress the gun.

The M2, M2A1 and M2A2 carriages were of similar construction, with minor differences between the three. They were all of a single, unsprung axle, two-wheel, split trail design with an equalizing system the

enable firing from uneven terrain. Once in the firing position the gun rests on the wheels and trail spades, which were incorporated into the design of each of the trail arms. The crew was protected by an armoured shield, which was introduced on the M2A1 carriage and improved on the M2A2 carriage to improve protection for the gun crew.

The Howitzer was normally towed by a 2 1/2-ton GMC 6x6 truck with winch or the M5 High Speed Tractor, while a typical gun crew consisted of a commander, a gun-layer and seven crew: height and fire aimer, loader, fuse setter and assistant, three armourers.

In its various forms the M2A1 105mm Howitzer served on all fronts during World War Two and went on to see extensive post-war service with the US Army and numerous other countries, making it one of the most widely used howitzers of the 20th Century.

Bottom right: pictured in March 1945, on the frontline in the St Nazaire pocket, a Sergeant of 871st Field Artillery Battalion, 66th Infantry Division prepares munitions for a 6-charge shot. Two powder sachets are already placed in the cartridge.



M2A1 Howitzer Fact File ...

- Artillery sleds could be fitted to the wheels for snowy conditions
- The howitzer could be transported on the amphibious DUKW truck
- Life expectancy for one gun tube was approximately 7,500 rounds

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COMBATCAMERA

This month Shaun Connors did several broad searches of the US DoD image database, the search criteria being a year... Here's the best of what he ultimately filtered out...

ombat Camera features a selection of images captured by service photographers around the world on exercise, disaster relief/humanitarian operations, and operational deployment. Where possible and where available the original captions, as originally presented, will be used, with any required supplementary text filling in any equipment identification blanks that may exist, this added as a follow on caption or inserted into the main caption in [square brackets].

This month's selection of images are all Australian or US DoD copyright.



Right: an USMC AAV7A1 Amphibious Assault Vehicle assigned to the 3rd Amphibious Assault Battalion, 3rd Marine Division comes ashore at Marine Base Ternate during Exercise BALIKATAN 2000. BALIKATAN 2000 is a joint combined field training exercise held between US and Philippines forces, and is the largest of its kind since 1995.

Main photo below: tanks are washed at the Tank Wash facilities that were completed in June, 1982. Sadly this was all the information supplied with the image, so if you know where these tank wash facilities are please let us know via the usual editorial channels.









Above: firefighters aboard a P-15 fire truck prepare to spray foam onto a fire caused by the explosion of a 40,000 gallon JP-4 aviation fuel storage tank at Osan Air Base, Republic of Korea, Apr. 5, 1986.

Left: USMC AAV7A1 Amphibious Assault Vehicles assigned to the 3rd Amphibious Assault Battalion, 3rd Marine Division land on the beach at Marine Base Ternate, while conducting amphibious assault training, during Exercise BALIKATAN 2000. BALIKATAN 2000 is a joint combined field training exercise held between US and Philippines forces, and is the largest of its kind since 1995.







Above: USAF personnel use forklifts to unload pallets of cargo from an Air National Guard C-103 [C-130] Hercules aircraft at the "AEORDROM SPLIT" located in Split, Croatia. From Airman Magazine's December 1994 issue article "Missions Increase Around the World - Ops Tempo: the Effects".

Top left: a US Army M939A2 5-ton truck rolls down the ramp of the Ready Reserve Force ship CAPE DECISION (T-AKR-5054) at a port facility in the Arabian Gulf region on 19 Oct 1994. Army stevedores from the 567th Transportation Unit, Ft Eustis, Va. were flown to the region to download the equipment from the ships in preparation for Operation VIGILANT WARRIOR, the US Armed Forces response to aggressive Iraqi actions towards Kuwait.

Left: a US Army M35A2 2 1/2-ton cargo truck is driven aboard the loading ramp of the US Naval Ship (USNS) Gordon (T-AKR 296). USNS Gordon is capable of carrying an entire Armor Task Force, including 58 tanks, 48 other tracked vehicles plus more than 900 other wheeled vehicles. USNS Gordon is one of 19 Large, Medium-Speed, Roll-on/Roll-off Ships, or LMSR, which will be built or converted at US shipyards by the year 2001. USNS Gordon is a former commercial tanker and underwent conversion to Navy Military Sealiff Command specifications to make it ideal for the loading, transport and unloading of Army and Marine Corps combat equipment. The ship is named in honor of Master Sergeant Gary I. Gordon, US Army, who was posthumously awarded the Medal of Honor in 1994 for his gallantry in action in Mogadishu, Somalia.



Above right: in the morning around 0800 at the Launch Facility, security policeman Senior Airman Blake Wingate of 341 OSS holds open Launch Facility K-11's gate and allows a transporter/erector vehicle from the 341 Missile Maintenance Squadron to come onto the site. Today the truck will be removing the 341 Missile Wing's last Minuteman II intercontinental ballistic missile from its launcher, marking the end of thirty years of Minuteman II's in the Air Force inventory and the completion of President Bush's 1991 "Stand Down" order which removed all Minuteman II missiles from alert.

Below: Airman First Class Greg (A1C) A. Fournier, a member of the 50th Tactical Missile Wing, drives a 10-ton tractor-trailer as it pulls a transporter-erector-launcher for ground launched cruise missiles (GLCMs). From the February 1985 Airman Magazine.





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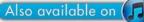




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Military 100 Roughly 100 Roughly 100

James Taylor looks at Dutch Army Land Rovers

or more than 60 years, Land Rovers have been purchased by military and paramilitary forces all over the world. They've been configured in more different ways than most of us have had hot dinners, too. In the late 1970s, the Dutch military replaced its long-serving NEKAF M38-A1 Jeeps with Series III Land Rovers. Local modifications meant their experience was not wholly satisfactory, says James Taylor, and in this feature he looks at some of the variants used by the Dutch military. As usual we're inviting readers to help fill in the blanks when

As usual we're inviting readers to help fill in the blanks when information relating to the photos shown is perhaps a little sketchy. If you can add more to what James has to say, he'd love to hear from you via the editorial office and we will in turn pass on that information to readers in future issues of MMI...



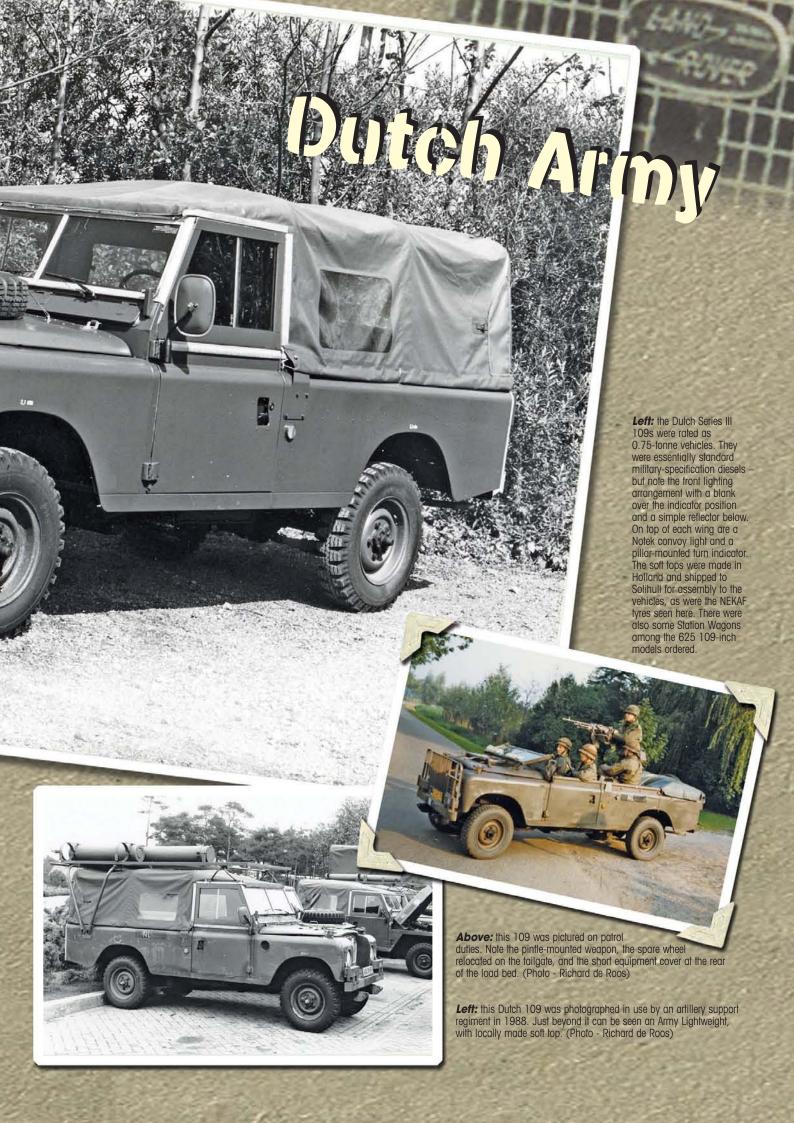
Left: pictured before allocation of its Dutch number-plate, this Lightweight is wearing the locally manufactured NEKAF tyres that caused so much difficulty. The S painted on the bonnet indicates that the vehicle was electrically suppressed.

LAND-ROVER.

Below: the insistance of the Army on using NEKAF tyres (on the left in this picture), of which they had many thousands in stock for their NEKAF Jeeps, earned the Series Ills a bad name in the Dutch military. These tyres had a noticeably larger rolling radius than those Land Rover fitted as standard, which caused several problems and eventually led to a massively expensive transmission replacement programme. (Photo - Richard de Roos)

Below: Land Rover had never built a diesel Lightweight before the Dutch asked. This is one of the 1974 trials vehicles, which has now been restored to original condition by Dutch enthusiasts.





REGULAR: ROVERPHILE

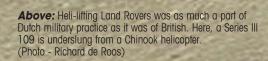




Top: the Dutch bought 537 ambulances with Marshall bodywork. These were similar in all respects to the British Army deliveries. One story is that the Dutch insisted their vehicles should be fitted with anti-roll bars, and that these worked so well that all subsequent British deliveries also had them. (Photo - Marshall's)

Above: the Dutch ambulances had the usual 2/4-stretcher configuration. The warning in red on the left of the roof notes that the shackles are to be used only for securing the vehicle and not, therefore, for lifting it. (Photo - Marshall's)





Left: equipped with a roof rack anchored to the rear body and front roof support rails, this is a soft-top 109 used for line laying by a field telephones unit in 1988. (Photo - Richard de Roos)



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out of the ordinary, but further investigation revealed that there was more in the sale than first met the eye A considerable consignment of fifty plus Land Rovers were once again listed and of note was a pair of station wagons in reasonable condition, a selection of Wolf 90 TUL soft tops and some surprisingly tidy 90s and 110s, many with recon gearboxes and engines. Close by was yet another batch of armoured Snatch Land gone by now?

Another sizeable batch of Leyland DAF 4x4 4-tonne cargo trucks was also listed, together with Bedford TM 6x6 cargo trucks, Foden heavy recovery trucks and a single example of the Seddon Atkinson 6x4 tractor unit, but three vehicles that stood out for me were the Marshalls MT cab Bedford 4x4 4-tonners. These trucks were essentially refurbished and upgraded examples of the old Bedford MK/MJ 4-tonne truck but fitted with the distinctive Marshalls MT cab, helping them to stand out from the

Although fewer in number, another varied group of armoured vehicles was also up for grabs in the April sale,

Vehicle Spares



Left: this set of tracks was simply listed as 'Russian etc. Track set', but you have to wonder where they came from?

Below: another unusual item found lying in the yard was this Fassi hydraulic crane, but to me the pronged blade lying on top looks to have come from a mine clearance vehicle.





MILITARY LAND ROVERS





Left: there were several examples of the refurbished Bedford MJ 4-tonne 4x4 truck. The trucks underwent a substantial refurbishment programme following years of sterling service. The most noticeable changes involved the replacement of the original cab with this Marshall MT cab, giving the truck a very different appearance.

including several FV432 APCs with a couple of command vehicles amongst them, a single FV434 fitters vehicle, an Alvis Stormer, CVR(T) Shielder and a single Combat Engineer Tractor, although there were many more CETs stored elsewhere on site. Just along the yard was a group of three CVR(T) Sabre hulls, which had been stripped of many parts, standing on just four roadwheels, but interestingly they still had the various brackets fitted that once took electronic countermeasure equipment and all still had the perforated add-on armour panels fitted to the hull.

MILITARY TRUCKS







Far left: amongst the Land Rovers listed were these 110 Station Wagons, both were 1996 dated and both were fitted with the 300TDi diesel engine rather than the standard 2.5-litre NA diesel.

Centre left: the supply of armoured Snatch Land Rovers is finally starting to dry up, but the April tender sale saw another batch being listed.

listed this month was a Saxon Patrol armoured personnel carrier. The Saxon Patrol was developed specifically for use on the streets of Northern Ireland, and while it was based on the original Saxon APC 'Battle Taxi', it differs considerably having been modified to better suit the needs of the troops using them on the streets of Northern Ireland. These changes included the fitting of additional Macrolon armour inside the vehicle, the addition of a large barricade remover at the front of the vehicle, a roof top observation hatch with protection (as seen on many NI vehicles), and in the case of this example, fold-out wings that afforded protection for the crew when operating outside the vehicle in riot situations. the interior was a bit of a mess, but hopefully someone will have bought the vehicle with a view to restoring it.

for sale in the tender, making it well worth the visit. Just before going to press the date for the next tender sale had been set for the end of May, and all being well we'll be covering the sale in a future issue, but you can also check for the dates of any future sales by logging on to the website shown below.

The Witham Specialist Vehicles' website also runs a very popular online auction site, with regular additions and updates and there's a direct sales section too, selling everything from trucks and trailers to

For further details why not log on to: www.mod-sales.com

Buyer's Tips...

- Mever try and buy a vehicle blind off the internet, always view before bidding, especially if the vehicle is expensive or unfamiliar to you
- If you can't get to view the vehicle yourself try and find someone who is going to the sale and ask them to take a look for you instead
- Don't place too much emphasis on cosmetic aspects of the vehicles, check expensive components such as engine, gearbox and axles
- Make sure you can transport the vehicle you buy and remember, the heavier the vehicle the more expensive it is to transport
- When bidding in a tender sale try spreading your bids across a number of items to be sure you get something
- Be sure you have the funds to cover everything you bid for, especially if bidding for multiple items, which you could potentially win

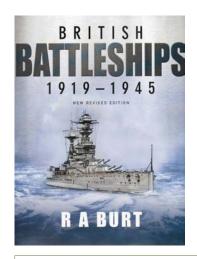




Far left: yet more Foden Heavy Wreckers turned up in the April sale, some in better condition than others!

Centre left: row upon row of Leyland DAF 4-tonners, which are being disposed of now the newer MAN 4x4 is in service.

Left: ex-Air Force Seddon Atkinson 6x4 tractor unit coupled to a King step frame low loader trailer.



Stunning British Battleship reference work

Anvone with an interest in the British Baftleships of the Second World War really ought to consider adding this stunning reference work to their collection. First published back in 1993, this classic reference source quickly become a must-have book for the Naval enthusiast and historian, but soon sold out due to demand. Having been out of print for many years, this extremely sought after publication is available once again, albeit revised and updated.

This superb 432-page in-depth reference work covers the former Great War Dreadnoughts and Battleships that formed the backbone of the British Navy's early war battleship fleet while

newer ships were built, as well as those newer vessels built to match the might of the German Navy. The ships are described in detail, covering the service life, construction, armament, use and camouflage schemes adopted, and even the damage inflicted by the enemy and the repairs needed to get them operational again.

Packed with black and white photographs, illustrations and line drawings, this profusely illustrated book offers the reader a detailed account of the British battleship fleet. Additional chapters also cover the converted aircraft carriers, making this a must have book for the naval enthusiast.

Title: British Battleships 1919 1945 Revised Edition

By: R.A. Burt

ISBN: 9781848321304

Price: £45.00

Format: Hardback

Available From: Pen & Sword Books Ltd. www.pen-and-sword.co.uk

The modern British Army goes under the spotlight

Title: The British Army Guide 2012-2013

By: Charles Heyman

ISBN: 9781848841079

Price: £9.99

Format: paperback

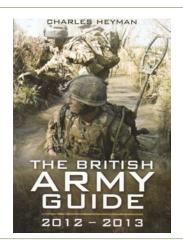
Available From: Pen & Sword Books Ltd. www.pen-and-sword.co.uk

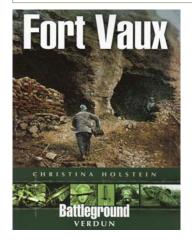
This new book from Pen & Sword offers a comprehensive guide to the modern British Army, providing up to date details of the organisational structures within the British Army. The 224-page book includes chapters on Army Organisation, International Commitments, Armoured Infantry, Army Aviation, Engineers, Communications and Combat Service Support, Units of the Army, Recruiting and Training and Reserve Forces.

The British Army Guide was first published in 1984 and this latest publication is the 12th edition of this popular reference source. The

information crammed into this book is a valuable reference source, dealing with all aspects of today's British Army and has proven popular with service personnel, the defence industry and other interested groups worldwide.

Although primarily a written resource, a short 16-page colour section is also included, featuring images of various key figures within the military, a number of current generation vehicles, weapons and aircraft. With a retail price of just £9.99 it's an inexpensive but comprehensive guide to the modern British Army.





The history of the Great War brought to life

The final offering from Pen & Sword this month is this new addition to the highly popular 'Battleground' series, which has more than 100 titles to its name. The book describes the bitter fight for Fort Vaux as part of the Battle of Verdun

during the Great War.

The author, Christina Holstein, is one of the leading authorities on the Verdun battlefield and its monuments, and in this new book she offers a precise, accessibly account of the fight for the fort, providing a graphic day-by-day narrative of the actions involved, which includes all the background information

readers may require to better understand the importance the battle for Fort Vaux played in the wider German offensive of 1916, itself a key aspect of WW1.

The 208-page book is packed with black and white photographs showing the key military figures involved in the planning and execution of the attack and defence of Fort Vaux, as well as photographic evidence of the fighting at the time and showing the area as it is now. Additional information is provided to allow the reader to conduct walking and driving tours of the fort and the battlefield. All in all a fascinating read.

Title: Fort Vaux - Verdun - Pen & Sword Battleground Series

By: Christing Holstein

ISBN: 9781848843578

Price: £12.99

Format: Paperback

Available From: Pen & Sword Books Ltd. www.pen-and-sword.co.uk

Dramatic race to save the trapped crew of a Russian sub

Title: 72 Hours

Bv: Frank Pope

ISBN: 9781409144069

Price: £18.99

Format: Hardback

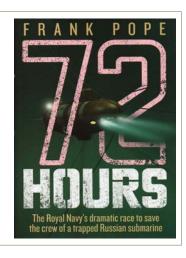
Available From:

Orion Publishing Group Ltd. www.orionbooks.co.uk

This book has all the twists and turns of gripping thriller and yet the tale is true. When the Russian Navy submersible AS-28 ran into a web of cables in 600 feet of water whilst on a secret mission to an underwater military installation thirty miles off the coast of Kamchatka, it found itself trapped and unable to surface, Russian efforts to rescue the stricken crew failed. 24 hours later and still haunted by the desperate loss of the submarine Kursk, the Russian authorities reluctantly requested international assistance in an effort to save the crew of the submersible.

Therein began a race to get to the crew and free them before they ran out of air. Commander Ian Riches of the Royal Navy Submarine Rescue Service got the call to race to the scene and attempt a rescue, but time was running out and Kamchatka was at the very limit of their operational range, but worst still they had just 72 hours to complete the

As British, American and Japanese rescue crews scrambled to the area to the aid of the stricken sub, a dramatic series of events unfolded, and it's all captured in this thrilling new book.





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Government Surplus Sales:

Witham Specialist Vehicles: Regular auctions of ex-military vehicles, equipment and spares. Contact Witham Specialist Vehicles, Honeypot Lane, Colsterworth, Lincs for details of the latest sales or visit: www.mod-sales.com

JUNE 2012

Friday 8 Saturday 9 **Sunday 10 June 2012:**

Southport Funfest: Victoria Park, Southport. For further details or to book in contact Jimmy Vasco: mg1966uk@hotmail.com www.westlancsmvt.com

Saturday 9 Sunday 10 June 2012: Home Farm

Heroines: held at Tyntesfield Estate, Wraxall, North Somerset, BS481NX. For further details contact James Shopland on: Tel: 07968 274480 james@shoplandsawmills.co.uk www.imps.org.uk

Saturday 9 Sunday 10 June 2012: Severnside Area

MVT Annual Military Vehicle Show: held at the Vintage Showfield, Cambridge, Gloucestershire, GL2 7AB. Show opens to public between 9.30am and 6.00pm. For further details contact John Keedwell on: Tel: 01453 890920 www.mvt.org

Saturday 9 Sunday 10 June 2012: Wicksteed at War: held at Wicksteed Leisure Park, Barton Road, Kettering, Northamptonshire, NN15 6NJ. Contact Tim Hawkes on:

Tel:07990 574 338 tim@letscrushit.com

Friday 15 to Sunday 17 June 2012: Cholmondelev Pageant of Power: held on the Cholmondeley Estate in Cheshire. For further details see: www.cpop.co.uk

Saturday 16 Sunday June 17 2012: Lister

Tynedale Steam & Country Show: held at Nibley House Farm, North Nibley, Dursley, Glos, GL11 6DL. For further details contact show organiser John Keedwell on: Tel: 01453 890920

Sunday June 17 2012:

Duxford Military Vehicle Show: held at the Imperial War Museum, Duxford, Cambs. Vehicle entry enquiries should be addressed to: V. Chiverton, 51 Collingwood Road, Eaton Socon, Cambs, PE19 8JQ.

Friday 22 Saturday 23 Sunday 24 June 2012:

The Yorkshire Wartime Experience: held off Hunsworth Land, Hunsworth, Bradford, BD4 6RN. Vehicle & re-enactor bookings call Stuart Wright on: Tel: 07748 604461 Stuart.wright@hotmail.co.uk Stall holders contact Paul on: Tel: 07709 052501 Pdt3945@hotmail.com www.ywe-event.info

Saturday 23 Sunday 24 June 2012: Muckleburgh Collection Military Display Weekend: Held at The Muckleburgh Collection, Weybourne Camp (off B149) North Norfolk, NR25 7EG. Call: Tel: 01263 588284 events@muckleburgh.co.uk www.muckleburgh.co.uk

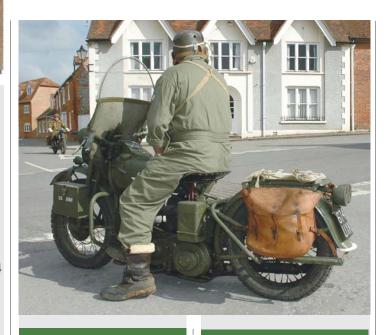
Saturday 23 Sunday 24 June 2012: Wartime in the Vale: National MVT Show, held at Ashdown Camp, Badsey near Evesham, Worcs. For more information visit the website at: www.ashdowncamp.webs.com

Saturday 23 Sunday 24 June 2012: Step Back to the 1940's: held at The Severn Valley Railway, Bewdley, Worcestershire, DY12 1BG. Pre-1945 vehicle displays at most stations. For details call David J. Mee on: Tel: 01299 404269 www.svr.co.uk

Saturday 23 Sunday 24 June 2012: Banbury Rally at Bloxham: showaround at Milton Road, Sat Nav users - 0X15 4HD. For further details contact: Tel: 01295 320100 banburysteam@hotmail.com www.banburyrally.com

Sunday 24 June 2012:

Militaria & Medal Fair: held at Stratford Leisure Centre. Bridgefoot, Stratford on Avon, Warks, CV37 6YY. For details: Tel: 01753 534777



JUNE 2012

Sunday 24 June 2012:

History on Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details: Tel: 01753 862637/833833 www.historyonwheels.co.uk

Saturday 30 June Sunday 1 July 2012:

Tankfest 10th Anniversary: held at the Tank Museum, Bovington, Dorset. For further details or to order tickets see the website at: www.tankmuseum.org or call Tel: 01929 462359

Saturday 30 June Sunday 1 July 2012: 40th Sheffield Steam & Vintage Rally: held at Rackford Road, North Anston, Nr Sheffield, S25 4DF For further details contact:

Tel: 01709 545047.

30 June 1 July 2012: The 1940s Experience: held at the Isle of Wight Steam Railway, The Railway Station, Havenstreet, Isle of Wight, PO33 4DS, open 10.00am to 5.00pm each day. For further details contact:

Tel: 01983 882204 info@iwsteamrailway.co.uk www.iwsteamrailway.co.uk

Saturday 30 June

Sunday 1 July 2012: Military Wings & Wheel Armed Forces Weekend 2012: held at White Waltham Airfield, Maidenhead, Berks, SL6 3NJ. For further details call: Tel: 01235 538134 info@statelysolutions.co.uk

JUNE 2012

DATE CHANGE... DATE CHANGE... Saturday 30 June

Sunday 1 July 2012: Military Manoeuvres Show: held at Conwy Touring Park, North Wales. The event features historic military vehicles, plus battle re-enactments and tracked vehicle rides. For more details contact Norman on: Mob: 07711 200631 sales@conwytouringpark.co.uk or check out the show website www.militarymanoeuvres.co.uk

JULY 2012

Sunday 1 July: Preston Arms Fair: held at Mercure Dunkenhalgh Hotel, Blackburn Road, Clayton Le Moors, Lancashire, BB5 5JP, Accrington. For details call the organisers on: Tel: 01254 263260 www.prestonarmsfair.co.uk

Friday 6 Saturday 7 Sunday 8 July 2012:

Military Vehicle Trust Show, Caple, Surrey: Show staged by the East Surrey & West Kent Area, Temple Lane, Caple, Surrey, RH5 5HJ. For details contact Yvonne on: Tel: 01306 711 907 yvonne@g-j-anstee.demon.co.uk

Friday 6 Saturday 7 Sunday 8 July 2012:

Operation Home Guard: for further details about the event or to book in please contact John & Elaine Ward on: Tel: 01524241024 www.ingletonhomeguard.co.uk

JULY 2012

Friday 13 Saturday 14 July 2012: Meltham Memories: Meltham, West Yorkshire, HD9 4AE, living history, vehicles etc. Vehicle bookings should call Steve Aldred on: Tel: 07542331945 Stalls/Tickets call Pam Cox on: Tel: 07841426945

Saturday 14 Sunday 15 July 2012: Dunkeswell Aero Rally: held by the South West Airfield Heritage Trust at Dunkeswell Airfield, Honiton, Devon. For more details call: Tel: 07776075996

Saturday 14 Sunday 15 July 2012: Manchester Airport Aviation & Transport Fair: in associaton with Ace Mobile Living History Group & H4H at the Runway Visitor Park. Tel: 07952 176134 www.tasmanchester.com/TAS Fair.html

Wednesday 18 to Sunday 22 July 2012: The War & Peace Show: The Hop Farm, Paddock Wood, Kent. The world's largest military vehicle show. For details: Tel: 01304 813945 www.thewarandpeaceshow.com Tel: 01622 872068 www.thehopfarm.co.uk

Saturday 21 Sunday 22 July 2012: Woodhall Spa 1940's Festival: Held at Jubilee Park, Stixwold Road, Woodhall Spa, Lines, LN10 6QH, Contact Stuart Holmes on: Tel: 01526 353215 (after 6.00pm) stupot667@talktalk.net

Saturday 21 Sunday 22 July 2012: Much Marcle Steam Rally: Rye Meadows, Much Marcle, Ledbury, Herefordshire, HR8 2LX. www.muchmarclesteamrally.com

JULY 2012

Friday 27 Saturday 28 Sunday 29 July 2012: Welland Steam and Country

Rally: held at Woodside Far, Welland, Worcs, between Uptonon-Severn & Malvern, WR13 6LN. For further details: Tel: 01531 890762 www.wellandsteamrally.co.uk

Saturday 28 Sunday 29 July 2012: Erewash Steam & 40's Show: held at West Park Leisure Centre, Wilsthorpe Road, NG10 4AA. For further details call: Tel: 01159 135823 dave.hovles@ntlworld.com www.midlandeventsclub.co.uk

Saturday 28 Sunday 29 July 2012: War Machines at Davidstow: Davidstow Airfield & Cornwall at War Museum, Davidstow, Camelford, Cornwall, PL32 9YF. For details call: Mob: 07799 194918 www.cornwallatwarmuseum.co.uk

Sunday 29 July 2012: History on Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details: Tel: 01753 862637/833833 www.historyonwheels.co.uk

AUGUST 2012

Friday 3 Saturday 4 Sunday 5 August 2012:

Gloucestershire Steam & Vintage Extravaganza: held at South Cerney Airfield, Cirencester. For details visit the website at: www.steamextravaganza.com

Saturday 4 Sunday 5 August 2012: Croft Nostalgia Weekend: For further details check out the website at: www.croftmilitary.co.uk





AUGUST 2012

Friday 3 Saturday 4 Sunday 5 August 2012:

Woodvale International Rally: Southport, Merseyside. See the website for more information, or contact Jimmy Vasco at: mg1966uk@hotmail.com www.westlancsmvt.com

Saturday 4 Sunday 5 August 2012: Military & Flying Machines Show: held at Damyns Hall Aerodrome, Aveley Road, Upminster, Essex, RM14 2TN. Open between 10.00am and 5.00pm both days. For further details see: www.militaryandflyingmachines.org.uk

Saturday August 4 2012: MVPA 2012 Alaska Highway Convoy: MVPA 70th Anniversary Convoy on the famous Alaska Highway. For details contact: hq@mvpa.org www.mvpa.org

Saturday 11 Sunday 12 August 2012: Cobbaton Combat VJ Weekend: Cobbaton Combat Collection, Chittlehampton, Umberleigh, N. Devon, EX37 9RZ. For details contact Tim Isaac on: Tel: 01769 540740 info@cobbatoncombat.co.uk www.cobbatoncombat.co.uk

Saturday 11 Sunday 12 August 2012: Combined Ops 2012: IMPS Military show & Classic Aircraft weekend, held at Headcorn Aerodrome, Near Maidstone, Kent. For details contact Malcolm Dunlop: Tel: 01303 267271 mgdunlop@aol.com www.imps.org.uk

AUGUST 2012

Sunday 12 August: Preston Arms Fair: held at Mercure Dunkenhalgh Hotel, Blackburn Road, Clayton Le Moors, Lancashire, BB5 5JP, Accrington. For details call: Tel: 01254 263260 info@prestonarmsfair.co.uk www.prestonarmsfair.co.uk

Sunday 19 August 2012: Panshanger Revival Day: held at Panshanger Aerodrome, organised by the North London Flying School. The event is open from 10.00am. For further details call the organisers on: Tel: 01707 391791 www.northlondonflyingschool.com

Sunday 19 August 2012: Militaria & Medal Fair: held at Yate Leisure Centre, Kennedy Way, Yate, nr Chipping Sodbury, Bristol, BS37 4DQ Doors open from 10.30am till 2.30pm. For further details call the organisers on: Tel: 01753 534777

Saturday 25 Sunday 26 Monday 27 August 2012: Rauceby Forties Weekend:

For further details contact: Tel: 01529 488354 www.raucebywarweekend@hot mail.co.uk

Saturday 25 Sunday 26 Monday 27 August 2012:

Military Odyssey 2012: held at the Kent Show Ground, Detling, Kent, ME14 3JF. The world's largest multi-period living history show spanning all periods. For further details call: Tel: 01268 772448 www.military-odyssey.com

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AUGUST 2012

Saturday 25 Sunday 26 August 2012: Eastnor Castle Land Rover Show: The Deer Park, Eastnor, Nr Ledbury, Herefordshire, HR8 1RL. For further details contact the organiser Mark Woodward: Tel: 016974 51882 www.4x4sparesday.co.uk

Saturday 25 Sunday 26

Monday 27 August 2012: Tanks, Trucks and Firepower Show: Situated just 1 mile from Dunchurch in Warks on the A426 Southam Road, 5 miles from Rugby with access off the A45 and M45. For further details call the organisers on: Tel: 0780 3080028

www.tankstrucksandfirepower.co.uk Sunday 26 Monday 27 August 2012: History on

Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details:

Tel: 01753 862637/833833 info@historyonwheels.co.uk www.historyonwheels.co.uk

Sunday 26 Monday 27 August 2012: Northeast Military Vehicle Show: held at the Durham Light Infantry Museum, Durham City. For further details about the event contact: nemvc@hotmail.com

SEPTEMBER 2012

Sunday 2 September 2012: Militaria & Medal Fair: held at The Princes Hall, Princes Way, Aldershot, Hampshire, GU11 1NX. Tel: 01753 534777

SEPTEMBER 2012

Friday 21 Saturday 22 **Sunday 23 September** 2012: Middlewich Wartime Weekend: held in Middlewich Town Centre, Civic Hall & Royal British Legion Club. For further details contact Dave Thompson: Tel: 01606 833434 Mob: 07765 025596 www.middlewich.org.uk

Saturday 22 Sunday 23 September 2012: lowa All Breeds Jeep Show and 4x4 Swapmeet: held in Nevada, lowa, hosted by the Jeep Outdoor Club of Central Iowa. for further details call: Tel: 515 708 0080 or see the website at: www.iowajeepshow.com

Sunday 30 September 2012: Newbury 4x4 and Vintage Spares Day: Newbury Showground, Chieveley, Berkshire, RG18 9QZ. Call Mark Woodward for details. Tel: 016974 51882 www.4x4sparesday.co.uk

Sunday 30 September 2012: History on Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details: Tel: 01753 862637/833833 info@historyonwheels.co.uk www.historyonwheels.co.uk

Sunday 30 September 2012: Manchester Militaria Fair: held at Event City, Phoenix Way, Urmston, Manchester, M41 7TB. Located next door to the Trafford centre. For Further details contact Amanda on: Tel: 01743 762266 www.militaryconvention.co.uk



SEPTEMBER 2012

Sunday 30 September 2012: Military Vehicle Road Run: in aid of Help for Heroes, meet at the White Lion Pub, Baldock High Street, Baldock, Herts at 10.00am. Road run starts at 11.00am, meeting back at the White Lion. For details call Mr Baker: Tel:01462 630214 Mob: 07963 09143

OCTOBER 2012

Sunday 7 October 2012:

Hack Green Secret Nuclear Bunker Rally: French Lane, Nantwich, Cheshire, CW5 8BL. For details call Rod on: Tel: 01270 623353

www.hackgreen.co.uk

Sunday 21 October 2012: Militaria & Medal Fair: held at Stratford Leisure Centre, Bridgefoot, Stratford on Avon, Warks, CV37 6YY. Contact: Tel: 01753 534777

Sunday 28 October 2012: Dallas Dig Out: Dallas Autos, Cold Ash Farm, Long Lane, Hermitage, Newbury, RG18 9LT. Tel: 01635 201124 admin@dallasautoparts.com www.dallasautoparts.com

Sunday 28 October 2012: History on Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details: Tel: 01753 862637/833833 info@historyonwheels.co.uk www.historyonwheels.co.uk

NOVEMBER 2012

Sunday 4 November 2012: Northern Military Expo: Newark Country Show Ground, Notts, 2 minutes off the A1M (NG24 2NY). For further details contact Mark Askew on: Tel: 01302 739000 jeep.promotions@btconnect.com www.northernmilitaryexpo.co.uk

NOVEMBER 2012

Sunday 4 November 2012: Militaria & Medal Fair: held at The Princes Hall, Princes Way, Aldershot, Hampshire, GU11 1NX. For details contact: Tel: 01753 534777

Sunday 18 November 2012: Military Vehicle Day at Brooklands Museum: Brooklands Museum, Brooklands Road, Weybridge, Surrey, KT13 00N. For details see: www.brooklandsmuseum.com

Sunday 18 November 2012: Malvern Militaria Fair: Three Counties Showground, Wye Hall, Malvern, Worcester, WR13 6NW. For further details contact Amanda on: Tel: 01743 762266

Sunday 25 November 2012: Militaria & Medal Fair: held at Yate Leisure Centre, Kennedy Way, Yate, nr Chipping Sodbury, Bristol, BS37 4DQ. For further details contact: Tel: 01753 534777

Sunday 25 November 2012: History on Wheels Motor Museum: Open Day, located at Longclose House, Common Road, Eton Wick, nr. Windsor, Berks, SL4 6QY. For details: Tel: 01753 862637/833833 info@historyonwheels.co.uk www.historyonwheels.co.uk

If travelling long distances to events we would advise people to check for cancellations before leaving home, MMI cannot be held responsible for any errors, omissions or cancellations. Submissions for Mission Briefing should be sent at least two months prior to the event and we would also ask event organisers to notify us of any changes as soon as possible.

Why not email your show details direct to: ian.young@keypublishing.com or post them to the Editorial Office details on page 3



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LANDROVER 110, 1986 (USA exportable) Good straight clean ex medics personnel carrier. Fitted with recon army 2.5 diesel, 5 spd gearbox. No rust on bulkhead or chassis. 12 months MOT, taxed. £3250.

Tel: 01743 718939 (Shropshire)



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Needs TLC, paint work poor, no rot, surface rust, engine bay very clean. Last run 8 months ago. III health forces sale. Lots of time spent internally, not a lot of work, good runner. Best offer over £2500

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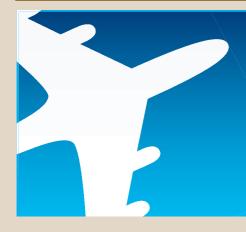
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