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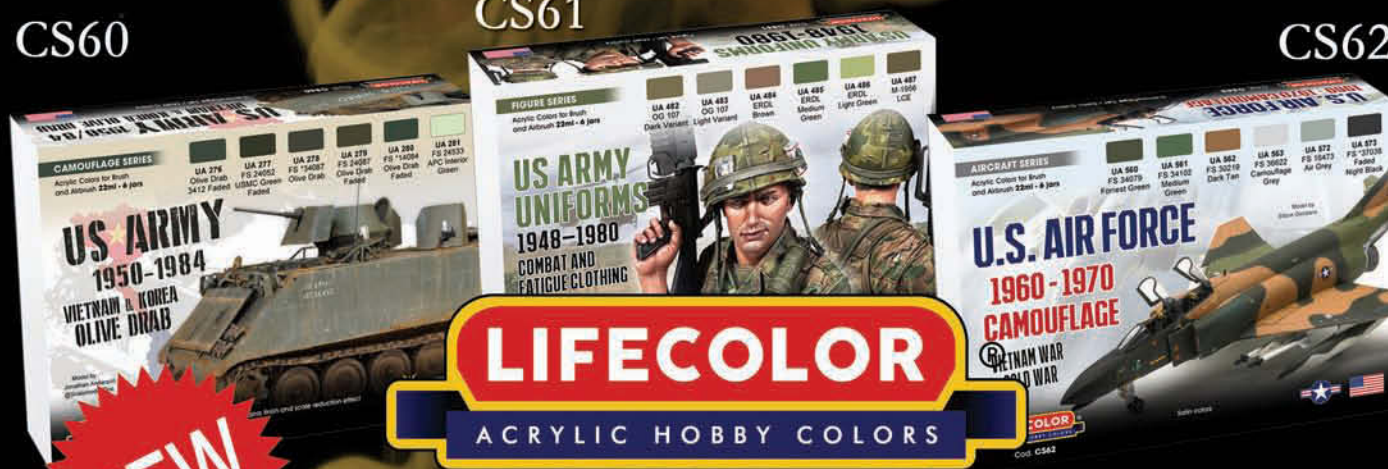
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AFV Modeller Ltd
Old Stables
East Moor
Stannington
Northumberland
NE61 6ES
Tel: 01670 823648
Fax: 01670 820274

Editor and Designer: David Parker
email: david@afvmodeller.com
Deputy Editor and Designer: Mark Neville
email: mark@afvmodeller.com
Sales Director: Keith Smith
email: keith@afvmodeller.com

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IAN BARRACLOUGH fulfils a Pipe Dream
building the Mighty Willich AVRE and
Scammell Commander combo

READY WILlich & ABLE



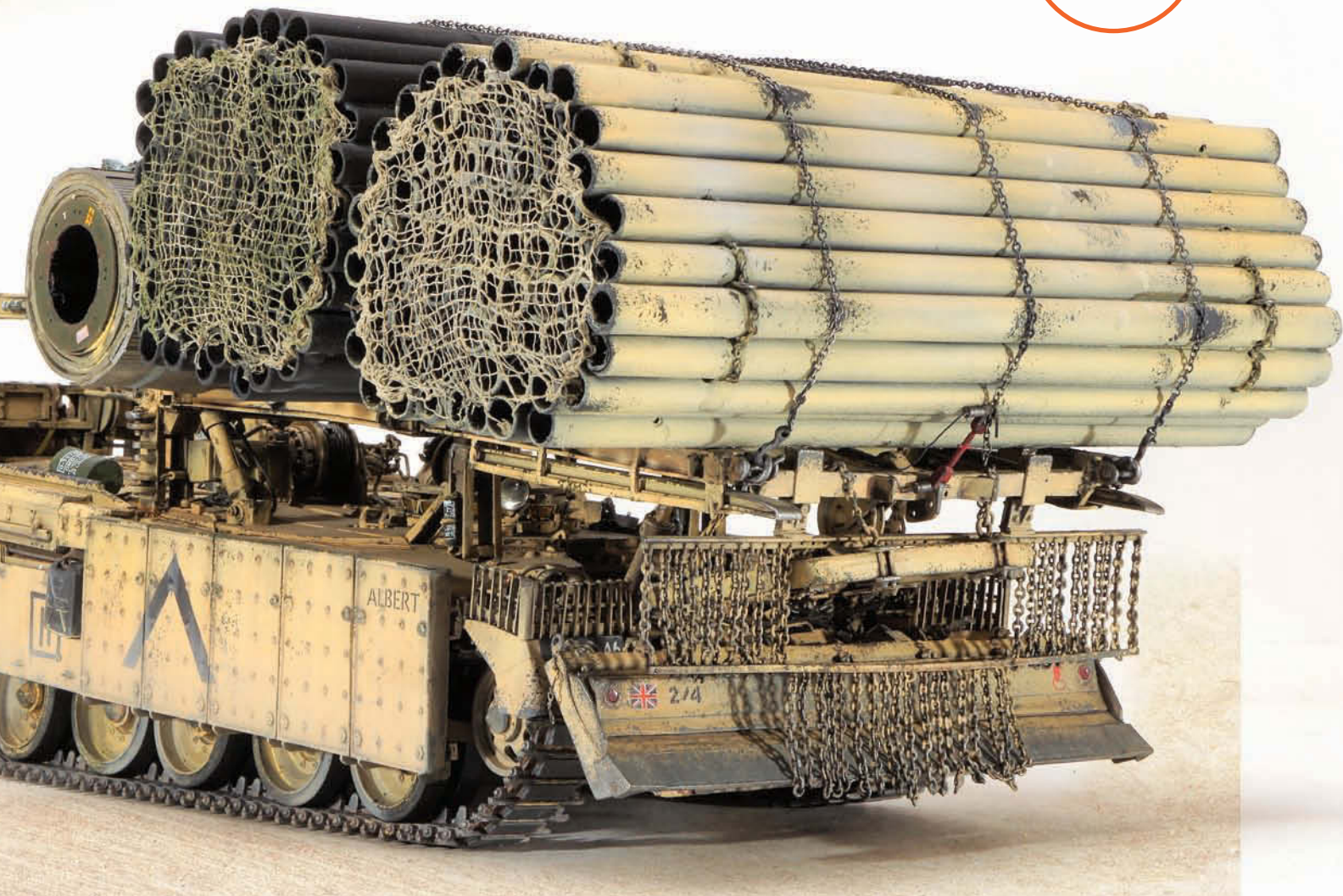


In the mid 80's the Centurion Armoured Vehicle Royal Engineers (AVRE) was starting to show its age. Its slow speed and limited load carrying capabilities were having a detrimental effect at the tip of the battle group, where it was supposed to be forming bridgeheads and clearing obstacles for the following armoured brigades.

As the new Challenger 1 was being introduced, there was limited UK engineering capability to also build a new armoured vehicle for the Royal Engineers (RE), so it was recognised that surplus Chieftain vehicles could have their turrets removed to reduce the vehicle weight, providing enhanced mobility even when loaded with engineering stores. Removal of the turret would also allow six Class 60 trackways or three fascines to be carried on top of the vehicle.

The Chieftain based 'Willich AVRE' vehicle was designed by Captain D Clegg MBE RE and entered service in 1987, primarily as a stopgap until UK manufacturing could produce a more permanent solution. Seventeen vehicles were built by 32 Armoured Engineer Regiment and 21 Engineer Base Workshop REME of the Royal Engineers under the direction of Lt Col JF Johnson RE based in the German town of Willich, hence its name.

PART ONE



The vehicle featured 3 'hamper' frames - built from former Bailey bridges; the front two of which could be made to tilt forward on hydraulic pistons. To operate the fascines, the Willich would drive forwards to the ditch to be filled with the hamper frame tilted forwards. As the driver braked, an explosive blow out pin would be fired, releasing the retaining chain or winch cable and allowing the fascine to roll forwards into the ditch - I'm told that it took some practice to get the procedure and timing just right.

On my modelling 'to-do' list (one of many...) is an image of a Willich AVRE on the back of a Scammell Commander tank transporter during the first Gulf War (from the book: Operation Desert Sabre, Bob Morrison, Concord Publications, Page 22). The unfeasibly large fascines on top of an already huge Chieftain hull; all loaded onto a massive Scammell Commander just looked too big to be real. It seemed that this build would remain a pipe (or 75 pipes - see later) dream as to scratchbuilt the Willich was beyond me; and the Accurate Armour 1/35 Scammell Commander was out of production and only selling for silly money on a well-known auction site (Note that Accurate Armour now have the Scammell Commander on sale again).

Sometimes the planets align! I'd managed to source a Scammell Commander for a reasonable price; and within days Newland Models announce the release of their much-anticipated Willich AVRE (Gulf War) conversion kit. Newland Models are a relative newcomer to the resin model market' although the Willich is item number 21 on their product list. Newland Models pride themselves on providing exceptional customer service, designing scratchbuilding the items you don't usually see elsewhere.

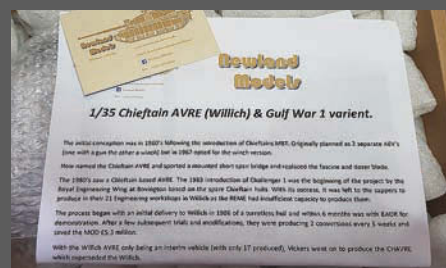
The Newland Models kit is advertised as being primarily for the Meng Models Chieftain, although I couldn't justify the expense of £50+ for the Meng kit only use the hull, track and running gear; and then bin the rest. The conversion instructions also detail the cutting of the front and rear hull 'tub' for the old Tamiya Chieftain which are obtainable for less than half the cost of the Meng kit, so I went with this option. I had a set of Friulmodel Chieftain Metal tracks left over from a previous project, but you could reasonably use the Tamiya ones as most of the track is hidden behind bazooka plates and extra armour on the sides.



The sturdy box, an modelling article must have!



Component kits in addition to the conversion.



A4 instructions are comfortably old school.



Measurements are provided to cut the front and rear from the Tamiya kit.



Marked up ready for cutting.



Always leave a bit on - it's easier to cut more off than add more on.



Cutting up the Tamiya wheel stations. With a bit of care and the addition of real springs, the Tamiya suspension can be made to work.



Suspension in place without cover fitted.



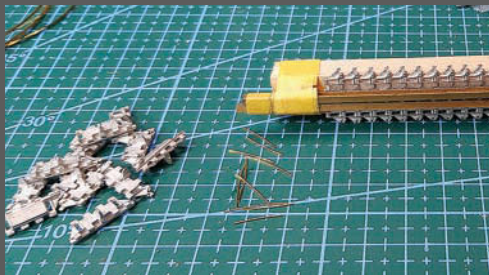
Casting number detail on the front hull.

As mentioned above, the build starts with cutting the front and rear from your selected donor kit, leaving just a central portion remaining that you mount your running gear to. The conversion comes with upgraded mounts for the final drives and idler, but you need to use the running gear from your donor kit. The conversion features a stunningly moulded whole hull top, along with front and rear section as one piece. This simply slides over the central hull portion from the donor, although my hull top was slightly warped and needed a soak in some hot water to be able to bend back into shape. Looking at my amassed reference images, it was apparent that when the Willich was fully loaded with fascines and

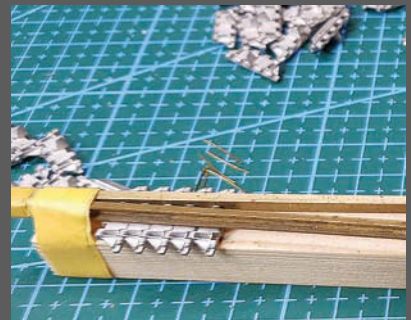
trackway, the AVRE really leaned forward, compressing the front suspension to what looks like it's stops. I wanted to replicate this look on my model so decided to make the old Tamiya suspension workable. I cut up the one-piece road wheel mounts, allowing the two arms per assembly to hinge at the real pivot point by drilling and adding a small brass pin. I replaced the plastic moulded springs with real compression springs (5mm x 25mm) and mounted this in between the two arms: hey presto working realistic suspension! With all 6 wheel stations treated in this way, the reminder of the lower hull build is very straight forwards, following the 'usual' Chieftain build steps.



The Tamiya final drive sprockets need a bit of adjustment to fit on the conversion kit mounts.



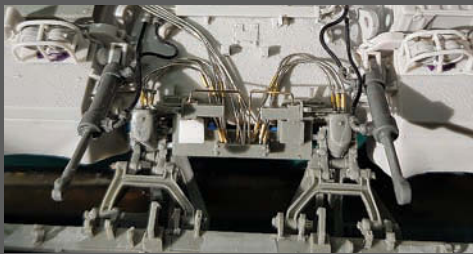
I made a track tool from brass rod and a piece of wood.



The resin hull top on the Tamiya base. The poor joints for the frame legs can clearly be seen.



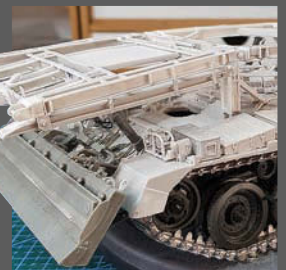
The rear frame is manually raised. The centre and front frames are hydraulically operated.



Hydraulic pipework for the Accure Armour dozer blade (dark grey parts). Note the antislip texture moulded onto the hull top.



The framework complete. Care must be taken to ensure the many parts are fitted in the correct order.



Again, referring to my reference images I noted that the example I was modelling was fitted with a Chieftain Tank dozer blade. I'm told that these were fitted in lieu of a mine plough as there was a shortage of these in the Gulf Theatre. Accurate Armour sell a separate Chieftain Dozer Blade (C090) which fits perfectly on the front hull of the Newland Models conversion. You will need to add hydraulic lines and leave off the armoured cover – I could find no reference images of it fitted when mounted on a Willich.

Moving on to the hull top, it's worth mentioning the conversion instructions here.

They are made up of large colour photographs of the (mainly) completed model, printed onto A4 sheets with the parts clearly identified and numbered. A bit of cross referencing between the images is required; and there are no real 'steps' as such. I chose to build upwards from the hull top, starting with the front lights and moving backwards to the rear.

There's not too much to add as most of the detail is already moulded in. There is a lot of clean-up required but this is common to most resin kits.



The old rubber hub caps from the Tamiya kit split once fitted to the wheel mounts so I replaced the hubs with the resin ones ordered separately, again from Newland models.

The most complex part of the build was the hamper frames. I can only advise that you identify the part numbers, lay out the hamper parts on your desk in situ and check again that you have the right parts in the right places. Each frame comes in its own bag, making the process simpler. Again, I found some of the resin was warped – I straightened this out as much as possible with hot water, but this may be an issue if you're not going to add the RE equipment (fascines etc.) on top to hide any misaligned parts. I was also a bit disappointed that the frame legs are butt mounted onto leg subs, with no real locating points, meaning that the joint is very visible and quite weak. I drilled out the mounting points for the top of the frames for the front two hampers where they connect to the legs, meaning I could leave them off for painting later.

The Gulf War version of the Newland Models conversion comes with a resin 'Mimic' Electronic Counter Measure (ECM) device that hangs on chains below the front frame. Also mounted below the front frame is a chain 'curtain' that is designed to prematurely detonate Rocket Propelled Grenades (RPG). In real life the crews had to cut out the centre portion of this curtain to allow the Mimic device to be fitted, meaning that the cut chains hung down above the dozer blade. I scratchbuilt this from plastic strip and metal chain (23 links per inch). The Newlands Models conversion also comes with the extra blocks of side armour fitted to chieftain variants during the Gulf War. No specific instructions are provided with these parts (or the Mimic) so good reference material will be required. I also replaced the plastic Tamiya side skirts with etched brass items from Accurate Armour, although again there's no reason you

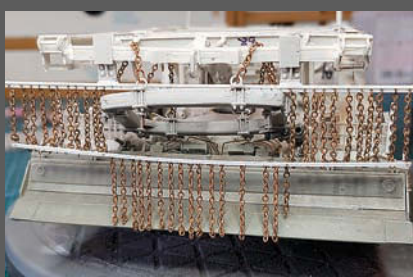
couldn't use the ones from the kit as only the two rear plates are used on each side.

Moving onto the load for the Willich, there's no option in 1/35 for either the trackway or fascines (AFV are releasing a fascine kit soon although the mounting instructions are incorrect) so I scratchbuilt both. For the trackway I couldn't find and close-up reference; so, I used the few images I had of the trackway mounted as well as images of the more modern trackway in use today. I heated some Evergreen 'siding' sheet in hot water and wound this around a central metal tube. On either end I fitted the bobbin ends cut from plastic sheet with a compass cutter. To add a bit more texture to the trackway I added plastic strips lengthways around the circumference of the trackway.

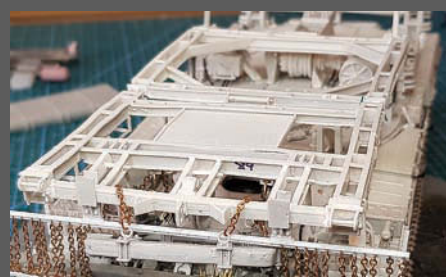
Although much simpler in design, the fascines proved to be a lot trickier, not because of complexity; but to buy the required amount of 6mm plastic tubing would start to get very costly. I real life these have a 'thickness' to them that wouldn't be replicated by simply using plastic straws. I opted to use 6mm plastic tube with 1mm wall thickness for the 30 outer pipes; and paper straws for the 45 inner pipes, as only the ends would be seen. As per the real thing, I threaded the 30 outer pipes together and then wrapped these around the 45 inner pipes. These bundles were then sat on the model and the outer plastic pipes liberally coated with Tamiya extra thin cement. With hindsight I should have built the fascine bundles in situ, adding one pipe at a time to get the correct sit of the bundles as mine look a bit stiff compared to the reference images. Scale camouflage netting was added to ends to hold in the loose centre pipes and soaked with watered down white glue.



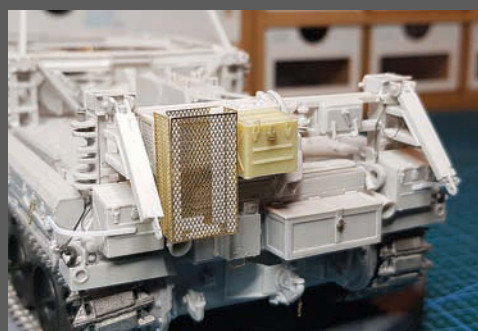
The framework for the anti RPG chain curtain. 50 lengths of chain overall!



The anti RPG curtain mounted beneath the front hamper framework.



The Mimic ECM hung from chains on the front hamper frame



I added a few extra stowage bins to the rear frame, based on reference images.



Component parts ready for primer.



Initial base coat applied with Mission Models Modern British Sand.



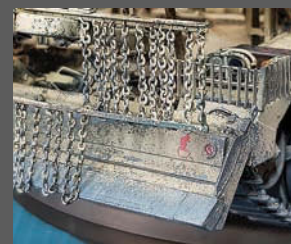
Disaster! The old Tamiya rubber hubcaps split.



Newlands models Chieftain roadwheels set. I only used the hubcaps from this set.



A bit of crew graffiti on the rear hull.



Wear and tear added.



The trackway was manufactured from a metal tube with plastic bobbin ends.



Test fitting the primed trackway. The '11' marking was applied with very thin masking tape, replicating what the crew would have used.



Trackway painted and weathered. Accurate Armour ratchet straps were used to tie it down.



6mm tubes used for the fascine outer pipes.



75 pipes per bundle. The inner pipes are paper straws supplied in exact 14cm lengths - perfect!



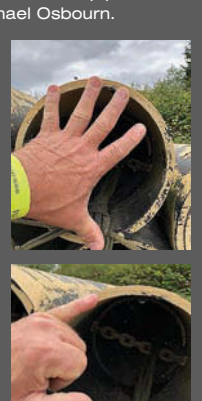
The net that holds the central pipes in place is tied onto the chain that connects all of the outer pipes. Copyright Michael Osbourn.



Note that 9 out of the outer pipes are reinforced with an inner pipe. Copyright Michael Osbourn.



Images Copyright Michael Osbourn.



For the initial painting of the model, I always follow the same steps before starting to weather: prime, main colour, highlight, detail colours and then pin wash. For the priming stage I used a dark brown car primer from a rattle can, ensuring a good overall coat as some of this may show through, even on the final model. Over this I airbrushed a coat of Mission Models MMP-039 British Sand Yellow Modern AFV, followed by a lightened coat of the same colour, concentrating on the upper surfaces and centre panels. There wasn't much detail painting to be done: the road wheel tyres and fire extinguishers were picked out in black and green respectively and the vision blocks of the commander's station painted in clear orange. Over the top of an airbrushed coat of Future Klear I applied a pin wash of diluted dark brown oil paint. There's so many nooks and crannies on this model that this soon became just one big brown wash, so before this had dried I had to wipe off much of the excess with cotton buds and clean wide brushes. On top of another airbrushed coat of Future Klear I applied the decals. There are no decals supplied with the conversion, so I selected some markings from the reference images and made these up from the spares box. I also applied some 'graffiti' to the rear hull wall with a black coloured pencil with a wet tip (hint: your local art shop will sell you watercolour pencils in large sets for much cheaper than the 'branded' weathering pencils). A quick coat of acrylic matt varnish sealed everything in place before I added the chipping using a sponge and Tamiya NATO green.

I concentrated on the hamper frames, dozer blade and around the bins where the crew would be trafficking the most, as after a few weeks in the desert environment the vehicles were starting to look shabby. The engine decks of the Chieftain were notoriously oily places and many reference images show Chieftains with oil pouring down the bazooka plates. When oil mixes with sand it becomes a dark brown gooey mess – that I wanted to replicate. I washed the rear deck with clean water before adding a liberal amount of LifeColor Liquid Pigment Road Dust. Whilst still wet I used a micro brush to push Mig Pigment Powder Track Brown into the corners and crevices of the engine deck. Initially this looks a bit of a mess but walk away and leave overnight. Coming back the next morning the

sand and brown pigments had merged together and created the brown gooey mess I was looking for! I sprayed the same LifeColor liquid pigment Road Dust onto all of the lower surfaces, running gear and tracks. On the tracks I used a sponge and Vallejo Metal Color Burnt Iron to highlight the worn surfaces; I used the same combination on the tip of the dozer blade and the exposed corners of the Willich.

The Trackway was painted and weathered in a similar manner to the rest of the Willich, the main colour of the trackway being Vallejo Flat Aluminium with the bobbin ends picked out in Tamiya NATO Green. I painted one fascine in black, highlighted with Tamiya NATO Black; and the other in Tamiya Dark Green, sponge chipped with NATO Black.

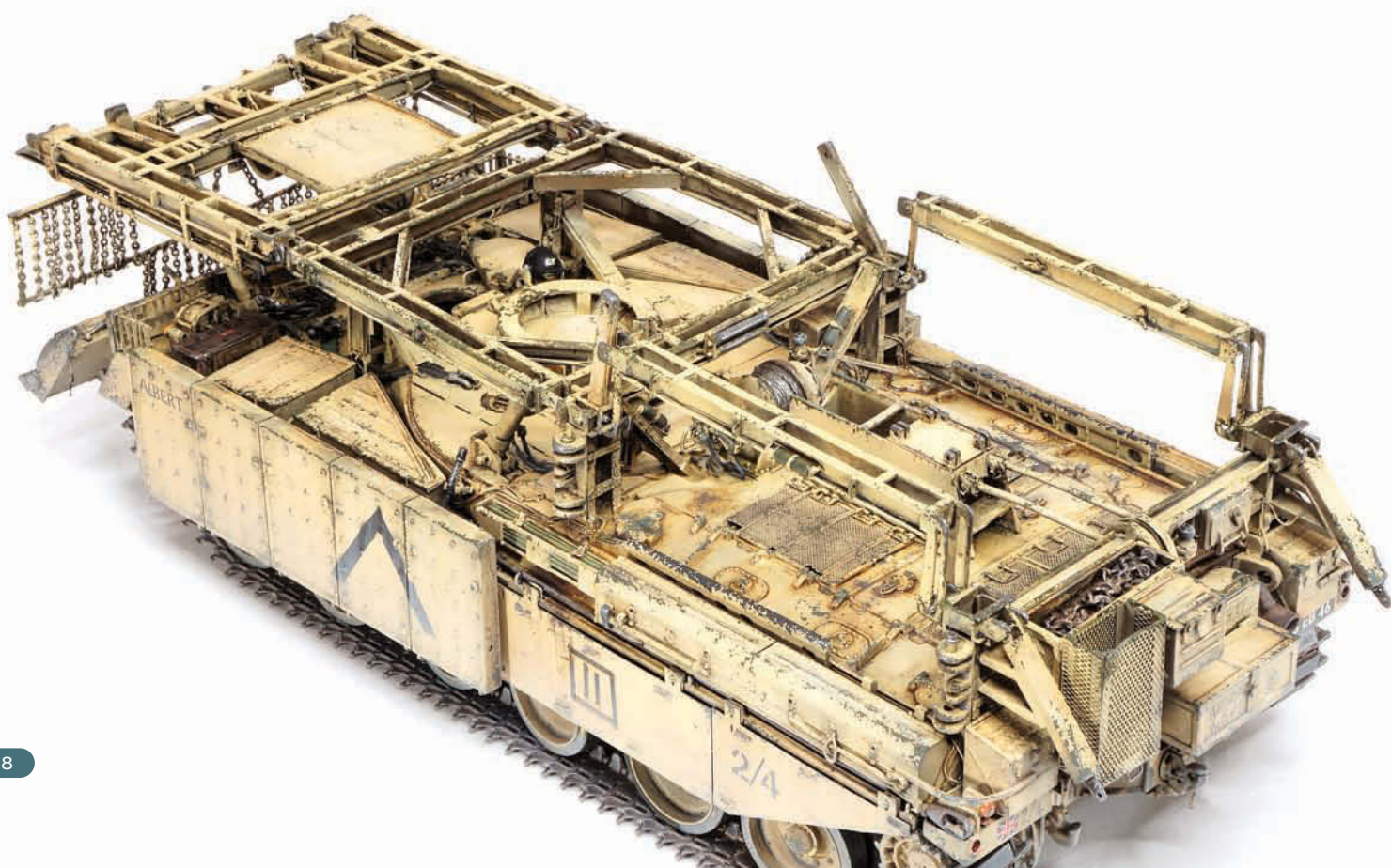
With the painting complete I added a few items of stowage and wrangled the ratchet straps for the trackway (Accurate Armour A144 Modern Ratchet straps) and micro chains for the fascines. Various hooks and shackles were added as supplied with the conversion and from the spares box.

The Newland Models conversion is a triumph of resin moulding. A bit of work is needed to get the best from it, but nothing beyond what is normally required with multimedia kits. Retrospectively, on cost alone it may have been cheaper to buy the Meng kit to start with as the Meng kit tracks and side skirts are far superior to the old Tamiya offering and would have saved on the cost of metal tracks, resin wheels and photo etch side skirts.

Overall, I'm delighted with the finished model. It's so heavy that it sits so low down on its 'real' suspension that I've had to place a prop under the belly as I'm concerned the running gear might break due to the weight!

A huge thanks to Michael Osbourne for his endless patience with my relentless questions.

Now, where's that Scammel Commander kit...





NEXT ISSUE:
THE
SCAMMELL

The events that unfolded in Ukraine, when it was invaded by the Russian military in early 2022, are well known throughout the world. The prominence of social media has given rise to a huge number of real-time images and video of recent conflicts, and this has been no different. Another fairly recent development has been the rise in accessibility of Photogrammetry, a technique for combining large numbers of photographs to build up a 3D model of an object. Many destroyed Russian vehicles started to appear online as 3D models during the ongoing fighting, and the Spanish company 'FCModeltrend' has been producing some of these as resin 3D printed models. This BMD-4M is one of the first (although incorrectly labelled as a BMD-3) and represents a vehicle destroyed early in the conflict. The BMD series of lightly armoured

amphibious vehicles are mostly made of Aluminium alloys to help keep weight down (both to assist in the amphibious capability and to make them suitable for airborne troops). This does result in them being susceptible to catastrophic destruction, often with the relatively weak armour melting in the furnace-like temperatures of an explosion and subsequent burning.

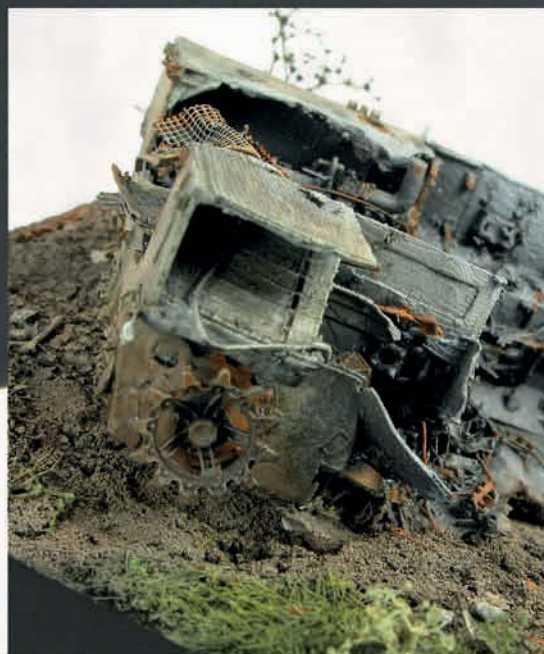
Upon receiving the model, I did find the subject to be incredibly sad both in what it directly represents in terms of the crew that were inside, and the wider implications of it. After initially starting on it I left it for a month or so but, ultimately, I went back to it and pushed on. I was determined to finish it as respectfully as possible and not try to dramatise or sensationalise the context or story

ONE YEAR LATER

Alex Clark skips the build with
FC Modeltrend's 3D printed
small-scale BMD-4M



1:72



The model is provided as a single resin piece, and as such can't really be described as a kit. The hull is destroyed with most of the top and right side completely missing (and hence no turret). As with most 3D printed parts, it comes with numerous thin supports connecting it to a base / raft underneath. Care needs to be taken when removing these supports, as the resin is on the brittle side. Immersing in hot water can soften some 3D resins, but for this I just carefully clipped them off with Tamiya sprue cutters followed by some tidy up with small sanding sticks.

In some ways the model is a victim of its own finesse and detail. The print has captured virtually everything down to the last wire, but some parts are so fragile that they broke off in transit. Others I felt could go the same way whilst handling, so I replaced some of the wiring with copper wire. Similarly, I replaced some of the other smaller parts with styrene equivalents, or in the case of the mesh on the engine deck with a more appropriate metal version. A couple of the suspension shock absorbers were damaged, so I designed a new one in CAD and 3D printed it. Given it's a wrecked vehicle some of the damage would probably have not mattered much but I wanted to try and get it close to its original state!

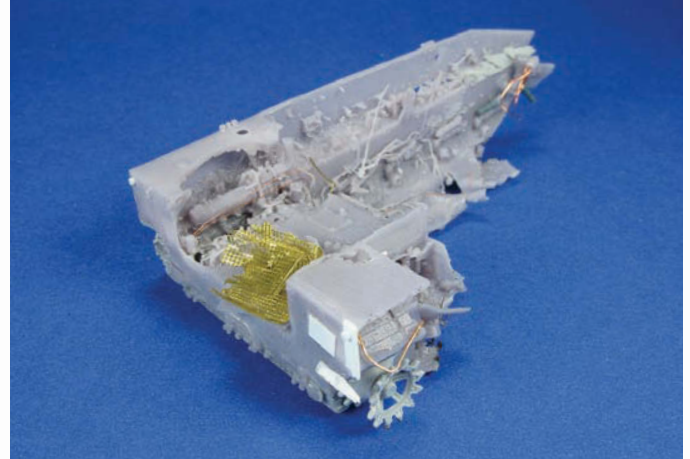
One issue sometimes found to varying degrees with 3D printed kits is the presence of banding / layer lines - an artifact of the layered printing process. Certain parts suffered from this quite noticeably, but on the flat featureless areas such as the outer hull side it was easy enough to lightly sand them away. Other areas, those covered in detail, were more of an issue. For those I brushed a few layers of Mr Surfacer putty over to reduce the

I rarely make scenic groundwork, not because I don't like it but because I usually get drawn to the next new model instead. Given the nature of this model it really needed a base, so I decided to go for something simple and compact. A lot of photos and footage of burnt-out vehicles are taken close in time after destruction and as such display a lot of ash and smoke residue all around the ground. However, I did have some reference photos of such vehicles from other conflicts that were taken quite some time after. The effects of the weather had gradually worn away many of these effects as nature had slowly started to take hold again. I decided this would be an interesting scenario to try and model. With the planned size of the base being small, I wanted some height to give it a bit of 'presence'. I went with an angled

slope, starting at the rear left of the base and running down to the front right. I planned to add a small amount of water too. Water is something I'd never represented before, so I wanted to create some, but thought it best to keep it small and simple in one corner. I worked through some other possible scenarios as context for the scene – perhaps the vehicle had gradually moved – slipped slightly down the embankment over time – or perhaps the Ukrainian military had pushed it down. Subsequent wind and rain over the next year had then removed virtually all the ash, and perhaps some vegetation had started growing again.



The model is provided as a single 3D printed part that requires careful removal from a multitude of printing supports. The detail is exceptionally fine and comprehensive, so fine in some places that I had to replace some damaged parts with wire.

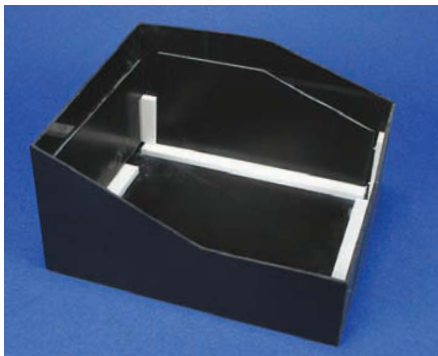


There was a small amount of additional damage to the engine deck mesh (beyond the actual damage from the destruction of the vehicle), so I replaced this with a brass piece of mesh from my spares box.

I replaced some other damaged items with white styrene, after which I gave the remaining parts of the running gear a coat of Mr Surfaces 500 putty to represent a layer of mud.



The model itself didn't take long to clean up and tweak, so I then jumped into doing the base before painting it. I started by making a box to hold the groundwork from black styrene sheet.



For the bulk of the base, I cut and carved some Styrofoam, just to the approximate shape so that it would snugly fit inside the box.



I CA glued the Styrofoam to the bottom of the box and applied a coat of fine all-purpose DIY filler. I made sure this completely covered the Styrofoam, along with any gaps with the sides of the box.



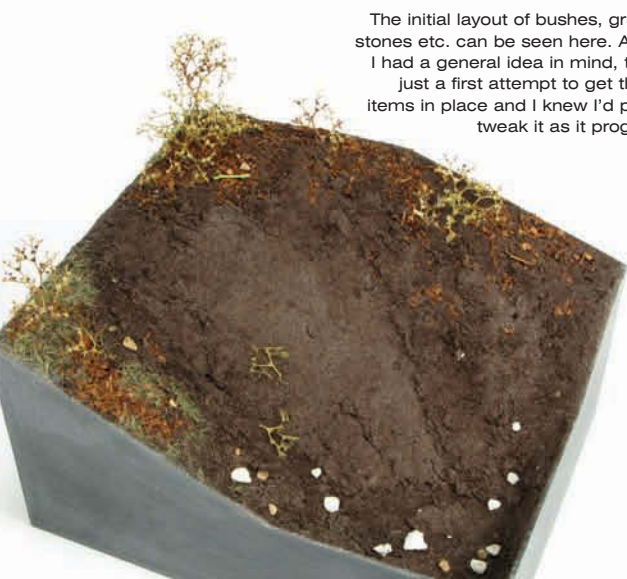
Once the filler was thoroughly dry, I applied a couple of coats of VMS Smart Mud XL 2.0, letting the first one thoroughly set before applying another. This has a very nice gritty and in-scale texture to it. When partially set I pushed the vehicle into it to avoid the potential appearance later of it floating on top of the groundwork.



Most of the additional groundwork features were created from a mix of dried, ground up Autumn leaves from my garden, cat litter and static grass. I attached these with diluted PVA glue.



I used several small pieces of Seafoam to represent bushes and branches. Other products are available to represent small scale bushes and foliage, but for me this has just the right scale appearance to it.



The initial layout of bushes, grass and stones etc. can be seen here. Although I had a general idea in mind, this was just a first attempt to get the main items in place and I knew I'd probably tweak it as it progressed.



After an overall covering of Tamiya Black acrylic (to act as a pre-shading base), I sprayed Flat Earth gradually lightened with Buff over the whole base. I focused the lighter shades over the raise areas, and then blocked in the grass colour using Flat Green highlighted with a little Yellow Green.



I picked out the rocks and stones with Tamiya Light Grey and Deck Tan. Rather than just make them all the same colour, I applied varying amounts of each randomly and then blended it in. A dark enamel pin-wash helped accentuate them and give some false shadow.



At this point I switched to painting the vehicle, starting by giving it a pre-shading coat of Tamiya Black, followed by a light overspray of Black mixed with a little Nato Brown.



I sprayed a coat of AMMO chipping fluid over the entire model and followed this with a patchily sprayed application of a light-grey tone.



I reduced the harshness of the black with a light overspray of Khaki Drab.

I painted both the vehicle and the scene with Tamiya acrylics for the most parts. Probably the most enjoyable part was painting and shading the damaged interior of the model, the level of detail and finesse being so good that it was a joy to do. The bulk of the hull on the real vehicle is made of aluminium alloy to keep the weight down. Upon burning the resulting oxide has a pale dusty grey appearance. After a black pre-shading coat and an application of AMMO chipping fluid, I patchily sprayed light grey over the top and wore some away with water and a small broad brush. The initial camo colours were applied to the remaining exterior and I followed this by hand painting the smaller interior details. Most of these ended up rusting in the fire that destroyed the vehicle, and I picked them out with various enamel orange, brown and red-brown shades. I weathered it mostly with enamel-based washes, an overall grubby brown first and then several increasingly dark pin washes that really helped the detail stand out.

I also pre-shaded the groundwork with black and followed this with several light coats of Flat Earth (each slightly lightened with Buff). The grass and bushes were approached in a similar way, starting

with Green and then lightening it with Yellow-Green. I hand painted the smaller items – rocks, a few small branches and roots, and some debris from the vehicle. I also picked out some of the leaves using a variety of orange, red brown and tan colours. This gives a much more interesting appearance than just keeping them all the same colour. The only washes I applied were dark pin washes around the rocks and stones. Once done I just needed to add the water effects.

I used AK 2-part clear epoxy water. I added a single drop of Tamiya Khaki Drab to this – it really only needs to smallest amount to tint the resin – and then carefully and slowly poured it to avoid creating bubbles. A few did appear but I gently worked them out with a cocktail stick. Once fully cured it gave a smooth glass like finish but didn't look quite right. I added some small ripples by stippling AK Transparent Water gel over the top. This dries much quicker and after a couple of applications it broke the flat surface up nicely. To finish off I added some more leaves on top of the water.



The left side of the vehicle was mostly intact, so I painted it in the common 3 tone camouflage scheme. The first colour was Buff lightened with some White, followed by sprayed Olive Drab with an equal amount of Buff. I hand painted the smaller black patches (from a mix of Black and Dark Earth). I then weathered it with various washes and light over-sprays of dust and mud colours.



The most intricate work on the vehicle was painting all the smaller rusted items. I picked them out in several mixed shades of Humbrol orange, brown and red-brown enamels. Several pin-washes, starting with dark brown and ending with pure black, helped the detail really pop out.

I also added a few more items from the vehicle, a short section of track I had left over from a full resin BMD kit and twisted strips of metal.



Once the vehicle had been glued to the base, I added a few more bushes, rocks, and leaves until I felt the scene was balanced and with enough detail to catch the eye. I picked out some of the leaves with various shades of brown, orange and tan to give some interest and variation.

For the water I poured some AK Interactive 2-part clear resin, with a small drop of Tamiya Khaki Drab to give it a muddy tint. Once dry, I stippled a couple of thin layers of AK Transparent water gel to give a slight rippled effect.

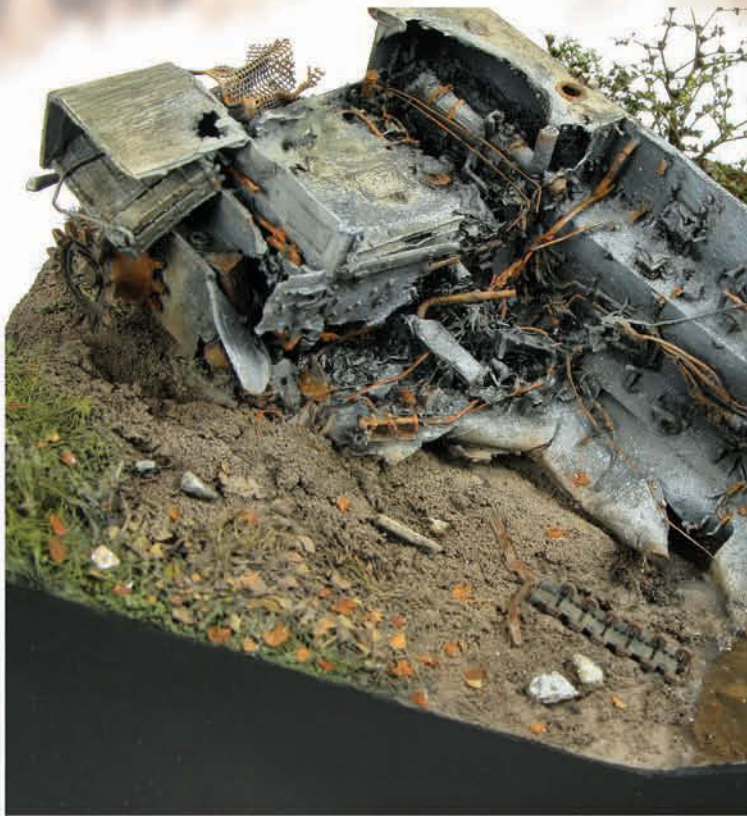
I painted the sides of the base black, using Tamiya semi-gloss acrylic. Wooden bases look nice but in some cases I find they can detract a little from the model itself.

The nameplate is a 3D printed piece I designed myself. After printing it I painted it in various shades of rust.

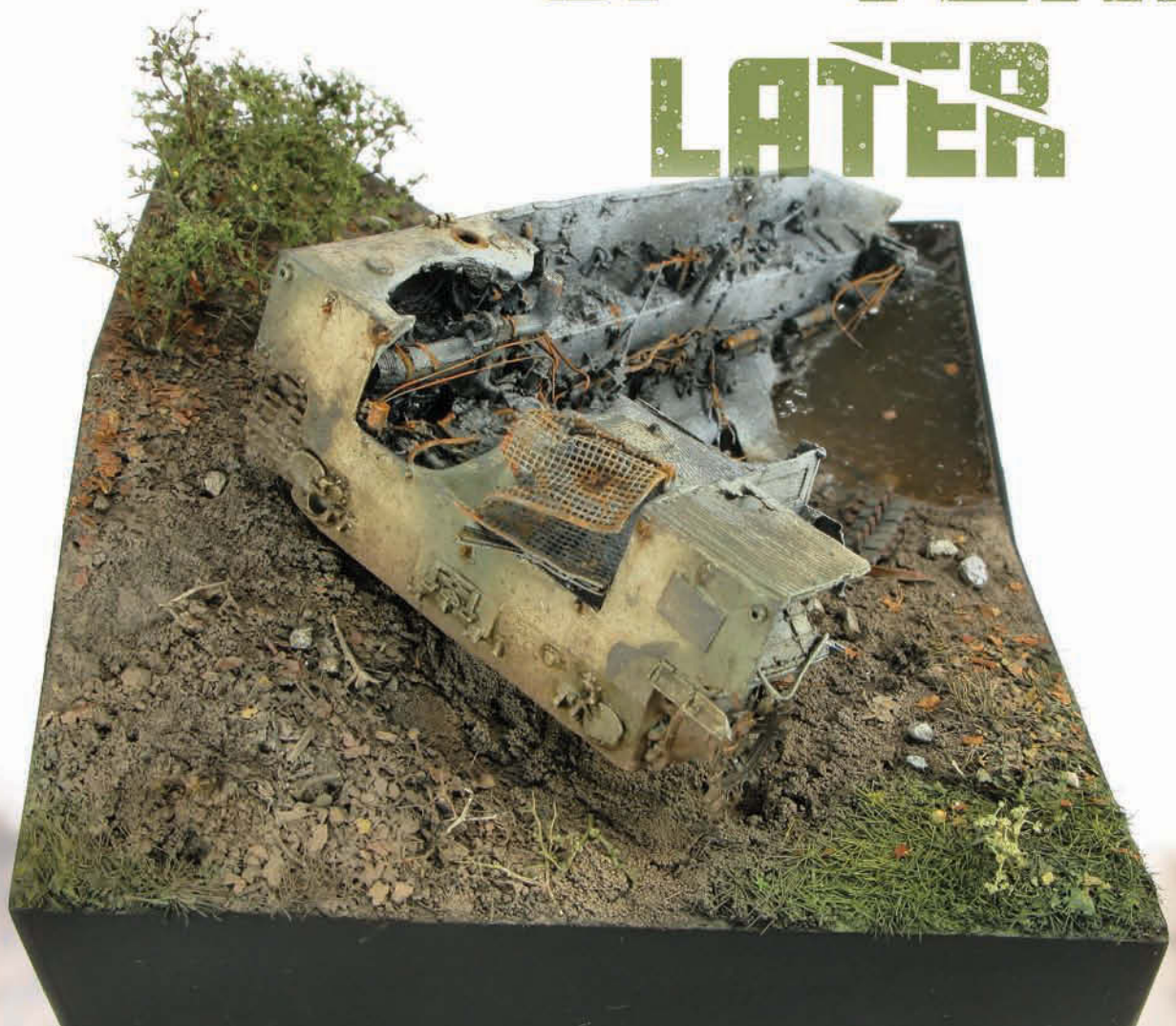
Final Thoughts

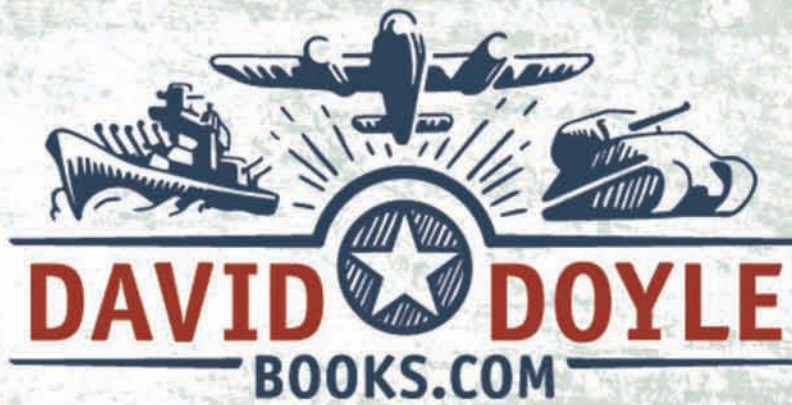
I really enjoyed working on the scene. Usually, I spend a lot more time on the model, correcting, adding detail etc, but this time the model didn't take long at all so I spent much more time working on and thinking about the groundwork. It's certainly something I'll be doing again.





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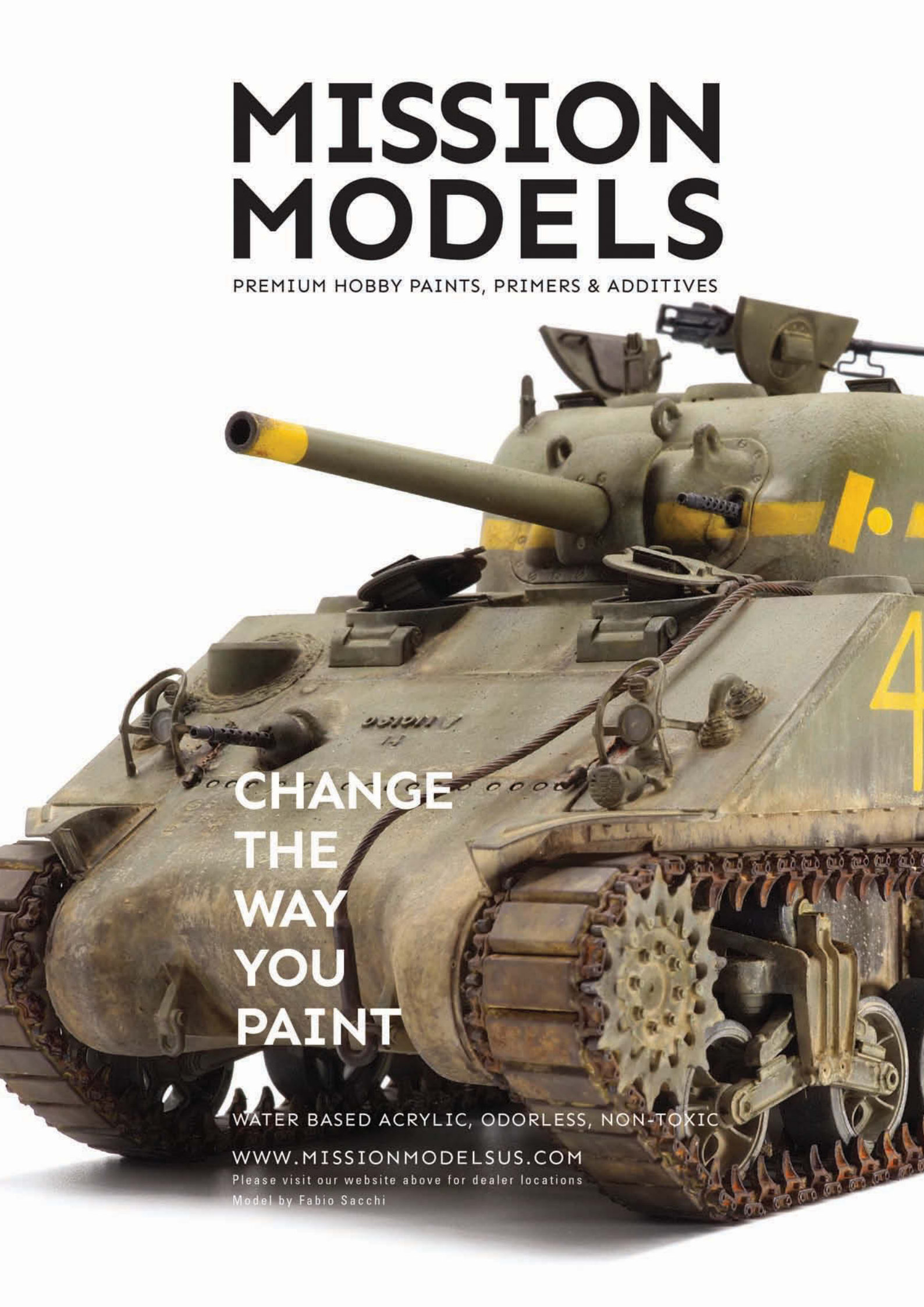


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Model by Fabio Sacchi



Imad Bouantoun's **Ukraine Diorama**



FOR OUR CHILDREN

I was surfing the internet for some inspiration for a diorama and I found few photos from the war in Ukraine. The one most poignant to me was an image a BM grad near a playground with children still present. I decided to start planning a scene based on this with the drama and contrasts of the bright playground colours and the horror of the war.

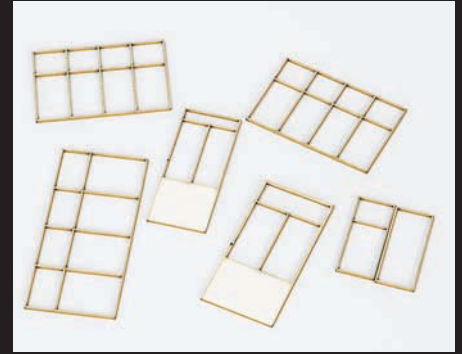
Правда у воді не тоне і в огні не горить

The truth doesn't drown in water and doesn't burn in fire.





After I laser cut the main structure of the kiosk from 2.5mm wood I start the assembly of balsa wood strip on it. I'm fortunate to have access to a laser cutter but everything of course could be cut by hand.



Doors are also laser cut using 2mm card.



As a base for the roof I used 4mm square section balsa wood.



For the main structure of the roof I use 0.3mm aluminum sheet



For the asbestos tiling I used Juweela corrugated sheet in 1:35



To simulate the texture of the asbestos plate I use Hull Tex powder from VMS.



A layer of primer followed to check the final result before I proceed with colours.



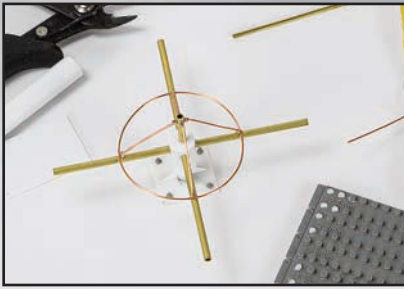
metal base was made using styrene Square rod and styrene bolts from Meng.



For the ventilation fan base I use Aluminum sheet and PE diamond mesh.



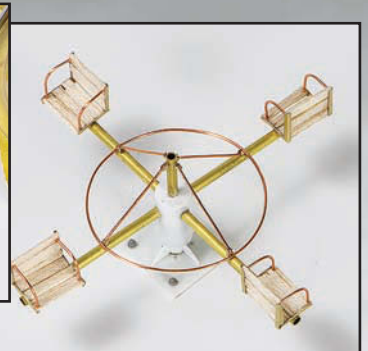
The kiosk assembly dry-fitted ready for painting.



I start building the round-a-bout using styrene 0.7mm thick as a base and a styrene rod diameter 8mm, also I used copper rods 3mm diameter, the latches are also from 1mm copper.



For the seats I used 1mm balsa wood and I created the shape of the seats using Aluminum sheet bent as you can see in the photo.



I built the swing using styrene and copper rods as you can see in the photo also for the chain holder I used spare sprue.



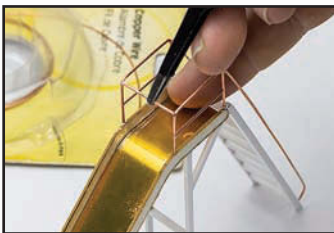
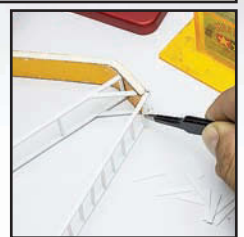
The frame was soldered together for strength.



The slide frame was built-up from styrene following a drawing 1:35 I already prepared.



The slide was formed from thin aluminium with styrene sides and steps.



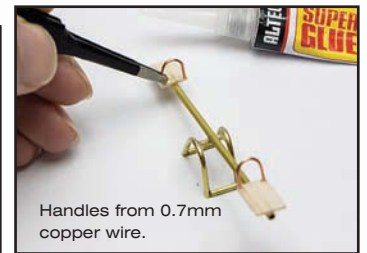
The upper rails were formed using 0.8mm copper wire soldered together.



The see-saw was also soldered using 2mm rods.



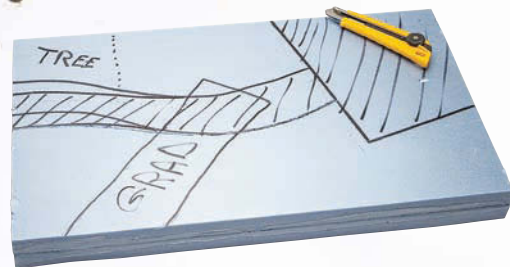
Seats are from balsa wood.



Handles from 0.7mm copper wire.

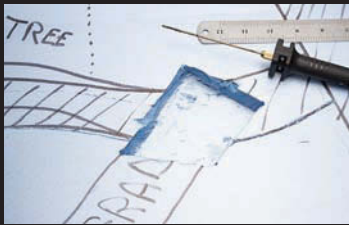


For the base frame I cut black matt plexi glass in 3mm.



Blue insulation foam made the first steps of forming the groundwork.





I engraved the blue foam to use a softer green foam insert in this area since to help in simulating broken concrete.



A clear acetate guide ensured the soft green foam would be a good, snug fit.



White glue (PVA) is water based and wont attack the surface of the foam.



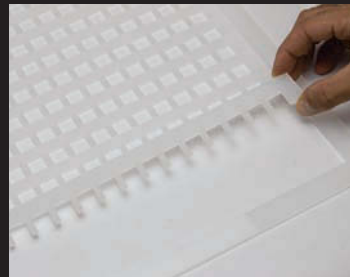
I used a compass to indicate where the paving slabs must be added.



To avoid any show-through later, black was airbrushed on the building and paved areas.



I designed and cut the mould for the paving stones from 5mm thick acrylic.



I assembled the mould and taped it down to a blue foam sheet



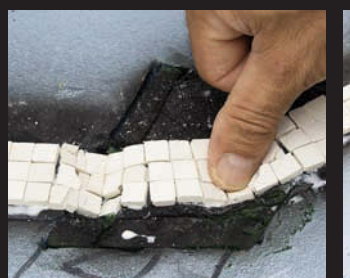
Plaster was poured, spread and allowed to set.



The finished paving stones after being removed from the moulds.



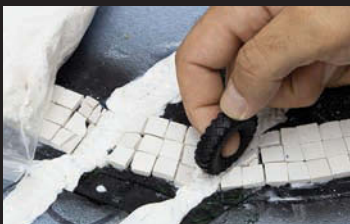
I start the assembly using white glue to fix the blocks.



I applied damage to the concrete blocks where the wheels damaged them due to the vehicle's weight.



I shaped the ground with a hot air gun to prepare creating the wheel tracks on the muddy ground



Some clay and the kit tyres allowed tracks to be imprinted in the earth.



I carved some puddles and primed the area with some PVA to help the application of resin.



I applied damage to the concrete blocks where the wheels damaged them due to the vehicle's weight.



I shaped the ground with a hot air gun to prepare creating the wheel tracks on the muddy ground



I started the painting of the building using different shades of yellow from Vallejo.



The tones for the concrete airbrushed using different shades from Tamiya.



Weathering on the concrete using different shades of oil colours.

Black undercoat applied ready to take the colours.



Upper areas were painted using different shades of grey, white and blue also from Vallejo.



For weathering the interior area I used a grey filter and then a layer of streaking grime to enhance the worn effect on the wood, after five hours I sanded the surface to enhance the effect.



I found some character poster images on-line and sized them to suit before printing. Sanding the surface gave a aged appearance.



An ochre filter acted as a base to start the weathering of the painted wood.



On the metal frame I started applying the scratches and flaking paint using sponge to 'dab' the acrylic colour.



Streaking grime was applied on the edges of the wood to create more contrast between the outer edges and the middle.



I base-coloured the asbestos plates using different shades of Tamiya grey.



For the metal flashing the rust was simulated using different rust tones and sponge techniques.



To simulate the green grime effect I used the slime grime dark and light from Ammo of Mig.



...then I airbrushed a diluted layer of engine grime.



The rabbit was hand painted on the wood using in Vallejo and outlined with a fine-liner.



The door was painted off white with wear and tear applied using sponge techniques. Dark grey represents the primer layer.



Streaking grime enhances the weathering process



I created the glass using plastic sheet from some packaging.



Finally I added different shades of enamel effects using the airbrush concentrating them on the lower part of the building.



Mr color provided the bright primary colours for the play equipment after a solid coat of primer.



Paint damage and corrosion was built-up by different layers of rust tones applied using sponge and 00 brush working carefully and gradually.



To enhance the weathering and to merge all the colours together I used different shades of oil colours blended carefully.



For the base plate I used dust enamels and steel pigment powder on the edges of the metal structure and more blended oil colours.



More slimy grime effect on the lower part of the swing and again layers of oil colour was applied.



I applied the first layer of weathering on the slide using rust oil tones followed by dust on the edges. Steel pigment on the slide simulates the polished bare metal.



A mix of Vallejo 60% Stone and 40 % white created the basic pine wood colour.



After a coat of hairspray tones of bright greens were airbrushed and later scrubbed with water and a stiff brush revealing the 'wood' underneath.



Various washes and blends of oil colour were used to weather the ammo crates.



After 24 hours from applying the oil colours on the boxes I added different layers of pigments in light dusty colours fixed in place.



The old chopped-up tyres were also given the bright colour treatment.



Back to the groundwork with an application of Vallejo thick mud.



After leaving the acrylic to dry for three hours I added some natural foliage I collected from the garden.



After 24 hours I added the snow layers using 'Precision Ice and Snow' brand and 'Deluxe Icy Sparkles'.



To create the wet effect on the ground I used Vallejo water texture liquid acrylic.



Deeper puddles were created with acrylic resin tinted with Tamiya colours.



The tricycle is from a Royal model photoetch set suitably painted and weathered.





Trumpeter's Ural is a nice kit, the build was very enjoyable but I decided to change the wheels in favour of resin versions from E.T. Model, also I used their full sets PE35600 Modern Russian BM-21 Grad and PE35601 Modern Russian BM-21 Rocket Launchers.

Also I added some scratch built additions like cables and connectors. I designed and 3D printed details for the rocket pods to enhance the look, learning this new technology as I progressed. As 3D printing becomes more accessible to modellers it's changing the hobby and the way we can approach projects.



I started the paint process using black primer from AMMO over the main chassis and the wheels.



The main cabin and rear part received a layer of automotive grey primer.



A mixed green from Mr color was next using Mr color 122 (70%) and Mr color 126 (30%).



I apply a layer of chipping fluid over the main green then Tamiya olive green and Tamiya white camouflage.



I add the decals on the truck doors using Micro sol and Micro set.



Mr color tire black and black was airbrushed over the wheels and tyres.



I start the weathering of the wheels by applying a layer of 'Kursk soil' dust wash...



followed by layers of dust effects finished by fresh mud and black. after 24 hours drying I enhanced the effect using dry pigment (dry mud and concrete).



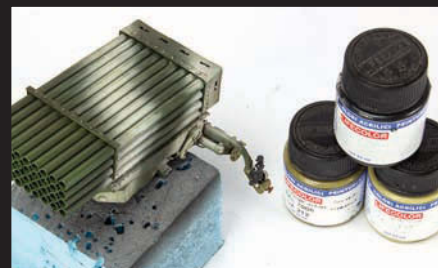
To apply the dirt on the main chassis I airbrushed 2 layers of 'Kursk soil' and 'dust effect' blended with a damp brush.



I start the weathering on the lower hull by applying AK dark mud (acrylic resin) followed directly by different layers of pigments.



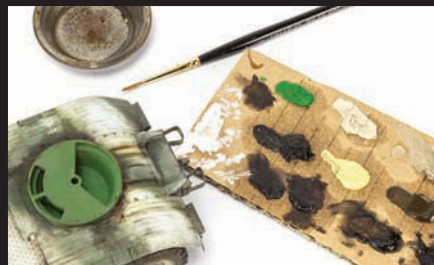
Two different layers of filters over the paint; grey over the white camouflage and brown over the green enhance the tones.



Lifecolor acrylics brush beautifully and were used for detail painting.



Soot staining on the rocket tubes were done with different shades of black and smoke gray thinned about 80% thinner and 20% paint airbrushed.



I start the heavy weathering over the truck using different shades of oil colours. The cardboard pallet soaks excess oils from the paint.



I applied MOLOTOW liquid chrome as a background for the lamp lens with orange transparent colour where needed.



Figures are converted from an Evolution Miniatures set and painted by my friend Alexey Sergeyev.

Everything is now ready to be positioned on the groundwork.







LRDG/SAS CONVERSION

1:16



LRDG / SAS Crew Bring the vehicle to life with these crew figures which are sold individually.

SAS/LRDG conversion sets

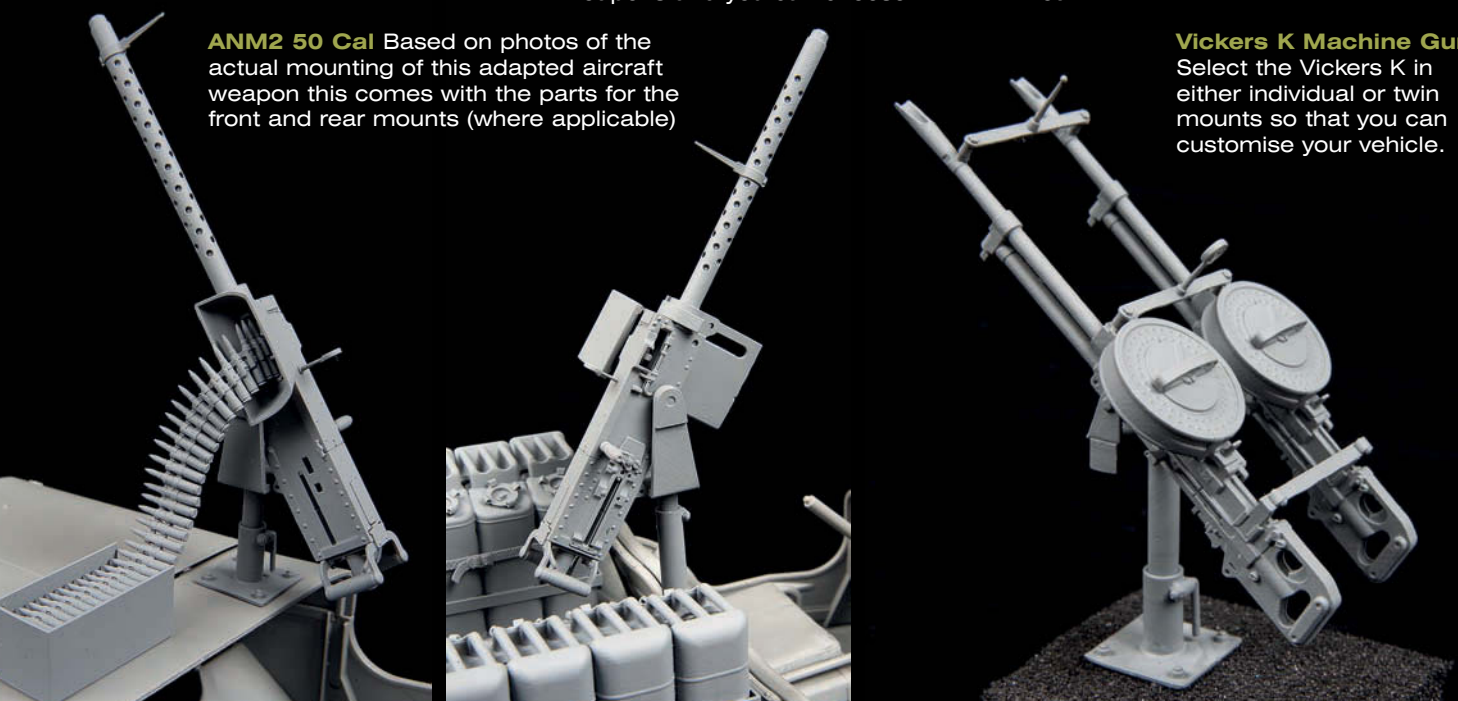
With the wide variations in the set ups for these vehicles we have tried to maximise the choice you have to set up your model by selecting from our "Parts Bin". Build your model around our base stowage set which provides the rear Jerrycan racks, the front bonnet Jerrycan racks, condenser can for the front grille and sun compass. You can then add the additional front fender jerrycans with a choice of US pattern or German cans. Then its the fun bit, picking the weapons and you can choose

between two versions of the ANM2 .50 Cal machine gun, the early bow mounted version with its spectacular ammunition feed or the later version with side mounted ammunition box which was mounted both on the bonnet and in the back of the vehicle. We also have a choice of twin Vickers K mounted front or rear and single Vickers K that can also mount front or rear.

ANM2 50 Cal Based on photos of the actual mounting of this adapted aircraft weapon this comes with the parts for the front and rear mounts (where applicable)

Vickers K Machine Gun

Select the Vickers K in either individual or twin mounts so that you can customise your vehicle.



1:16 .30 CAL BROWNING

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THREE THIRTY'S Following on from our .50 Cal Browning we have done the same for the .30 Cal now available in three configurations:

1917 Cradle The familiar semi-circular cradle as used on a wide variety of Allied vehicles.

Tank Cradle Ideal to add the .30 Cal to your 1:16 Sherman.

Jeep Mount Using the D58626 cradle and dual 50/30 feed tray this will replace the rear .50 Cal Jeep mount.



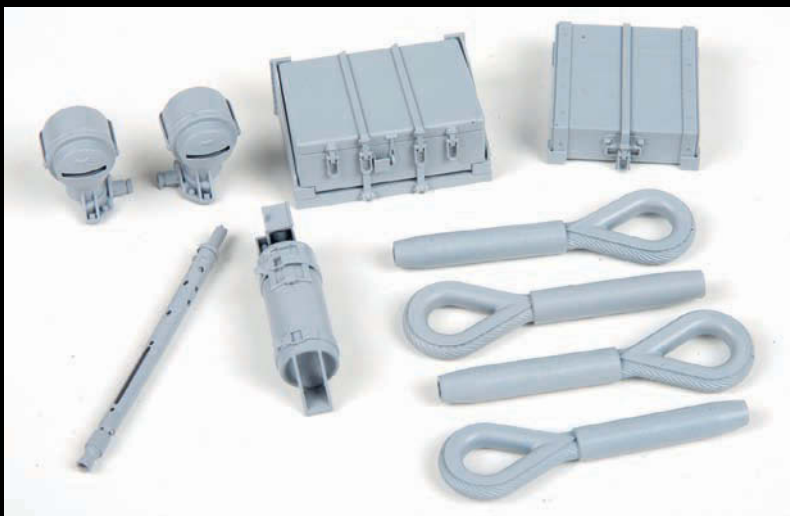
Spent .30 Cal Rounds sixty spent cartridge casings to scatter around your Jeep floor or Sherman turret



.30 Cal Barrel Ammo box set



.30 Cal Barrel set Set of three hollow printed .30 Cal barrels to replace the plastic moulded ones on your Stuart or Sherman.

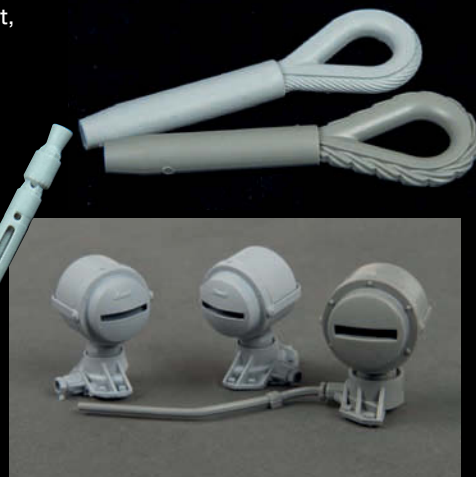
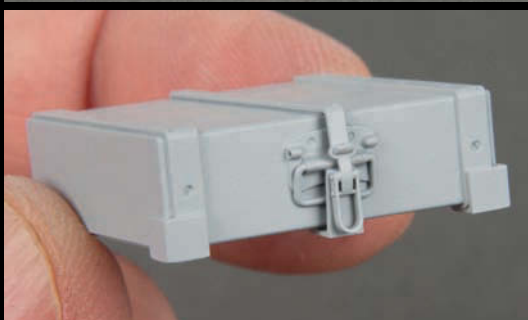


1:16 TIGER 1 CORRECTION SET



TIGER 1 Correction Set

A quick simple fix set to correct the weak areas of the AHHQ 1:16 Tiger 1 kit, it contains a corrected and more detailed Jack block and Toolbox, replacement fire extinguisher for the underscale kit part, correctly sized and more detailed headlamps, hollow MG 34 barrel and corrected tow cable eyes.





Chris Johnson kit-bashes his way to a unique Canadian MRT

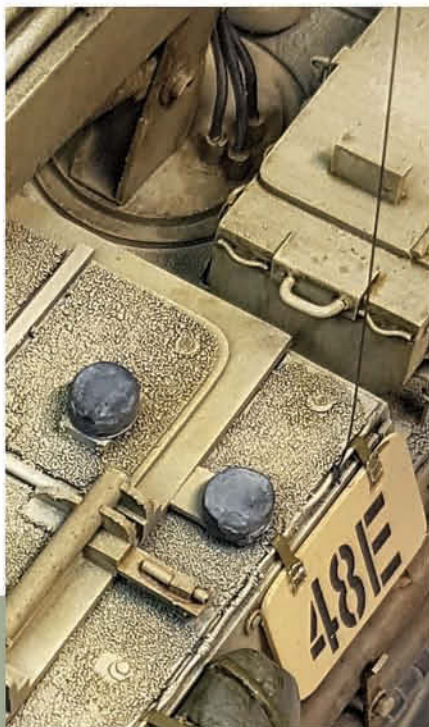
BISON

I have a penchant for recovery and engineering equipment in my model building pursuits and as no kit exists of the Canadian Army's Bison MRT, I was naturally drawn to it. Entering service with the Canadian Army in 2010, there were a total of thirty-two built. To date, aside from the addition of an add-on armour package, there hasn't been a need for any other major modifications which is testament to its design. The MRT is primarily employed in 1st Line LAV equipped units for maintenance and repair duties in the field.

In 2002, the Lord Strathcona's Horse (Royal Canadians) deployed a reconnaissance squadron to Afghanistan as part of the Canadian military contingent, and a Bison MRT was attached to it. My interest in the MRT was really kindled after seeing a photo of it in theatre, boasting a desert yellow paint scheme, and weighed down with a full combat load.



1:35





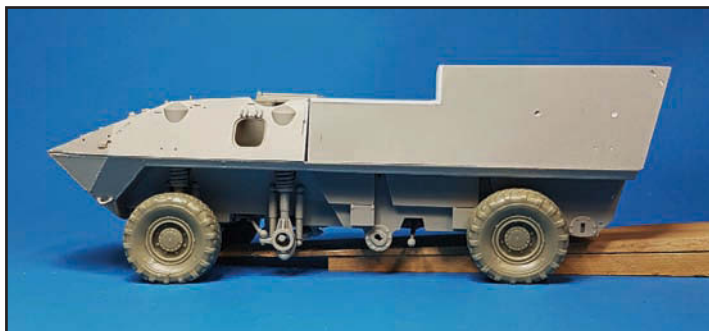
The image that got me started. The LdSH (RC) RECCE Squadron Bison MRT on station in Afghanistan, 2002.
Photo credit: Anthony Sowards



The surgery and amputations are done. The crane deck and rear compartment roof are roughed in. The air spotter hatch will butt up against the angled portion of the roof.



A good illustration of how the suspension is compressed on a Bison MRT, largely because of the additional weight of the crane.
Photo credit: Anthony Sowards



Setting the suspension height using shims to allow for making minor adjustments before cementing everything in place.

I chose Trumpeter's ASLAV-PC Phase 3 kit as the best option on which to base my MRT as the rear hull compartment matches that of the Bison. I also raided their USMC LAV-R Light Armoured Vehicle Recovery kit for its crane. Real Models markets a weighted resin wheel set for the LAV series so I picked that up and as the ASLAV kit has a partially open engine compartment, I decided to add Black Dog's resin LAV engine compartment to the mix. The major alteration required to the ASLAV-PC is to add a crane deck in the upper hull, behind the forward crew compartment. Towards that end, I initially cut the upper hull in two, immediately behind the crew commander's station. I then removed a section of the rear portion of the upper hull to match the profile of the MRT's crane deck. Using sheet styrene, I constructed the basic crane deck and the roof of the rear compartment, which includes a short angled section at the extreme rear of the hull.

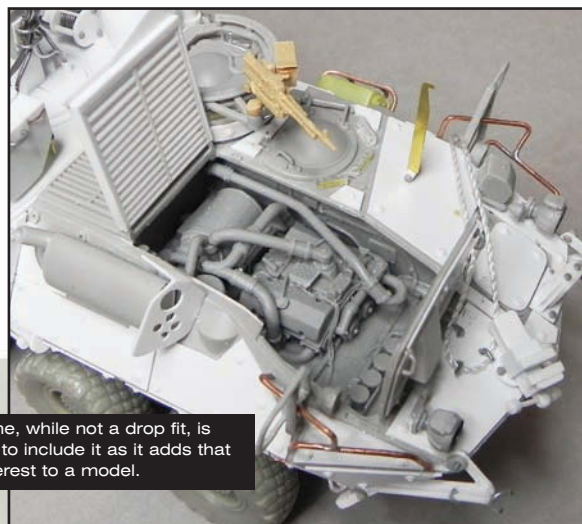
Armed with the Real Models weighted wheels, I decided to try my hand at replicating an MRT with a full combat load. That required compressing the suspension from front to rear to illustrate the additional weight of the crane and combat load in the rear compartment. The suspension of a LAV doesn't lend itself to adjustment, but it can be done with care. I began by setting the different heights of the first and last wheel stations. With their wheels attached. When I was satisfied with the gradual slope of the hull from front to rear, it was a simple matter to fill in the

remaining two wheel stations, thereby ensuring that all of the wheels rested uniformly on a hard surface.

With the suspension completed, I began to make the individual add-on armour panels and the bosses that retain them. Relying on reference photos to determine each individual panel shape, size, and placement, it was very much an exercise in custom fitting them to the hull, much as was actually done when this package was retrofitted to the actual MRT. I used 1 mm plastic sheet which approximates the actual thickness of the panels, and punched the two piece bosses with my RP Toolz punch and die set. The add-on armour panels were the most tedious part of the project as it was very much a trial and error procedure in measuring and fitting the panels around the existing raised detail.

The Black Dog engine compartment wasn't designed for the Trumpeter LAV series of kits but with some interior surgery to both the upper and lower hulls, it can be made to fit. The first step was to open up the upper section of the engine compartment by removing the moulded on access door. Not surprisingly, it didn't survive the surgery intact so I scratch built a replacement. Both it and the kit's mating door would be posed in the open position so the engine itself would be visible. With these alterations completed, I cemented the two upper hull sections to the lower hull, together with the rear plate to close up the hull. There was a slight saw gap between the two upper hull sections that I filled with putty.

All of the wheels are in place, the Air Sentry hatch is roughed in, a new engine compartment door and outriggers have been made and the smoke dischargers are in place. Work has begun on installing the add-on panels with their retaining bosses.



The Black Dog engine, while not a drop fit, is well worth the effort to include as it adds that extra element of interest to a model.

The next step involved making recessed cut-outs in the sponson plates on either side of the hull to accommodate the stabilizer legs. I made the legs from telescoping plastic tubing, some bits of plastic, and lead wire for the hydraulic lines.

The water can and naptha container holders on the rear plate are a different design from those in the ASLAV kit so I made new ones for both. The man door in the rear ramp received an add-on armour panel, together with a new latching mechanism. Ramp stops located at the top of the ramp were made from brass strip and the armoured guards around the taillights were made with short sections of plastic tube and rod. I scratch built the two spade anchors which flank the man door.

Image 007

Luckily for me, Real Models includes a spare wheel and tire in their resin set because a spare wheel rack is commonly seen on the nose of Canadian LAVs. I scratch built the rack and the spare wheel ramp based on plans and measurements supplied by a friend. The rack is secured to the hull by means of steel pins at the top and clevises on the bottom. I sourced the clevises from my spare parts box and used plastic rod with Meng bolt heads for the upper connectors. Rounding out the front end are a scratch built double roller fairlead, a mechanics vice, brush guards made from soldered copper wire, an equipment tie down strip, and an

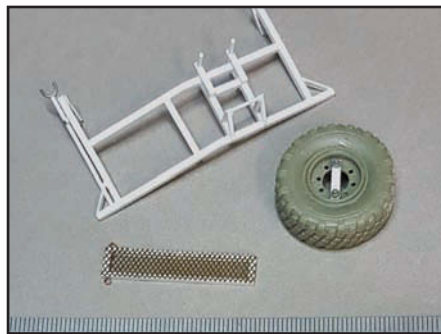
oil drip pan. In regards to the latter, the Detroit Diesel powerplant is well known for oozing oil and I'm reliably informed that LAVs don't go anywhere without a drip pan!

Images 008 and 009

Moving on to the crane deck, my references showed that it was reinforced with add-on armour plates, having cut-outs for the crane's base plate, so that feature was added first. There is a large stowage box located on the right side of the deck which I scratch built. I bent brass strip to make the form fitting legs, added handles made from wire, Meng bolt heads, and equipment tie down strips. The securing straps for the box were made with strips of masking tape and Aber photo-etched buckles. On the left side of the deck is a winch assembly. This is the same winch as that incorporated in Canada's LAV III so I checked that Trumpeter kit, but its winch was rather light on detail, so I decided to make a new one based on my reference photos. The capstan was made from a piece of plastic tube to which I added a sandwich of plastic discs. I shaped that into a dome with sanding sticks. I used lead wire and Meng bolt heads for the additional details. Flanking both sides of the crane deck are smoke dischargers mounted on brackets. The dischargers came from Takom's Leopard MEXAS kit and I added short lengths of 40 link per inch chain to detail them.



The rear of the hull is taking shape with new jerry can holders, detail added to the man door in the ramp, spade anchors and armoured covers for the rear lights. Visible on the roof is the rear fairlead for the winch and an equipment tie down strip.



A spare wheel rack is commonly seen mounted on LAVs and MRTs. In addition to the spare, a wheel ramp is usually also mounted on it.



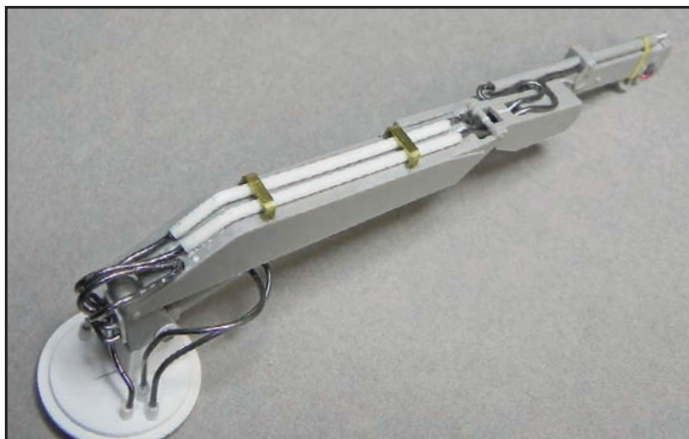
A drip tray was usually carried on the MRT and LAV as the Detroit Diesel was notorious for seeping oil. It was generally slung on the spare



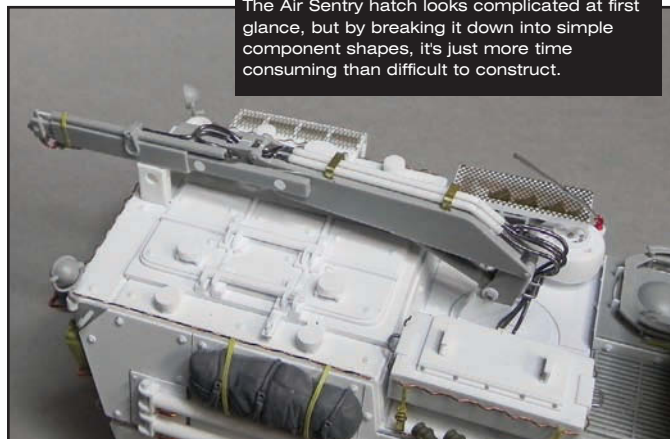
The crane deck with the winch and stowage box in place. The straps on the box are Tamiya masking tape with Aber photo-etch buckles.



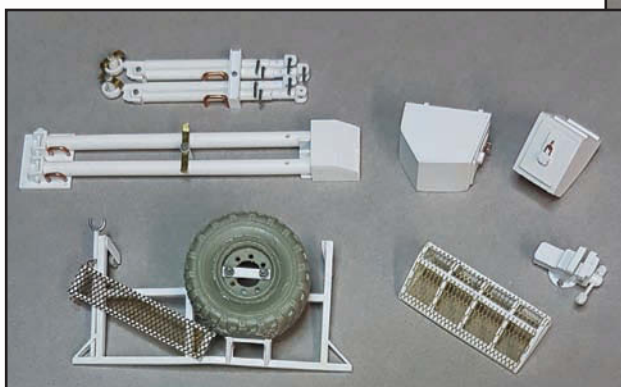
The coiled electrical cord was made by winding thin copper wire around thicker wire, and then stretching it out to shape.



The crane in the USMC LAV-R kit is rather basic so I fleshed it out with hydraulic lines made from lead wire, the protective conduit for the lines from plastic tubing, brass strip brackets, a new base, and a simple retaining strap for the hook which was made from a strip of masking tape.



The Air Sentry hatch looks complicated at first glance, but by breaking it down into simple component shapes, it's just more time consuming than difficult to construct.



Some of the component features for the MRT. The basket covers the pioneer tool rack, the stowage lockers are slung under the rear of the upper hull, the spare tire rack, and the Hollebone draw bars.



I've read that embossing powder is a good material for replicating anti-skid texture so I tried it on this model. After priming, the texture looked perfectly in scale to my eye.

I had hoped to be able to use the air sentry hatch and doors from one of the project donor kits but unfortunately, the MRT's is of a different design. There was nothing for it but to scratch build a replacement along with the rear fairlead and the protective walkway over top of the winch assembly. I used a generic diamond mesh photo-etch sheet from Aber for the latter. The MRT is equipped with multiple equipment tie down strips located around the hull and on the crane deck stowage box. These were replicated with thin copper wire using a simple plastic jig incorporating raised strips of plastic. The wire was first straightened by rolling it on a hard tile surface with a steel ruler and then it was press formed on the jig.

There are two large draw bars stowed on the right side of the MRT's hull along with two Hollebone style draw bars mounted on the left side. I made all of these, along with a protective mesh cage that encloses the pioneer tools. I used nylon kite string and bits of plastic and copper wire for the tow cable. I drilled the hull and inserted wire to replicate the cables stowage brackets. Resin water cans from an old Maple Leaf Models set were added to a soldered wire stowage rack on the left side of the hull and to the racks on the rear of the hull. Two stowage lockers slung under the rear corners of the upper hull were made from sheet plastic and I added pad locks to them made from bits of plastic and wire.

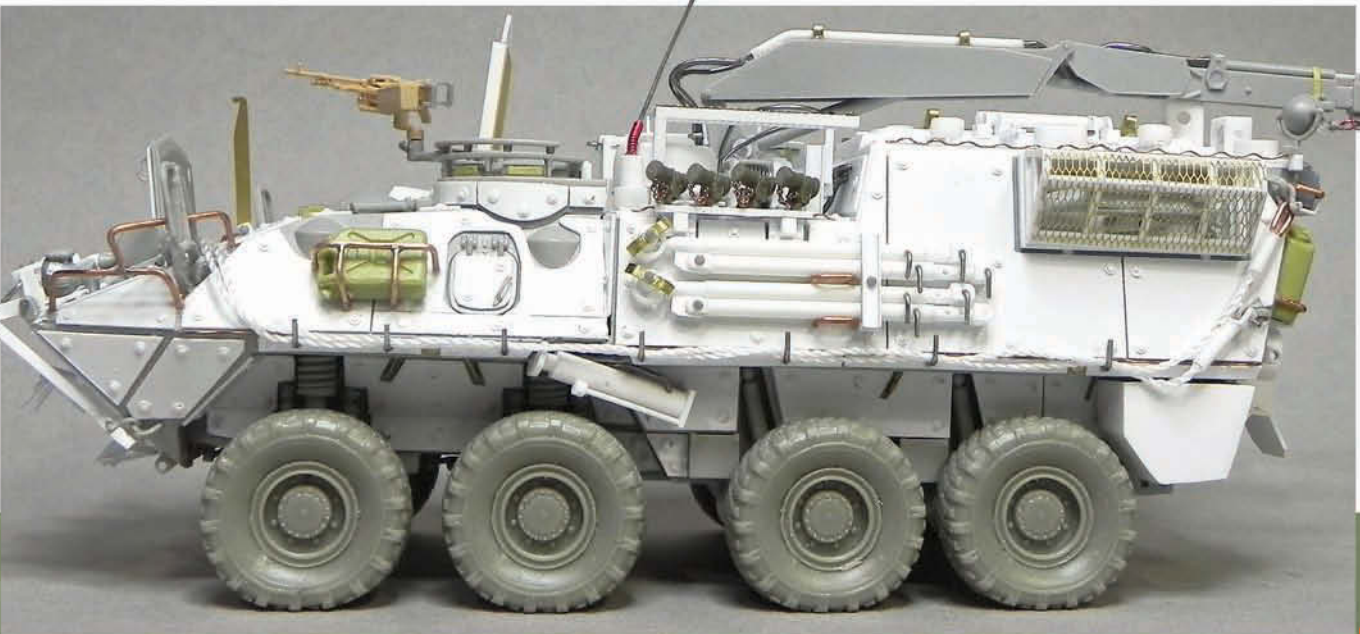
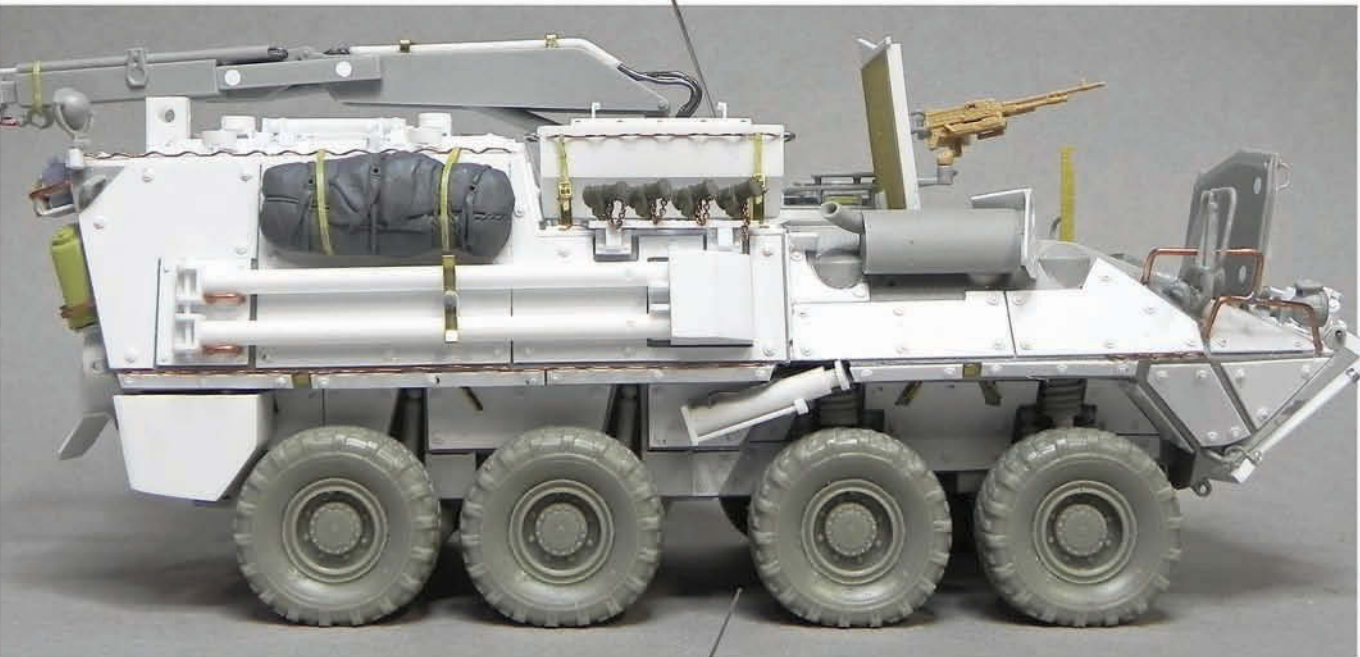
The MRT has anti-skid texture applied to the horizontal surfaces so I replicated that feature with embossing powder I found at a local craft store. For the adhesive, I used the glue from the VMS

anti-skid product as it comes in a squeeze bottle with a narrow tip applicator, which makes it easy to apply exactly where needed. I sprinkled the embossing powder over the glue and blew off the excess. After priming the model, it looked perfectly in scale, at least to my eye! I was quite pleased with the result and will use embossing powder again for future projects.

My friend Jim Carswell was instrumental in this project by supplying the 3D printed naptha cans located on the rear of the hull, the milk crate on the crane deck, and lastly, the toilet seat slung on the left side of the hull. I made a frame and legs to go along with that seat. Toilet seats were commonly seen on the sides of Canadian AFVs in Afghanistan so I knew I just had to have one on my MRT for that extra bit of interest it adds.

The caution light on the left rear corner of the roof was made with a piece of clear styrene sanded and polished to shape, and painted with Tamiya Clear Orange. The spotlights on the rear of the hull were donated by the Trumpeter's Husky kit and I made the coiled electrical cord for them from thin copper wire. I wound the wire around a thick, stiff piece of wire, and then pulled it into shape.

The Crew Commander's 7.62mm C6 Medium machine-gun was taken from Takom's Leopard MEXAS kit. I replaced its butt stock with butterfly grips, as per my reference photo. The aerial is simply a piece of stiff wire rolled straight, bent to shape and tied down with a length of 2lb test fishing monofilament line. I wound thin wire around the base of the aerial to replicate its spring mount.



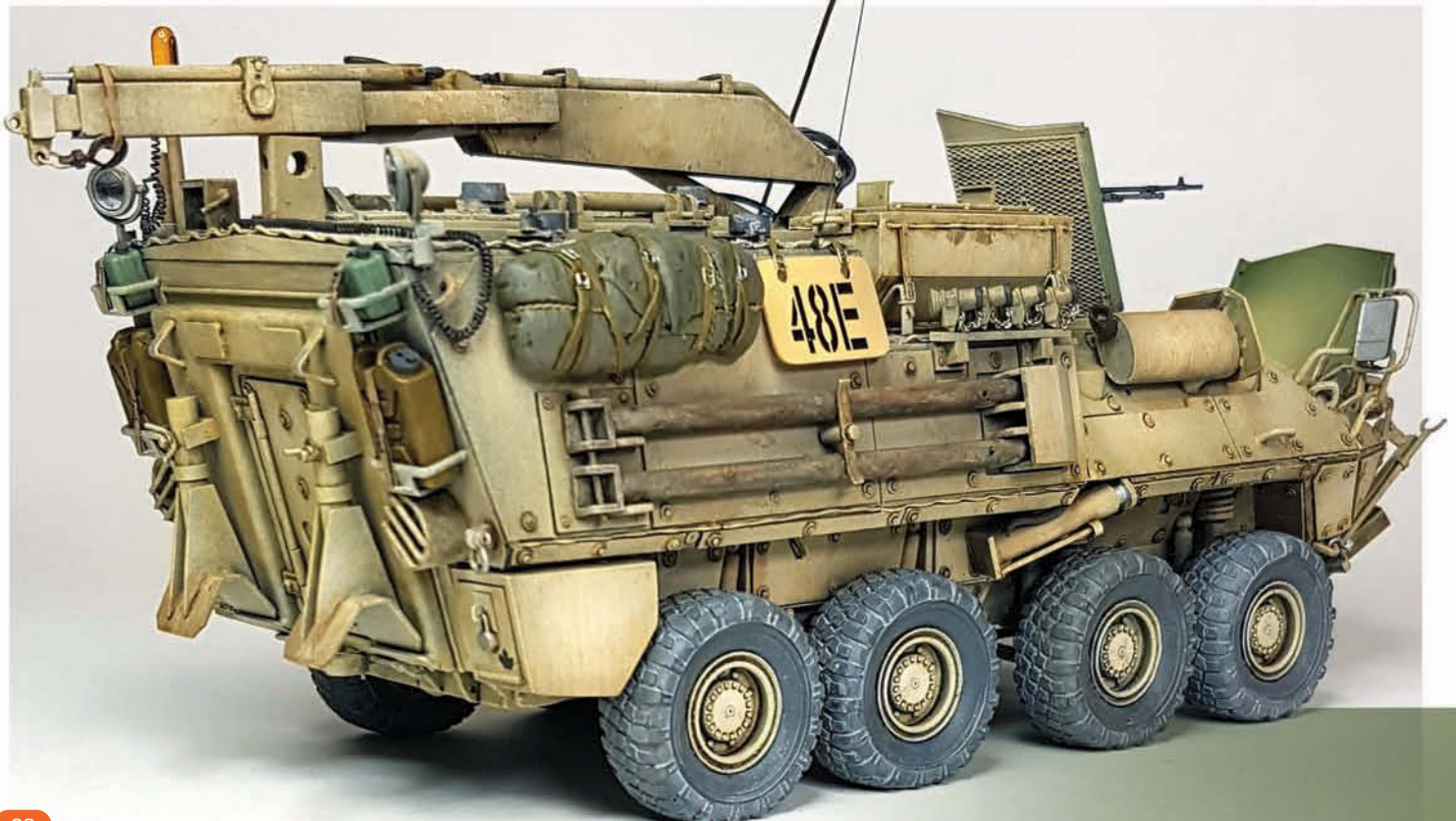
After black basing and misting on Real Colors CARC Tan, I wasn't happy with the shade I ended up with. Time to apply filters!

Construction being complete, I began the painting process by black basing the model with Stynylrez primer. I used AK Real Color CARC Tan RC079 for the base coat of paint which I misted on over the black primer. I repeated that process several times to add depth, lightening the colour each time with the addition of Tamiya Deck Tan XF55. I wasn't happy with the resulting shade as I thought it was too washed out in appearance, so I applied an acrylic satin clear coat over it, followed by several oil based Raw Sienna filters. These gave me the colour shade that I had envisioned from the start. The open hatches and engine compartment were painted with Tamiya NATO Green XF67. The detail brush painting was all done with Vallejo acrylics.



The markings on this MRT were restricted to small black, low visibility tactical markings on the front and rear, along with the vehicle's callsign applied to removable placards on either side of the hull. I drew all of these markings in CorelDraw and printed them out on my laser printer.

After applying the decals, I shot the model with another satin clear coat and began the weathering process. I favour subtle weathering effects in my modelling and towards that end, I started with an overall wash of Winsor & Newton Raw Umber, again, to add depth to the colour. As an aside, I like their Winton Series as I find they emulsify well with the readily available hardware store thinner I use. That was followed by another satin clear coat to seal the effect and then I applied various shades of oils to achieve the worn, hard use look I was aiming for. I followed this with the application of an oil dot technique for some further depth and subtle streaking. Lastly, I applied a dark pin wash to the small raised detail to accentuate it.



The orange caution light was made with clear styrene sprue runner, sanded and polished to shape, and painted with Tamiya Clear Orange. Just visible on the lower left stowage locker is one of the tactical markings.



I made the decals in CorelDraw and printed them out on my laser printer. I always print more than I need, just in case. In the end, the ROEME colour markings weren't used and the viewer has to look carefully to find the others.



The Detroit Diesel and insides of the access doors were painted with Tamiya NATO Green and highlighted with washes, filters, and various Vallejo

Toilet seats were often seen strapped on the sides of Canadian AFVs in Afghanistan so I had to have one on mine, along with the frame and legs to go with it. The straps holding the Tac Sign placard are masking tape with Aber photo-etch buckles.

This was an enjoyable and unique modelling project and it took me just under three months from start to finish, which is about the length of my attention span for any one model! I'd like to thank Anthony Sowards, Mark Minnis, and Stephane Parent for sharing reference material that was crucial for the successful completion of this project.



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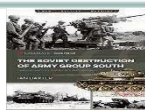
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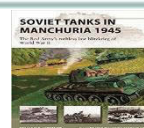
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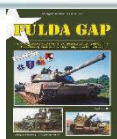
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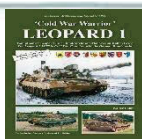
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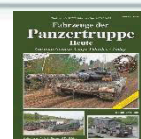
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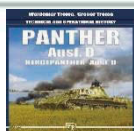
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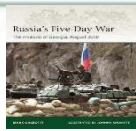
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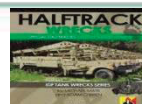
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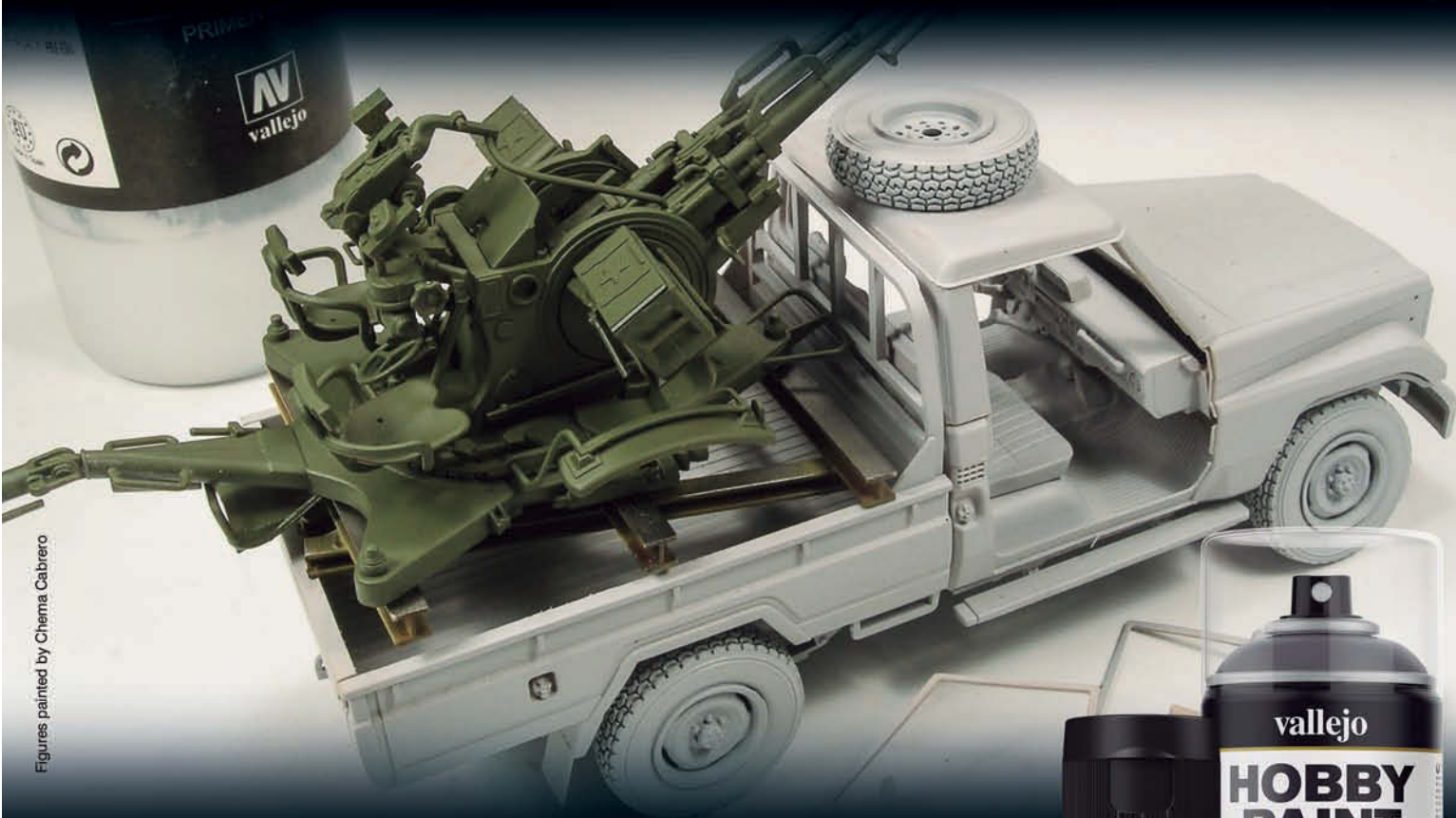
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FIT FOR A *Queen*



She was the first full time Royal female to serve in the forces, and in that time she was working and maintaining various service vehicles from Staff cars to Training vehicles and of course Service Ambulances.

After a time she was nicknamed by the press as the "Princess Auto Mechanic", and as history proves, she didn't end up working on vehicles for the rest of her life, but still liked to drive herself, and wasn't daunted by driving larger vehicles, this I imagine dates back to those ATS days.

The Queen died on 8th September 2022, and throughout all her life she has been connected to the Armed forces in one way or the other, this stems back from when she started life in the Auxiliary Training Service (ATS) in February 1945, at the age of 18, in Camberley, Surrey, which is about 20-25 miles from Windsor, so was fortunate to go home in the evenings, but she had insisted that she joined the Forces in one way or the other.

She was assigned to work for the Mechanical Training Section as a Subaltern (Officer in the British Army). Whilst working at the ATS she learned to drive, and repair engines to some sort of degree, and after a period of time she was promoted to Honorary Junior Commander by the end of the war.

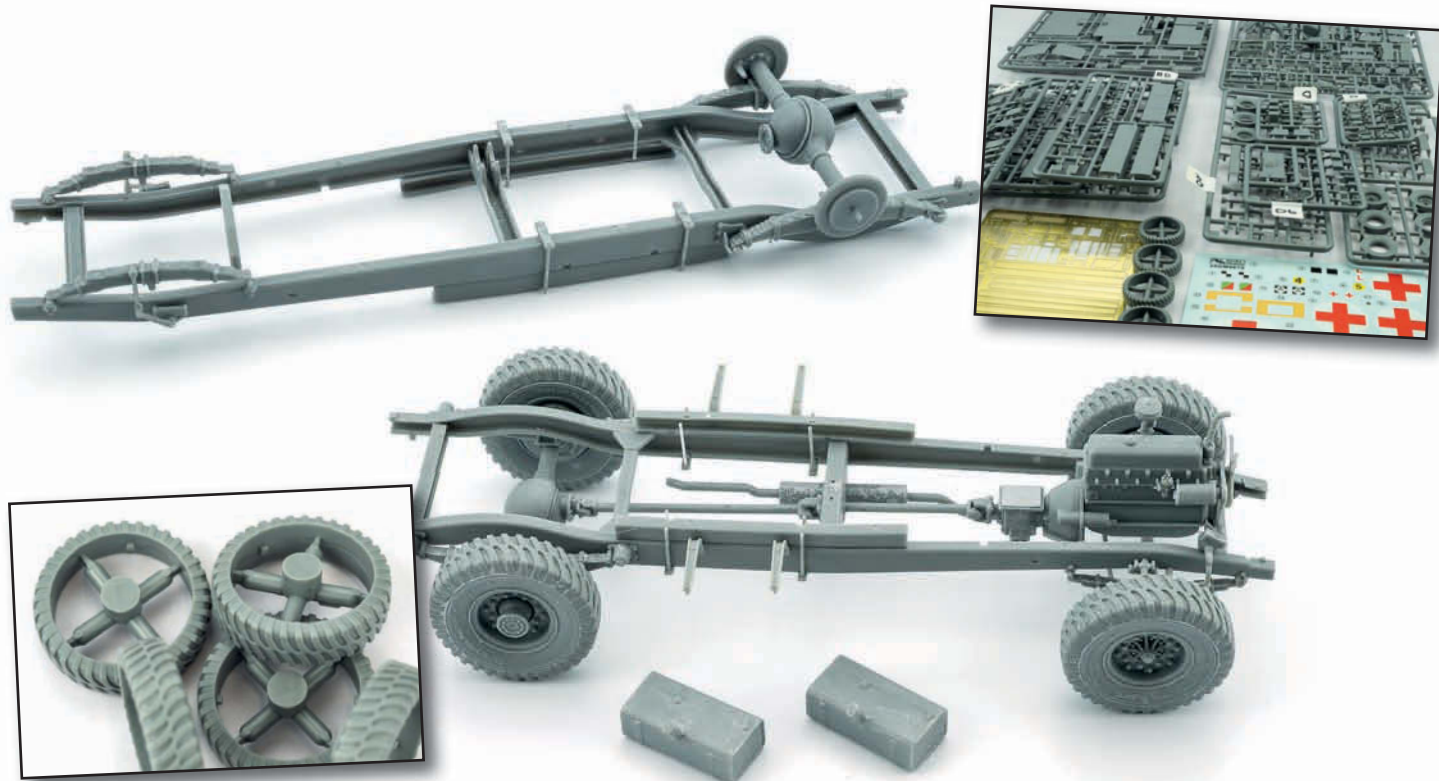




GARY MATTHEWS
MODELS THE
QUEEN'S KATY
AMBULANCE



1:35



On opening the box we find 20 grey sprue's and also 1 clear and one sheet of Photo Etch with an excellent CAD aided instruction manual, its all very plain, clear and precise, with 2 call out colours which use Mission Model colours in their call out which surprised me as they were for the "Ice Cold in Alex" version from the 1950's film, and also from the Auxiliary Territorial Service based in Camberley Surrey, (South West of London), bizarrely the bonnet (hood) has the "Princesses" from the famous colour picture where she is standing in front of Katy, which has the serial number on this vehicle, yet the call out colour is a SCC2 Brown on the Auxiliary vehicle based in Surrey, yet she is standing quite clearly in front of a Green vehicle, possibly SCC7? also scratching my head is the box art, this is shown as a Green vehicle, yet no call out or diagram for the Greens....strange!!

Nonetheless, I didn't want to detract from my build which was, the Princess standing in front of an operational training vehicle as per "famous photo", the vehicle being "Green" in colour, yet with a slight twist, this was to be slightly weathered, subtle in appearance, even in the famous photo, there shows some sign of wear.... I like to have a set of parameters to work to in my vision of a completed model, quite an important step before I start.

So where to start, I didn't fancy deviating from the instructions initially, so went with these for the time being, and like most vehicles of this nature the chassis was first on list to be built, this was made up from two moulded pieces, from front to back and cross braces making up the basic framework, the leaf springs were cleaned up, and fitted and various other parts to make up the sub structures were cleaned too. There wasn't a lot to clean up to be honest, but what there was I used these Infini sanding sticks with adhesive sandpaper in various widths and grits, these are one of my favourite tools, as you can get into places that are near impossible to get to with other sponge type sticks, these became my best friend during the build.

Next the wheels, an unusual design for fitting, I am used to a tyre just fitting the hub, not in this instance, there a locating pins on the tyres themselves, but found these would not allow for proper fitting to the hub, so I removed the pins, this made for a better fit, unlike the tyre itself, there seemed to be a gap around the tyre and hub, seemed a small error in engineering, but nothing Mr Hobby surfacer couldn't fix. I left the wheels and petrol tanks off for the time being, knowing from previous experiences that its rather difficult to get into the B side of the wheel for weathering which I like to do, I slowly get into the feel and yet an unobtrusive way of

In addition the fuel tanks were left off, I thought they may get in the way, and this had a silver lining, as this meant that when working on Katy, you could easily pick her up and hold her to work on where they were supposed to be, holding the chassis comfortably instead of the fuel tanks.

Next the engine, there are certain forums I have researched and extracting the information it seems that there were a 3¼ colours of the engine, dependant on when they were built, these range from an Eau-de-Nil (like a duck egg blue/green), a Green, and also good old fashioned black.

I plumped for the Eau-De Nil version, as I had a similar colour in my paint library, this ended up being Mr Hobby Aqueous H67 (RLM 65), this engine was produced in this colour from 1943-53, which is the era Katy and the Princess were photographed.

I added some wires to enhance the engine, because at this stage, I thought I would open one side of the bonnet up to show to all, this came to haunt me later on though when I succumbed to not doing enough research on this particular part of the Ambulance, and the instructions didn't show how this was to be done either, which seemed to be an error in my book.

The bonnet doors are in 2 parts, shown in the instructions as such, but I had already glued 1 part of the bonnet to the body as per instructions show which is incorrect, if you want the engine open, not knowing that this is not the correct way of the bonnet opening, it is more of a concertina opening, actually opening back on itself, note to self, more research required !!

I was looking forward to the larger Photo etch of the radiator grills, these were to comprise of 3 parts of PE, but oddly fitted to the outside instead of the usual inside. The PE is a good quality at 1.2mm thick but these had to be rolled longitudinally and laterally to form the correct shape and radius, using an RP Tools cylinder roller, the PE was carefully rolled and shaped little by little checking every few rolls of the tool to achieve the correct Radii, it worked perfectly as you can see.

So by now we have most of the chassis completed along with the wheel arches and now time for fitting the internal cab and details, nothing unusual in the completion of these details, pedals are in PE, the steering column went through the firewall, into the engine and lined up perfectly, I must point out the steering wheel detail, it was a superb rendition, even with the "Austin" logo imprinted onto the main hub of the wheel, and the steering wheel contours were superbly done, such a nice job Gecko.

I decided to leave the main cab removed whilst I painted and weathered, the usual scuff marks and dried in boot marks were applied using various shades of 502 oils and Mig Pigments, this produced the general dirt accumulation I was after, even in the famous picture there are signs of dust/dirt deposits in the front cab area, so felt vindicated that the Princess would "work" in a dirty vehicle, heaven forbid!!

The instructions by now have started to add small delicate/fragile pieces, the external lights, the cow horn type radiator protector, these were left off for obvious reasons, I knew that the handling would alleviate them from their prospective positions, these could easily be fitted once all the major parts have been installed and formed.

I decided to take a bit of a break from the main areas, and moved onto the "bits and pieces" that make up Katy, the stretchers, the Vickers Water cans, the bending of the stretcher bearer parts that form a U shape profile to rest the stretchers onto, these by the way were formed by using my lovely Dspiae PE bender, I have had this a long time, and I specifically bought this for longer PE that required bending, until now I have never had to use it, I knew one day it would come in handy, seems like today was that day.

Of course there are other ways of bending longer parts, i.e using 2 steel rules together and bending them that way, I am sure there are other ways too, but for me, having the right tools is essential.

I also added some extra blankets from Red Zebra, these are beautifully produced, and added a little more authenticity, and talking of extras, I had some medical bowls, buckets and even a stethoscope 3D printed by a lovely lady from Instagram, called @rosemodelcompany

Sophie can re produce these, as she now has the files. We collaborated to get these produced, she did all the hardwork to be honest, I supplied photo's of the bowls, she did the rest, even though, I won't be using the stethoscope, not sure if her majesty was qualified to use them!!

But a lovely addition I thought, it brought the inside to life. The flooring and the bracing for the stretchers were painted and assembled, the internal walls again proved to be a another talking

point on various sites, and pictures also concluded that there were conflicting colours, Beige, White, and also a Blue Grey, again unless there was colour swatch available from that original ambulance, then you have to go and make a suitable choice. I tend to go with an average, if I see 5 Beige's, and 2 Whites, it will be the Beige that wins over, some may see this as lazy, but I don't want to pour hours and hours over research (unless its something critical) when I could be building, life's too short, and I know of at least one "famous" modeller that has the same perspective as me.

The internal walls and door were painted Mr Hobby Aqueous H313 Yellow, with a tad of H336 Hemp in the mix, to me this is not a million miles off, this would change colour once the roof goes on as well, it would of course become darker in tone, so went for a slightly lighter hue.

Once the internal walls, blinds, the internal door were all painted and slightly weathered, again with oils and washes it was time to glue them all together, no longer could we comfortably get to parts that may of been missed, a final check over and happy to proceed. I can safely say that it went together like a dream, sometimes there are fit issues with so many little parts that may obstruct each others construction/fit, but Gecko have got this nailed.

There was a very small PE etch part that was just looking at me every time I picked the PE sprue up, it looked small and very fragile, again I was not looking forward to fitting, let alone getting it off the sprue and handling it without damaging it, knowing it was a vital part, that being the windscreen wiper, and blade, only time would tell how this was going to play out...

The roof construction was next, nothing untoward here, straightforward enough, a shovel, and metal bar incorporated into the roof, painted in wood and metal from, this wasn't going to be seen, unless you turn the whole thing upside and peer through the door, something I had no intention of doing.





I decided I wanted to have the drivers window slightly open, the easier option would have it closed, but confidence started to grow by now, lets see if we can do the harder tasks, I masked up the windscreen and painted this with the corresponding Greens to the outside and inside,

This now left that very small fragile looking windscreen wiper to be fitted I spoke of earlier....so placing the PE Sprue this on my usual hard surface (like a modern day Bakelite substance), I placed a piece of masking tape underneath the wiper, hoping this would stop it flying off into the carpet monsters jaws if it were to escape. I slowly cut this from its sprue, holding my breath, I felt the joy of cutting through both attachment points, to my amazement its still there complete, not bent or damaged in anyway, a clean cut... phew!! This job comes in two parts though, the installation of said wiper onto the windscreen, this may get lost, fall off my tweezers, bend at the last hurdle, the things that go through your mind, a small amount of MIG Ultra glue touched on the wiper, then positioned, voila!! job done, that was easy, one happy builder.

The windscreen itself was left off for the outside painting, I used various forms of masking from Post-it notes to masking tape, I didn't want to use masking tape completely as I still felt that this is fragile/delicate model, as I didn't want to pull/break anything off at this stage, or at any stage to be honest.

I have decided to use Mr Hobby H421 RLM 81 Brown Violet, a semi gloss paint (this would have a dull-cote/varnish after completed), I have gone with this, as to my eyes this is a combination of various colour pictures, and unless your monitor is calibrated you really have to go with what your eyes are telling you, and as you can see from my paint library, some were almost identical, some were slightly off, in fact I would say that all of those greens would be acceptable in some form, I have made that choice and would be sticking to it.

The outside was now painted in H421 and didn't look out of place. I slightly modulated by adding an off white to the green to lighten the top of Katy, and a darker green added to the lower portion of the main of the body and cab.



I then proceeded to vary the tone with various Vallejo washes and 502 oils, these were done to keep it all subtle, I paid attention to the corner "box" area, as these are where most of the dirt would congregate, the roof was lightened somewhat, again seen in some black and white pictures, to give a sun bleached affect, again ever so subtle.

Once all painting was done, it was time for the large decals, these were of course the Red crosses. I haven't used "large" decals for a long while, since my early aircraft days, knowing that larger decals can be problematic at times. I was looking forward to fitting these, but there was a small issue with the top of the roof decal, as this had to be cut around 2 vents. I made a template of the actual diameter of the decal, and placed it over the top and made an outline on the template and cut away bit by bit to get the proper fit.

Once this was done, I transferred this onto the actual Decal, then cut around that, this worked a treat, the only thing now was the vents themselves were green. I had already found the almost exact colour red required from Tony Ghiraldi from the Aberdeen Modellers, he pointed out this was Vallejo Scarlett 70.817 it was almost identical to that of Decal. Thanks again Tony for that tip. Also the white was painted in, an easy colour match there.





The decals themselves were some of the best I have ever used, they conformed perfectly, and gave no trouble whatsoever, these were fitted with Micro-Soled only, again top marks to Gecko for the decals.

Once the decals were fitted, it was almost time to wrap this up, all the missing parts were added, the small parts which could of ended up being broken off due to the handling, the fuel tanks which I initially heated and dented them purposely just to add a little wear/character and the doors, these were left open, because there was no way I was going to close these up, there was a lot of work involved internally, yes it would of made for a lot quicker build, but that's not the point of this kit, it needs to be shown to its full potential.

With all these accoutrements fitted and painted, I finally stood back and admired, this kit took a while to complete, just a couple of months, but this was a 5 hour a day project, now being retired that's feasible. I am not a fast builder by any stretch of the imagination, but its one of those kits that at times "get to you", I am sure we have all had one of those, but just kept with it.

The only outstanding items were the "Princess" herself. Gecko supply a figure which I am guessing is that of her Majesty. I am not really a decent figure painter yet, and I didn't want to end up in the Tower of London, for defamation, but I gave it my best shot

Conclusion...

As far as timing goes, it probably could have been slightly better. Airfix launched initially, but Gecko had issues with having to halt the production for a period of time, and I do know there were issues and the rights could of possibly been given to another modelling company, so I imagine Gecko have had their work cut out getting this onto the modelling shelves.

The kit itself is not by any means a weekend build, and is quite fragile in places, this also is not really intended for a novice builder either. The Airfix version maybe a better option, yet as far as costing go, there is far more detailed parts in the Gecko version, for only a fraction more in price, which seems strange.





The fit at times was questionable, especially initially, but once you moved through the build, it became pleasurable, and once those large Red Cross decals went on, it started to feel like a truly magnificent kit, the instructions are first rate as well, no issues with those.

I always ask myself a question once finished, would I build another one? that's the litmus test for me, I have to say no (I can only recall 2 other kits that I would happily build again) I don't think I would, even though I am fairly happy as to how she has turned out...That is no defamation on Gecko's part, just my opinion, I am a hard taskmaster I guess.

Right, where's my Cold one?



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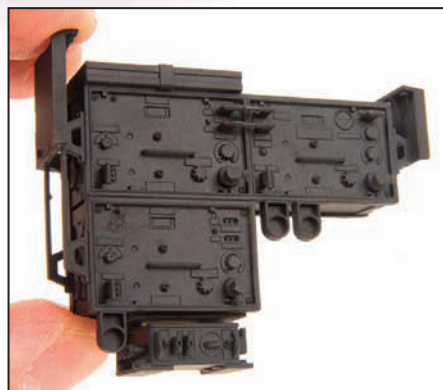
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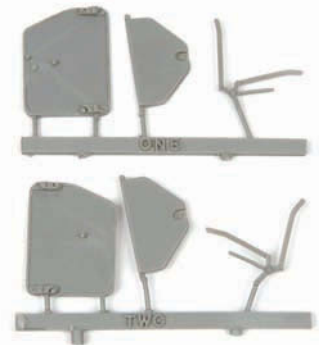
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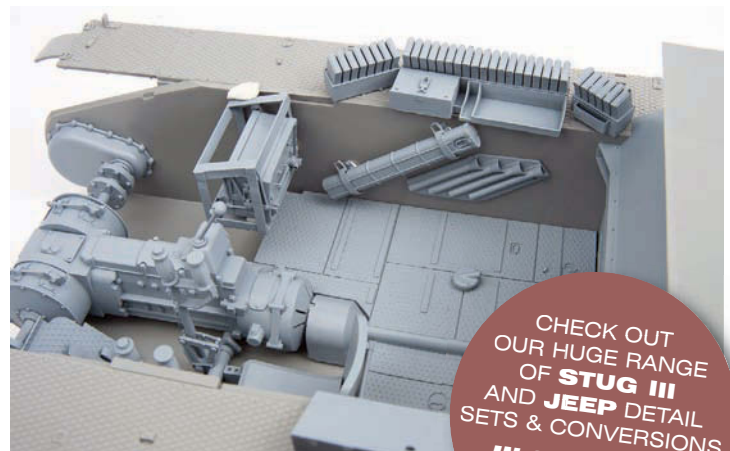
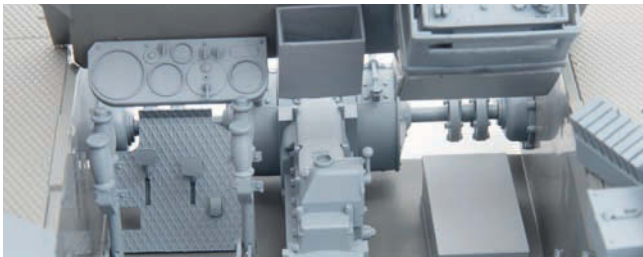
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BUMBASTIC

Chris Meddings
shares the 'craic'
on this particular
Centurion AVRE

I've always liked Cobbaton Combat Collection, a private military museum in North Devon.

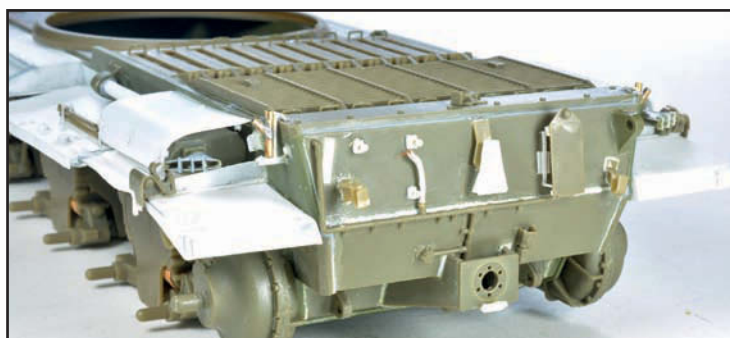
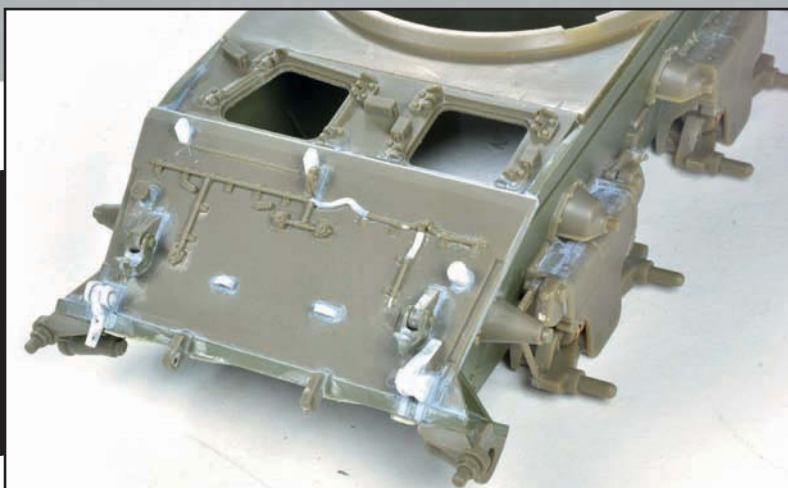
Started by Preston Isaac, and run by his son, Tim, it has a number of very interesting AFVs. I was lucky enough to get permission to get on, and inside, a couple of the tanks around 8 years ago, and I always wanted to model their Centurion AVRE, but there was never a suitable kit available (the resin Accurate Armour Conversion required too much work to model this particular AVRE).

The AVRE at the Museum has its own story. Deployed to Qatar in the first Gulf War in 1990, it fell off a dock while being shipped, and was written off. Sold off, it found its way to Preston in North Devon. Its 'little accident' left it unusable for military purposes, but perfect for modelling!

The crucial piece of the puzzle was the kit, of course. A Gulf War up-armoured version was released in 2020, but I knew AFV Club were working on one, and being a loyal fan of AFV Club, and for my friend MH, I decided to wait. When it came, it wasn't the Gulf War version, but for my purposes, that was fine. The AFV centurions are based around a relatively old mould now, dating back to 2006 (amazing how 'old' now means more than ten years, as kit design moves so quickly) but it also has a lot of new parts and I think it holds up really well. The only aftermarket addition I made was the outstanding DEF Model Mk.V AVRE Canvas Mantlet Set.

As anyone that has looked at Centurion AVREs can tell, they were not constructed (or rather converted) to a completely uniform pattern; each one is individual in many details. This leaves you with two options, study them all, or pick one and get a ton of photos and make that one. I'm lazy, option B it is.

A note to our American readers:
an explanation of some British 'slang' words.
'Bum' we use as you would 'Butt' or 'Ass' and
'Craic' (pronounced 'crack') is 'story' or
'what's happening'.



We all know how the AFV Club Centurion kits build, or at least we should do by now. Suffice to say, like all AFV Club kits, it repays care and attention, but with careful cleaning (the plastic is a touch soft) and test fitting, virtually no filler is required and it goes together very well. I have read of people having trouble with the suspension, but I honestly cannot work out why, I found it very easy.

The big failure of the AFV kits is the vinyl tyres, but that has been fixed and the kit now includes styrene ones. Not only does this now mean I don't have to worry about them degrading or splitting, but it also allowed me to add damage and wear. I used a rotary tool and scalpel to chip away at them, aiming to add wear and tear from grinding stones between the tyres and tracks, and from the effects of age on rubber. This does leave some fuzziness, but a little Extra Thin takes care of it.

Converting the hull to the version at Cobbaton was relatively easy, and I worked section by section. I started on the glacis. Some of this was replicating the damage to the tank, like the bent electrical ducting; some styrene rod of the right diameter handled that, I also drilled out the ends of the tubing where it showed. The tank has the spare track brackets but the kit has these moulded onto the spare track, so I made new ones. The hinges for the dozer are different on the Cobbaton tank than they are on the AFV kit, so I made new ones from sheet styrene. To get duplicates, I tacked several sheets together with CA, cut the shapes, then teased them apart with a sharp blade. There are two rubber-tipped bump stops on the top edge of the glacis, right in front of the driver's

hatch. At first, I thought they were for the hatches, but of course they open sideways. I guess they are maybe for a bad weather windscreen.

The mudguards were always going to be a big part of the look of this build. I did look for PE fenders but couldn't find them from any of the usual suspects, which was rather a surprise. It would have been easier, and preferable, to solder etched ones together, then bash the living daylights out of them. As that was not an option I tried making some from copper sheet, but the results were not very good, it was just too difficult to bend sharply and get fine detail. In the end, I settled on drawing the parts on the computer and using a Silhouette cutter to cut out the components needed to assemble them from .2mm styrene sheet. Making my own gave me the option of making the mudguards thinner, and opening up the stowage boxes, as well as making them a little easier to damage. I was too lazy to scratch new locker latches or some of the details for the mudguards so I used some kit parts where needed.





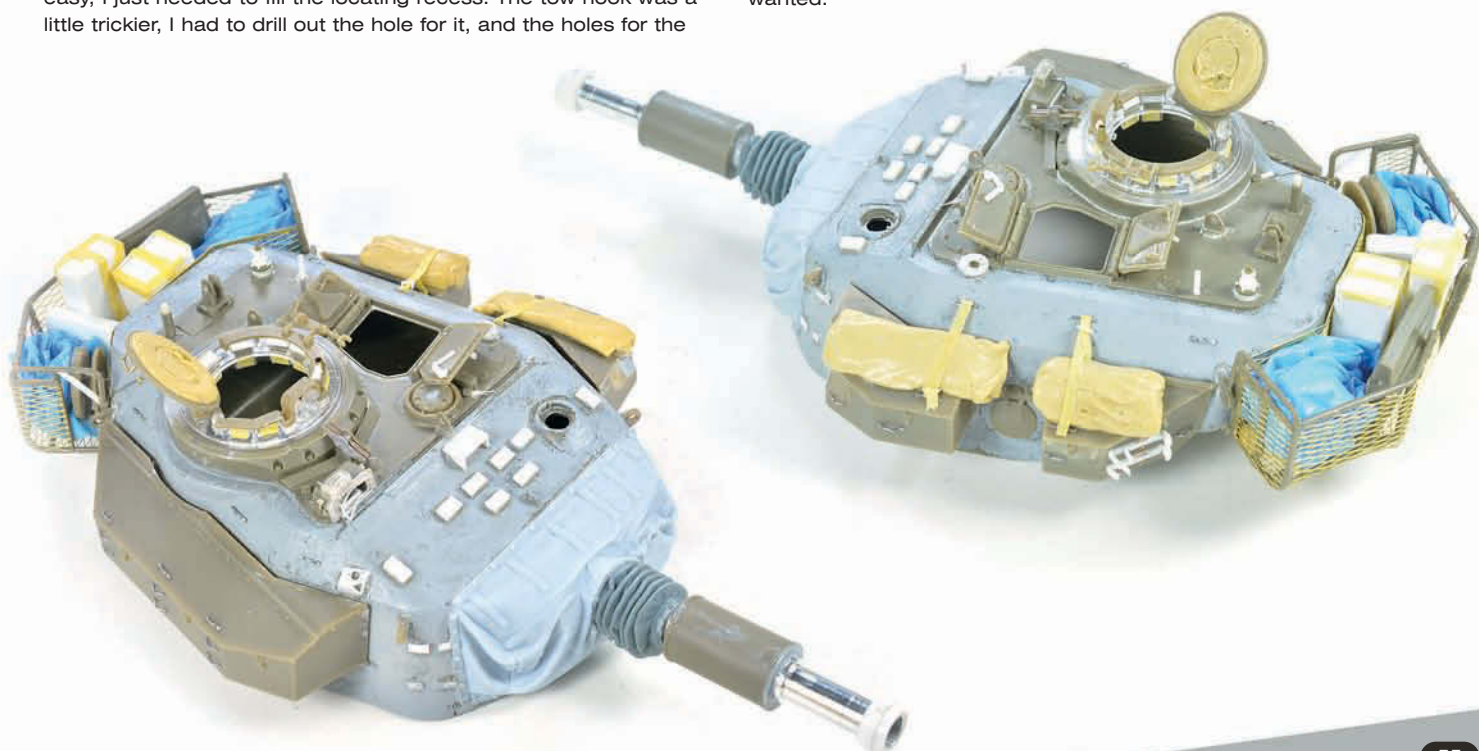
Tool clamps were replaced with styrene and the moulded-on clamps were pared off. The exhausts on BOMBASTIC are a little different from a standard Mk.5 Centurion, so I made new pipes from styrene rod. The hose-like sections were made by wrapping wire around the rod and using Mr. Surfacer to blend in the lines between the coils. Like some Centurions and Centurion AVREs, BOMBASTIC had additional exhausts for the Morris 8 engine generator. Some tanks do not have these, some have one, and some have two. "Bombastic" has two, so I made them by wrapping two styrene tubes with styrene sheet to get the silencer shapes, and filling the ends to leave two opposing holes from the tubes, which were used to locate the 'in' and 'out' pipes. I also discarded the moulded-on heat shield part of the main engine exhausts, built the silencers back up with styrene and added new brackets and heat shields to allow for the gap between silencer and shield. The fishtail exhausts were assembled, then hollowed out with a rotary tool before new strengthening ribs were added. None of that is essential of course, but I prefer a good hollow exhaust!

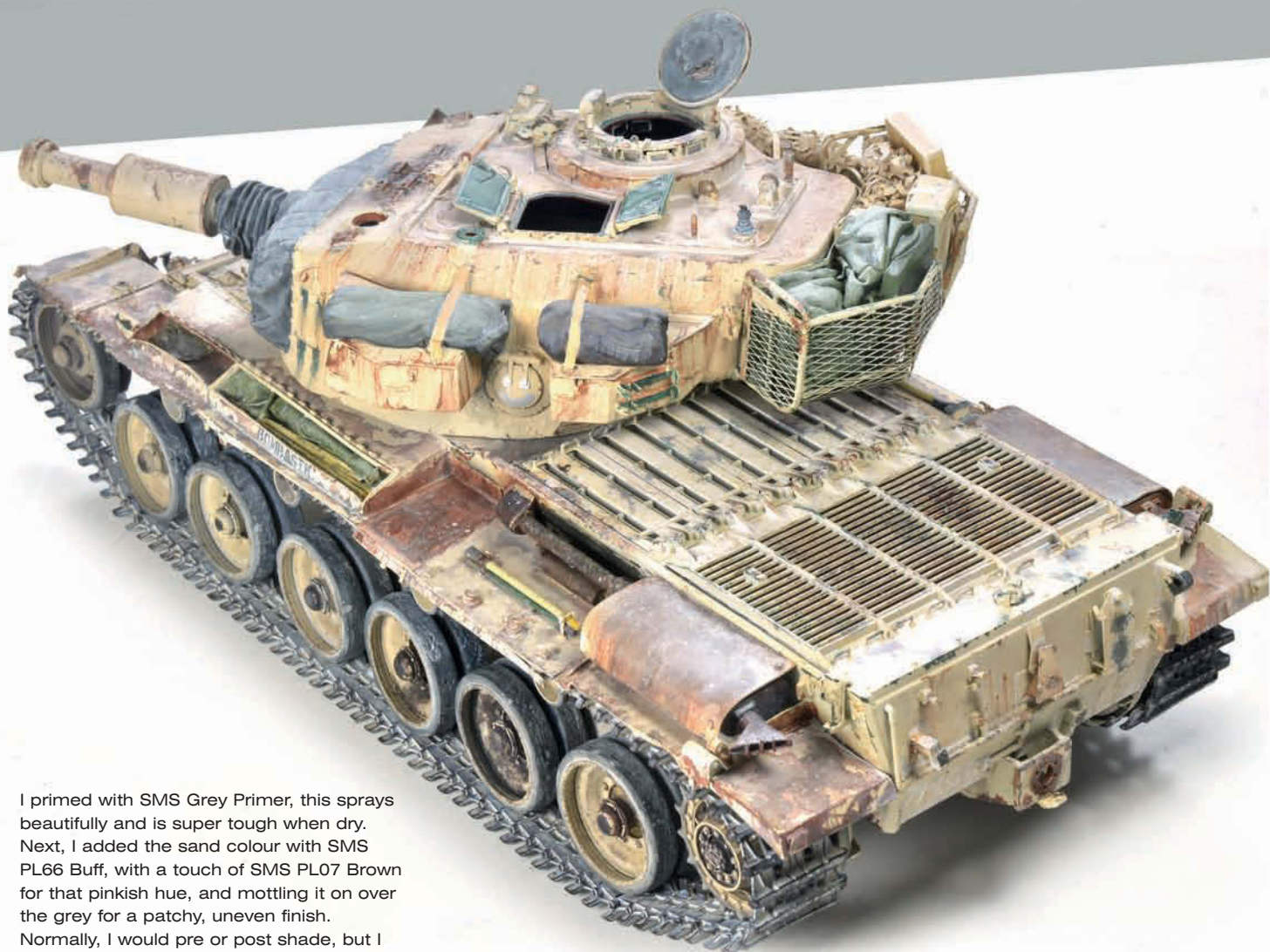
This tank also had mounts on the rear of the engine deck for camo or tent poles. I added them from soldered brass tube and styrene. The rear armour needed a few changes, the mount for the tow cable ends needed to be changed, as the one in the kit is a different shape. The rear end needed a few welds, mostly where the Mk.5 had been converted to add the fuel tank, I made them with stretched rod, softened with styrene cement and the bead pressed in. The kit has a nice infantry telephone box, but the one on BOMBASTIC is missing. It wasn't too much work to make new mounting posts sans box. The popped towing eye on the left was easy, I just needed to fill the locating recess. The tow hook was a little trickier, I had to drill out the hole for it, and the holes for the

mounting bolts, in the bracket, and frankly I always have trouble with correctly locating drill holes! I added new license plate mounts to match BOMBASTIC, then finished with the wiring for the license plate lamp and broken off conduit for the phone box.

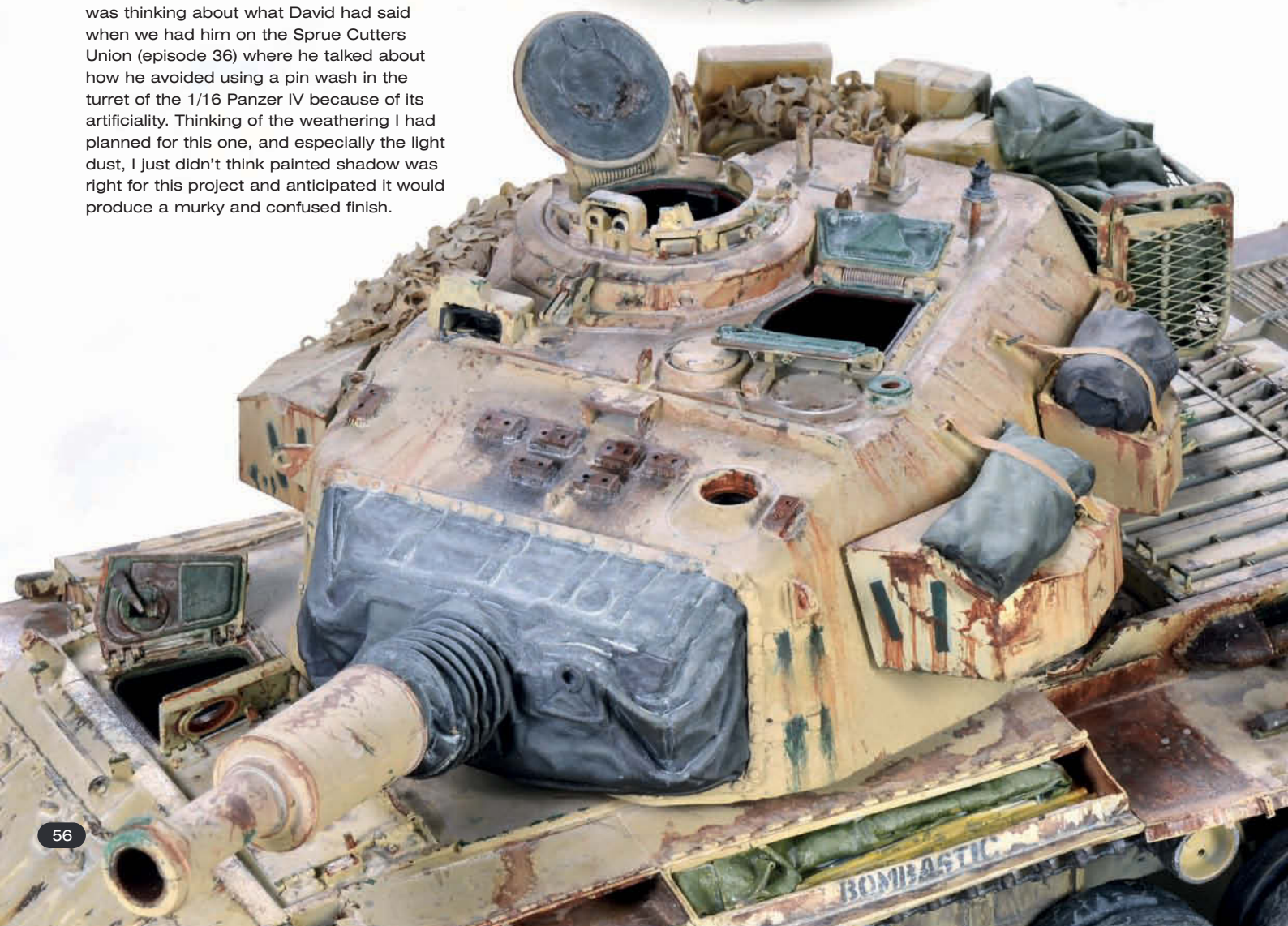
The turret in this kit is partly from the old Mk.5 kit, and partly new. The sides of the turret are the same, but the roof is a new part, with mounts for various AVRE-specific fittings. Unlike the earlier AFV Club Centurions, it comes with a mantlet cover, made from a vinyl type material, and it's not bad, but I don't trust the longevity of vinyl and DEF Model have released a beautiful resin one (D35126), so I used that instead.

The gun on the Cobbaton tank is not in the correct position, and it has in fact got stuck semi-recoiled, I adjusted the very nice AFV Club metal barrel included in the kit, to the correct position. I added Mr Surfacer all over the turret after removing the moulded-on footman loops, which textures the turret and hides a multitude of filling sins! Of course, the AFV Club kit does not have the armour pack fittings, so I added them from styrene blocks and added the welds. A few other minor fittings, such as converting the Larkspur arial mount to a Clansman mount and the broken seal on the sights, and the basic shell was done. The provided etch mesh did not fit the basket will at all, and I had to do quite a lot of fettling to make it work. In the end I cheated and took a little off the frame to make it smaller. I stuffed it with various stowage including putty tarps, and scratched cardboard boxes, and added the wire to the empty section of the basket. Some of the bins needed to be damaged and dented, so I thinned them from the inside with a rotary tool, and pushed them into the shape I wanted.





I primed with SMS Grey Primer, this sprays beautifully and is super tough when dry. Next, I added the sand colour with SMS PL66 Buff, with a touch of SMS PL07 Brown for that pinkish hue, and mottling it on over the grey for a patchy, uneven finish. Normally, I would pre or post shade, but I was thinking about what David had said when we had him on the Sprue Cutters Union (episode 36) where he talked about how he avoided using a pin wash in the turret of the 1/16 Panzer IV because of its artificiality. Thinking of the weathering I had planned for this one, and especially the light dust, I just didn't think painted shadow was right for this project and anticipated it would produce a murky and confused finish.



Instead, I moved straight to the detail painting stage and started with the beautiful DEF mantlet cover. I basecoated it with AK 3rd Gen Tenebrous Grey (AK11026), which is my new favourite analogue for black, as it is very dark but has a reddish-brownish-grey depth that gives it a little more life than black. I applied it in kind of a heavy glaze, not as wet as a wash, but enough so that it settled off the most raised areas preserving some light and shade. I used that as a guide and, using a greyish green that I mixed, I started to add the mid tones for the dark green cover. Next, I lightened it with a touch of interior green and picked out the light areas. Finally, I added a touch of buff to make a lightest tone and picked out the highlights. The other tarps were painted in a similar fashion and a greener hue was used for the cushions in the turret hatches.

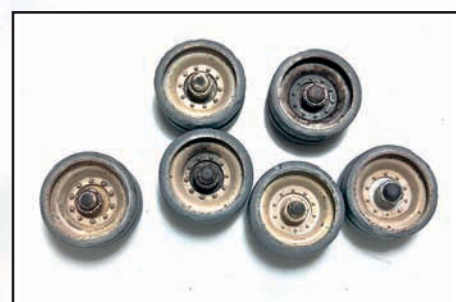
Painting the basket presented it's own issues. I had made some elements, like the cardboard boxes, removable, so they were painted separately but the rest had to be painted in-situ. I started by spraying the areas with the green stuff green, basket and all, and went on to highlight and shade them by hand, then painted the mesh and basket back to the hull colour by hand. Turret stowage was finished off with the excellent camo net from Tetra Modelworks.

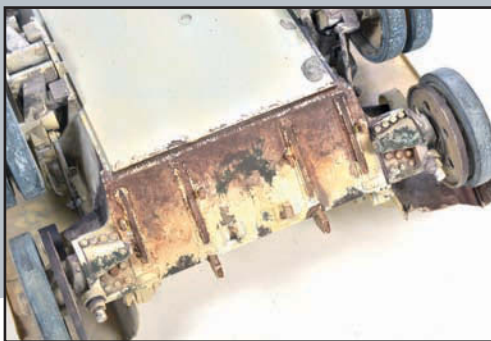
Markings obviously could be done with decals. I used my Silhouette cutter to cut out the tank name 'BOMBASTIC' on the stowage bins from vinyl mask, and sprayed them. The other markings appear (very) hand painted. These are "LN5" in large letters on the glacis, and the vehicle registration: "79M563" on the glacis and rear armour. So what better way to replicate hand painting, than painting by hand?

I started the weathering with the lower chassis and wheels. The wheels have a very particular look, one I would not have imagined if I was not working from photos of the actual AVRE, so it was interesting to try to duplicate it, rather than falling back on the modelling standard look. I started with heavily thinned localised washes of Tenebrous Grey. This was not a pin wash, but just in specific areas following the reference, on some wheels I did not

use it at all. I also added stains and marks, using glazes of the same colour, building it up to avoid that 'painted-on' look. In some areas I darkened it with black, in others I added a touch of brown instead. In some areas I added chipping, using sponge and a fine brush. The base colour on the tank was bronze green and it was overpainted was sand for the operation, yet the chips seem much darker in pictures, so I went with mostly more of the tenebrous grey mixes.

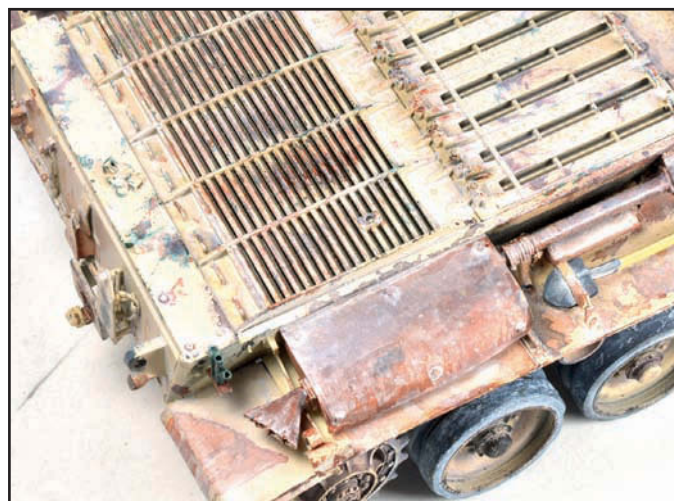
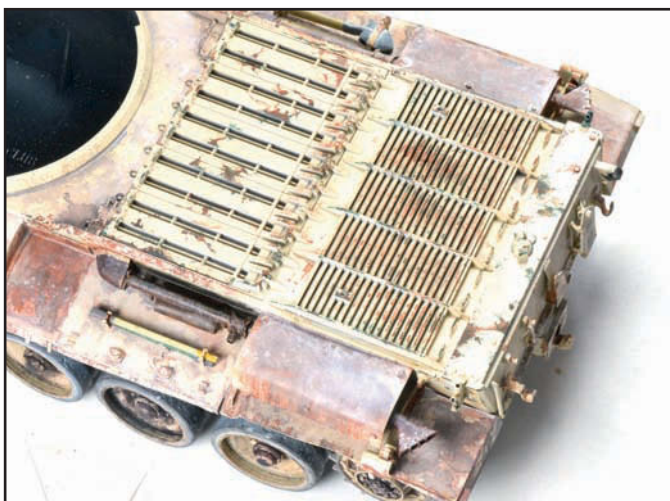
For the dustier wheels, and for all the tyres, I used a heavily diluted application of Tamiya XF-1 white and AK 3rd Gen Decomposed Flesh (11058), about 3:1. This was diluted with water, and the reason I used Tamiya white is that it breaks up when heavily diluted in water, creating a dusty solution. Before I applied this 'dust', I dampened the area with clean water first, not to make it wet, just damp, as this helps prevent tide marks. Once the dust had dried, in some places I went back and added stains of the tenebrous grey by applying small amounts to specific areas and actually letting it 'stain' and leach into the dust and other acrylic marks. The chassis under the mudguards was done in more or less the same way, but perhaps leaning a bit more on the dust, and latter stains.





The bow plate was a bit different. The real one shows significant chipping, including some greenish chips. I painted these on with a fine brush, concentrating on trying to make the smallest and finest marks and scratches that I could manage, around the larger chips. I used a mix of Tamiya Nato green and Tenebrous Grey, adding the grey to bring a tonal similarity across from the previous weathering. I also added a little light streaking with a thinned version of the mix, but only in some areas and only a little, as streaking is one type of weathering that seems almost entirely absent on the real tank. Next it was time for the rust, which is missing on the side of the chassis, but can be seen here, perhaps

because of the dip it took in Qatar. My preferred method for rusting has been the Lifecolor Liquid Pigment "Rust Wizard" set, and this stuff is as magical, as the name suggests. I started with LPW07 Eroding Dark Rust, applying it in dabs, almost pointillist style, and slowly building it up. In some places, I used a small piece of sponge to build it up, but be cautious with this as the liquid pigment is a lot thinner than paint and you can overdo it. Once this application had dried, I added LPW06 Deep Rust, which is much darker, and got me to the tone I could see in the photos. Finally, I added more dust using the same mix as the wheels.

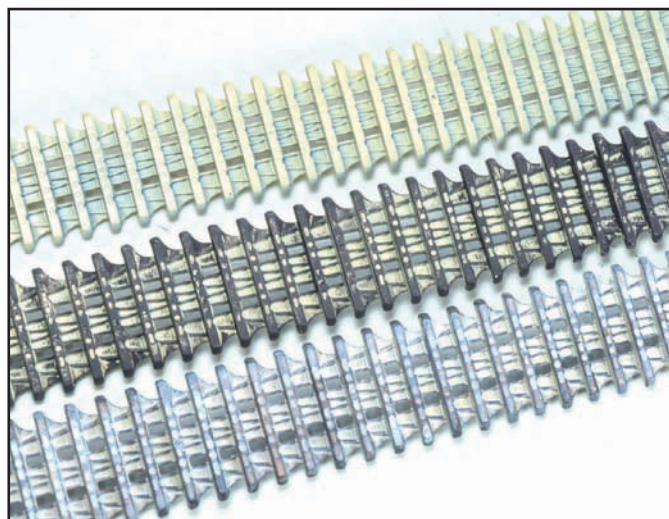


The mudguards, exhaust, etc were all done in more or less the same way, although some features like the exhaust silencer shields, I used more of the lighter tones from the Liquid Pigment set, as these thinner sheet metal elements rust differently to the armour elements. On the engine deck I chipped in green and chipped it quite heavily, as photos often show the crew stood around on the decks, and it was a high traffic working area on the AVRE's. I also added some rust to this area. Finally, using a liner brush and a mix of tenebrous grey and black to pick out panel lines where parts would be moveable.

might have used the kit vinyl track, but the kit comes with the 'hushpuppy' track. The good think about link and length is that it is very easy to paint and weather. I started by spraying the track buff, as the basic dust colour. Next, I drybrushed the track with the dark track colour: a mix of tenebrous grey, flat brown, and a touch of black. Finally, I added a wash of lighter dust.

The turret was weathered in much the same way as the rest, but again with more light rust colours on the attachment blocks for the armour packs, and the stowage bins. The liquid pigments behave much like oils in that they can be streaked, using a brush moistened with water, you may find that the pigments can leave hard edges, looking a bit 'painted on', you can easily feather them with a damp brush. Like the mudguards, dust is heavy on the turret on the flat surfaces, but applying the dust mix heavily over the rust will give you pink dust, because the water reactivates the rust pigment and no one wants that! So, I sealed the rust with VMS matt varnish before applying the dust.

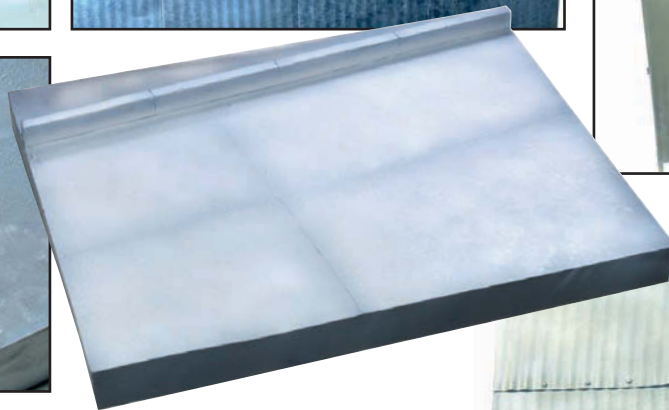
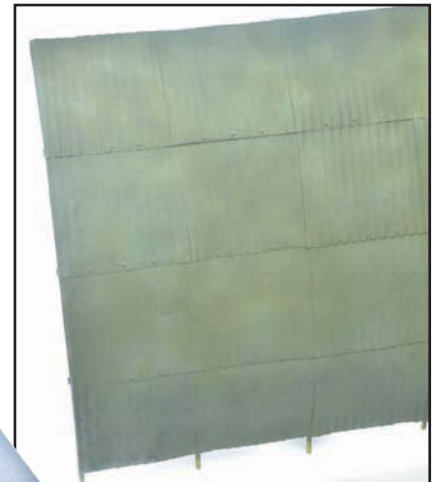
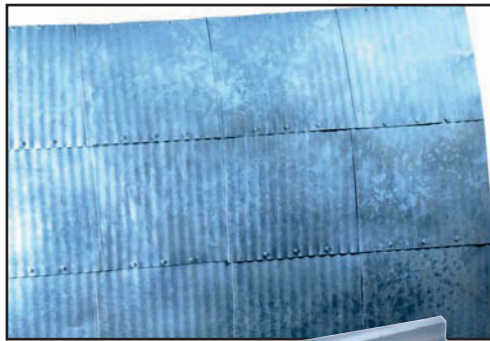
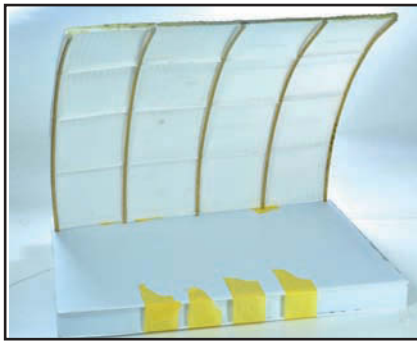
The final part of the tank was the track. I used the AFV Club "Quick Assembly Link & Length Track set" (35338). To be honest, I thought I was buying the individual link set, but these were fine. I





With the tank done, it was time to create the museum. I started with the figures for the mannequins on the tank. These are dressed in GW1 fatigues, but the helmets are the slightly earlier, 80s tank helmets. The closest I could get is the excellent Miniart set 'Modern British AFV Crew' (37059). They needed some modification, but it was pretty simple stuff. I adjusted the poses to make them look stiff and unnatural, like actual mannequins.

Next it was time for the self portrait! I used an AFV Modeller resin sculpting mannequin as the base. I could make my own from wire and putty, but it saves so much time and work, providing most of the anatomy for you, and I'm happy to pay for that. I added my favourite red hoody, and trousers, leaving a little 'self-deprecation' and humour for the viewer, then it was painted in AK 3rd gen acrylics.



The museum is inside a couple of large Quonset huts in North Devon. I did not want to model the whole museum, and decided on a section of the hut, and the floor instead. For the base, I used a section of 50mm foam, which I covered in 1mm sheet styrene, attaching it with UHU Por, which is a foam safe adhesive and pretty strong. Next, I made the section of wall from a frame of 2mm styrene, which I skinned with corrugated sheets made from .2mm styrene run through a tool for squeezing oil paint tubes. Brass tube was added for the tubular interior frame of the hut, and it added much needed rigidity. I left the ends of these about 3cm long and drilled holes in the styrene on the base and pushed them through into the foam, which made the whole thing very solid. The exterior of the wall was painted with SMS grey surface primer, then various stencils were used to spray mottling, starting with black on the lower areas and using white further up. Then I covered it with SMS Camo Green.

The concrete on the base was made by dabbing Mr. Surfacer all over it. I masked off four big squares to do it, to give the impression the floor had been laid in big slabs. The base was painted with various greys, mediating them with different colours, from buff, to pink, to blue. The floor was finished with a liberal application of the same acrylic 'dust' washes that I used on the tank.





The last element inside the 'museum' is the clutter. Cobbaton Combat Collection is famous for being rammed to the non-existent rafters with stuff. To replicate these, I made a couple of display cabinets and filled them with spare weapons and items from the spares box. I also printed some posters and newspapers to go with them. I made the cabinets so that they did not match, as if the owner had accumulated them as and when he saw a good one second hand, much as the real museum has acquired display items. I did the same with the two mannequins, one painted in a fake fleshy colour, with chips on the face, and the other in a glossy black. I had a set of Russian tank ammunition from miniart, so I painted some of them using AK 3rd Gen steel, and the Lifecolor metal set, and scratched and painted a fire extinguisher. Other random ammo cans and stuff were sourced from the spares box or scratched. Hardboard panels with posters

and photos adorn the walls of the real museum so I used that to really fill up the space, but there was still a sizeable gap. I filled that with a T-54 engine from Miniart, on a scratchbuilt stand, there is no engine in the real museum, but they do have a T-54, and this made a nice nod to that.

To finish the outside I sprayed some light green mossy marks on the bottom of the wall, then some buff over the lowest part. Then I built up the ground just a little with brown filler paste, and added some spare wheels and a couple of track links, then grass growing over them.

Finally, the tank was glued in place and the scene was complete.







The main attraction of this particular AVRE as a subject, was the sheer variety of textures to replicate



Every Centurion AVRE was a unique conversion, and every one has details specific to that tank, (like these holders for camo poles) which also makes it great fun to model

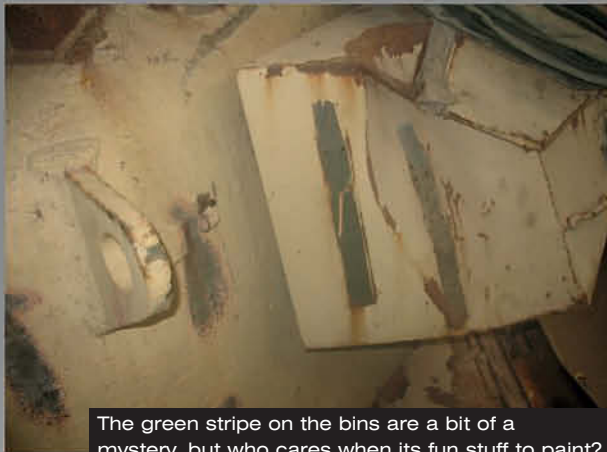


Little details like this damaged seal can make all the difference to a convincing derelict vehicle



Note how the paint on the weld has stuck better than on the rusted steel

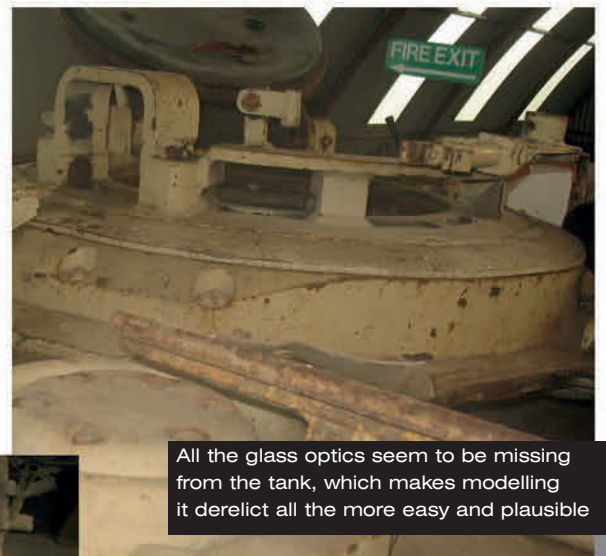




The green stripe on the bins are a bit of a mystery, but who cares when its fun stuff to paint?



The applique armour is missing from the Cobbaton tank, which made it easier to make with the earlier version of



All the glass optics seem to be missing from the tank, which makes modelling it derelict all the more easy and plausible



The engine deck is folded back and the original green of the tank is visible on the underside of the louvres

1:16

1:16

1:35

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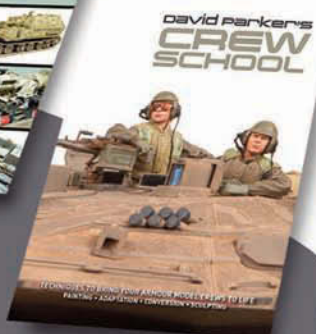
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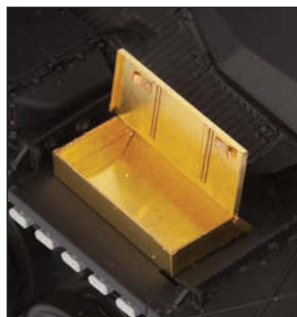
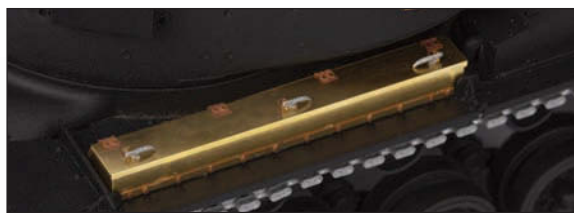
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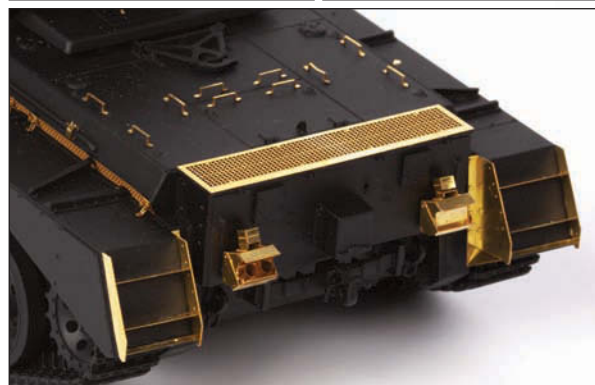
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