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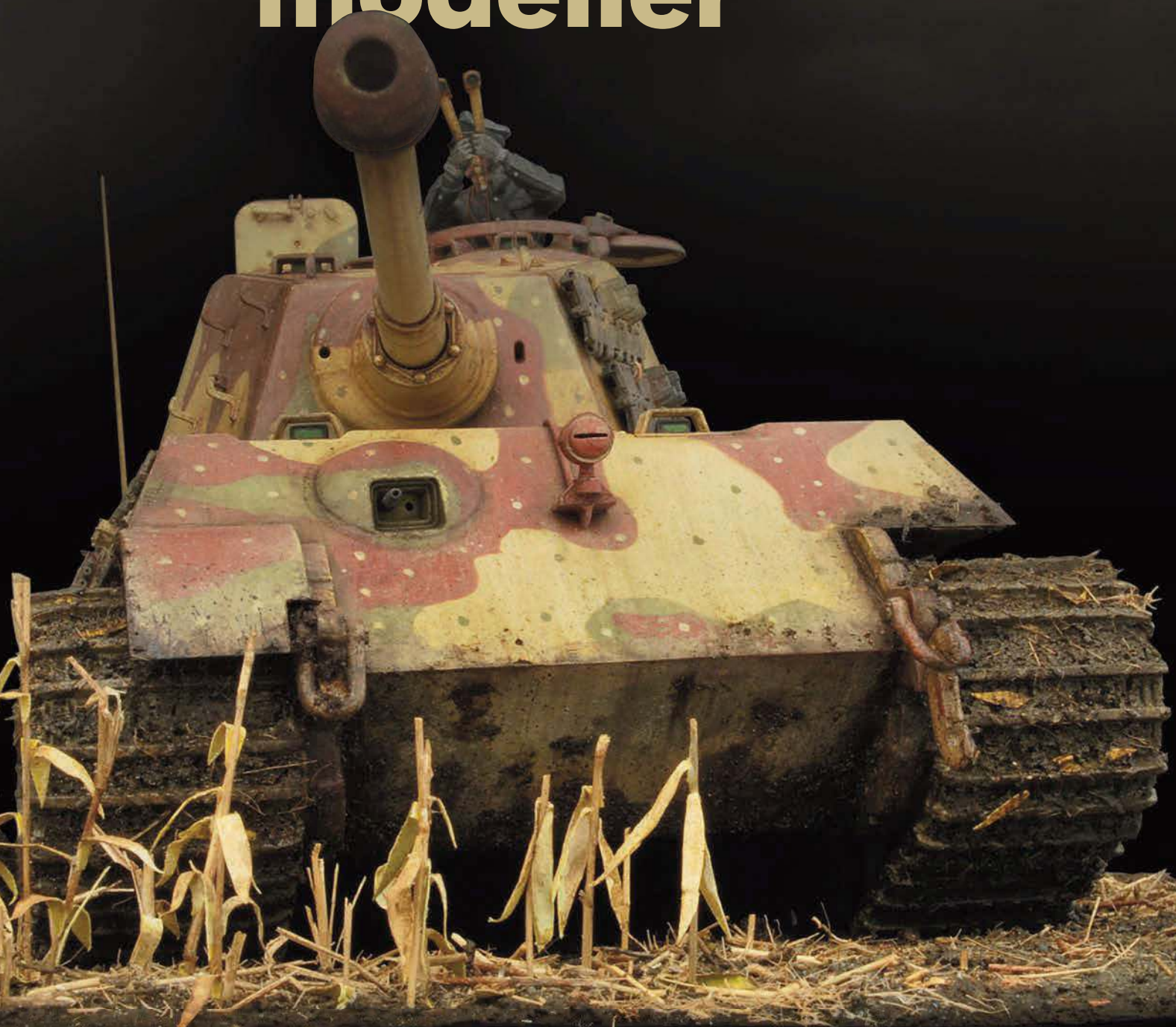
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PANTSIR-S1

Jari Hemila builds Meng Model's new 96K6 Pantsir - S1 in Iraqi Service



The Meng Model factory has surprised us again, this time by releasing a Russian Air Defence Weapon System 96K6 Pantsir-S1. This vehicle is one of those modern weapon systems made for modern warfare. You can build an extremely well detailed model out of the box, it requires some patience and care, but the results are amazing!

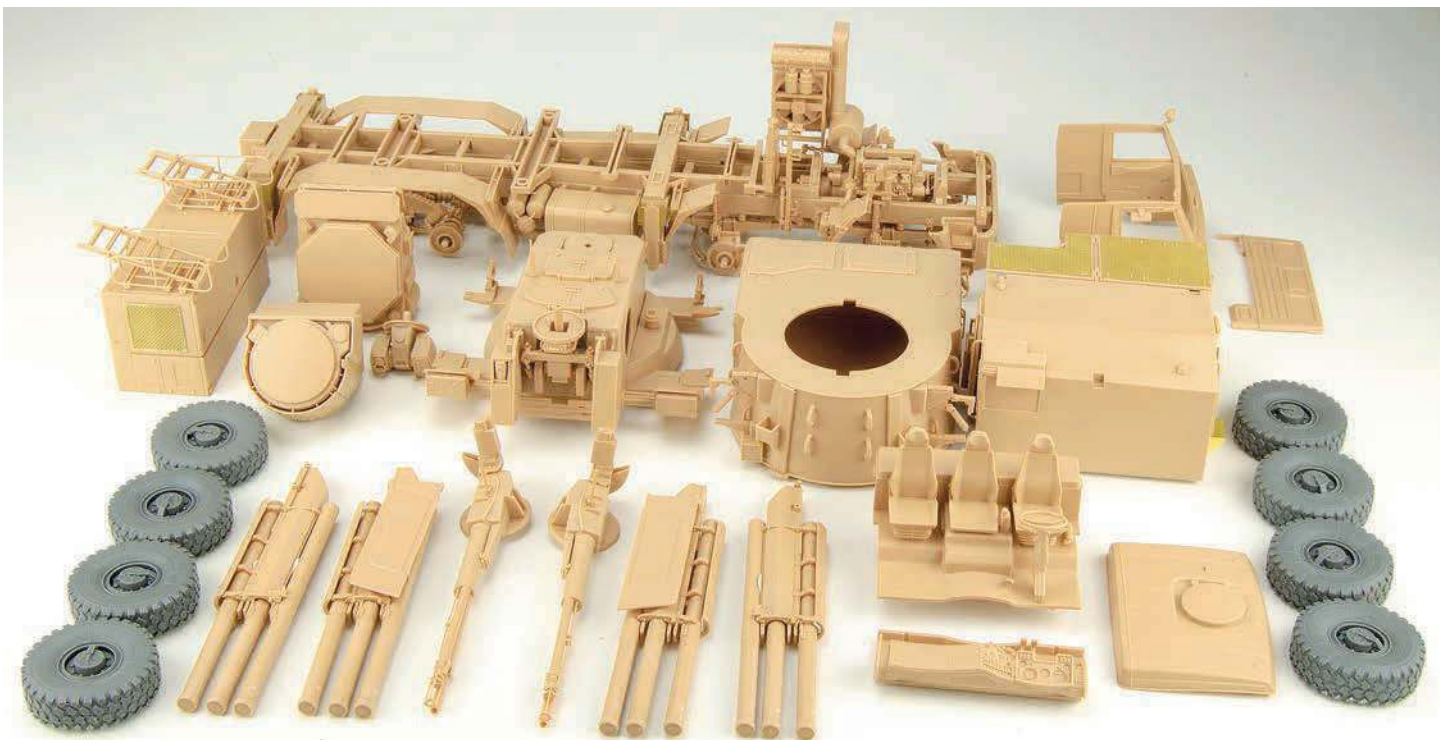
Meng did great job with their Pantsir kit. Kit offers parts for a total of six different versions and camouflages as well. All options differ slightly, so before you begin you need to choose your camo preference. There are two options for main radar, turret roof and loading ramps, three different power units etc. The painting instructions consist of two green, one 3-tone camo and two different desert camos and finally an interesting, white Arctic camo version.

I decided to build the Iraqi version in Sand yellow with Dark green stripes. Based on kit painting instructions, all multicolor camos seems similar to me, so maybe vehicles were painted already at the factory? Consequently, I painted a Russian green base colour with light sand camo. Iraq has used this weapon systems since autumn 2014, so I wanted to model a subject that has had some real action and result of that, some wear and tear too.

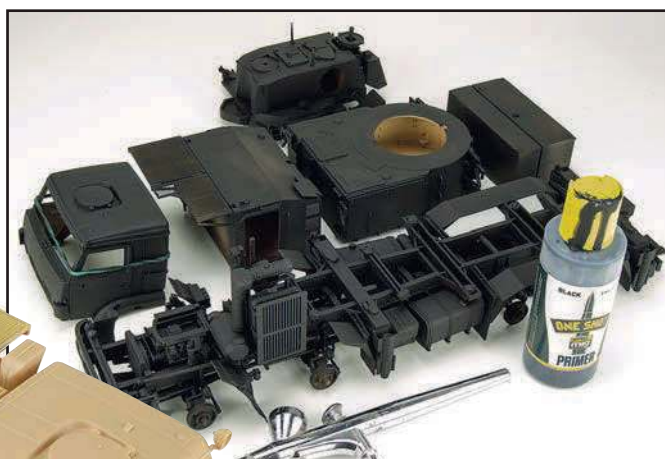
The building was easy to do following kit instructions, but some extra care was needed in

some areas, like building the upper structures. With some extra care, there is no need for putty at all! The overall fitting is excellent, despite the complex structure of the kit. Straying from the recommended sequence of the instructions could cause you problems so please follow the instructions! I put the windows in after paintwork, but it is better glue them properly when called out in the assembly sequence and then mask before painting. The fit of parts in modern kits doesn't allow even thin layer of paint, so follow instructions, and your life is easier.

Meng has nicely used Photoetched parts where they really have to be used, like roof grids and loading ramps. If you want, you can add some detailing, like different water and oil pipes, on your Pantsir model. Meng gives us a lot of valves and places for extra details. Many of these details are hidden by different structures, so it is up to you if you want make some extra detailing or not. I used Meng's own resin wheel set, the wheels are one piece, bulged-type and there are four different positions per side and separate spare wheel with a rim. The resin is excellently cast, details are crisp, and there are no air-bubbles at all. Kit wheels are black vinyl rubber, and they fit on rim very well, so they can be used of course, too. If the stabilizers are lowered, the bulge is not even needed on the tires. To ease painting and weathering, I find those solid resin wheels much more easier to handle.



After the unpainted vehicle pictures were taken, the kit was dismantled for painting. This helps to paint and weather everything properly, but also helps to handle model. After attaching the upper structures, it is a demanding model to handle because of its size.



The model is first primed with black Ammo One shot primer. This primer works nicely, all you need to do, is shake it well and then airbrush directly from a jar, there is even no need for thinning. I recommend you let primer dry overnight. These One shot primers work both on plastic, resin and metal surfaces. It's recommended to paint thin layer first on bare plastic surface, let dry for 5 minutes and then continue with thin layers until surface is totally covered.



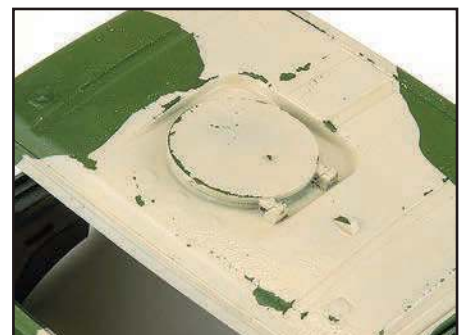
The wheels were painted with the tires finished in a dark rubber colour, this time with mixture of Satin black and Rubber. The rims were painted in flat black.



The model was first painted in sub-assemblies with a Ammo Dark Green 915 acrylic paint. It is very easy to airbrush, only some their own thinner is needed, if any, but the main advantage is their suitability with hairspray technique. This advantage will be used soon.



The camouflage was masked with masking putty. The basic contours were covered with small rolls of putty and attached over green areas and then smaller pieces were used to complete masked areas. The Camouflage masking putty is self-levelling so it is perfect for hard-edge camouflage.

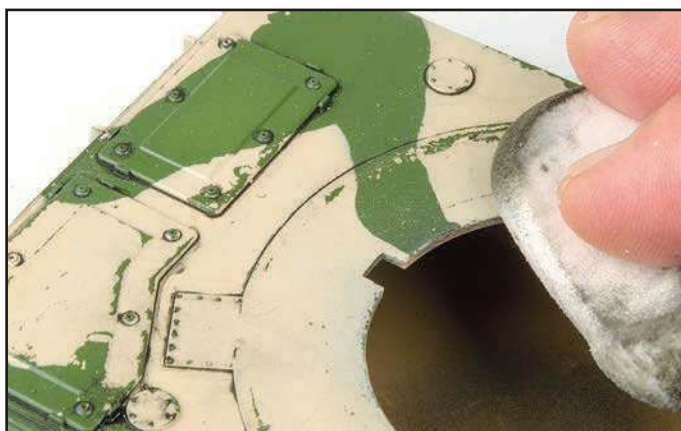


Unmasked areas were airbrushed with two thin layers of Scratches Effects and I also used chipping fluid before masking but for some reason, the putty took some fluid away leaving some unwanted marks. Those marks were easily removed with water but still caused some harm and extra work. The camo colour was chipped next. I wanted to show some wear and tear, exposing the original green colour under sand camo. The surface is moistened with hand warm tap water and with a soft paintbrush. Working slowly, the sand paint will chip away nicely. All the sub-assemblies, cab, control unit, turret, turret lower hull and power unit, were painted and chipped this way.



Now it is time for a proper wash! My technique is to add quite harsh pin washes to pick up the details.

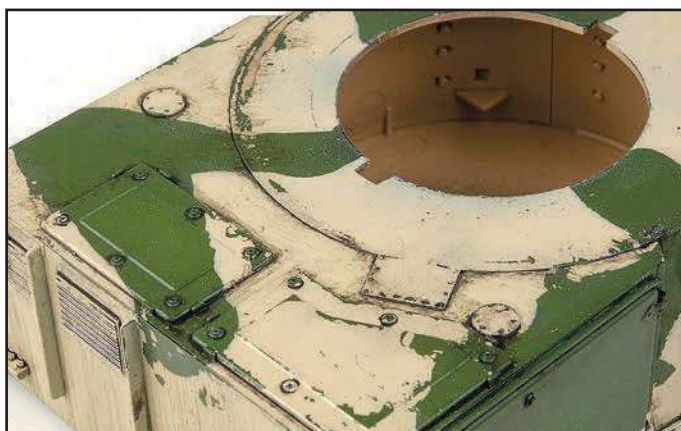




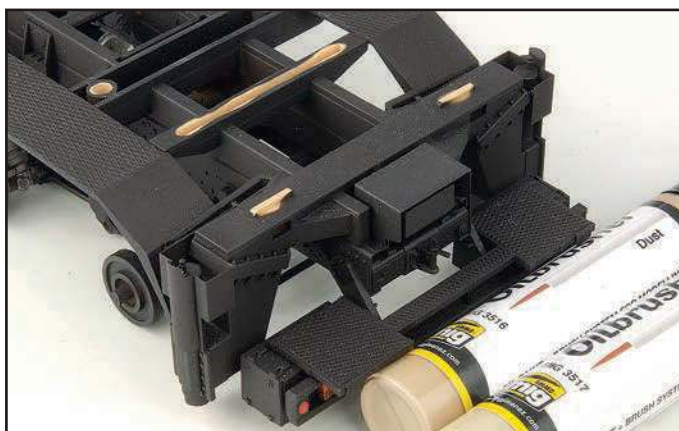
After it has dried for approximately 10 minutes, I cleaned away the excess with a make-up sponge moistened with just a drop of enamel thinner, leaving wash only in recessed areas. You can also use paint brush for this purpose and in small details. And as always, allow it to dry and repeat process if needed.



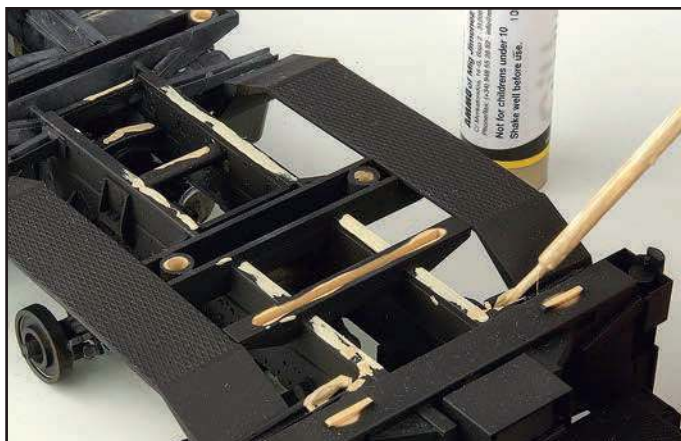
The weathering starts by adding some dusty and dirty enamel washes on areas where dust and dirt accumulates, like the inner corners and around raised details. Washes were applied with a small paintbrush and then left to dry for a couple of minutes.



With a bigger round paintbrush, moistened with fresh enamel thinner, the areas are faded leaving dust and dirt just in the areas wanted.



The hull was painted at first with flat black and then all the details were picked out with detail painting and then with black pin wash.



The dusting was done mainly with oils, Dust and Buff Oilbrushers. Oil paints are applied to the surfaces, and left to dry for a while.



This was then blended with both dry and enamel moistened paint brush. This was an easy task, unfortunately nearly everything will be covered with upper structures and wheels.



The completed oil washes on the chassis.



I wanted add pigments to some details now before upper structures were attached. Lighter European Earth was applied as general dust and darker Earth was applied to areas that will be moistened with fuel spills. Pigments were fixed and when dry, the excess wiped away. The fuel spills are made with Ammo Engine oil, diluted with enamel thinner. This step needs to be done with several layers to control effect. Too much oil at once will leave unwanted marks and give an unrealistic effect. As a final touch, you can add some Engine oil directly from a jar.



After washes were dry, the next step was to add some steel colour chipping. Both with piece of sponge and small paintbrush, steel colour chipping was applied on areas were crew walks, like loading ramps, roof panels and steps around the vehicle.



The dusting was done this time with chipping fluid and enamel washes. At first, the dusted area is airbrushed with couple of thin layers of chipping fluid. Once dry I started to apply washes with an airbrush. To get the best results, apply darker tones on lighter, sand colour areas and light dust to darker, green areas. There is no need to cover everything, so random passes are perfect.



After you have properly cleaned your airbrush, the washes are dry enough to be chipped. With hand warm tap water, NOT enamel thinner, I started to chip dusted areas with soft, big paintbrush. Try to make the chipping random. On horizontal areas, use a tapping motion and on vertical surfaces, downwards

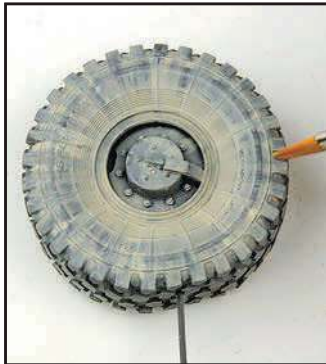


strokes. Water softens chipping fluid and so dried enamel washes can be removed like using acrylics. After chipping is complete, I let it dry overnight and then sealed it with couple of thin layers of airbrushed matt varnish. Now you can repeat process if needed.



Some dust acrylic dust color was airbrushed around rim edge and tread. The wheels were now ready for weathering. First I brushed some radial lines from tread to rim randomly with Buff Oilbrusher and let them set for a few minutes. With a flat, dry paintbrush I blended the lines, and then moistened it with some enamel thinner and completed radial lines.

Below Tread was painted with dusty oil color, diluted slightly with enamel thinner. The idea is to get the colour to run into every corner. Right after the oilcolor was applied, some European earth pigment was sprinkled over the wet paint and then spread with old paintbrush. When oilcolor was dry, the excess pigment was brushed away.



The final step for wheels was to expose some black rubber using drybrush technique. Raised details were picked up with black oilcolor. Load some oil colour on wide, flat paintbrush, wipe excess off with paper towel and then start rubbing the colour on. The effect is excellent but still remember not to overdo this, not with every wheel! Ok, we have eight wheels, so we can have some variance between them.



All upper structure sub-assemblies were treated same way, only the cab had a different approach. The Windscreen wiper areas were masked with masking tape and then dust and dirt washes were airbrushed on. If you want leave sharp marks, let the dust dry overnight. I wanted to make some softer effects and faded the marks with a dry cotton bud.



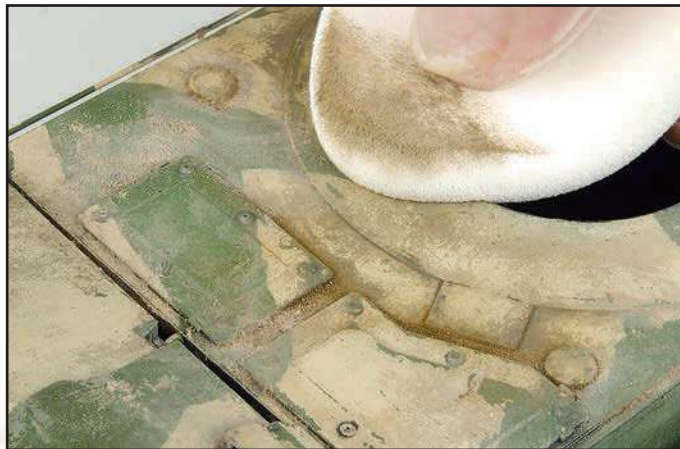
The dusting continues, now with pigments. I used two pigment tones, light Europe dust for dry, light dust and darker earth tone for more shadowed areas.



The pigments are applied with a small old paintbrush, try to avoid blending different tones together. This way you get more interesting results when dusting is not solid colour.



The pigments were now fixed with a few drops of enamel thinner. Try to avoid touching pigmented areas much with a paintbrush, it easily leaves unwanted marks on pigmented areas.



After the thinner is evaporated and so dry, the excess is removed by sweeping surfaces with dry make-up pad leaving pigments only on areas where dust is realistically accumulated.



The excess is now removed and the pigments are accumulated around details and recessed areas.



The weathering was completed with real sand and earth. Sand and earth were applied with paint stirrer in places where earth accumulates, like stabilizers. Sand can be adjusted with a paintbrush and then fixed with a few drops of Ammo Sand and Gravel glue. Let this dry overnight. Glue can be satin if used too much, but with small amount of pigments, you can fix the problem.



One of final steps was to add some metallic sheen on the model. Previously chipped edges got some metal pigment and work continued with a graphite pen. Graphite was applied to outer corners, panel ends and some handles.



The final step was to apply some oily marks around AA guns by flicking thinned Engine oil effect around gun bays and spend shell outlet area.



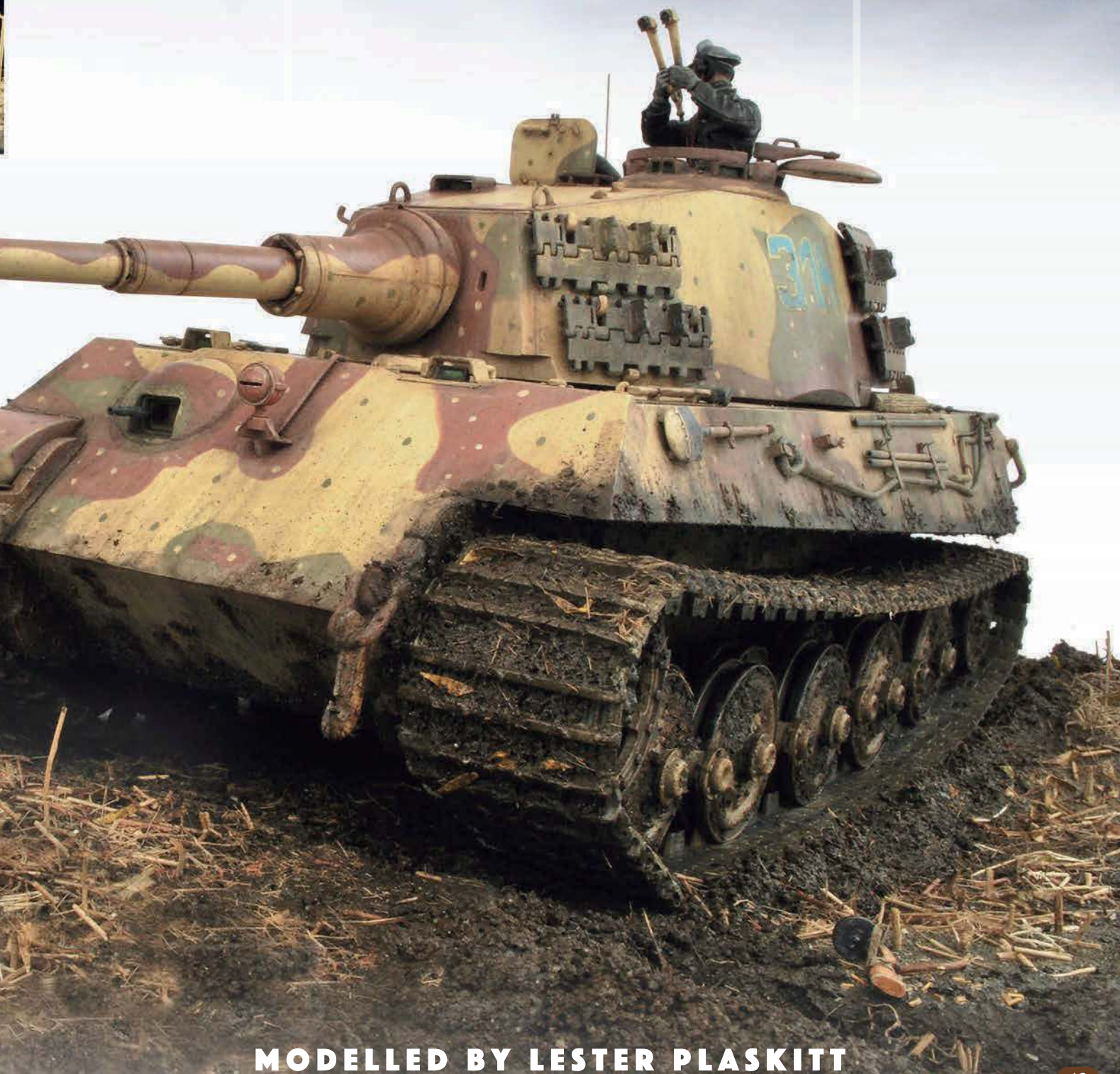


**MENG'S 1:35 KING TIGER,
OPERATION FRUHLINGSERWACHEN HUNGARY 1945**



DER LETZTE SCHLAG DER PANZER

THE PANZERS LAST STRIKE



MODELLED BY LESTER PLASKITT

From my earliest interest in modelling World War 2 German armour the one camouflage pattern that has stood out for me is the hard edge "Ambush" scheme applied to late war King Tigers, probably due to this patterns bold hard edge shapes and colours. Considering my admiration for this pattern its seems strange that I have not attempted a King Tiger in the Ambush pattern before, I have had plans for quite a few years for such a model placed in a scenario during the failed German Spring Awakening (Fruhlingserwachen) offensive in Hungary during March 1945. My idea was to try and recreate a veteran King Tiger from Panzer Abt 501 during the opening phases of the offensive advancing over the muddy Hungarian terrain with the overexposed commander scanning for targets as the tank comes over the crest of the hill and the more experienced loader shouting for him to take cover.

This I thought would be a great weathering opportunity to have the bold camouflage pattern of the vehicle contrasting against the muddy groundwork and running gear and with the arrival of the Meng King Tiger kit from the guys at AFV modeller the time had come to put the idea into practice.

As the construction of the Meng kit has been covered previously I won't repeat describing this process. As can be seen the additions I made were to add an aftermarket metal barrel, some etch brass tow cable clamps, replacing the gun cleaning rods with new ones made from plastic rod and adjusting the sit of the kits suspension to give the impression of a vehicle climbing a slope. The kits link and length tracks were then adjusted to match the suspension and glued in place.



Before painting commenced I added some areas of mud build up on the road wheels and lower hull using squadron white putty. I find this process is more controllable than adding large amounts of mud later in the weathering stages and will help define and bulk out the areas of mud build up for further weathering steps.



The basic shape of the base is now roughed out using foam blocks used for home insulation.

The painting of the base colours was carried out using the AK Interactive German late war colours set. As is my practice the tones of the three camouflage colours were lightened by approximately 20% to compensate for the coming weathering effects which will serve to progressively tone down the colours. The camouflage pattern was reproduced using a combination of masking tape and masking putty applied following the set pattern for this scheme with each colour being masked and painted individually over the yellow base colour.



The decals came from the Archer rub down range, with the model being marked up as a vehicle from the 3rd company of Abt 501. A scalpel was used to add some damage and wear to the markings more in line with a veteran vehicle.

The distinctive spots of the Ambush scheme are now added being careful not to add to many or not enough but to find a balance.



After some small touch ups on the camouflage pattern the base colours and markings were sealed with a coat of satin varnish as protection against the coming weathering process.

Although I was happy with the results so far the model looked a little too bright and needed to be toned down to help the base colours become more harmonious with each other but not to the point of losing the rich tones of the

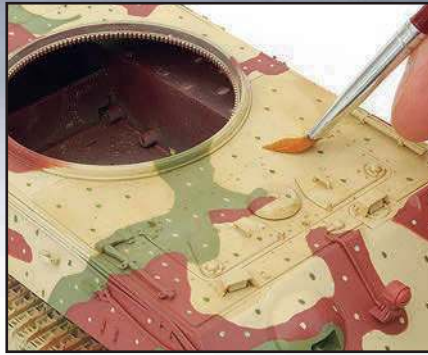


base colour too much. The start of this process was an enamel dark brown filter. Here I have used Humbrol enamels though any of the AK dark brown premixed filters would suffice.





To further tone down and fade the base colours the "oil dot technique" was employed. This is a great technique for adding more localised fading effects, with dots of unthinned oil paints being spotted onto the model then carefully blended in



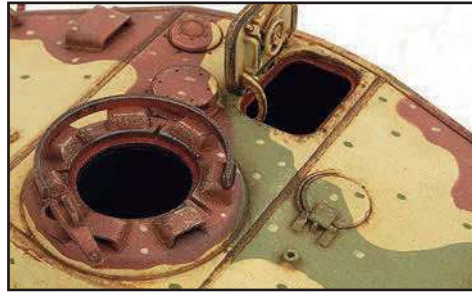
using a brush moistened with enamel thinner. Care must be taken to not have the blending brush too damp as this will only result in the oils being washed off the model surface.



With the oils fully dry the next stage is a pin wash made up from Abt 502 Sepia and Bitume oil paints heavily diluted with thinner. This stage in the weathering process is one of my favourites as it emphasizes any surface detail and starts to bring the model to life.



To add further interest to the paintwork heavily thinned sepia oil paint was applied to the turret and hull using the speckling technique. The tiny spots of paint subtly break up the large flat areas on the model, and as the effect is produced using oil paint any overly heavy concentrations of paint can be easily blended away using a clean brush moistened with thinner.

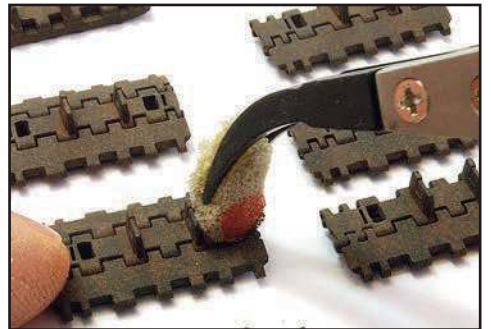


Restrained paint chipping followed next using a slightly lightened base yellow tone for the lighter chips and scratches especially on areas of the camouflage



pattern and a dark brown/grey mix for areas of heavier chips and scratches all applied using a piece of fine sponge and then enhanced with a fine pointed

With the basic filters, washes and chipping complete the detail painting and weathering of the tools, tow cables, exhausts and any other items was concluded paying attention keep these items in harmony with the rest of the paintwork. The tracks including the spare track links were painted using a dark grey base colour with various rust tones from the AK rust set being sponged over the links to give a representation of light surface corrosion on the links.





With all the base painting and weathering completed on the vehicle I was able to start the next process in the weathering stages and probably the one I had looked forward to the most, the recreation of the mud and dust effects. The first step in this was to add a base layer of a dried mud effect on the lower hull area. This was obtained using the hairspray/chipping fluid effect. Firstly 2 light coats of AK heavy chipping fluid were airbrushed on to the lower hull and along the upper hull side panels, once this had dried a

mix of Tamiya Buff with a small amount of Sky Grey acrylic paints are mixed together and heavily thinned with water, the Sky Grey is added to the Buff as this will give the dried mud/ dust more of a winter grime effect and also help the mud stand out against the dark yellow base colour. Too light coats of this mix is then airbrushed onto the areas where the chipping fluid has been applied previously, taking care not to build up too heavy layers as this will make the mix harder to remove.



After leaving the dust mix to dry for 15-20 minutes using a stiff brush moistened with warm water the dust mix is gently removed keeping the brush in a downward scrubbing motion. Notice how larger patches of the dust mix are left in place in the areas where the dust /dried mud would naturally have a heavier build up.



Happy with this effect so far I still felt it needed some more enhancement and texture, this would be added using a mix of Abt 502 Light mud oil paint and Wilder brown mud splatter with a small amount of Wilder dry Russian earth pigment to add some texture. Again this mix was heavily thinned with white spirit and using an old paintbrush flicked off a cocktail stick onto areas of



the model where this kind of mud splatter would occur in real life. Giving this mix 10-15 minutes to settle a flat brush again slightly moistened with thinners was used to gently drag areas of the mix down the hull sides to give the impression of tracks of mud that had run down the hull sides before drying out.



Now work can start on the heavier mud tones and built up mud areas, first the mud deposits previously added before painting from modelling putty are painted in using various dark mud tone colours.

The blocked in mud deposits can look very stark with high contrasts. To tone down these contrasts a filter made up from AK Kusrk earth and Earth effects enamels is mixed up and applied to the lower hull and wheels.

Adding further interest to the wheels and lower hull areas AK Dark brown enamel wash was used to add more mud splashes, again this effect is added using the speckling technique. Where this effect has been used on the hull sides and lower hull a wide fan brush was moistened with thinners and used to drag down some of the wash to give a rain streaked effect.



This effect was also used on the turret sides but not in the same intensity as the hull sides.



AK 723 Dust is now used to add a base layer of dried winter dust / mud to the upper surfaces of the turret and hull, the acrylic paint was thinned with water before application and once mapped onto the areas where this effect would naturally build up a damp brush was used to blend the edges of the paint. Also some further rain streaks were added to the turret sides, again keeping the effect subtle and in harmony with the rest of the weathering effects.



Moving along the next main component in the weathering process was adding the heavy and wet mud deposits, for this AK diorama products Muddy ground and Wet mud were mixed together until a dark heavy mud colour was obtained. These products are premixed with a certain degree of texture but as I required a heavier



texture more in keeping with heavy churned up soil I mixed in some tea leaves with the AK products which resulted in adding a more organic texture to the mix. This mix was then applied to the lower hull, tracks and wheels; care was taken to add this mix in logical areas where this type of mud would collect. The hull sides and rear plate



had a more selective placement of the mud mix building up heavier effects towards the lower areas of the panels with smaller deposits toward the upper areas of the panels with a more concentrated application towards the rear of the hull where the tracks would have thrown up more mud.



To further blend in the mud, a splatter effect was added by flicking the AK wet mud from an old brush against a cocktail stick to create the mud splatter up the hull sides and rear panel. Any unnatural looking splatter was either removed or blended in using a brush dampened with water.



Attention now returns to the turret roof and upper hull panels, AK Sepia and Burnt umber oil paints are now added over the dried mud and dust effects to represent areas of damp wet deposits. The oils were applied neat then blended using a brush moistened with thinner.



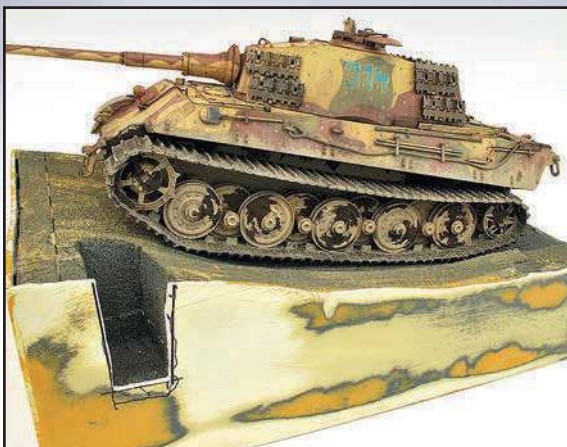
Final wet and split fuel effects were added in selected areas using AK track wash and fuel stains.



With the weathering effects on the vehicle nearly completed my attention turned to the crew, to keep with my original idea of the interaction between the commander and loader figure would require an amount of conversion and scratch building. The commander figure is an Alpine miniatures figure with replacement arms from an evolution stug commander figure. His pose and neck angle were adjusted to enable him to have a leaning back pose bracing himself as the tank climbs the slope.

The loader is made from a spare Dragon models German tank crew torso and a Hornet shouting head, as he is in the process of pulling closed the hatch his left arm had to be scratch built from Magic Sculpt putty. Following more than a few test fits and adjustments the figures were primed with Tamiya grey primer then painted exclusively in acrylics.





Alongside working on the King Tiger work was progressing on the base. After a test fit of the Tiger I thought the base a little bland so the decision was made to add a slit trench to the base, this would also tie in nicely with my original idea of the Tiger advancing into the Russian lines passing through the outlying trenches. The trench was cut into the foam using a razor saw. Once happy with the shape of the trench the edges of the foam were faced off using plastic card which was primed and any gaps filled and sanded



before the application of a final satin black base coat.

With the satin black coat on the base fully dry the sides were masked off and work commenced on the groundwork, again the AK diorama products used for the heavy mud deposits on the vehicle were employed for this purpose. I wanted to depict a Spring heavy wet soil and mud effect but not to the point where the ground is completely water logged, so tea leaves were again added to



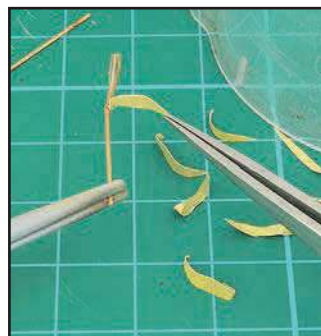
the premixed AK products along with some sea grass trimmings and small dried plant roots to give more of an organic texture and match the mud applied to the vehicle. The areas of the trench and where the tank would sit were tackled first building up the mud in layers being careful to make sure the Tiger sat down in the mud to give the impression of the weight of the tank. Some dried roots were added around the edge of the trench to represent roots that would have been exposed when the trench was dug.



A prominent feature of the Hungarian landscape seen in many period photographs was the extensive corn fields, having seen this added to a number of Hungarian themed dioramas notably by Swedish Modeller Mirko Bayerl, I decided adding the feature of a corn field would not only give the base more visual interest it would also provide historical context. Contacting Mirko he generously

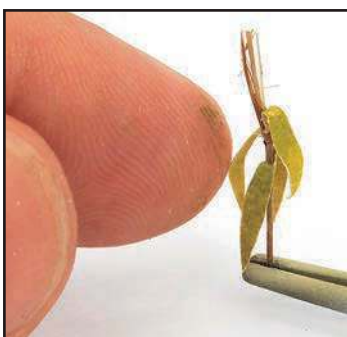


provided me with a description of how he produced his corn stalks, with this in mind I set about reproducing the corn stalks from scratch. White copy paper would be used to produce the leaves. First the paper was painted using acrylic colours in buff and pale yellow tones as this would act as base coat for further effects and add some stiffness to the paper.



Once dry leaf shapes were cut from the paper trying not to make the leaves too uniform in appearance.

The stalks of the corn would be made from bristles taken from a household hand brush which had bristles made from natural twigs, a number of these were cut from the brush and cut down into smaller sections.



To add some 3D effects to the leaves they were rolled between my fingers, this gave them a more natural organic and weather beaten texture. My aim was to recreate corn stalks that been harvested and their husks removed so there was no need to recreate this part of the plant. Next selecting a suitable bristle the leaves were glued on individually using PVA glue. With the glue fully dried the leaves were flattened down to recreate the look of dying and wilting leaves. Using a pin held in a pin vice holes were pushed into the groundwork and the individual stalk glued into position again using PVA glue. In addition to the stalks a number of extra leaves and bristles were also added to the groundwork to enhance the impression of harvested corn being fixed in place with AK sand and gravel fixer. Once dry further paint



effects were added to the leaves by adding more pale sand tones to represent dried out dying leaves, followed by a light wash of Abt 502 Burnt umber oil paint to further enhance the decaying look. Also to keep the vehicle and base in harmony and show the corn that would have been churned up and caught in the tracks of the vehicle extra corn leaves and stalks were added into the tracks of the Tiger and blended in using a second mix of the AK diorama mud mix.

With the Tiger now fixed to the base the second mix of the groundwork was used to build up fresh mud deposits around the tracks of the vehicle to depict the mud and soil that would have been displaced by the weight of the Tiger.





To add a back story to the trench some abandoned Russian equipment was added to give the impression of the trench having been quickly evacuated in the face of the advancing German forces and following the addition of wet effects again from AK the base was completed.

I would like to thank Mirko Bayerl for his advice during this project.





1:35

Self-propelled Anti-tank Vehicles were a very popular concept with US Army Commanders. These vehicles should have been relatively fast and able to match any enemy armour. Actually the only real purpose-built AT Vehicle was the M18 Hellcat, while all the previous attempts were just adaptations of an existing chassis and powertrain. To enhance the speed in most cases armour protection was sacrificed and ultimately the concept proved to be ineffective. The M10 was somehow a middle of the bridging concept: it used the M4A2 (Twin Diesel) chassis with a new, thinner and more sloped armour. The selected gun was a 3 inch M7 (76mm) AA gun which whilst it had respectable armour piercing performance when selected, it became less and less effective the more new

German Armour entered the battle field. With this in mind Great Britain chose to change the M7 gun with the much more powerful 17 pdr. anti-tank gun. Modification was relatively simple as 17 pdr. gun sleeve diameter was identical to M7 one and with few modification it could be adapted without changing major turret components. Even the front gun shield was the same, however an additional cast collar was welded on to it. It was put in service as M10 Achilles Mk Ic and Achilles Mk Ilc. Differences between Mk Ic and Mk Ilc are essentially the type of M10 turret used for modification: the Mid type with sloped rear walls (Mk Ic) or the late type with vertical rear walls and prominent counterweights nicknamed "duckbill" (Mk Ilc).



PANZER POUNDER

Packing a 17 pounder punch,
Fabio Sacchi returns with an
accurate build of the British Achilles



THE KIT

I confess that I have a sweet spot for self-propelled guns and tank destroyers. If you combine it with 'Shermanitis' then the M10 family is the natural result.

Unfortunately Plastic Kits for these tanks, until recently, were poor at best. Both AFV Club and Academy have proposed in past 10/15 years some M10 models but all were marred with serious dimensional problems or incorrect details.

I tackled some years ago an M10 for which I completely scratchbuilt the turret and

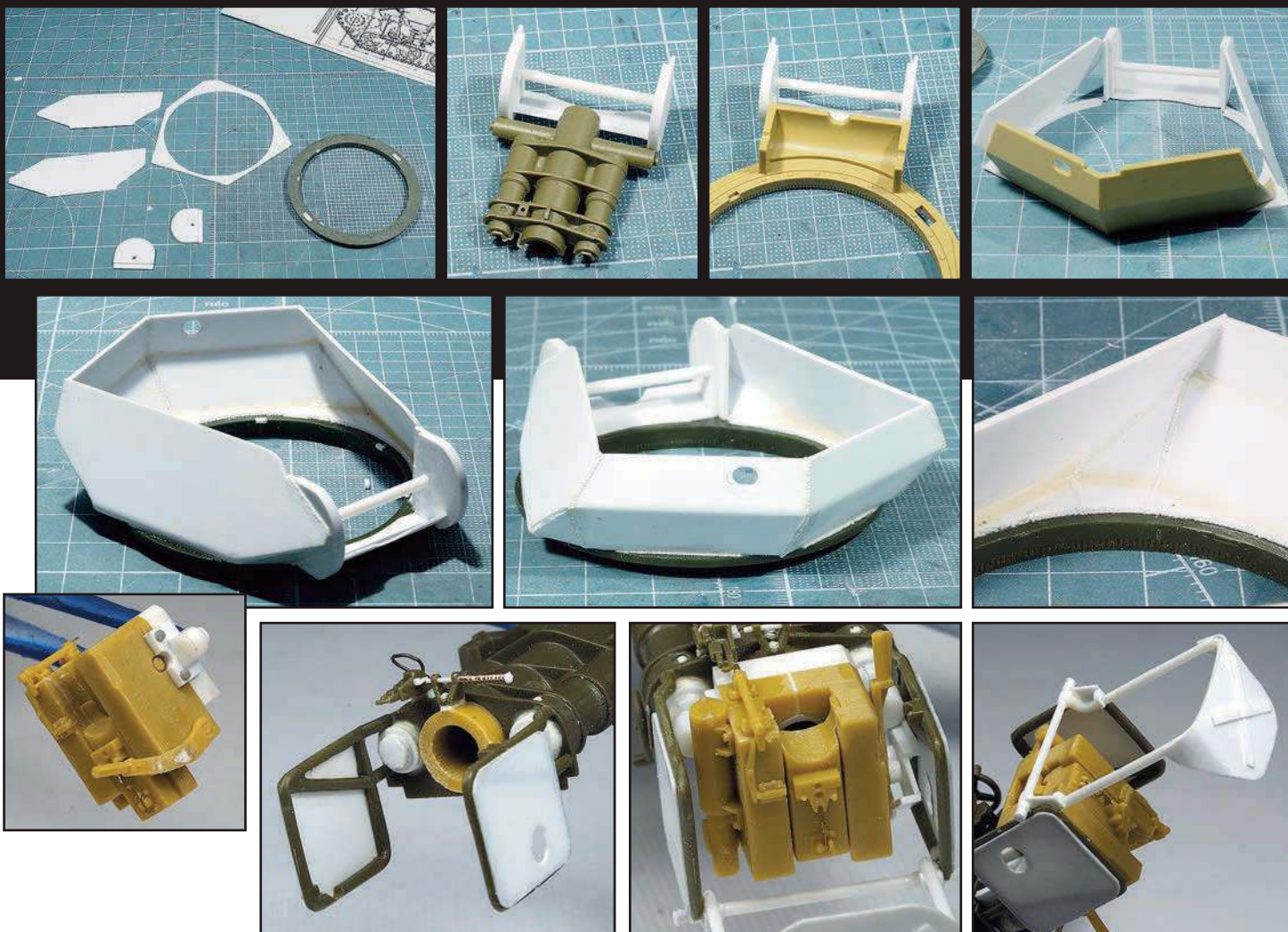
added a load of additional details (This model was featured in this magazine some years ago). While I was scratch building the turret I thought was a good idea to build a second one, the later model, with "duckbill" counterweights. It was then put on the shelf to make an Achilles.

Unfortunately the extensive modifications and crosskitting necessary resulted in the project being frozen.

When Tamiya announced a brand new M10 three years ago I was happy and of course I bought a kit. This kit is very "Tamiya": reduced parts counts, "shake

and bake" construction, detailed but not that much. Most importantly, the basic measurements are very accurate, finally! Having finished an M10 just recently, I had no inspiration to start another, however the kit was too good to be left on the shelf.

So my decision was to build it and to convert it to an Achilles MkIIc. As usual project was split in subassemblies and lets start with the turret.



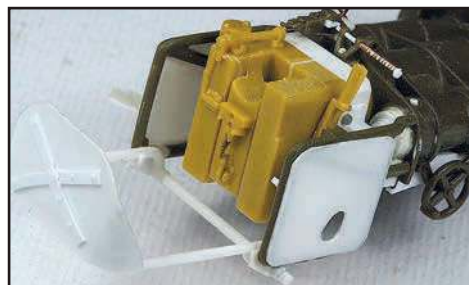
TURRET

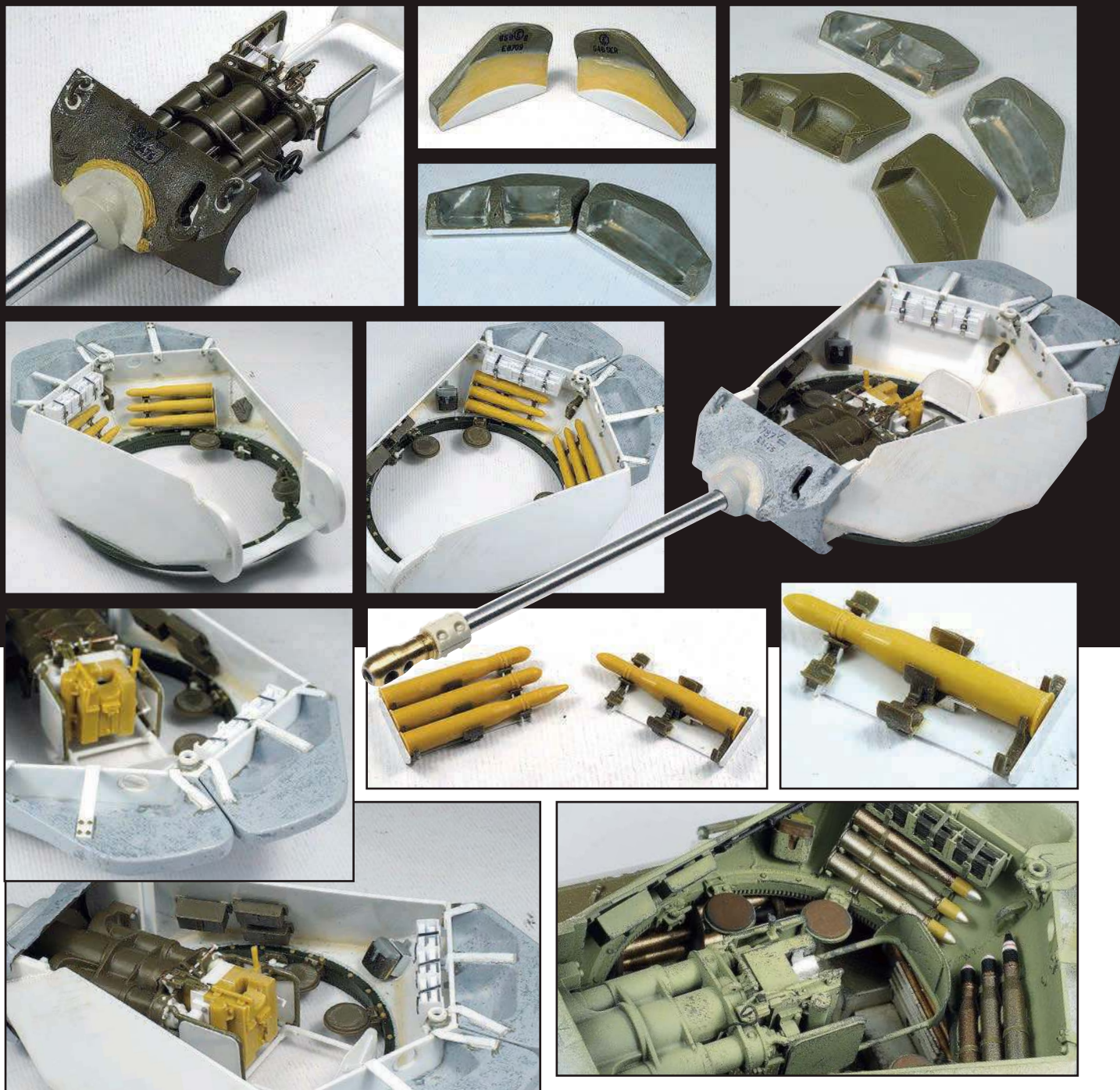
The first thing I thought was to update Tamiya's turret to the later "duckbill" style, but, having a complete scratch built one I decided to return to that. My worries were about the dimensions: it was not automatic that Tamiya's gun trunnion would fit my turret walls. I was lucky (or precise) and Tamiya's gun trunnion was just fitting snugly. I therefore undertook very same process that British engineers did more than 70 years ago: modified 17 Pdr to fit 3inch cradle and applied a heavy cast collar to gun mantlet.

Initially I thought to use either Academy or AFV Club 17 pdr. Gun breech.

Well..Academy is undersized and AFV

Club is enormous. I went therefore the difficult way, I started from a Bronco 17 pdr. gun breech to which I applied all modifications to take it to same specs as of the gun mounted in Achilles. It gave also a nice boost in detail as the Bronco part is far more accurate and detailed. Recoil guards were specific to 17 pdr. and were foldable. AFV Club parts, due to the radical changes in dimensions could not be used Academy ones were just inaccurate.... They were therefore scratchbuilt with 0.88mm styrene rod bent into shape with hot water. Side recall guards frames were saved from AFV club and modified with styrene sheet.





With complete gun ready I then tackled the interior details. Most of details came from the AFV Club Kit while ready round racks which were however thinned and rounds substituted with Bronco offerings. Also with the gun shield I used same process. I wanted to use the Armorscale gun but its included gunshield was for the Academy kit therefore 2.7mm too narrow. I therefore cut away the Armorscale resin collar and applied it to the original Tamiya plastic piece. The heavy welding around it was then replicated with Tamiya epoxy putty.

The last parts to be tackled were rear counterweights, the duckbills. The Academy versions were too narrow and a weird shape too. AFV Club ones were in the ballpark but the shape needed to be adjusted due to the different corrected turret angles. In addition they needed to be thickened by applying 1mm plasticard to the undersides. I then reshaped the form and applied welded/bolted holders. Some cast numbers were added by means of Archer transfers surface details, following photo references. Once the turret was completed I painted the interior details. The base was Lifecolor SCC15 Olive Drab while the shells were painted with Vallejo Metallics mixed to obtain some different and subtle tones of brass.



HULL

The new Tamiya M10 Hull is quite accurate dimensionally and details are mostly OK. The first thing was to cut away additional armour bolt attachments on hull sides as they were not present on later hulls. After that I also changed transmission cover as Achilles MkIIc mostly sported the later "peek" armour. In the kit, transmission sides are attached to hulls sides. I had therefore to cut them and adapt a Tasca/Asuka late transmission. As they are dimensionally correct fit was not a problem when combining them.

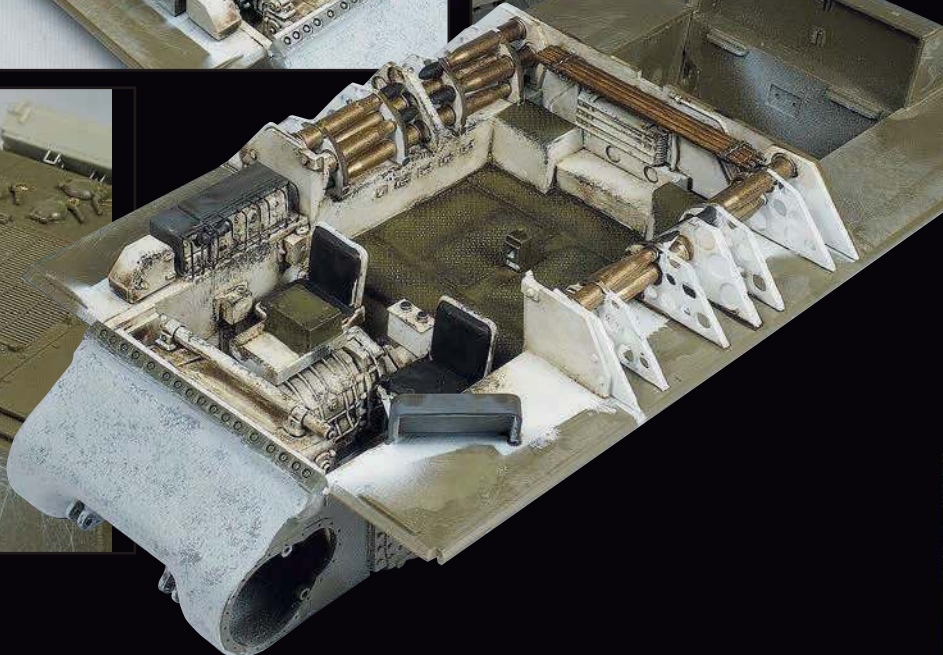
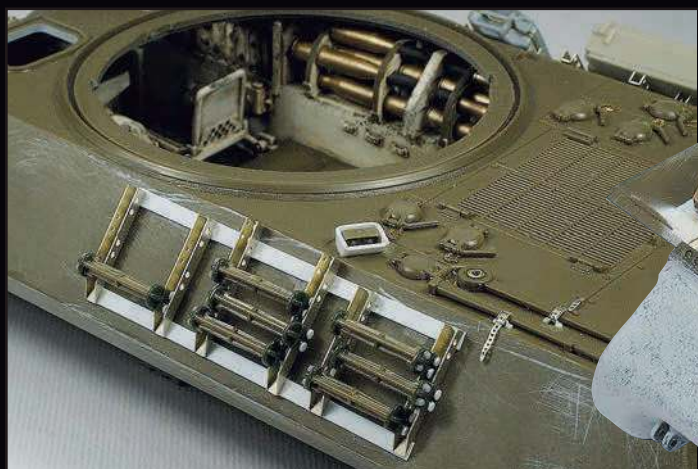
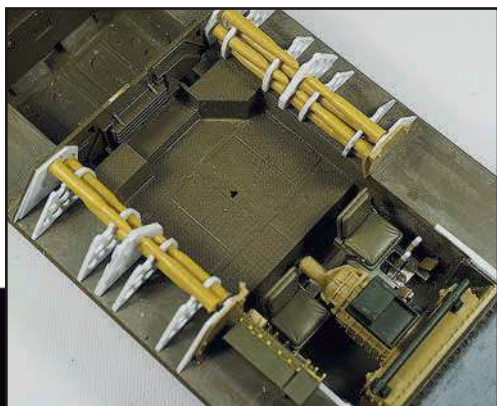
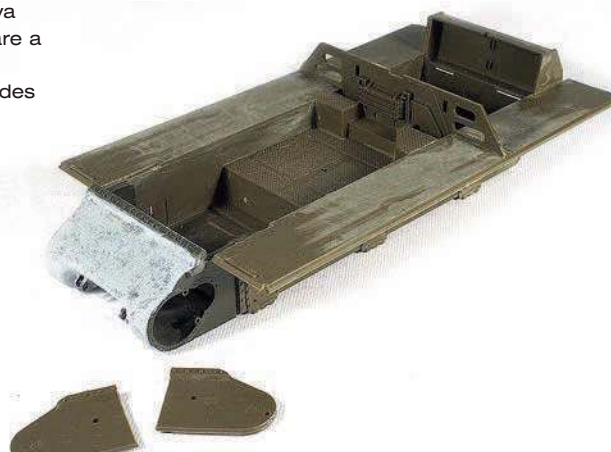
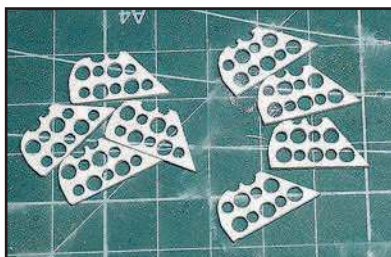
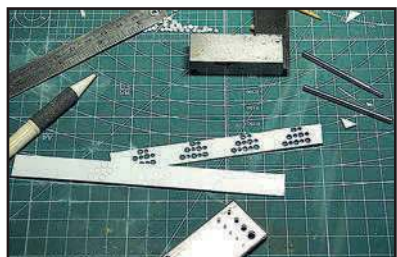
Unfortunately Tamiya provides no bow interior, just ammo racks (finally correct for a 3 inch gun though), turret floor and engine firewall. I therefore added driver and radio operator seats from AFV Club parts (actually they are the only correct ones as on the M10 the seats were attached to side walls not to the hull floor) and the Academy gearbox and transmission cover, not the best but good enough while peeping inside the front hatches. Details come from an Aber set dedicated to the M10, wireless set no19 is a Bronco offering.

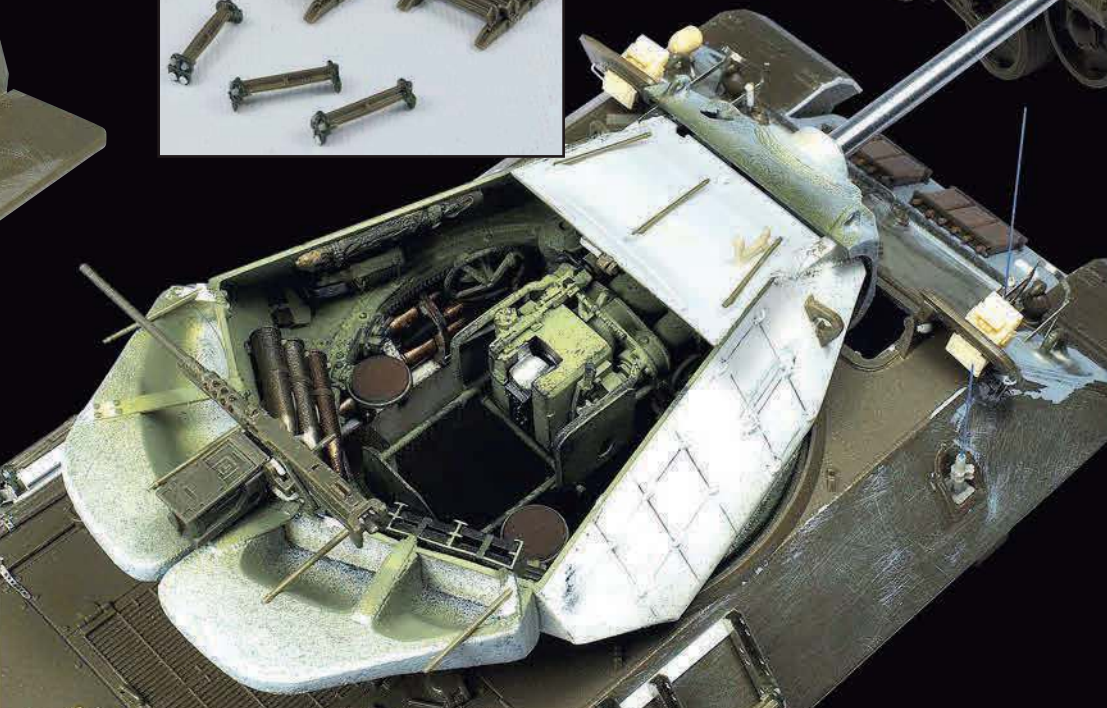
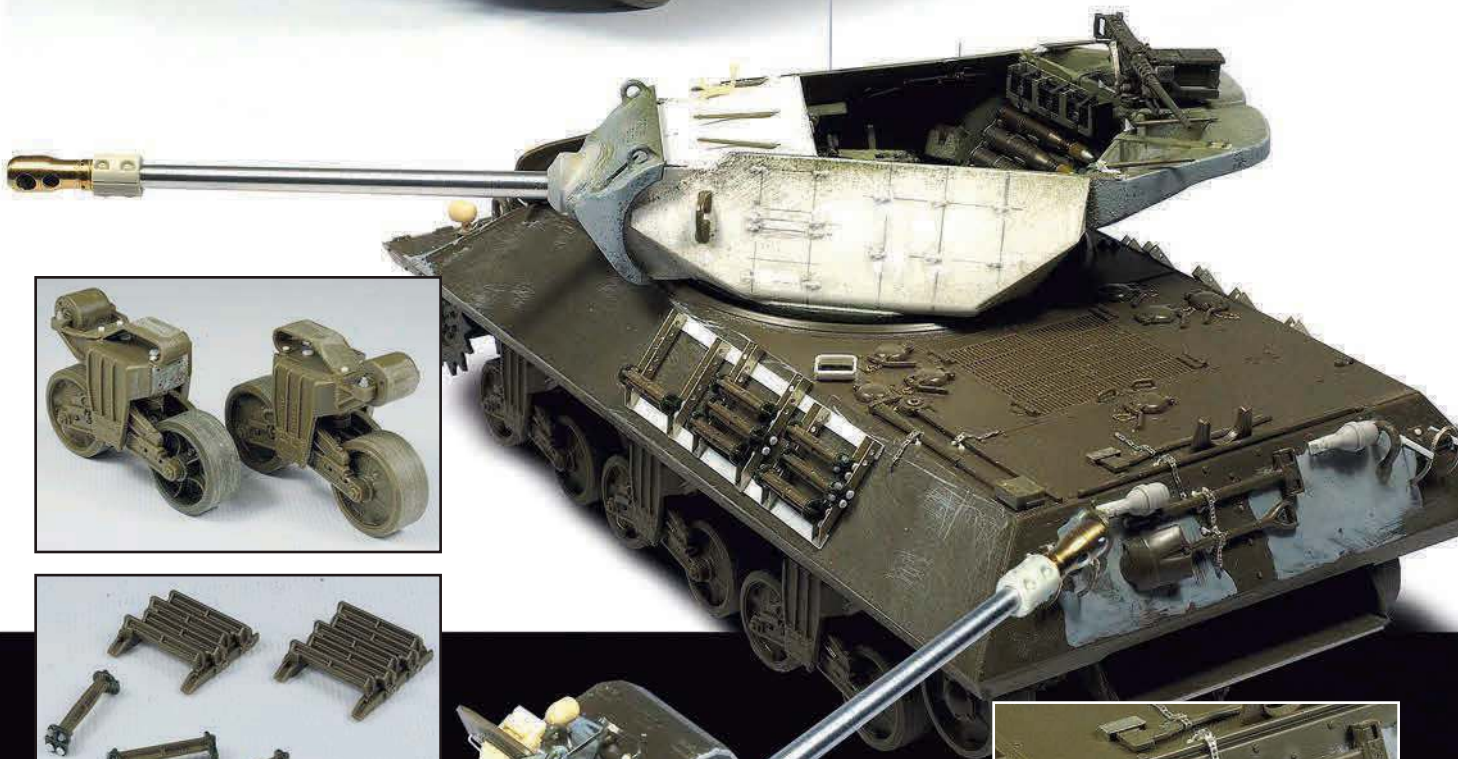
It was then time to modify ammo storage as 17 pdr. layout differs a lot from original US equipped gun versions. To create new frames I used punch and die set to punch out consistent shaped holes in the plastic. To make it I created a template and then I punched holes using the template for positioning. It sounds difficult, it turned out to be merely boring. Once the hole patterns were reproduced each frame was trimmed to its final shape. Here again I used a Bronco Plastic ammo set and to be fair I filled just the front two rows as those behind are impossible to see.

With the Interior completed I painted it all with Lifecolor Elefenbein (a good base for a dirty white) and Lifecolor Olive Drab for the exposed parts. I therefore closed the hull. The outer upper hull details had also to be readapted for an Achilles. Tools were repositioned, two fire extinguishers added to rear wall. Grousers frame was substituted with amber parts as Tamiya offers them as a one piece and they are a little chunky. Grousers were built from original Tamiya parts with Academy sides for better details.

All tool straps are from ABER photoetched set. On front hull, six spare tracks pads were added whilst assembling Model Kasten T51 tracks.

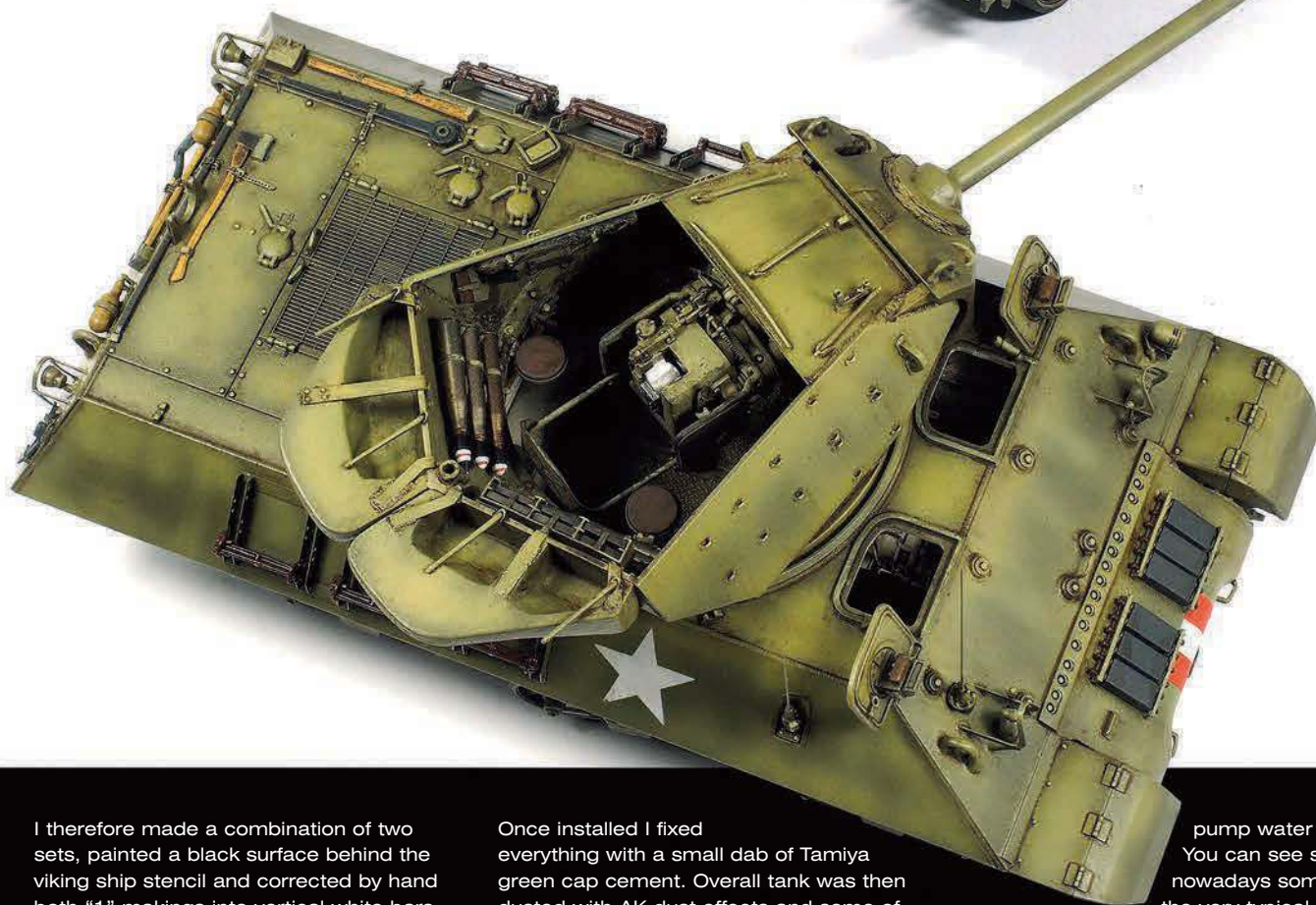
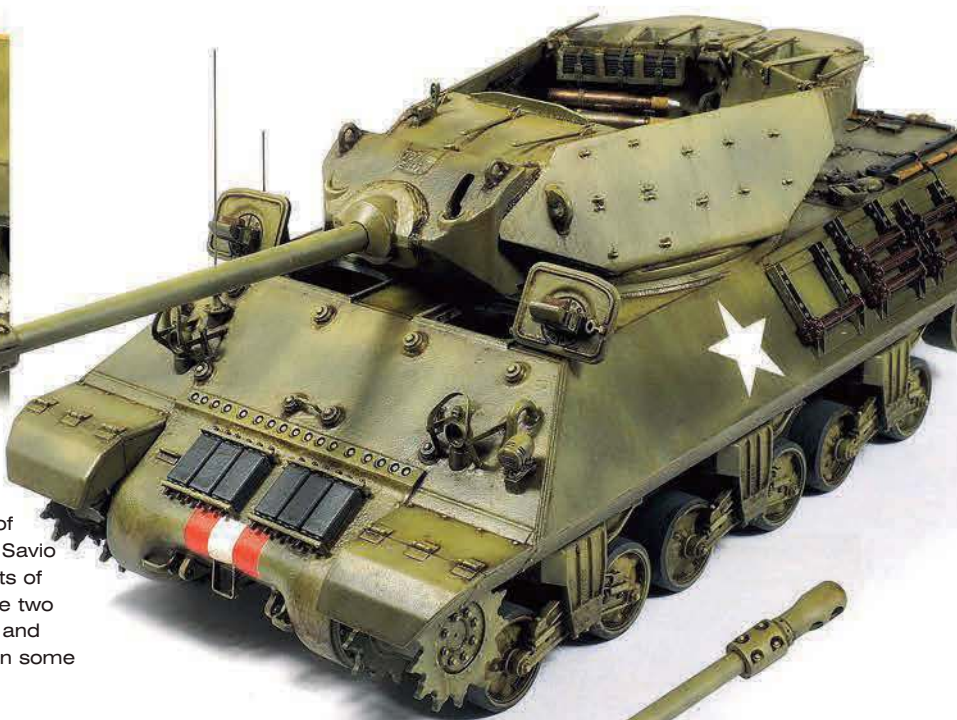
Running gear for Tamiya's kit is brand new. It is good but not excellent. First of all the way it is broken up is rather weird and in spite of it not much detail was added. In addition bogies braces are fixed so remember this if you are planning to use the kit in a diorama where a little bogie swing is required! Some of the missing bolts were therefore added with the help of a punch & die set. Tracks were the last pain. Model Kasten are gorgeous in details but a slog to build, I recently switched to Bronco offering, slightly less detailed but much more effective in building. However I still have a nice stock of Model Kasten tracks that have to be used, sooner or later. After build was completed it was time for painting.







Base was done with Lifecolor Olive Drab Easy 3 set starting from darker shade to the lighter. I then applied decals. I wanted to depict an Achilles of the 93rd Anti Tank regiment in Italy after passing the Savio River. In AFV Club and Academy Achilles you get parts of the required marking but with some inaccuracies. The two white vertical regiment bars are represented as "11" and the "viking ship" should be on a black field. In addition some of the vehicles had blue and red rectangles inverted.



I therefore made a combination of two sets, painted a black surface behind the viking ship stencil and corrected by hand both "1" markings into vertical white bars. Side walls stars are from Archer transfers. Everything was then sealed with Vallejo satin varnish and the weathering process started. The first focus was the vertical walls behind the running gear in the muddy Italian terrain a lot of earth is normally caked on. I used a mix of AMMO ready splash effects and oils and once satisfied I glued on the bogies. Before fitting, the tracks were weathered with Vallejo pigments fixed with airbrush thinner. Styrene Modelkasten track parts are somewhat allergic to enamels and you may end in having your 5 hours work falling apart miserably!

Once installed I fixed everything with a small dab of Tamiya green cap cement. Overall tank was then dusted with AK dust effects and some of the parts more prone to scuffing were dry brushed with Kassel Hearth Oil. Some subtle pin washes with thinned Paynes Grey were then applied. Rear exhaust deflector was then heavily weathered with some dark oils as two six cylinders diesel engines of the 40's would have for sure left a lot of exhaust oily stains.

MODEL BASE

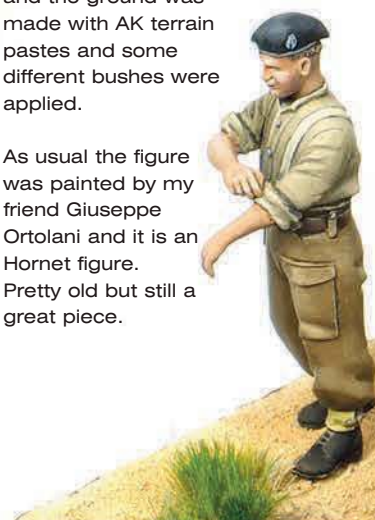
Once I was satisfied with outcome of model weathering I began considering a base. I was looking for something not that generic and therefore I tried to depict a small corner of a North Italy farm barn with a

pump water well. You can see still nowadays some of the very typical barns layout : two floors: lower for the cows, upper, fully opened, for hay storage and last the tiled roof. Hay would also act as a great heat insulating material. I therefore build the basic shape with Balsafoam which I then sculpted with a home made rectangular shape. The well basin was carved from a piece of Balsafoam leftover. All the parts were then textured with an old toothbrush and then sealed with two light coats of a 50/50 mix white glue/water. Last step was a layer of paint gesso mixed with some Polyfilla filler to render a coarser texture.



Colours for the base are two Lifecolor rust tones applied with a large flat brush. I then applied some brownish/ochre tones on some single bricks to make some variation and as last step it was weathered with Lifecolor Liquid pigments. The stone well basin was painted with Lifecolor stone colour sets and the ground was made with AK terrain pastes and some different bushes were applied.

As usual the figure was painted by my friend Giuseppe Ortolani and it is an Hornet figure. Pretty old but still a great piece.

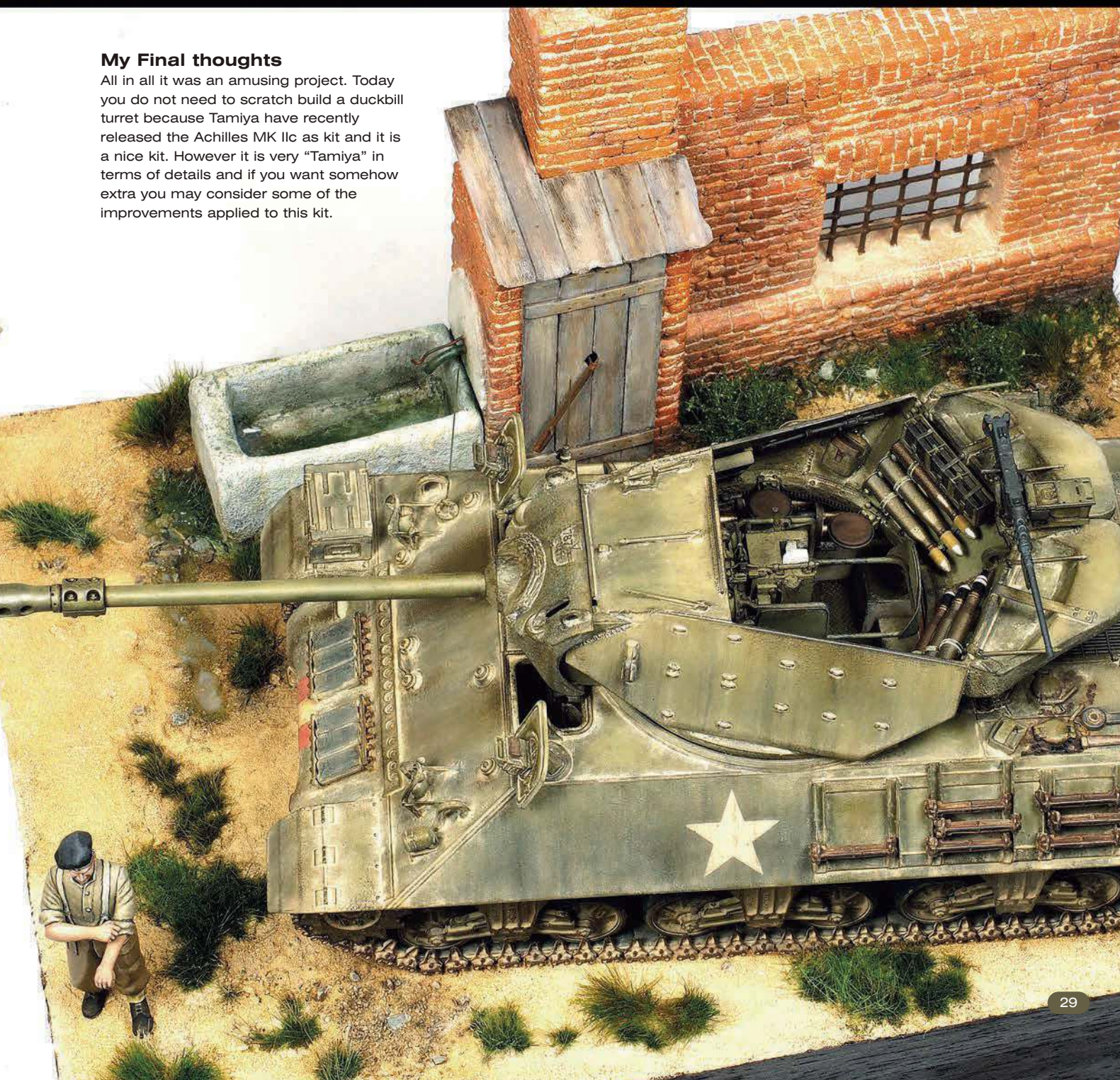






My Final thoughts

All in all it was an amusing project. Today you do not need to scratch build a duckbill turret because Tamiya have recently released the Achilles MK IIc as kit and it is a nice kit. However it is very "Tamiya" in terms of details and if you want somehow extra you may consider some of the improvements applied to this kit.





Kampfgruppe 1001 Nights





REQUIEM FOR A DREAM



By April 1945 the dream of a German thousand year empire had degenerated into a catastrophic nightmare for the whole of Europe, what remained of Hitler's armies making a final stand on the Oder attempting to bleed the Soviet steamroller heading for Berlin with several million refugees fleeing the consequences of the policies carried out in their name.

modelled by
Graeme Newman

The enigmatically named KG 1001 nights first came to my attention some twenty eight years ago when reading Munoz's "Forgotten Legions" and Le Tissier's "Zhukov on the Oder". In fact it was a typical late war unit formed around a cadre of experienced troops fleshed out with troops that were from military schools and raw recruits. The reason for the name is somewhat of a mystery, unusual even among the bombastic names given to late war units. The unit was further divided into three subunits Sulieka, Harem and Sultan somebody had been reading the Arabian Nights (originally 1001 nights in arabic). Sulieka was composed of three companies of Jagdpanzer 38t from 560th SS Jagdpanzer abteilung supplemented by a company of Stug III from 27th SS Langemarck. As you will have gathered I

am as interested in the historical side as much as modelling in fact the history came first as a boy which naturally led to modelling. A more recent publication "Endkampf" from Start Verlag publications in Germany provided some photos of this unit something I never thought would have existed! It shows heavily camouflaged vehicles with many crew members wearing leather uniforms, Start publish some of the highest quality books though not cheap they are truly top notch. Extra information provided showed the unit in defensive positions in and around Wriezen on the Oderbruch in spring 1945 in support of Pz Division Muncheberg. The genesis for this project was something far grander in my mind but as usual my ability to execute what I had planned was tempered by time, size and the loss of

detail that often accompany large sized projects. At the core of the scene was to be a late Jagdpanzer 38t, the model chosen was Academy's late version the reason being it was dimensionally fine had late road wheels and a selection of late idlers. Years of hoarding provided the Aber mudguards, side shields and various small details, oh and some Friul late Hetzer track, I'm not trying to be glib here but I shock myself sometimes at the hoard I've accumulated; probably one of modellings many junkies. I quite enjoy tarting up kits a bit of 'old skool', the build was quite straight forward and if I'm honest I'll try to recount what I did as this was built in late 2016 painted and put away in storage as my larger over ambitious vision of the scene dissipated and I moved onto something new.

As can be seen in the photos the mudguards were replaced this immediately adds some scale finesse, general details like the engine louvre and mesh are beautiful items as are the many small camouflage loops that were placed in their respective positions. All the tool clasps were replaced I use 1:48 tool clasps as they are more accurate scale-wise and further etched detail was added to the remote machine gun mechanism including the shield.

One area that I found was lacking was the exhaust shroud, this was inaccurate, manufactured out of aluminium sheet this was tricky to get correct but using plans in the MBI Czech publication on the Hetzer a rendition I was happy with what came to fruition after several hours.



The tricky thing was to cut the two dimensional template that would become two tubes that mated accurately at the correct angle, once happy tiny details were fitted like the vanes that hold the shroud to the exhaust on the inner surfaces of the exhaust shroud. Sometimes highly frustrating, this type of thing although time-consuming can add immeasurably to the finesse of a particular model.

The tools were replaced where necessary with Tamiya items and corresponding Aber brackets as well as other key features added like vision block guards and beautifully rendered in etched the spare track retaining brackets.



Panzerwrecks published a great book "In Focus" Jagdpanzer 38 which shows great close up shots of the vehicle in action and abandoned with super artwork relating to key images, a 'must have' if you like this vehicle it shows main paint schemes and vehicle features. Having no images at the time of the unit I decided to paint a hard edged BMM factory scheme which was very common towards the end of the war. Both BMM and Skoda produced distinctive schemes, Skoda being symmetrical evenly spaced bands of colour while BMM was more random strands of colour. Using the In Focus book as a guide I decided to use Lifecolor acrylics RAL 6003 Olive green, RAL8012 Red brown and RAL 7028 Dunkelgelb, sometimes the interior ivory colour was used instead of Dunkelgelb by the Czech firms but I stuck with Dunkelgelb. I lightened the Dunkelgelb

whilst using the other colours as is, it was the first time I had sprayed the lifecolor paints and because of the acrylic's quick drying I had to carefully keep cleaning the airbrush nozzle during use. The green went on first then using tamiya masking tape the area's of red brown and dunkelgelb were masked off. A feature of the BMM paint scheme is the false visor pattern running diagonally to the right when viewed from the front of the vehicle this was replicated on the model. I sprayed the tracks a dark grey then washes of raw umber to give a red brown tint of exposed metal this is followed by earth tones and pigments are washed into the track depending on the ground work, finally the tread surfaces are highlighted with graphite and silver pencils. At this stage the model was put in a box until I was more comfortable with creating a scene that was not over ambitious.

Usually something small reignites interest in one's mind this was the case when a small hut caught my attention on the Diodump stand at SMC in Eindhoven last year. I began formulating the scene in my mind, the Jagdpanzer 38 was to be in a defensive position in a semi industrial yard at the edge of a small town a drainage ditch was to run along its rear as well as an unpaved track. The yard is supposed to represent a packed gravel and dirt surface, this was achieved by first sketching out the areas on the base then forming them with foam board covered in polyfilla, before allowing to dry any impression of the vehicles tracks or weight have to be considered it is important to place the vehicle in position at this point depressing it into the plaster so it sits in the ground rather than floating unrealistically on top.



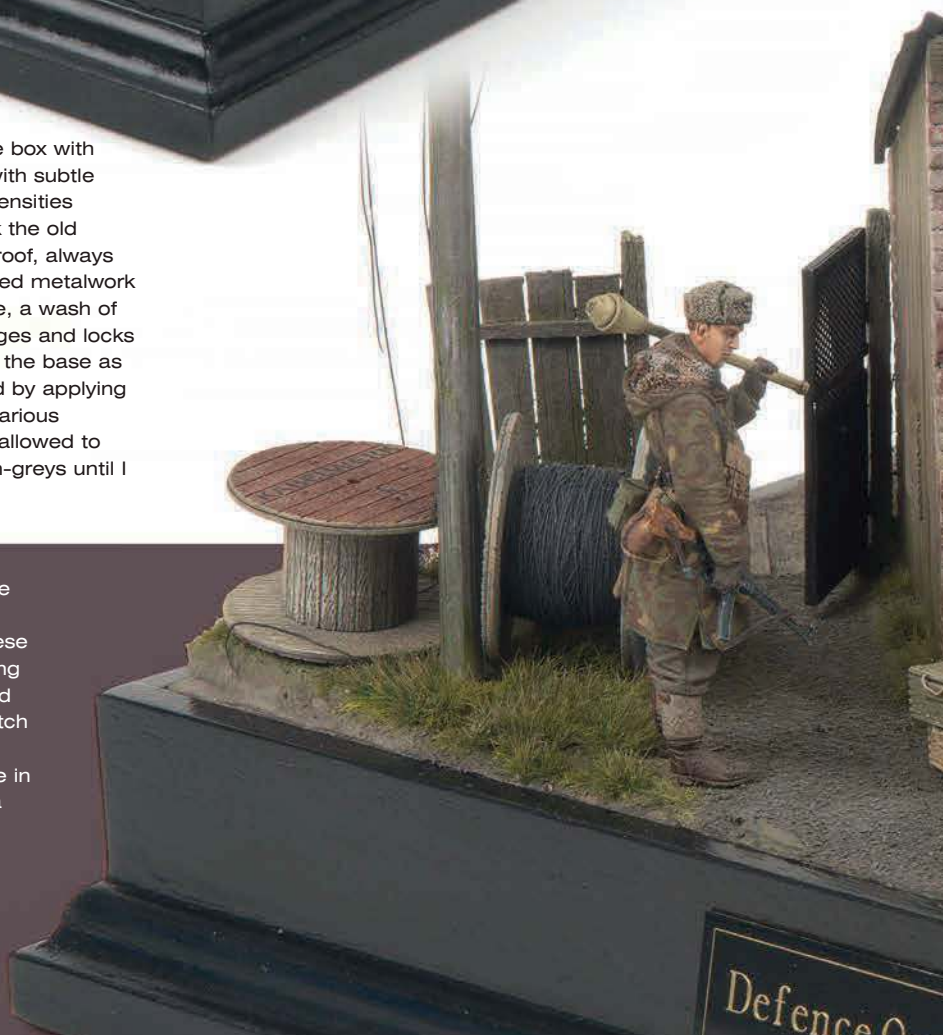
To facilitate this I sprinkle fine sand where the tracks make contact waiting until the plaster is just beginning to dry then placing it in position and applying light pressure, once dry the vehicle can be released and minimal plaster adheres to the tracks, using a brush any sand can be removed from both vehicle and base.





The hut was painted pretty much as illustrated on the box with care to show tonal variations including damp areas with subtle washes of green. The use of oil washes of varying intensities provides satisfactory results. As well as the brickwork the old woodwork was treated in the same way, as was the roof, always keeping in mind that wood is never brown and exposed metalwork always has an oxidised hue, no I'm not talking orange, a wash of raw umber over these areas to create the effect. Hinges and locks were added to the door before the hut was added to the base as the Polyfilla was applied. The gravel yard was created by applying white wood glue over the dried area then sprinkling various gradations of railroad scatter ending with the finest, allowed to dry this was painted a neutral grey followed by brown-greys until I was happy with the tones and variations.

In a similar fashion the trackway was created with fine scatter powders sieved over the area, the texture is important here not the colour as I always airbrush these areas to achieve a realistic colour. I'm always snapping photos when I'm out for a walk such as dirt tracks, old buildings and so on, in fact the track and drainage ditch is loosely based on a place only a few miles from my home; it's always useful to have this type of reference in mind when recreating a realistic setting as reality is a combination of colours, textures and finishes on objects.



The drainage ditch was filled with AK's Still Water, this is fine for small areas and was built up by applying thin layers via a syringe and needle over several days allowing it to set between applications. Since I had used Tamiya acrylics for much of the groundwork there was no issue with the compatibility between the material and enamels. The fence is simply basswood cut and glued together then primed and fitted to the base. The kink was deliberate as I wanted to give the impression that the vehicle had driven into it before reversing slightly. Again taking care to recreate aged wood the fence was washed with various tones of grey- brown culminating with

green oil washes that are synonymous with old wood work. The iron gate was made from plastic card and etched mesh painted and aged with raw umber and a very faint remnant of original paint work.

One motivation for revisiting this project was the appearance of various fauna items in printed paper form, these have

become readily available over the past few years I bought some last year and was impressed by their

ease of use and authentic appearance so decided to try out various types. I ordered ivy, bracken, reeds and weeds from 'Modelscene' and applied them to the areas you can see in the scene. Ivy was set up the fence and building with the bracken on the edge of the track with the reeds filling some of the drainage ditch, I painted some of the reeds

a straw colour interspersing them with the fresh green shoots as per my observations. It's important not to get carried away and have fauna that is not native to the area that your modelling!

Figures have come on leaps and bounds in the last fifteen years companies like Alpine moving the bar to a new level, Russian sculptors have always been highly talented and I particular like some of the recent creations such as those from Evolution which I used, the figure pointing and the one holding the panzerfaust. The figure in U-boat leather jacket is Alpine whilst the crewman is a modified Cromwell models figure, the final two figures the wounded Russian is a heavily modified ICM offering the dead figure is one of my own creations. Where necessary I have replaced heads, hands and defined undercuts adding uniform details, once primed they were all painted in Lifecolor acrylics for the clothing as they dry perfectly flat with the faces painted in oils, the leather jacket was given a black-brown hue to lift it from the flat panzer uniform washed with relevantly coloured oils to give the jacket a satin finish. The camouflage uniforms take the most time and good reference and practice is essential, key is the shades used, size of pattern and the flat texture. The figures were given a bit of thought as regards their interaction and placement this can be one of the more demanding aspects of creating a realistic scene and must be thought about carefully at the planning stage. The scene depicts an ambush position with Soviet scouts

surprised one of whom is taken as a "tongue". Added points of interest are the telegraph pole, the cable reels and the panzerfausts with containers these are all from Miniart who have some really useful sets designed for dioramas and are producing some very interesting kits.

The Jagdpanzer 38 was weathered by building mud up on exposed areas wheels and mudguards, I mix white glue, flour and pigments these are then allowed to dry and airbrushed to match groundwork colours. Areas of dust are sprayed on the vehicle with washes of various tones to highlight damp and dry spots. Any chipping and scratches are carried out with a fine brush and pencils especially the hatches and engine bay. The process can be revisited many times building layers of weathering until your happy. Photos show many vehicles with a stowage box tied to the rear of the vehicle so I added one along with foliage lines, this is very fine lead solder from Aber and hangs naturally. The foliage is naturally found mosses which resemble fir branches, these are carefully chosen and moulded to fit the vehicle in a natural way.

In summary Kampfgruppe 1001 Nights like most units were brushed aside by the Soviet offensive when it eventually broke through the Seelow Heights but not before exacting a high price, fighting a defensive withdrawal north then to the west of Berlin running out of fuel, ammo as they retreated, stubbornly clinging onto a long lost cause.





For those interested in further reading:-

"Zhukov on the Oder", Tony Le Tissier. **"Endkampf"** Start verlag, Axel Urbanke
"Red Storm on the Reich" Christopher Duffy

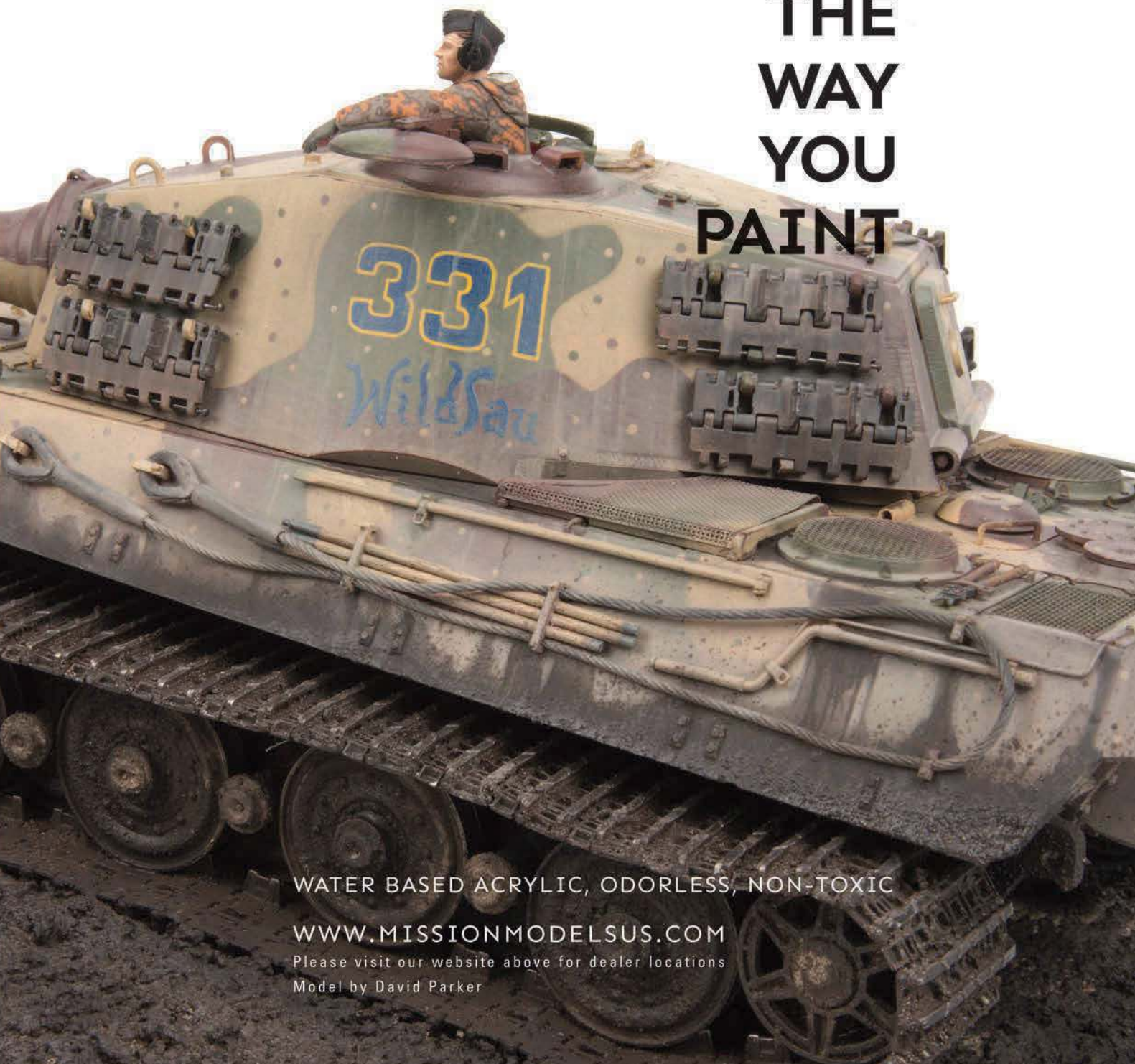
"The Oder Front 1945" A. Stephan Hamilton
 Volume 1 Heeresgruppe Weichsel 20th March- 3rd May
 Volume 2 Documents, reports and personal accounts -
 these two volumes are highly detailed and a treasure trove of information for
 the seriously interested historic modeller!



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Model by David Parker

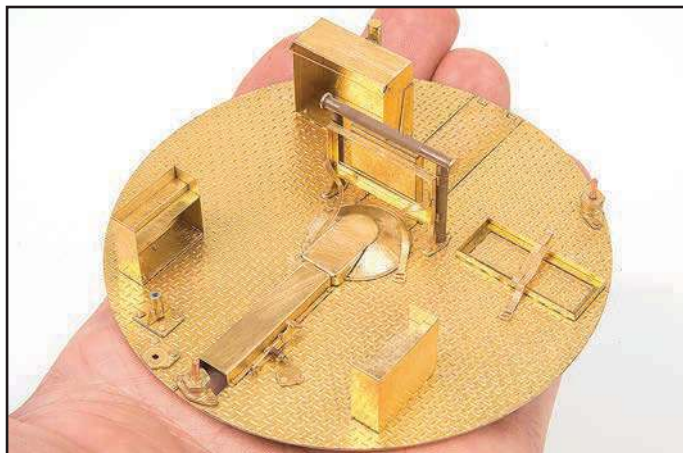
Panzerkampfwagen

David Parker builds Trumpeter's 1:16 kit

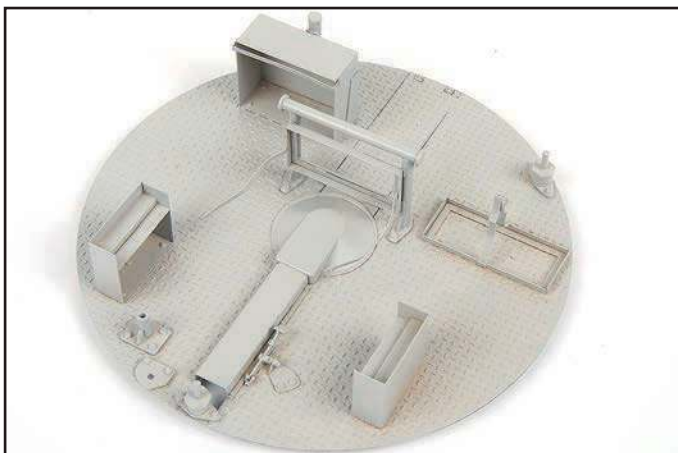
Part Twenty Seven

Although there are some areas in the bow that still need my attention like the bow MG mount, I chose to move onto the turret basket next. It will come as no surprise to learn that what the kit provides has only a loose resemblance to the real thing. I had something of a head start with a new photoetched turret basket

floor but as the work progressed it was only the basket support legs that were retained from the kit and even these were modified slightly. Certain details were hard to pin down and I initially modelled my Loader's seat incorrectly on a non-original example but I managed to track down an original example and made the



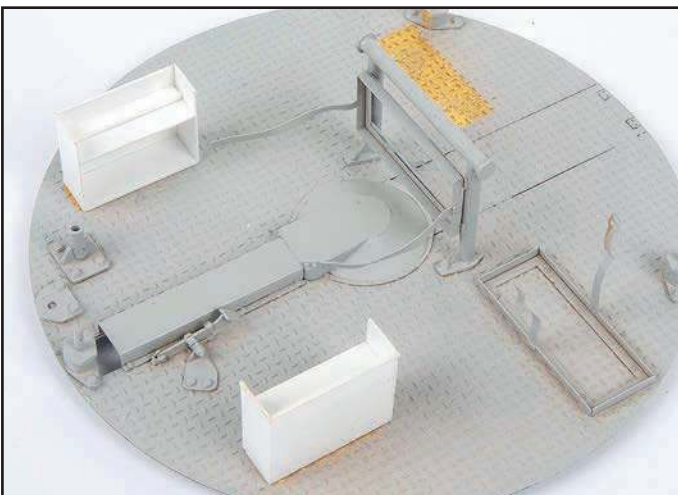
My starting point for the turret basket was this jewel-like photoetched creation by Krzysztof Sroka who designed and assembled this impressive replacement floor.



There were a few details that I wanted to change but before starting I applied a coat of Mr Primer Surfacer to the brass.



One of the advantages of this new turret floor is the fully detailed underside. my plans to have a removable turret made this an important area of detail.



I replaced the pair of holders at the front of the basket with my own versions which were slightly wider to hold a pair of the folding ammunition crates.



The loader's seat is mounted on one of the turret basket legs. The seat bracket was completely replaced with Albion Alloys slide fit brass tube combined with plastic rod. The seat itself was reshaped with a raisedommel at the front made with Magic Sculp.



I managed to find pictures of the simple bracket that stops the seat from rotating (it could be flipped up to give the Loader more room). This locks over the small peg on the seat support.



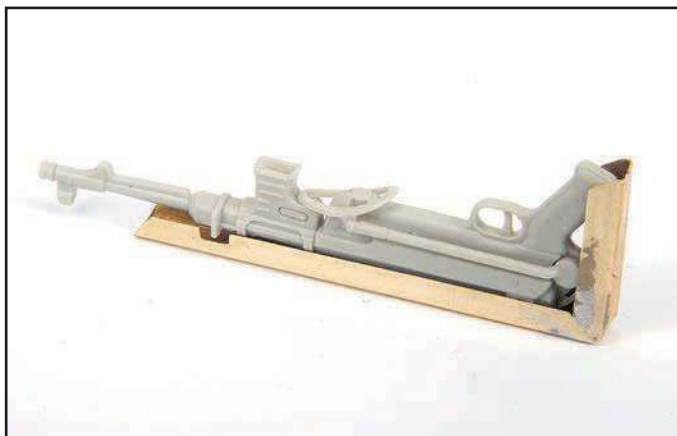
The seat covering is cut out around the bracket so I added a thin layer of putty over the seat to create the cover. The cover was textured with Mr Finishing Surfacer 1500 Black and the fastener details were added around the edge of the seat.



Some revision of the seat mount was needed as the centre post I originally modelled was not correct. This was removed and two triangular brackets were used instead. The hinge detail **1** had also been added to the leg bracket.



Also stored on the Loader's seat support is the MP40 carried by the vehicle. In order to make the rack I cut a strip of brass sheet and folded it into a U shaped channel using a folding tool. Notches were cut in the sheet before it was folded.



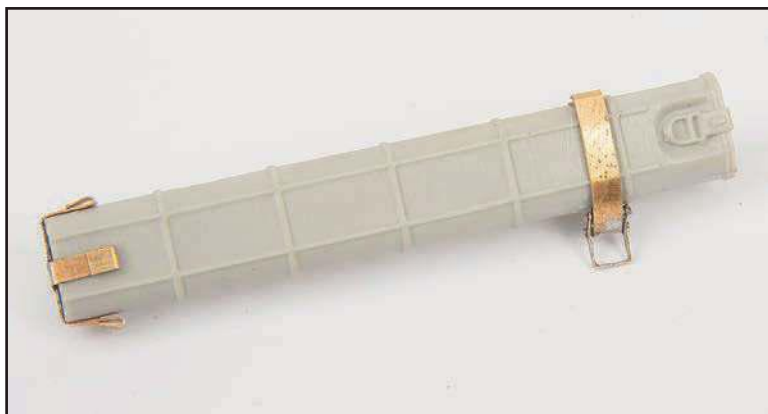
The base of the rack was folded up and soldered.



A pair of mounting brackets were added from more brass sheet and I cut slots into the basket leg to provide a stronger joint when it is eventually glued in place.



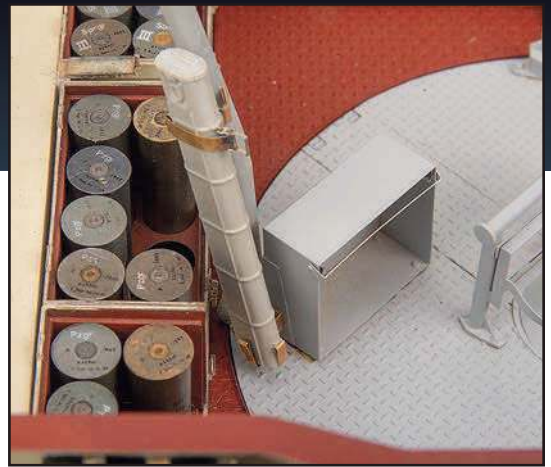
I used strips of brass and the handle from an ABER tool clasp to construct the clasp to hold the spare MG34 barrel case. The sharp eyed will notice that I have incorrectly assembled the latch, something I later corrected and the overhanging copper rod was trimmed back.



The clasp (now corrected) is fitted to the top of the barrel case and the base 'basket' was also constructed from brass strip soldered together. The case is a resin accessory from the AFV Modeller range as the kit does not provide one.

Right My first attempt and fitting the barrel case assumed that it would be mounted vertically but I only had clear information on the location of the top bracket at this point.





A quick test fitting of the turret basket into the hull showed that the barrel case was fouling the floor ammunition bins when the basket rotated. The barrel case had to be fitted at an angle and I eventually managed to find an

image confirming the position of the lower bracket, mounted on the floor next to the MG ammunition locker. Another test showed that the basket would now rotate cleanly without hitting the floor bins.



Time for another test fit of all the parts on the Loader's side of the basket to check that nothing is causing a problem. The gasmask case will need its correct mounting brackets on the side of the MG ammunition locker, but it is added to check the overall alignments.



Moving on to the Gunner's seat and the basic seat shape is fine but the mounting support underneath it is removed. The seat is missing a rim around the base so this was constructed from plastic card and glued into position on the seat base. The weld bead was added using fine Slaters plastic rod which was melted with liquid glue to give a good weld texture.





Once the putty had dried it was sanded and primed and then polished to produce this finish. To add the final surface texture I sprayed Mr Finishing Surfacer 1500 Black but holding the spray can further away from the cushion than usual to produce a more spattered finish which gives a great texture if built up over 3 or 4 coats.



Like the Loader's seat the Gunner has the ability to flip over his seat through 90° and there is quite a substantial bracket on the back of the seat to lock it in the horizontal position. Here the new mounting shaft is fitted under the seat



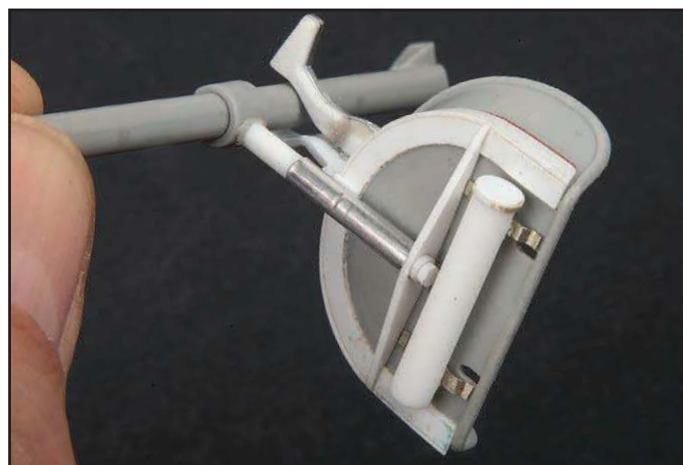
and the fixed part of the bracket is added to the back of the seat. The bracket is kinked to wrap around the upright of the turret basket support on which it is mounted.



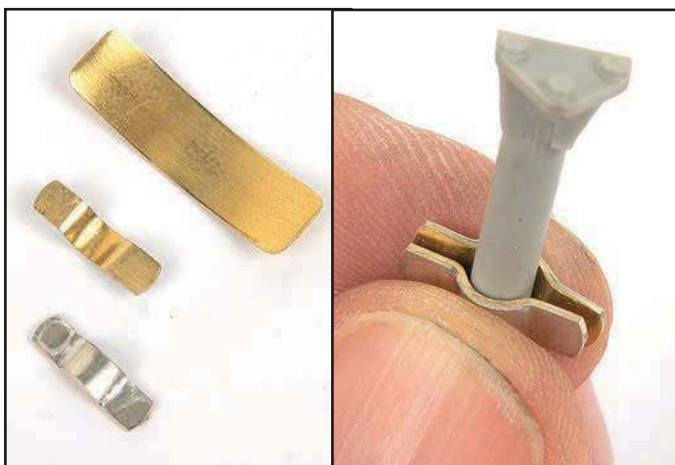
On the other side of the bracket there is a locking handle which forms the other half of the bracket. The handle was shaped from a piece of plastic card and a section of plastic rod for the pivot point.



The two pieces of the handle were blended with putty and a strip of self-adhesive aluminium tape was added to make the raised rib down the front of the handle.



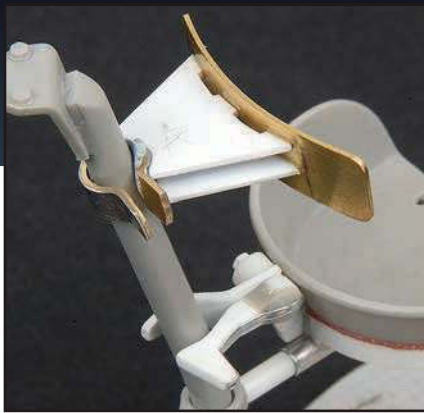
Beneath the seat is one of the Atems Schlauch breather tubes.



The Gunner's backrest is not supplied in the kit so I had no option but to make my own. I used brass sheet to form the base of the padded rest and the clamp with a layer of pewter foil added to get the scale thickness.



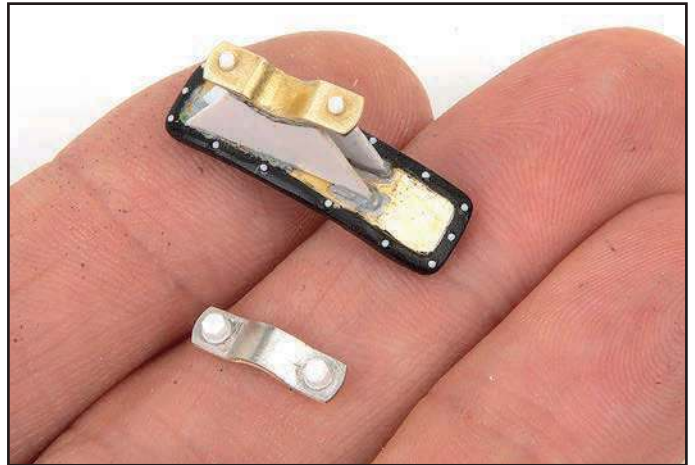
The angled leg of the turret support makes for some complex geometry for the backrest. With no plans I had to judge the shape of the bracket by eye. The backrest is offset and angled when fitted to the bracket.



Happily once the backrest was glued in place and the whole bracket was test fitted on the leg of the basket it lined up correctly with the seat base.



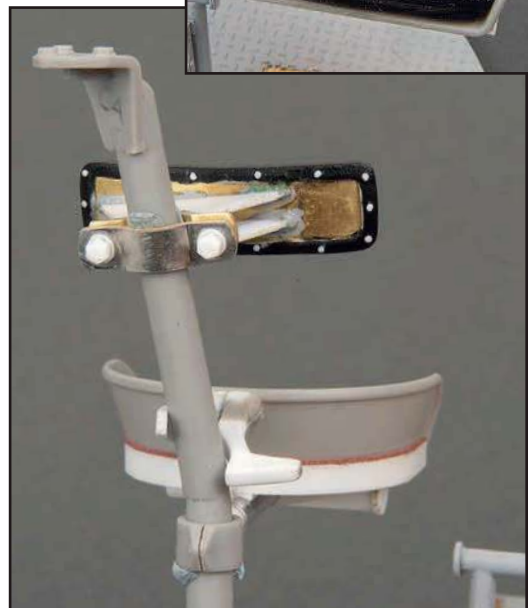
The obligatory test fit in the hull to check the alignment which happily was successful first time.

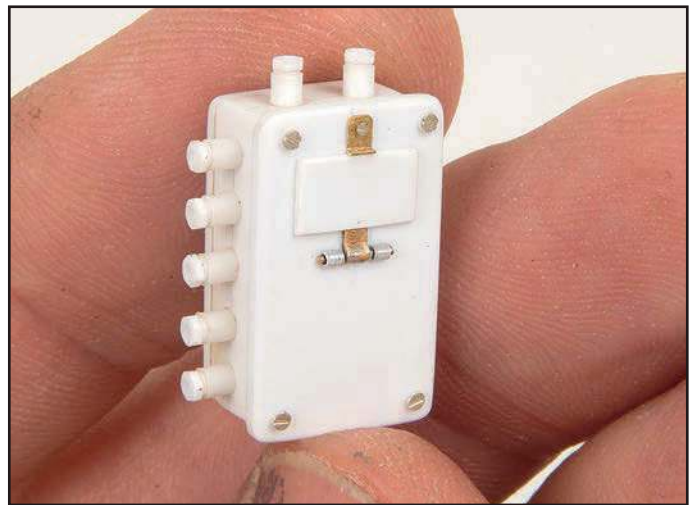
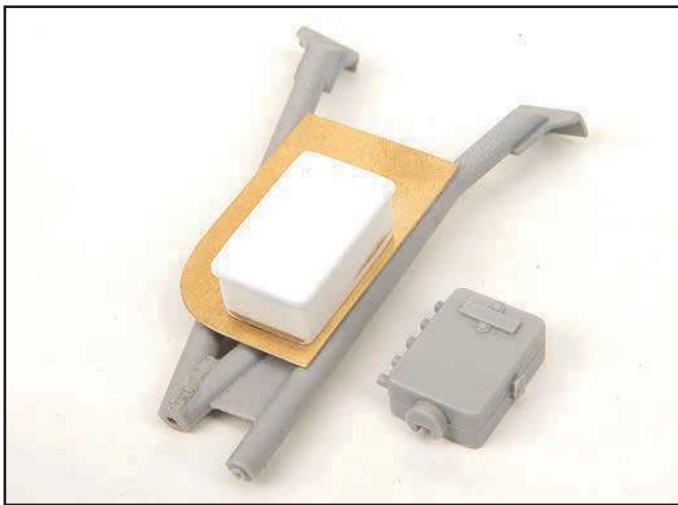


The padded cover for the backrest was made from Magic Sculp applied over the brass backrest and wrapped around the back. The cover was masked and sprayed with Black Mr Surfacer to texture it like the seat cushion and the rivets were added to the back.



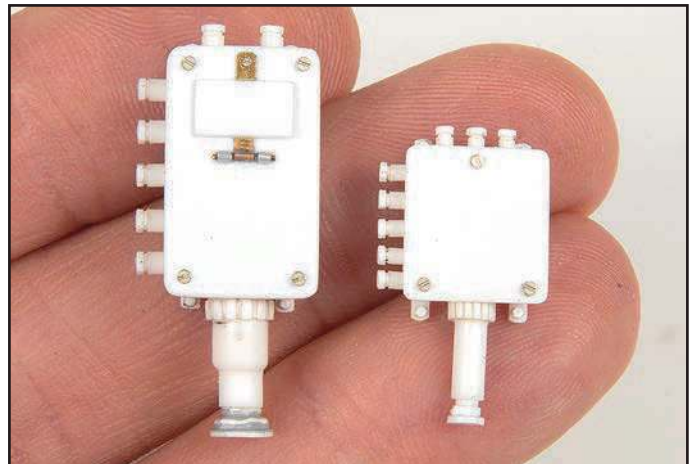
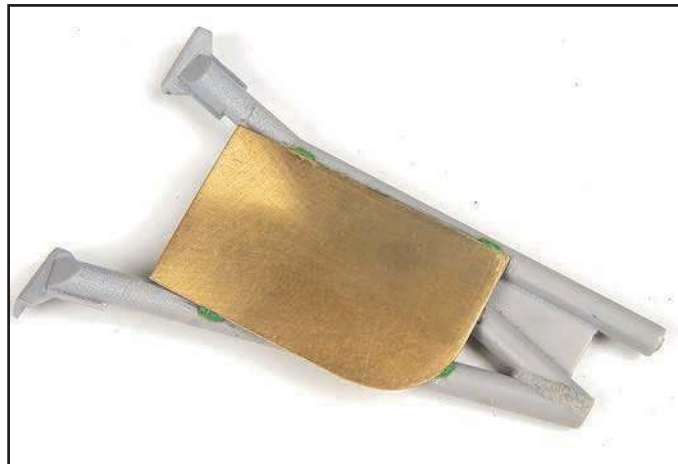
The seat cushion completes the seat and back rest.





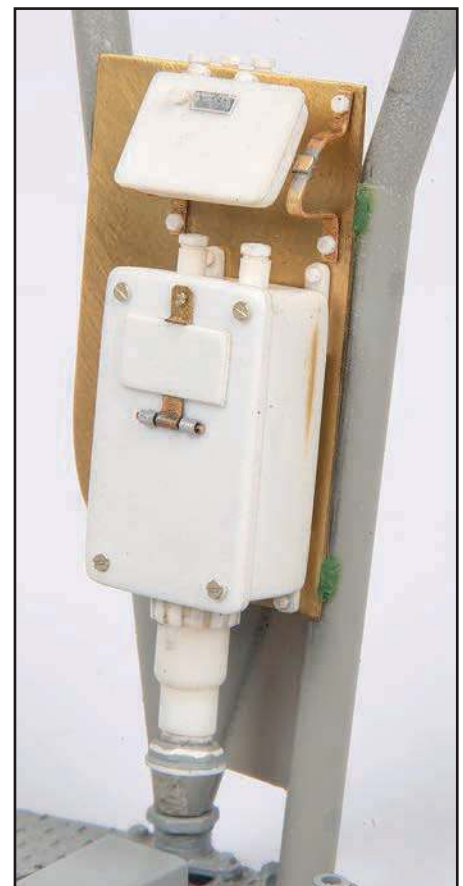
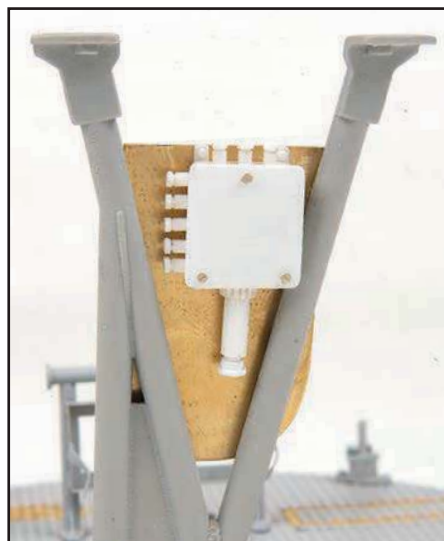
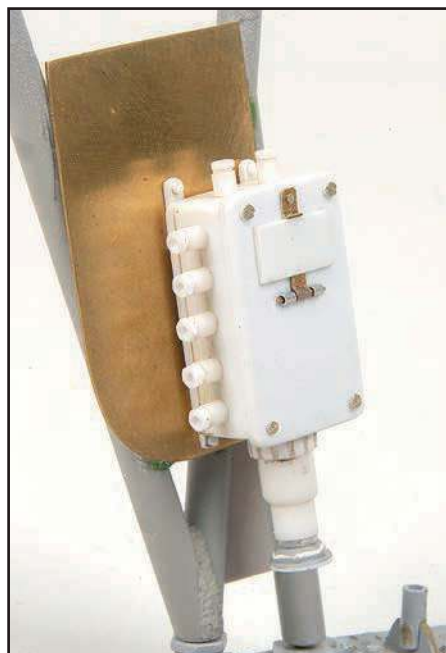
Turning now to the front face of the turret basket the double leg acts as a support for the electrical fuse boxes. I reworked the weld at the 'V' base of the legs and made a new mounting plate from brass sheet. The biggest main terminal box was replaced as the kit part was wildly undersized.

With the main shape of the box complete it was detailed with the seven cable sockets and the cover for the cut out switches on the front face with the hinges made from scrap photoetch and Albion Alloys aluminium tube. ABER screw heads were added to secure the cover of the box.



The mounting plate was glued into position and the welds were added using Green Stuff putty.

The large terminal box was completed by adding the cable socket to the base. The second small box (completely overlooked by the kit) is a similar design to the first but slimmer and this too was scratchbuilt.



Above The two boxes are located back to back on each side of the mounting plate and test fitted with Blu-tac used to hold them in position.

Right Another part missing from the kit is the battery box. This provides a safety back up to the gun's electric firing circuit. The box itself is a simple rectangle but the angled frame it is mounted on was a bit more demanding. I used a plastic card former to bend the scrap photoetch fret strips used to make it. This ensured they were the same shape. They were then soldered together for a strong bond.

The project continues in the next Issue

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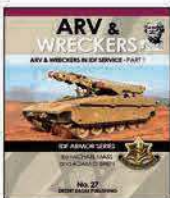
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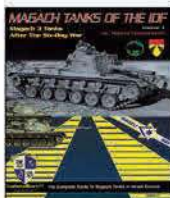
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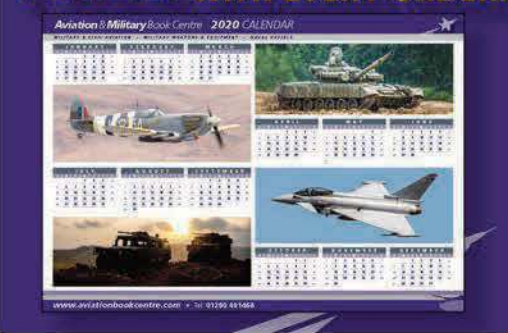


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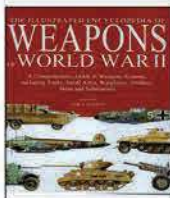
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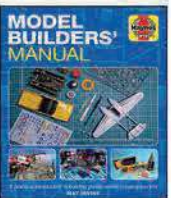
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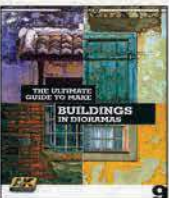
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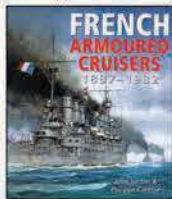
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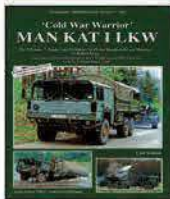
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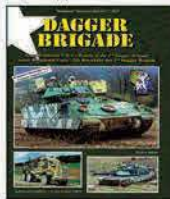
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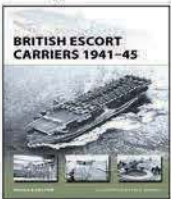
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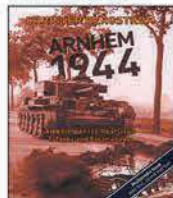
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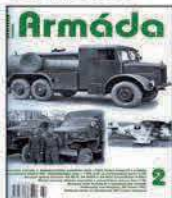
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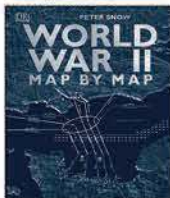
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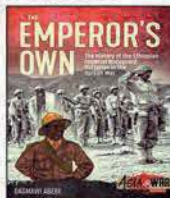
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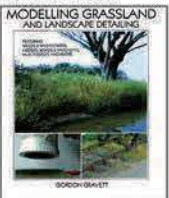
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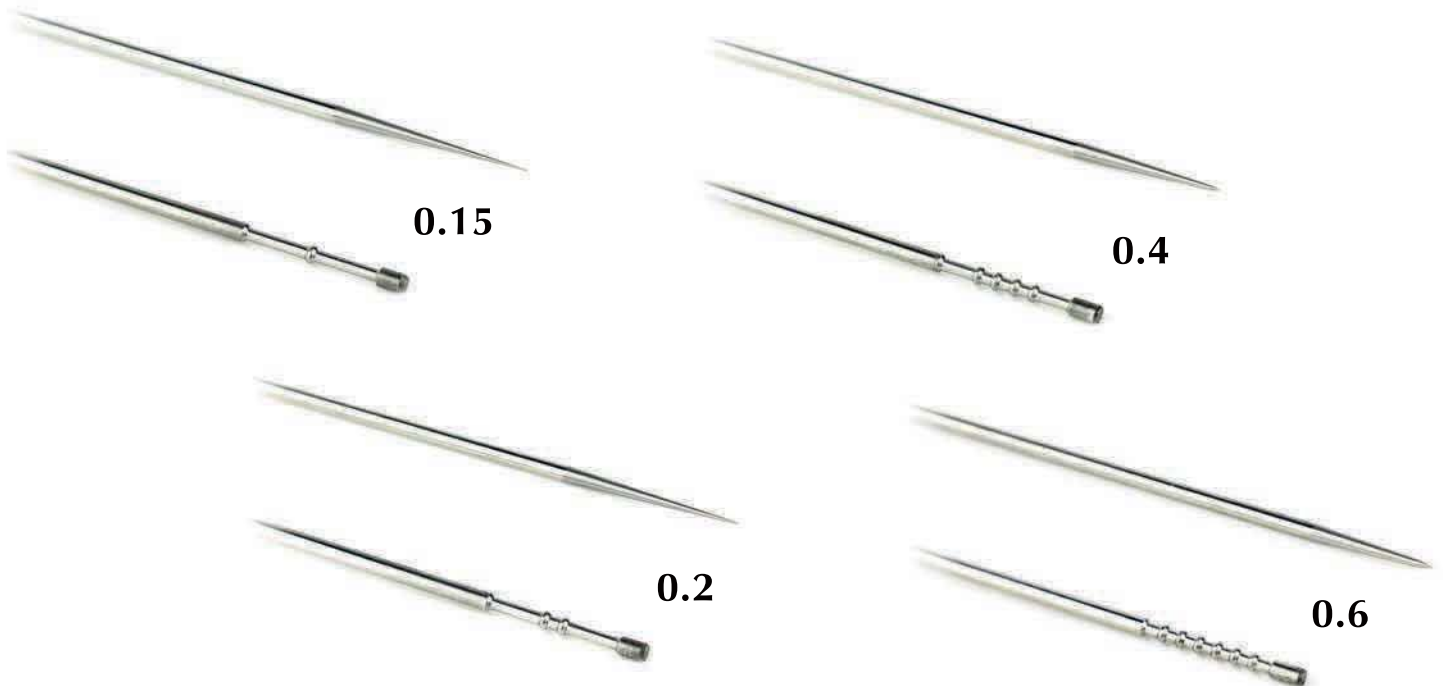
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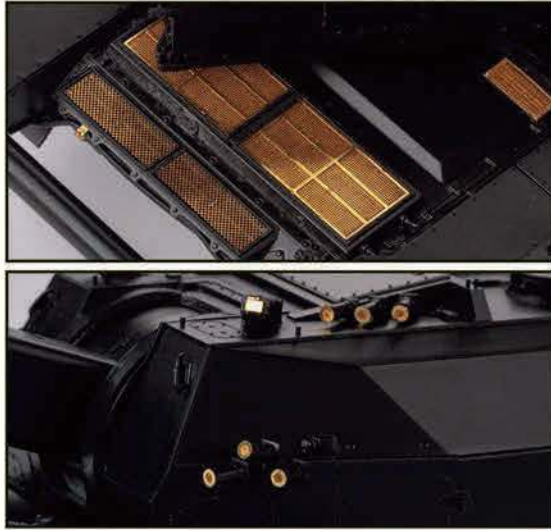


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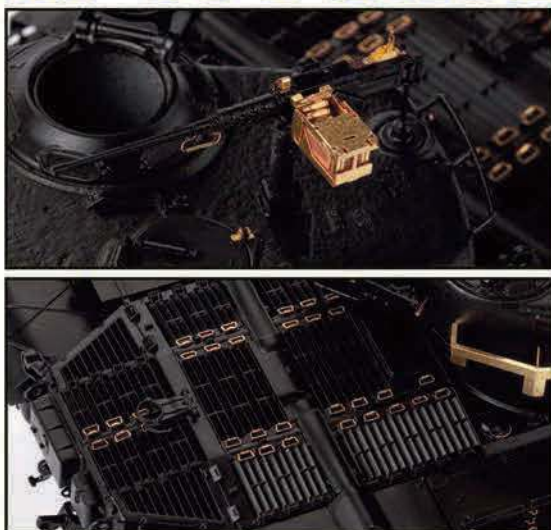


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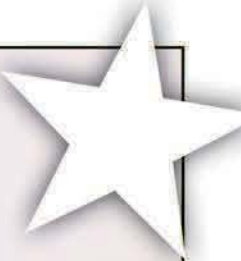
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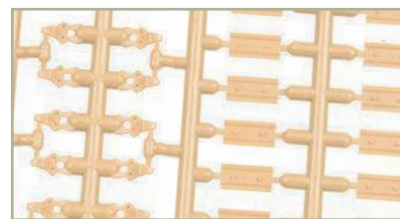
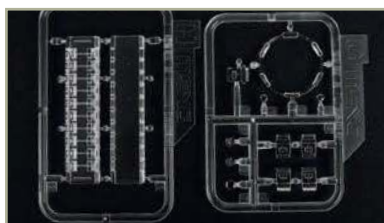
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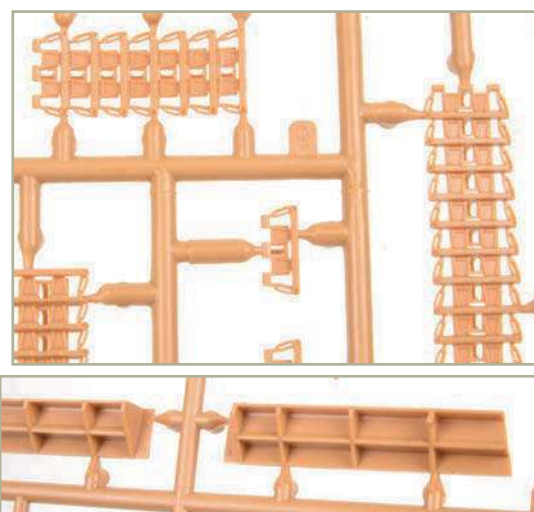
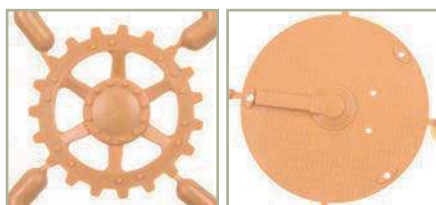
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Meng 1:35 U.S. Medium tank M4A3(76) W

Meng often surprise us with the subjects they release, usually because some are on the radical or obscure side, but what could be more mainstream than an M4? Already there's the usual cries of "why do we need another Sherman?" That might be so, with many manufacturers producing many versions (Tasca / Asuka probably presently holding the crown) but we need to remind ourselves that Meng don't make a penny from other manufacturer's Shermans! We can only presume from the design of the kit this is the first of many M4 variants Meng will look at and the A3 is a good place to start. The 'W' denotes the updated ammo storage (wet, surrounded by water jackets) improving crew survival chances in combat. The chunky carton displays some beautiful box art depicting 'Thunderbolt VI' famous for its actions in Bastogne (another three late-war schemes are included) and the contents aren't as bulging as usual. In Meng's standard tan plastic the standard of moulding and finesse is as good as it gets with some superb attention to detail. There's no big surprises in the design and assembly; the hull is supplied as a 'tub' to which the transmission housing and internal bulkhead are added, the upper hull has a separate engine deck incorporating multipart hatches with some stunning weld detail and even the faintest impression of 'gasoline' text moulded into the fuel cap guards. Sand skirt attachment rails are beautifully done with the correct short runs of welds and the armour plate captures a pleasing texture. For the light guards Meng offer plastic parts or photo etched options with a very welcome moulded jig to form the shapes, the same applies to the periscope guards. Back to the running gear, the bogies feature something special with actual

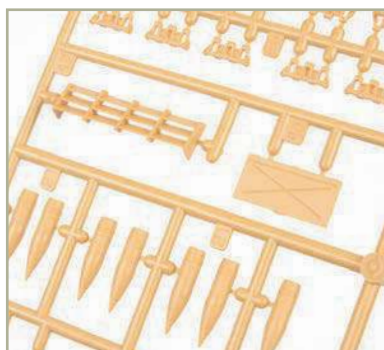
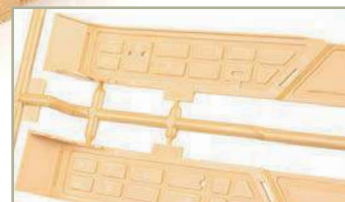
scale volute springs in steel allowing the suspension to really work as per the real vehicle, casting details on the bogies is again superb (two subtly different options are supplied) with the skids very nicely handled with bolt details present. Wheels (again, two options) and sprockets look nice with a realistic cast texture where applicable and subtle manufacturers marks on the tyres. The turret offers more superb detail with nice textures, foundry marks and a lovely .50 Cal. Which can be assembled stored or ready for action. All hatches can pose open or closed with all-round detail and clear moulded optics. The initial release of kits comes with an aluminium gun barrel with choices of muzzle and the kit provides a very comprehensive gun breech to flesh-out the turret interior. Now for the tracks. If you're a regular Sherman builder you'll know there's no easy way to achieve well detailed T48 track with extended 'Duckbills' and the number of parts here in the box could appear daunting to some builders. The pads come as an inner / outer face and the connectors and duckbills are also separate. Anyone who has assembled the classic Modelkasten versions of this track will testify as to how fragile they are; Meng have addressed this by incorporating metal pins (inserted and trimmed to length) as you'd expect to see with metal track sets. Assembly is aided by a clear jig to build short runs of links. From experience (with Meng's tracks) they always go together quicker than you'd initially think, certainly the most involved part of this kit but if you look online Meng have some great video footage of the tracks running at quite some pace with the moving suspension! Meng should have a big hit on their hands with this Sherman, not only a beautiful kit but it attractively priced too.



Zvezda 1:35 Panzer IV Ausf.G

Zvezda continue to expand their Panzer IV family with their version of the Ausf G. The kit features link and length track, partial turret interior. So far so good you would think but unfortunately when we get into the details and basic dimensions the errors start to add up. The tread pattern on the trackguards is massively underscale so that is more than twice as small as it should be. The location of the bolts on the rim of the drive sprocket are incorrectly positioned on the rim. On the left hull side the Driver's visor is missing the pair of lower bolts and the details on the insides of the

hull hatches are very poor with an imaginary lip around the edge of the hatch. At the back of the hull the air intake vents on each side are poorly replicated with incorrect spacing for the vertical dividers. The side turret hatches are poorly detailed and in fact the whole turret interior is extremely vague with the turret basket featuring a wildly overscale treadplate pattern. And so it goes on, there is much to be corrected and with many far better versions of the Ausf G already on the market it is hard to see much to recommend this one other than its price perhaps.



Tamiya 1:35 'Hummel' Late

A natural progression from Tamiya to base a 'Hummel' on their Nashorn from a few years back. These kits offer a simple alternative to the Dragon or AFV Club productions of these vehicles to give a more novice modeller a better shot at building a quite complex Self Propelled Gun or if you simply fancy a quicker build of a great painting and weathering subject. On inspection of the sharply moulded sprues it's evident this kit shares little with the Nashorn, we even have new link and length tracks and being a 'Late Production' version we have the full width driver's compartment. Although all of the superstructure is moulded to Tamiya's usual high standards the inside surfaces are peppered with ejector pin marks and the mudguards have rather

ugly raised areas moulded on the undersides. The all-new 15cm howitzer has also been designed with ease of build in mind and can be made to elevate with a few clever touches and the use of a few screws which hopefully won't be too visible on the finished model. A turned aluminium barrel is available separately from Tamiya, the kit relies on a regular two-part horizontal split arrangement. Tamiya figures have become a great feature of their kits in recent years, this crew of three posed replenishing ammunition are another excellent addition, ammo and cases are also included. A very build-able looking kit in true Tamiya fashion but falling short on finesse in some areas.



Beginners Guide to Modelling

Eduardo Fernández Rodríguez
Published by AK Interactive
Softback format, 136 pages
ISBN 9788469790694
www.ak-interactive.com



We'd imagine most of our regular readers have a good grounding at least in the hobby but to anyone new or returning to modelling after a break of anything more than a few years things can be a little confusing with the amount of techniques and products available these days. This new release from AKI is an excellent guide for the beginner or someone starting to progress with modelling covering all aspects from the correct working environment, choosing suitable kits, assembly techniques and painting and weathering. A lot of effort has gone into this book to ensure every question a novice may have is covered in a pictorial manner which is easy to understand (some of the Spanish to English translation in our English sample version isn't brilliant but it doesn't detract from the content). Although being a major player in the market this isn't just a marketing tool for AK's products, many of our favourites feature throughout; recommended reading for anyone wanting to advance their general modelling skills.



Deutsche Panzer

German Tanks in WWI
(1917-1918)

Carlos De Diego Vaquerizo,
Ricardo Recio Cardona
Published by Abteilung 502
hardback format, 108 pages
ISBN 9788469790694
www.abteilung502.com



Abteilung 502 are part of the AK Interactive family of brands, seen as their premium end of the market some new book releases are certainly fitting with a hardback presentation and quality paper stock, quite the 'coffee table' kind of book. The content is very visual with some beautiful period black and white images and top quality colour profiles which detail many of the known A7Vs and their history. With such a small number of home-grown tanks in the Great War many captured (Beute) panzers also feature with some inspiring schemes. Detailed 1:35 plan drawings also feature and tables of the A7Vs details and each vehicle's fate. Available direct and from your favourite specialist book dealer at a good value price.



Their Last Path- IDF Tank Wrecks Merkava Mk.1 & 2

Michael Mass, Kristof Pulinckx
Published by Abteilung 502
Hardback format, 154 pages
ISBN 8435568301757
www.abteilung502.com

More premium presentation with a new release to please IDF fans, in particular fans of the legendary Merkava in it's early form. With unique access to a compound of Merkavas at the end of their service we have a unique collection of sharp colour images offering superb reference of these vehicles including engine bay and interior close-ups and many external components in clear detail. Captions are very detailed and informative (as you'd expect from Mr Michael Mass of Desert Eagle fame) with a bonus feature of 3D rendered technical drawings breaking fittings down into component form. A superb visual reference for modellers of the Merkava and beautifully presented.



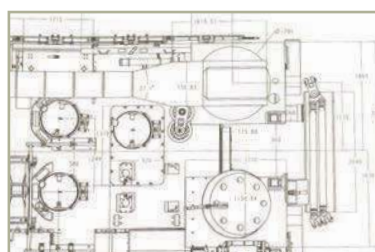
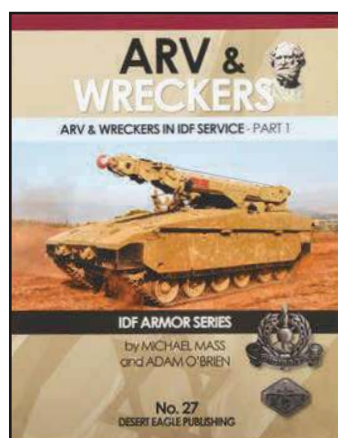
Mac One Models

Mac One are expanding their range with some great accessories for the modern diorama builder in very finely cast resin. Road blocks and barriers are common place in war-torn cities, these sets are ready to paint after some minimal clean-up. MAC35176 is 3 stacks of three tyres filled with rubble, MAC35177 is a set of three battered oil drums filled with rubble and MAC35175 is a great set of thirteen traffic cones in various states. A bundle of several of these items and three concrete road barriers are in set MAC35178. Set MAC35173 is a set of eight waste bins of several styles. A larger centre piece for a diorama is a watch tower (MAC35174) based on images from Iraq but applicable to other scenarios. Cast in an acrylic resin it has the look of concrete straight out of the box. Take a look at Mac One's excellent website where there's some great colour product images and secure shopping should you be tempted.



Stalingrad

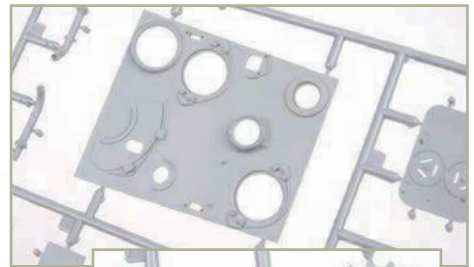
Based around a collection of well known war-time photographs, Stalingrad have the perfect group of figures to complement Tamiya's new Nashorn (or indeed any Hornise of Nashorn and other vehicles with a few tweaks). Available as a 'Big Set' of six figures (and horse) or split into three sets of two, our sample is the mounted dipatch rider and officer receiving paperwork (or maybe just his copy of AFV Modeller?). As usual the sculpting and casting is amongst the best in the business with superb anatomy and detail. www.stalingrad.diorama.ru has excellent images of the painted figures and details of where to purchase the range in your part of the World.



ARV and Wreckers in IDF Service- Part 1

Michael Mass, Adam O'Brien
Published by Desert Eagle
Softback format, 83 pages
ISBN 9789657700143
www.deserteagle-publishing

More to excite IDF modellers from Desert Eagle with a look at the history of Armoured Recovery Vehicles with their usual top-quality visual approach to serving-up some superb reference. Many vehicles are featured from the early M32 Sherman, Centurion Mk.2 ARV and M88A1 through to the modern Rekem and Namer Aqhzaka plus many more providing an absolute goldmine of unique large format colour images for the converter and detailer alike. Along with overview images of operating vehicles there's a good selection of interior and exterior walk-around shots with detailed plan drawings of the Merkava based vehicles giving the scratch-builder plenty of information. Plenty of diorama inspiration is also at hand with unique images by the author of these beasts getting right down and dirty. A really interesting addition to the Desert Eagle range of essential IDF reference.



Dragon 1:35 Jagdpantzer Ausf. G1 Late/Ausf. G2

Having produced a new bench-mark in Panther kits in the early 2000s Dragon released their first new-generation Jagdpantzer in 2007 and not wanting to miss out on the recent Panther-Party with so many Panther variants released recently from Meng, Takom and Rye Field in 1:35 they've created a combined bumper boxing of both their G1 and G2 versions. As you'd expect there's masses of sprues which will result in plenty panther parts for the spares box- there's even a couple of Panther turret mantlets made their way in there! These kits represent Dragon at their peak with beautiful sharp detail throughout producing superb models straight out of the box, not weekend builds but detail of

this calibre takes time to assemble. Two full upper hulls are included incorporating accurate details such as the different angle of the rear plate, G1 / G2 exhaust assemblies, engine deck fan housings, mantlets...really just about every optional part to create the Jagdpantzer of your choice. Perhaps fans of Dragon kits would prefer the inclusion of Magic-Tracks with their superb detail instead of the single piece DS tracks are offered. Dragon are announcing a few of these 'bundle' kits which exploits any tooling they have readily available, unfortunately the retail prices don't really reflect the fact. A superb Jagdpantzer nevertheless.



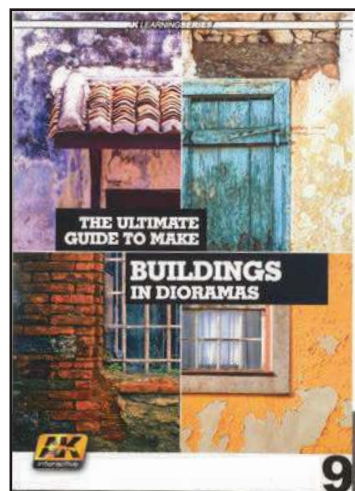
MIG Productions

The re-booted MIG Productions brand continues to release some of their old favourites. In finely detailed and cast resin are three sets of drums and containers ideal for populating modern vehicles and dioramas. www.migproductions.com



AK Interactive

AK are constantly expanding their Diorama Series with some easy to use products which give maximum effect and detail. Grass tufts come in various sizes and tones and are self adhesive with very realistic results. Bracken Fern is part of a collection of laser-cut coloured paper foliage with superb finesse and very easy to use. www.ak-interactive.com



The Ultimate Guide to Make Buildings in Dioramas

Published by AK Interactive
Softback format, 87 pages
www.ak-interactive.com



Number 9 in the 'AK learning Series' of compact little guide books focusses on buildings and features work of some of the best modellers around. Featuring kits and constructions completely from scratch there's a great variety of materials and techniques described as well as the use of reference from all around us and the best composition of the elements that go into making a successful miniature scene. There's an equal amount of diverse techniques for painting and weathering shown in step-by-step visuals with plenty of superb modelling on show to learn from and all nicely presented.

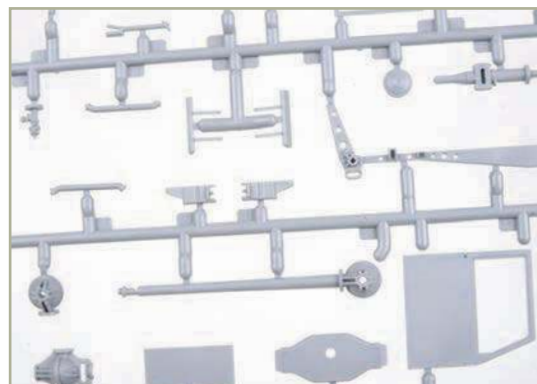
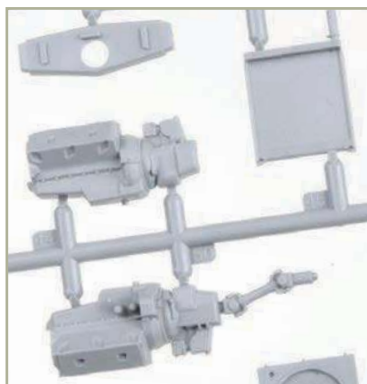
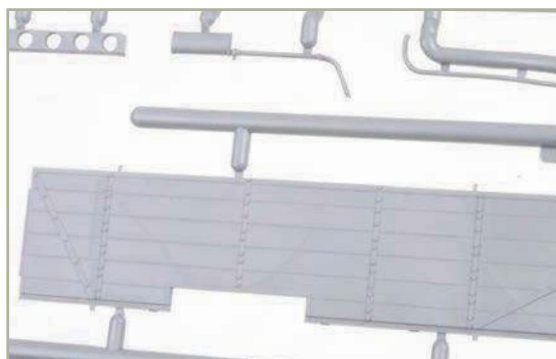
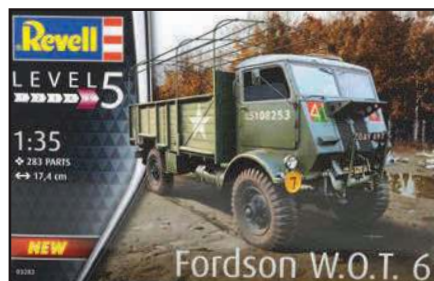


Magach Tanks of the IDF Vol.3 Magach 3 Tanks After the six-day War

Dr Robert Manasherob
Published by SabingaMartin
Softback format, 80 pages
ISBN 9781732548923
www.aviationbookcentre.com

The interest in modelling IDF subjects never seems to wain which is most probably helped by some of the superb reference available, none more so than the series of books from SabingaMartin Publications. This is the third volume focussing of the early M48 based tanks developed and modified by the Israeli forces. Aimed squarely at modellers (the author being one himself and a serving IDF Officer) there's everything you'd want to build

an accurate Magach with many period images of unique and previously unpublished images including in-action and crew studies, walk-around close up details in colour with superb images of the power-pack and engine bay, beautiful colour profile illustrations and insignia details. Detailed plan drawings in 1:35 finish a very comprehensive one-stop reference which is easily accessible if you want to build a 'proper' Magach!



Revell 1:35 Fordson W.O.T.6

With around 30,000 War Office Truck 6's manufactured they were used worldwide during WWII by commonwealth forces and even seeing service into the 1960s and 70's; testament to their rugged design. It's only fitting that we've a highly detailed modern tooled kit in 1:35 of this important soft-skin, last year ICM stepped up to the mark with a great kit of the Fordson which has now been re-boxed by Revell. With close to 300 parts this is a kit for the more experienced modeller with a fully detailed multi-part chassis frame, suspension and flathead V8 with some beautiful detail and fine moulding. The cab and rear body is also finely detailed and

we're happy to see there's no attempt at over-scale woodgrain and the cab interior is suitably busy with posable doors and a full frame is included for the rear load bed cover (comments have been made about the body style being suitable for a machine/engineer version only? time to check references if this bothers you. The vinyl tyres are a weak-spot of the kit with basic detail and dubious tread pattern if you're depicting a WWII vehicle but with the low retail price a set of resin wheels isn't out of the question should you wish. Great subject and value from Revell. Inquiries: ukbranch@revell.de Website: www.revell.de/en



Panther Ausf.G
1./Panzer-Regiment.29
Spandau
August 1945



Panzers in Berlin

By Lee Archer, Robert Kraska,
Mario Lippert

Published by Panzerwrecks
Hardback format, 392 pages
ISBN 978-1-90803-216-4
www.panzerwrecks.com

Fans of the Panzerwrecks stable will have keenly anticipated this incredible comprehensive study of the tank combat in the fall of Berlin. This big almost 400 page hardback comes with all the usual high design and production standards that Panzerwrecks are synonymous with and lavishly illustrated both with photos and the hyper-real illustrations of Felipe Rodna bringing many of the featured vehicles to life in full colour. The book begins by looking at the different German units deployed in the defence of the Capital with some fascinating first hand accounts from some of the veterans. The defence of Seelow and the retreat are examined with a fascinating list of wrecked vehicles catalogued postwar as part of the reconstruction process. The book then moves on to looking at the city area by area with mostly large full page images of the knocked out or abandoned vehicles supported with excellent captions and peppered with first hand veteran accounts again. There is a fascinating chapter looking at the 10 damaged Panthers and 12 Panzer IV tanks that were repurposed as dug in strongpoints at tactically important junctions after engines and running gear had been removed. These tanks have long provided inspiration for modellers and this brings them all together with multiple views and more of the evocative colour profiles to provide further inspiration. There is a chapter devoted to the conversion of the Borgward B IV into the B IV Panzerjäger with an improvised mounting of 6 Panzerschrecks with some great shots of the new crews inspecting their vehicles as well as plenty of images of the

vehicles recorded after the fighting. As the book moves deeper into the city we are treated to a feast of different vehicles, some will be familiar but having them printed as a full page image and in many cases with remarkable sharpness is a real treat. Photos showing an improvised maintenance area in Wilmerdorf feature near intact Panther, Jagdpanzer IV/70, Wirlwind and fabric-draped King Tiger for example. dotted throughout the book are QR codes which will allow smartphone users to view the coded photo location as it appears today, simply by pointing their camera at the code. Panther fans will appreciate the rare final production Daimler-Benz vehicles built with the Ausf.F hull and delivered in full camouflage straight from the factory. The breakout attempts by adhoc German forces are documented with streets littered with destroyed mostly wheeled and APC vehicles and the grim images of fallen troops attesting to the fruitlessness of the attempts. Postwar collection points for vehicle wrecks and an exhibition of German war equipment are discussed and throw up more fascinating images. The book concludes with a selection of vehicle wrecks who's location has not been pinpointed and by looking at the armament factories in the area, notably Daimler Werke 40. The book also comes with a loose map of the city, showing the various districts and the locations of the wrecks from the book. A stunning book, fascinating, haunting and surely bound to become a classic so snap one up while they are still in print, you won't regret it.

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GOOD SENSE OF

PUMA

CHRIS MEDDINGS details
the Trumpeter kit of the
Italian 6x6 inside and out

1:35



**I've
recently**

come back to modern
armour after a protracted
period of allied WWII and tend to
build any subject that might catch my eye
rather than focus on one area. When I saw the
Trumpeter 6x6 Puma in the local model shop it
certainly caught my eye with its one piece angled side
armour and sleek lines, so I picked it up.

The PUMA 6x6 is one of a pair of Italian wheeled Light Armoured Vehicles developed by Consorzio Iveco Fiat - Oto Melara for the Italian Army. The vehicle is manufactured in two main variants, 6 wheeled and 4 wheeled, the former is a light APC and the latter operates in pairs for reconnaissance. It is in service with a wide variety of Italian units from Special forces, to cavalry, Parachute regiments, Air Assault and Alpini regiments. They were also sold to the new government in Libya. Upgrades including remote control turrets and armoured upgrade packs are in development.



The Trumpeter kit is a great example of what can be achieved in modern injection moulding. Detail is refined and crisp, and the kit is reasonably accurate right out of the box. It also comes with a good size PE fret to add extra detail. However, for this project I wanted to get the most out of the kit, refining the detail as much as I could and adding an interior, so I also purchased the Voyager Update set (35625) and went for a set of DEF wheels (DW35047) to replace the kit's vinyl tyres. In addition to these being resin rather than vinyl, the detail is far sharper and better rendered than the kit wheels and they have a realistic and not overstated 'weight' in the sag. I would also be needing plenty of styrene sheet and rod.

OK...LETS GO

The instructions have you start by sliding the one piece upper hull over the lower floor pan, then attaching the suspension parts. As I knew I would be adding an interior I added the suspension parts that attached directly to the lower pan first so I could then fill around them from the inside

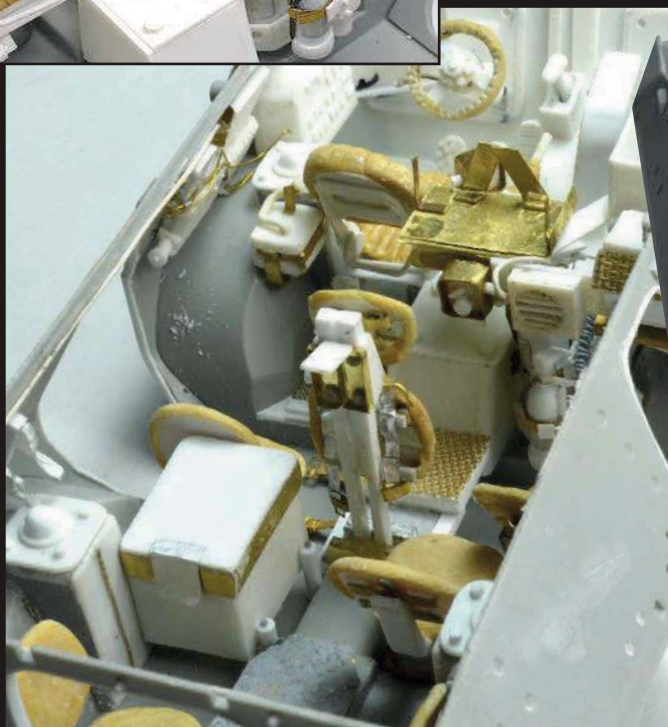
to avoid them showing in the floor.

I then took a look at the upper hull and the biggest issue the kit presents in adding an interior; the side and rear doors are moulded shut. I cut these out by carefully scribing around the doors with the back of the tip of a new blade making quite a few light passes until eventually the doors could be removed. This left me with two side doors and the large door in the rear wall, but I still had two issues; firstly the doors were too thick and secondly they were now undersized due to the material removed in cutting them out, so I made new ones from sheet styrene.

I had a look at the floor and filled all the location holes with squadron white filler and sanded them smooth, I then started work on the floor to add the basic structure of the actual floor seen in pictures. I began with the housings for the suspension springs, boxing around the round parts in the kit to get the correct square structure then sanding it to the right shape and adding welds and the domed tops. Then I added the firewall. This was

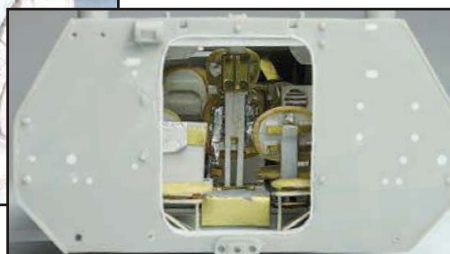
really a case of trial and error. I made some basic measurements inside the upper hull shell then tried a few shapes, testing by sliding the upper hull over the lower with it in place until I found a good fit. I then added a little detail in the form of the driver's computer screen and pedals.

I tend to work in compartments when doing interiors, to help me focus I work on one area at a time. In this case I decided to finish the Driver's station first. Utilising photos kindly supplied by JW de Boer, I worked out the right hand console with the gear stick and left hand one full of buttons. The seat provided something more of a challenge, but multiple photos helped me work it out and I built the frame from styrene sheet, rod with some additional brass rod. The seat upholstery was made from Tamiya two part epoxy putty, pressed into shape then allowed to go off for a few minutes before having the detail pressed and cut into it with various tools. Finally it was mounted into a short tube of aluminium glued onto the floor.





I didn't use all of the voyager set, but it did supply some excellent details



Voyager supplies a superb winch in brass

The right side of the forward compartment was boxed in and I discovered I had got the driver's right control console incorrect so I removed it and replaced it with a corrected version including the handbrake. The steering wheel was added and I started work on the details for the right side with boxing in in front of the commander's seat, the driver's right button console and the fire extinguishers; these latter were formed from styrene rod with copper rod hoses and stretched sprue 'security ring pulls'. I later added safety tags from thin styrene sheet and more stretched sprue. The extinguishers were then secured into their holding brackets with spare straps from an old used PE set. At this point I decided to remove the roof to make it easier to work on the interior and glued the hull shell onto the floor. I thought about adding the engine at this stage, but with too little reference to work from I decided against it.

The air conditioner was put together with

styrene sheet and had a hose made from wire wrapped around heat formed styrene rod and covered in a couple of layers of Mr Surfacer to give the illusion of a ribbed hose.

The intercom speaker had its inner grill supplied again by spare PE from a 1:72 kit, then styrene strips over that. It was mounted with the commander's intercom control box. Above this the ammunition rack was added for the commander's MG, with the driver's IC box behind it. Next I built the commander's chair in much the same way as the driver's seat and left the bottom down as if the commander had been stood in the cupola before dismounting. I built the crew seats in a similar fashion and added the large box to the compartment before finishing the interior with rifle racks made from styrene with foil straps, and adding various small electrical boxes and wiring.

The only thing on the interior that really needed doing now was the inside of the hull roof. This has a conduit carrying air

around the compartment. I made this from shaped styrene, and added the commanders grab rail from heat shaped styrene rod, I finish it all by adding the head pads that stop the commander cracking his head when using the periscopes.

After all this ship-in-a-bottle stuff it made sense to paint it before sealing it all up. I started with an off white then painted in all the details before highlighting the white with pure white by hand. The seats were painted a grey-ish blue and highlights added in acrylic. I regretted not leaving the extinguishers out until after painting, but managed to get some red on them all the same, although some touch ups on the white were necessary afterwards! I finished it with a wash of dirt pigments mixed in Windsor and Newton Oil thinners, then sealed all doors and hatches with masking tape from the inside and glued the hull roof in place.



STEP OUTSIDE

I now moved on to finishing the exterior. I started with the rest of the suspension but I have to say that was a bad idea. In handling the model to add things later on, I managed to break the fragile steering and suspension rods several times. I would suggest anyone building the model add them last. I did see in the pictures that there is a very fine anti slip texture on the upper surfaces so I added this with two thin layers of Mr Surfacer, stippling it as it dried with a scouring pad. I got the voyager set for this build as it had quite a few details I wanted to add including a jewel of a winch system. However about 60% of the set stayed on the frets. The smoke launchers, including the brass tube, supplied by Voyager really don't offer anything over the nicely moulded styrene parts and much of the kit PE is duplicated in the Voyager set, which seems pointless, although the kit PE is a

little thicker and so is sometimes more troublesome to bend, so I did use the voyager alternatives a couple of times. The parts I did use though were very good indeed and I can recommend the set for what it adds.

In terms of adding my own touches there were not that many on the exterior. I removed the moulded on springs from the driver's hatch and the rear hatch.

Trumpeter rather unhelpfully put sprue attachment points on the springs so rather than try to clean them up I made new ones from stretched sprue wrapped around brass rod. Stretched sprue is ideal for this, you can get it really thin and it remains very elastic.

I also used stretched sprue to add the cap retention wires to the smoke launchers. Voyager provides chains for this but pictures show wires.

Next I finished the doors with their external and internal details, built from stock styrene and spare brass sheet. These were mounted using the very fiddly, but very good, Voyager door hinges. These were in fact my primary reason for buying the Voyager set. Again though, this is a job best left till last. After the doors I built the M2 MG. This is a beautiful item from Voyager and the turned barrel and cooling jacket add a great deal to the model when finished in my opinion.

I finished the build by adding the very nice Voyager radio mounts and stretched sprue aerials, and masked off all clear parts. I topped it off with DEF sagged wheels. This are outstanding, beautiful detail, crisply rendered and an excellent 'weight' to the tyres that is not overdone. They are a tight fit to the axles so make sure you mask those off when painting. It's that close!

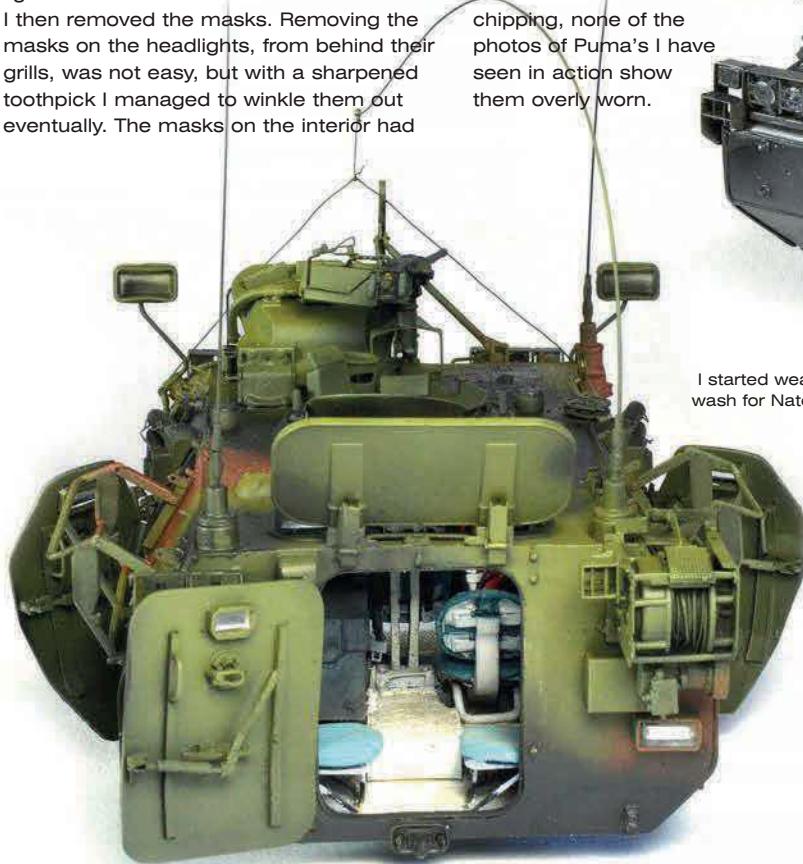
PUMA PAINTING

I started painting by giving the whole a coat of Alclad II black primer. This is my new favourite primer, its easy to spray, gives a good (and importantly: very thin) finish and is very tough indeed once cured. I followed this up with custom mixed NATO green from various Tamiya colours, Tamiya Nato Brown straight from the bottle, and a custom mixed dark grey brown for the black. If I'd started with straight black it would be very difficult to shade it later, and as models always get darker as I weather them I started the 'black' and other colours lighter.

I then removed the masks. Removing the masks on the headlights, from behind their grills, was not easy, but with a sharpened toothpick I managed to winkle them out eventually. The masks on the interior had

provided a good seal and I was relieved to see I didn't need to fix up the interior paint work.

Weathering began with several highly diluted applications of AMMO 'Wash for NATO vehicles' as a pin wash, then what that was dried a couple of light all over washes with the same. Next I painted in all the details and added some scratches and dings with lighter acrylic with Vallejo Grey Black in the centre. I didn't go overboard with the chipping, none of the photos of Puma's I have seen in action show them overly worn.



I started weathering with washes of AMMO wash for Nato vehicles

I then added the decals, these when on with no drama. They were settled with Mr Mark Softner, which I find avoids any silvering later, with or without a preparatory gloss coat. I no longer bother with the gloss personally. The wheels were next and I used Vallejo Grey Black, diluted, on the tyres, giving them a couple of thin coats by hand, leaving the hub black from the primer. Once this was dry I gave them a few light washes from heavily diluted black oil paint.

After this I started on highlights. I mixed a yellowish green using ochre and jade oil, almost entirely Ochre.

I applied this un-thinned in very small dots on upper edges and other areas I wished to highlight on the model and worked them in with a clean, soft short haired brush. I applied a very little at a time and waited for it to dry for a while before deciding whether I wanted to add more. I also added very light streaks using the same mix. I also mixed a lighter grey oil and drybrushed the tyres.

The careful masking of the painted interior thankfully paid-off with no need for any retouching.

By this time the oils were dry enough again to work on. I used the diluted AMMO wash to add shade to lower areas using it as a filter. The enamel based wash dries very quickly which is a boon considering the speed at which I prefer to work when weathering. Once that was dry I added a little more shade around details with a thin pin wash that I allowed to bleed slightly into the surrounding areas to provide better transitions. In other areas I added more oil for highlights, this time with neat ochre oils. I made several applications of the light and shade until I had achieved the contrasts I wanted. Usually I follow this with a wash to unify it all and soften the contrasts slightly, but in this case the base colours were already dark enough and I didn't want to take that further so I used restraint in the light and shade to avoid overdoing it.

There was now a slight sheen to the model. Normally I would matt this down, but in this case I know modern vehicles are not usually completely matt, so I left it as I thought it would provide a nice textural contrast to the dead flat 'dust' I was about to add. At this stage I had to leave it till it totally dried. If I had added pigments right away they would get stuck in the oils and ruin the finish so I left it a good 48 hours to cure.

Below At this point I took a break from painting while the oils dried and started on the base.

This was a solid oak base onto which I built a 'box' of styrene shaped into the profile that I wanted for the ground work. I used a styrene floor to the ground work to avoid moisture seeping into the oak and causing it to warp. Onto this I layered sheets of expanded polystyrene to build up most of the height, saving on weight. On top of this I poured a mix of household filler, pigments and paints. The pigments and paints mean the mix is the right colour all the way through so if it cracks later no white shows through in the cracks. I finished it by pushing 'grass' cut from old paintbrushes into the wet mixture in tufts.



Once the oils had cured I could now add pigments. I mixed a reddish-orangy-brown from various MIG and AMMO pigments and diluted it with a lot of oil thinners. Using a fine brush I added it in small amounts at a time around all the details first, where dust would naturally collect, then in more dabs, building it up slowly in other likely places where it would either naturally collect, or where crew would deposit it. It applied more on the lower surfaces of course, especially in the wheel arches.



Once the thinners had evaporated I looked to see if I wanted to add more, and I did, so the process was repeated adding only a little at a time, until I had built up the effect I wanted to achieve. When it was all dry I gently brushed it all with a soft wide brush to smooth out the edges. Finally, to duplicate the streaks seen in some photos where a light rain had run through the dust, I dipped a fine brush in thinners and with quick downward strokes, added the streaks of 'clean' showing the paint underneath.

To finish the model I painted the sides of the base gloss black. At this point I fumbled and dropped the base! The plaster cracked and broke off the polystyrene underneath and at first I thought I had a disaster on my hands. But then I thought I liked the cracked look. It looked like soil that had been baked in long weeks of sun, pretty much the right look for the environment I wanted, so I stuck the pieces back on with PVA, and ground up the leftover plaster stuck in the pot it was mixed in and added that to the gaps. I dripped diluted PVA onto the base to secure it all and finally (when the glue was dry), I added some of the same pigment mix I had used on the model to the base to tie it all together and give the model and base the same sense of place.





he model was finished with numerous applications of pigments suspended in oil thinners and the same was applied to the base to finish it



the base was built with coloured plaster to simulate arid conditions and the model placed 'dry' before fixing to test all the wheels would sit correctly on the adjusted suspension

Conclusion

the trumpeter kit is a great little kit and although it needs some work to do what I've done, it is easier than most kits to work with as a detailer. The DEF wheels are, I would say, essential if you want a great looking model. A highly enjoyable project overall and I would like to thank JW de Boer for his considerable help which made the build, especially of the interior, possible.

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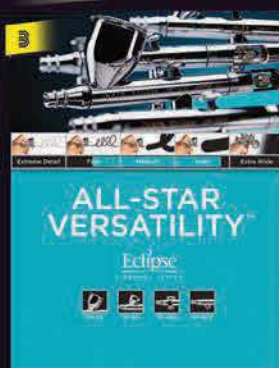
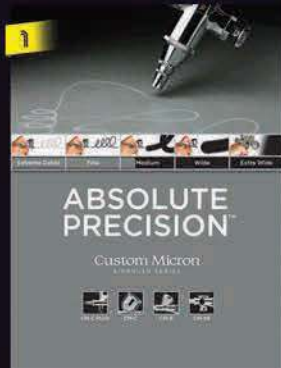
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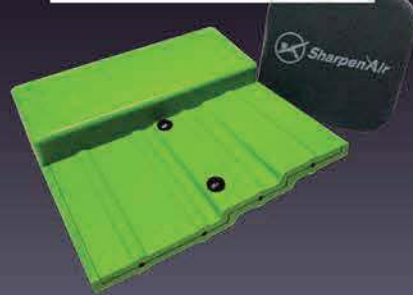
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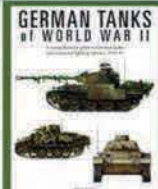
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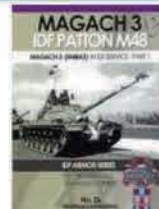
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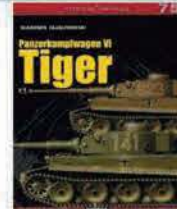
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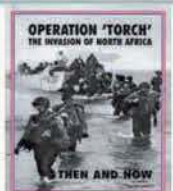
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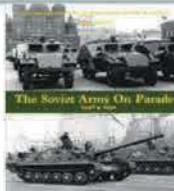
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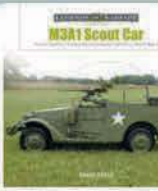
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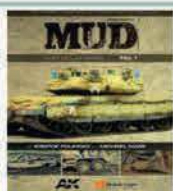
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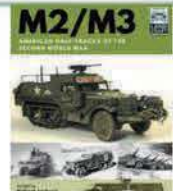
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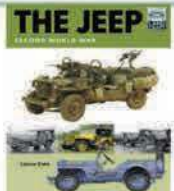
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