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BERGEPANZER 38(t)



KEV SMITH'S "LITTLE HELPER" BUILT USING
THE THUNDER MODELS 1:35 KIT

HETZER



Beregpanzer 38(t) was a recovery vehicle based on the Hetzer chassis with lower open-top superstructure, manufactured by BMM company in Prague. The plans were approved in September 1944 with a total of 170 vehicles but the German war machine could only produce a total of 101 vehicles. The Beregpanzer were equipped with a two-ton tri-pod collapsible crane able to remove engines and other components of a stricken vehicle. In Addition, the vehicle was equipped with a five-ton winch, this was driven by

the vehicles power pack through a transition system. The Bergpanzer 38(t) was developed to accompany and recover Hetzer for the unit's operating the new Jagdpanzers. One Beregpanzer was to be manufactured for every fourteen Jagdpanzers, but by September 1944, only seven were available. The open topped vehicle was an ideal base for conversion. For example, production commenced of the 15cm Sig33 Sf based on the Bergpanzer, other variants include a 2cm Flak38 mount.



In typical fashion the construction of the Hetzer begins with the lower hull and running gear. There are no surprises to catch the modeller out, the parts build up with ease. It seems logical to me that with the anchor mounted to the rear, the vehicle would be low on the rear suspension units. To replicate this the rear two sets of swing arms were re-worked so that the Hetzer would adopt a slightly lower stance towards the rear of the vehicle



This is the appearance I was after. The subtle rearward shift of weight can be observed in these shots.

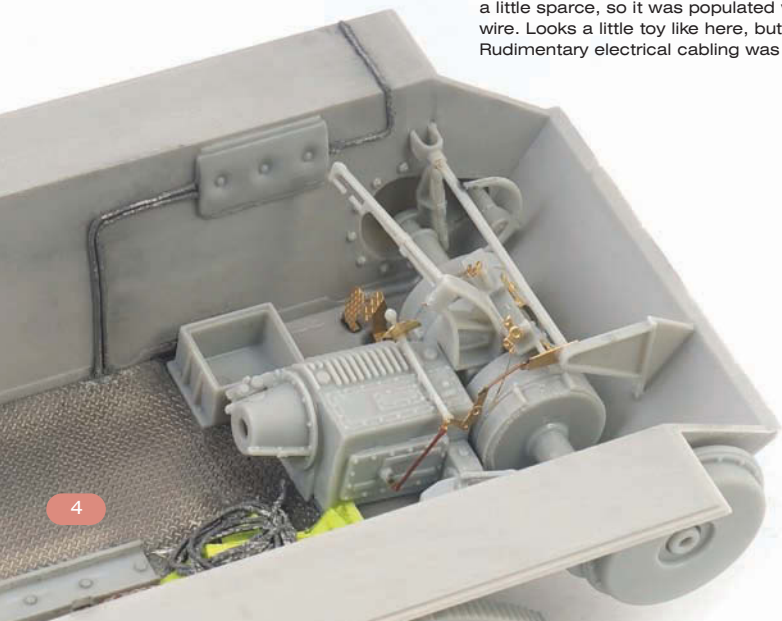


Photo etch isn't for everyone and can be frustrating to use, but you can't get away from the fact that using the fine metal parts add a greater level of finesse to your model. Include in the box is a small photo etch fret that mainly provide details for the interior such as details on transition, and drivers controls. A nice touch is the inclusion of some details for the rear plate and the large air vent on the engine deck



Reference photos indicate that there are a number of securing points on the front glacis plate. Fine 0.3mm wire was inserted into holes that were drilled into the front plate, the loops were formed, then pulled from the reverse side until the desired depth is reached. The weld seams are a little weak on the model. Tamiya Epoxy Putty is an excellent medium to use for this task. The putty was rolled into long noodles, placed onto the model, a tooth pick was cut down and used to fashion the weld pattern.

Here is a good example of the advantages of photo etch. This level of finesse could not be reached with plastic parts alone. I did use artistic licence as far as the floor plates go, I couldn't find any reference for this area and settled for some off cuts German floor plate, this was intern cut to fit the hull. The floor area looked a little sparce, so it was populated with a jerrycan and off cuts of paper, and led wire. Looks a little toy like here, but once painted, looks very convincing. Rudimentary electrical cabling was also added.





Pictured here are pretty much all the additions I have made to the external areas of the model. reference pictures show that, whilst not rough the external metal surfaces do exhibit some texture. Tamiya putty thinned with liquid poly glue which was then stippled onto the surfaces to add a little texture to the metal plates. The missing tarpaulin frame was fashioned from thin wire and plastic rod.



A total of six individual parts builds up the large anchor and is an impressive piece of model design. Even though a little extra work was needed to add a little more authenticity. The weld seams are missing from the joins of the large blades. Stretched sprue was fixed in place with Tamiya extra thin cement, whilst the lengths of thin sprue were still soft, the weld pattern was embossed with a cut down tooth pick. Any resulting rough edges can be cleaned up with another pass of the Extra Thin.



When it comes to the tracks, I like to build them up as complete sub-assemblies. Particularly the link and length type that are becoming more popular with kit producers using this method, in my opinion this way of approach speeds up the building time, and more importantly, the painting and weathering of these track runs is a lot quicker.



Because of the interior detail of an open top vehicle the model has to be painted from the inside out. This isn't a problem as long as time is taken and some planning ahead - once things are buttoned up it is virtually impossible to rectify any mistakes or go back to any missed areas. Here, the painting of the interior is well underway. Following the basic paint guide on the instruction sheet AK 3G set 11688 German Interior set was used and applied through my airbrush. This is my first experience of these paints, and I have to say that I found them to be excellent.

Note: I used a little artistic licence as far as the internal construction. I figured that the sponsons would be used for extra stowage.

The two rails were fabricated from plastic rod with items from the spares box. The seat is also an addition.



The weathering of the interior is complete. The large winch has been painted and weathered separately then fixed into place.



With the hull interior completed, it is time to turn attention to the exterior areas of the model. The two halves were mated but before painting could be addressed, the three interlocking joints needed attention. The detail is surprisingly soft here, but is easily improved by using Tamiya Putty. With the finer details taken care of the model was under coated in Tamiya XF-69 NATO Black. Over the top of this, a light coat of AK 11318 Dunkelgelb, this was then lightened with a couple of drops of 11372 White, this mix was then mottled free hand through an airbrush over the top of the basecoat. The wooden beam you can see in this picture is fashioned from Balsa wood, with a simple frame cut from plastic card off cuts.



Before I started the model, I knew the large anchor would be a focal point. I had in my mind that the real anchor would consist of a metal surface covered with different layers of primer and paint. I started with a layer of AK 126 Dark Base to represent the bare metal. This was then followed with a layer of hairspray. Over the top of this, the base colours were applied, followed with more hairspray. Whilst this was still wet, I sprinkled on some salt. The trusted hairdryer used speed up the drying time.

This was followed with more layers of Dunkelgelb. At this stage the whole thing looked a mess, and I did wonder if it would work at all. The anchor was the held under a running tap and washed off with an old toothbrush, I was pleasantly surprised with the result. Next Humbrol 27003 Metal Coat was dry brushed onto the leading edges of the anchor then buffed up with a cotton bud. The final stage was to flick on different shades of orange oil paint to suggest rust forming on the anchor.



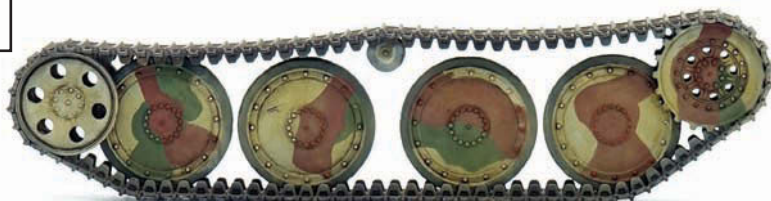


I had two choices when it came to applying the Camouflage pattern. Airbrush over a masked pattern, or as I have done paint by hand. I thought with the overall size of the Hetzer it would be a lot quicker to paint by hand. The approach was to paint on the individual blocks of colour with heavily thinned (water) coats of paint.

Once that the pattern was complete, a light coat of Tamiya XF- 60 Dark Yellow was airbrushed over the model to unify and pacify the bright Camouflage pattern.



With the hull ready for weathering, it was time to turn my attention to the tracks. AK Track colour was airbrushed on to the whole of the sub-assemblies. This will act as a pre-m shade.



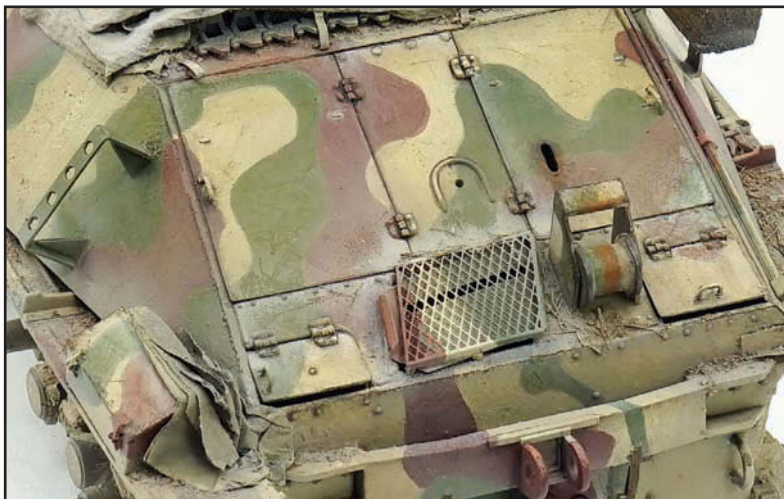
The track assemblies were painted in the same way as the hull. With both track runs painted, the weathering can begin.



AK Dried Ground was stippled onto the undersides of the track guards and lower hull. when dry, an old short bristled brush and toothpick, were employed to flick on AK Splatter Effects Dirt on to the areas the tracks to represent fresher mud thrown up by the tracks. Fresher mud was concentrated to the rear most road wheels.

Now that the tracks were finished, and put away in a safe place, it was time to start the weathering of the hull. The first stage is to add some fine dried soil and static grass to logical areas of the vehicle, after all there is nothing like real soil to replicate soil. The deposits once in place can be moved around the model with a paint brush until the desired effect and location is reached. The deposits are then fixed in place with a drop AK Soil and Sand Fixer.

Next stage is to give the model a light coat of hairspray, distance and speed of application is a key factor here, don't flood the model with hairspray. I hold the model at arm's length, and work from front to side then the rear. Next, a homemade dusting of light grey mixed with Tamiya XF-57 Buff and XF-63 German Grey was loaded in to my airbrush, and was blown on sparingly, lingering slightly where dust build up would occur. Don't forget to dust over the mud deposits, as this unifies the fresh soil with the model surface. The final step is to remove the layer of grey with a damp brush leaving the desired effect behind. Thinning the Tamiya paint with water goes a long way with helping the process work, using lacquer thinners creates too strong of a barrier. A nice touch is to add fine scratches and scuffs in the dust with a toothpick.

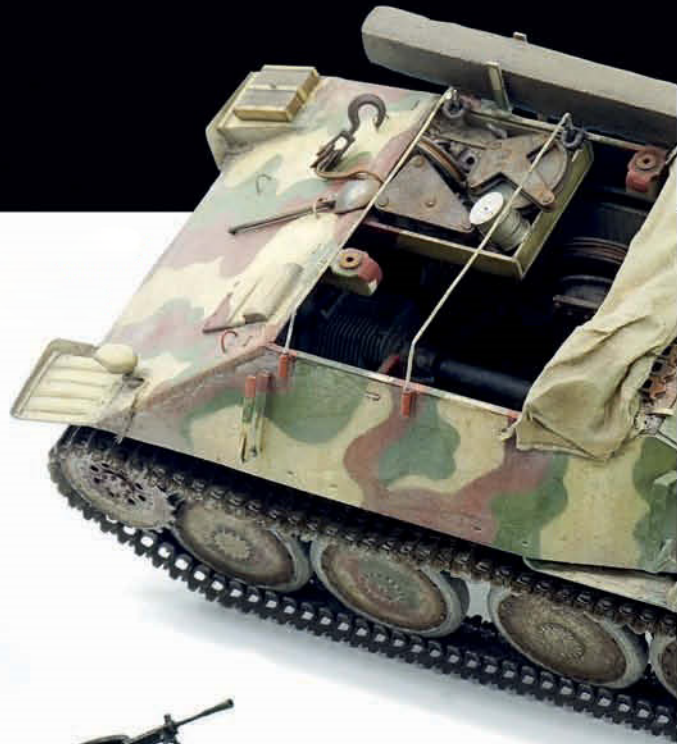


The toy like appearance of the wood in the tool tray that was supplied in the kit was replaced with some cuts of thin wood from food packaging.

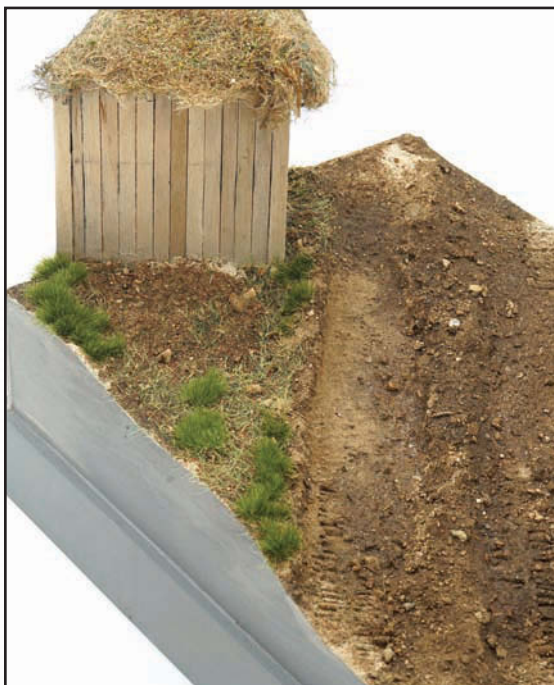
The crane equipment was painted and weathered separately, then randomly placed into the tray. Items of stowage can help tell the story of the vehicle, so it's important to spend time on detail painting of these items.







A suitable picture frame was purchased once the base rough dimensions were established. These are inexpensive and ideal as bases. A saw and hand grader are essential tools when working with insulation foam. One to cut, and the other to form the features of the ground work.



I wanted to create a little height to the base, to do this, I incorporated a little slope in the foam and for added interest corner of a farm building. The first step was to construct a Balsa Wood skeleton of the building to the required dimensions, once happy, coffee stirring sticks were cut to size and fixed to the balsa frame. Not forgetting to add the nails holes. The final construction stage was to add the thatch roof. The best material I have found to recreate this, is hanging basket liner, the material can be thinned by pulling the mat apart to the required thickness.

Balsa wood was used to form the walls of the diorama. After sanding with fine grade sand paper. The soft balsa wood received four coats of thinned PVA Glue to add strength. The over the top of this grey car primer was sprayed directly from the can.



A paste mixed from real earth, fine sand, and PVA glue was spread over the foam, followed with dried earth sprinkled over the top of the wet paste, then left to dry overnight. Here we can see the beginnings of the grassed areas, I used tufts from the AK range. These were stuck onto the groundwork in a random pattern over the base. Then, Static grass mixed with sea grass was sprinkled over the surface area. Secured in place with thinned PVA glue. I try to use as much variety of textures to add visual interest, this also reflects mother nature.



Once the groundwork had dried the entire base is painted black with matt black.

Thinned AK Wood base was heavily thinned and airbrushed on in thin coats to replicate the wood finish. This was followed with washes of 502 Abteilung oils.



I then applied the more the more coarsely textured AK earth Products to areas of the track, the final layer was stiffened with tea leaves to replicate churned up earth.

Tamiya paint was airbrushed on to replicate the earth tones. This was followed with washes, finally picking out the individual stones with earthy greys painted by hand.

Here we can see the use of different densities of foliage. In this case the grass tufts are perfect for the low-level areas, then the mid-level is taken care of with AK foliage products. With the grass airbrushed with different tones of greens, the ground work is finished.



The figure was painted in Acrylics for the base colours of the clothing, with oils employed for the flesh tones. To give the crew-man a little character the supplied head was substituted with a Hornet item.



I enjoy building an open-top vehicle, of course, there is a lot of work involved, but, as with any model, the modeller gets the reward from the effort put into a project. The lack of good references on the interior layout of the Bergehetzer was a hindrance. I added the commander's seat as I reasoned he would need one. A little frustrating to get some of the smaller details correct, but overall an enjoyable project all the same.



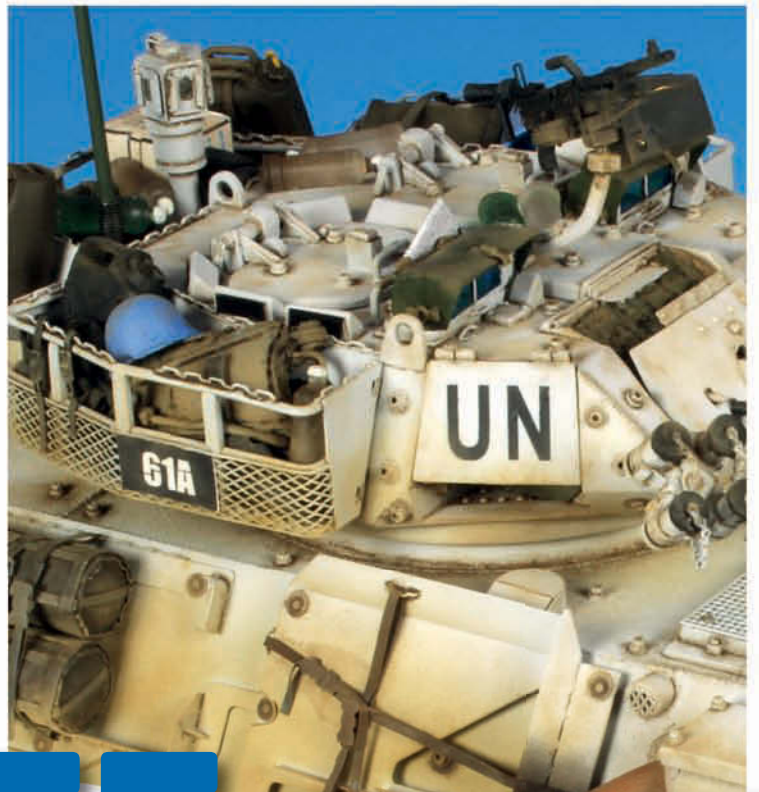
HELPING HETZER

Jason Bobrowich builds a United Nations Canadian Coyote Recce LAV



In 2000, the war between Eritrea and Ethiopia came to a cessation and the United Nations established a Temporary Security Zone to monitor the withdrawal of Ethiopian forces from Eritrea. The United Nations Mission in Ethiopia and Eritrea (UNMEE) resulted in Canadian forces deployed under the umbrella of Operation Eclipse. Canadian Infantry and Engineers conducted patrols, humanitarian tasks, manned checkpoints, monitored the withdrawal of forces, and participated in minefield clearance tasks between December 2000 until the completion of the mission in June 2001.

The deployment of Coyote Recce LAVs from 2nd Battalion, Royal Canadian Regiment, H Company, Reconnaissance Platoon was the first and only mission for the Coyotes in United Nations white paint. The Coyotes in Recce Platoon were the ground deployed "Battle Group Surveillance Suite" version and did not have the mast-mounted sensor array. The white paint and UN markings provided a unique look for the Coyotes and set them apart from the commonly seen NATO green Coyotes as well as the tan painted Coyotes initially deployed to Afghanistan.



COYOTE ECLIPSE





COYOTE CRAFTING

The UNMEE Coyotes did not have the add-on armour panels attached. This provided me an opportunity to build a Coyote using a combination of a base kit, an aftermarket conversion, and some scratch building.

The 1:35 Trumpeter ASLAV 25 formed the base for my build. Added to the mix to create the Coyote was the Real Model Unarmoured Coyote conversion. The ASLAV 25 kit provides most of the upper and lower hull components as well as the turret. The Real Model conversion focuses on the main add-on components that are required to transform the ASLAV 25 kit into the Canadian Coyote. The approach taken by Real Model in their conversion requires more elbow grease by the modeller to add fine details not included in the conversion, but it reduces the overall cost of the conversion for the modeller.

GROUND UP

The upper hull required preparation for the Real Model conversion parts. I removed the hull side periscopes, the moulded-on tie down loops, exhaust mounts, and filled a variety of holes not required for the conversion. On the left hull side some surgery was required to create a missing hatch. The Canadian Coyote has an oblong hatch containing access to a variety of connections for the ground mounted sensor and communication cabling. To create the hatch and cover I used a Trumpeter LAV III kit to donate the required parts. I cut out the oblong hatch from the LAV III kit and cut a same sized shape in the ASLAV 25 kit. The fit was near perfect and with some filler putty the hatch was sealed in.

On the rear upper hull, the ASLAV 25 kit include a recessed cut out for the fuel filler cap. This is not present of the Coyote and filled in with putty and sanded over. Also, on the upper rear hull the circular hole for the ASLAV dome vent was filled in.

The Coyote's upper hull surfaces have a factory applied pattern of anti-slip. I masked off the upper hull surfaces and sprayed light several coats of Rust-Oleum Fine Black Textured Finish Spray Paint.

The Real Model conversion includes a resin replacement rear hull section for the square shaped doors on the Coyote. A minor amount of clean up was required to get a near perfect fit. The lower hull was prepared by sanding off the mounts for the trim vane on the lower front. I also blanked off the open channels on

the hull bottom for the marine drive components as the Coyote does not have a swimming capability. A series of mounting bolts and access plugs were added to the blanked off area. The upper and lower full fit nicely together but did require a minor amount of filler and sanding.

The suspension assembled as per the instructions except for leaving off the marine drive components and adding two additional details to increase accuracy. On the rear four brake and vent line covers I added angled deflectors and brake/vent lines using styrene strip for the deflectors and copper wire for the lines. On the four front suspension stations I added dual vent and brakes lines using copper wire to each strut. The Real Model conversion includes a full set of resin Michelin XML wheels. The resin wheels required the removal of the casting plug which earmarked the location for sanding to create a flattened weighted spot on each wheel.

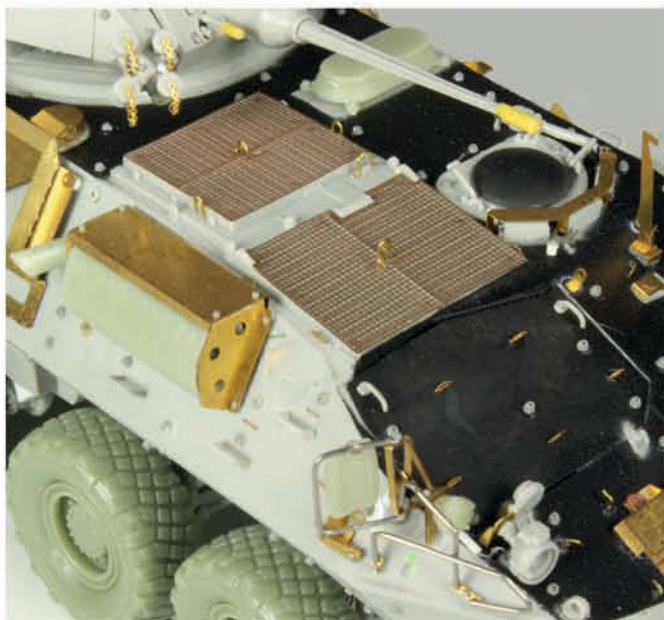
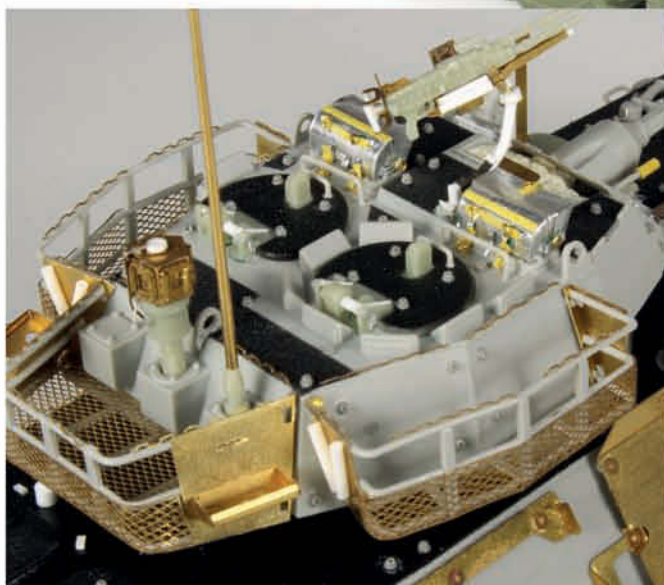
SIDE BY SIDE

The hull sides have a slew of racks and brackets for the vehicle kit and surveillance package components. I started with the replacement resin exhaust. From there I worked my way along the right hull side adding the photo etched parts. Comparing reference images to the parts they are not the same size, and I found the photo etched parts just a touch undersized compared to vehicle images. Moving on to the left side I started at the front and worked my way back along the hull side bending and attaching the photo etched parts. The pioneer tool rack requires additional work to create the frame from brass wire and attached the mesh cover.

The tail lights created a unique challenge as the photo etched guards require delicate bending and the angles need to be near perfect to allow the resin lights to be inserted into the guards. This required several attempts, and this is a component Real Model created undersized compared to reference images.

REAR TO FRONT

The hull rear started off with adding an oblong vision block on the left door as Real Model failed to include the vision block in their resin door. On the lower edge of the rear hull, I added two small airline connections inside the photo etched bracket.



On the upper hull rear several details were added convert the ASLAV 25 hull to a Coyote. A raised angled styrene addition was integrated on the top of the left rear top hatch. Around the hatch a series of raised armour mounts were added. A brass wire handle was the last detail added to the hatch. Several other raised armour mounts and hatch locking brackets were added to the upper rear hull to finish it off. Real Model's photo etched engine grills attached once the raised edges of the kit grills were sanded down flush all the way around. Added to the grills and surrounding area were multiple brass lifting eyes. At the driver's hatch, a photo etched periscope guard was added as well as periscope washer nozzles. The glacis plate was detailed with a wire cutter, windscreen mounts, a licence plate mount, tow cable brackets, and multiple tiedown loops on the engine hatch.

On the glacis plate the resin headlights and turn signals were attached to photo etched mounts. Thin wiring and a styrene conduit were added to each headlight mount. To finish the front hull the large mirrors, mounts, and multi-angled brush guards were added to both front hull corners. I started with the photo etched angled mirror mounts as they would add stability as an anchor point for the mirror arms. The mirror arms were formed using solder and attached to each bracket. A variety of Meng bolts were added to the mirror mounts and arms. Each end of the brush guards attaches to mounts on the hull side. I attached the photo etched mounts to the hull first to provide a landmark for correct placement. Using solder, and patience, I started with bending the outer brush guard. The inner brush guards are a simpler shape but need to be positioned perfectly through the mirror mounts and then attach to the hull mounts. Next, the multitude of add-armour mounts were added to the entirety of the hull. Meng 1mm bolts were used for the mounts and each mount was drilled out slightly with a pin vise bit to create the tapped opening.



TURRET TRICKS

The ASLAV 25 turret and the Coyote turret look similar. They share the same basic turret, the mantlet and 25mm cannon are the same, and the stowage racks are the same. The similarities end there, and when looking closer there are a variety of modifications that needed to occur to create a Coyote turret.

Anti-slip surfaces were mapped out and sprayed on the turret top in the same manner as the upper hull. The mantlet cover on the Coyote is very evident and a tight accordion shape rubber material for the 25mm and coax. I used Tamiya Smooth Surface Epoxy Putty to form the cover. After letting the putty set, I used blunt edged tools to form the shape of the tight folds.



The turret sights were modified to include the covers. Real Model provides the sights in resin, but the covers seen on operational Coyotes are not included in the conversion. I opted to use thin metallic foil to form the cover on each sight. Added to the covers were Tamiya tape straps and wire buckles.

The resin turret hatches provided in the conversion replace the plastic versions in the kit. The hatch hinges and mounts did require additional styrene details as the resin mounts are undersized.

The multi-barrel grenade dischargers (MBGDs) from the ASLAV 25 kit were used but the mounts for the turret needed to be completely rebuilt. The ASLAV 25 mounts are simple vertical stalks while the Coyote mounts are horizontal and angled extending the distance of the MBGDs out from the turret. Using styrene strips and rod the mounts were cut and formed to accept the MBGDs. The side and rear turret bin frames are directly from the kit. I opted to use the Real Model provided photo etched mesh for the sides and bottom of the turret bins as the details are better than the Trumpeter photo etched parts. Added to the top of the bin rails and the turret edges are a host of photo etch tie down loops. The detail really starts to stand out when the sections of tie down loops were attached.

I ran into a challenge with the turret jerry can racks. The Real Model photo etched jerry can racks are well formed but they are undersized to fit any 1/35 modern water or fuel cans. I tackled this issue later in finishing.

I moved back to the front of the turret and added the 25mm and coaxial machine gun. The UNMEE Coyotes had muzzle covers on both guns, so I was able to use the kit parts without having to details the muzzles. I used Tamiya tape to create the muzzle covers with a light coat of PVA glue to provide a rounded look. On the 25mm muzzle cover I also added a wire cinch strap and a small metal loop on the bottom.

A total of four mounts were attached to the turret for antennas

and the Laser Warning Receiver (LWR). On the turret rear the LWR was attached in the center. Real Model provides the raised mount in resin and a detailed LWR is constructed using multiple photo etched parts. On the left side of the LWR a blanked over antenna mount was attached. On the right side of the LWR, a mount and antenna were attached. I used a Real Model antenna based which was drilled out to accept a single brass tapered antenna produced by BMK (BMK-352). The fourth mount is attached to the front left side of the turret. I sourced this blanked over antenna mount from the Trumpeter LAV III kit. Added to the outside of the mount is the Tactical Command & Control Communications System (TCCCS) box. Provided by Real Model as several photo etched parts to create the box, multiple Meng bolts were added to finish the detailing.

I proceeded with the task of prepping and attaching the myriad of add-on armour mounts to give the turret some further 'pizazz'. Moving on from this task I set about to create the mount and cradle for the turret top mounted C6 GPMG. The machine gun mount supplied in the ASLAV 25 kit is the Platt swing mount and not correct for the Coyote. The resin curved mounting arm provided in the conversion is inaccurate. Real Model provides a basic photo etched cradle for the C6, but it is under detailed. Using the Real Model resin C6 and photo etched cradle I used reference images to add further details. The butt stock of the C6 was removed and spade grips added. On the cradle several details were added to bolster the size and shape of the cradle. I used spare photo etched parts to create a likeness of the butterfly trigger mechanism on the left side of the C6. The front pintle received a mount which would be mated to the vertical mounting arm. The vertical angled mounting arm was formed using styrene rod bent to replicate the correct angles and curves. The final addition to the cradle was the addition of the Real Model 7.62mm ammunition box. This is a small but impressive part that even includes a detailed lid latch.

GEARING UP

On the left hull side, I selected a modern water can, fuel can, and a fantastic 3D printed Naphtha can (white gas) created by Canadian modeller Jim Carswell. Pioneer tools were finished for the caged hull storage rack. On the turret I assembled a variety of small items for the side and rear storage bins including ration boxes, resin water bottles, an out of production Maple Leaf Models Canadian C7 rifle, helmets, a small duffle bag, and a water hydration pack.

On the engine hatch, a tarp was created using a section of a black nitrile glove. I have used this technique to make very realistic modern rubber tarps for years with impressive results. I rolled the tarp shape and then used two photo etched straps to secure it aligned with the engine hatch tie downs. Voila, no fuss, and not a drop of glue used to create or secure the tarp.

On the right hull side, the stowage would consist of two large cylindrical bags which hold the ground surveillance system components. These bags do not exist as aftermarket items so with epoxy putty and metal foil in hand I scratch built the stowage bags. I cut two sections of 5.5mm or 7/32" styrene tube to form a base for the bags. I used Milliput two-part superfine epoxy putty to plug the ends of the tubes and created a slight bulged look. I cut Deco brand metal foil to wrap around the tubes to replicate the rubberized bag material. Before wrapping the foil, I bunched it up and then carefully unfolded it to create slight unevenness in the material. With the foil wrap and putty ends in place I used Voyager Model's photo etched modern strap buckles and Tamiya tape to create the bag seams and the quick release buckles.

The final stowage adaptation were the modern fuel cans in the turret storage racks. As stated earlier, the photo etched racks are under scale for kit or aftermarket cans. I elected to modify resin fuel cans by sanding them down equally until they slid into the racks.

WHITE LIGHTENING

I primed the turret and hull with Vallejo Grey Surface Primer. After the primer was airbrushed on the hull, I noted several imperfections on areas that had been filled and sanded. I attempted to re-fill and sand the small areas, but the Vallejo primer did not respond well. I decided to strip the primer off the hull but that proved exceedingly difficult with the Vallejo primer and the hull was deemed not salvageable. I decided instead to completely rebuild the hull in the exact same fashion with a new ASLAV kit and new Coyote conversion. The second new hull is a better build than my original and I happily restarted the painting process. The new hull was primed with Vallejo Grey Surface Primer. This primer is a white more than a grey and

served perfectly as the base coat. I used Tamiya XF-2 Flat White as a highlight coat to achieve a very subtle level of colour modulation. Once the base coat was airbrushed on the hull and turret, I moved to applying the UN markings. The UN markings on the UNMEE Coyotes were unique as they varied in size and the locations they were placed. I used a variety of UN decals I had on hand, and they looked the part compared to reference images.

DUSTY ROADS

Patrolling the roads in Eritrea resulted in weathering ranging from light to heavy deposits of road dust on the Coyotes. The dust ranged from a sandy coloured consistency to a reddish tone. My goal was to replicate a moderate buildup of dust on a Recce Platoon Coyote. Using Tamiya XF-49 Khaki, I airbrushed from the lower hull upwards to create a tapered look for the dust pattern. Weathering a white vehicle creates an opportunity to use washes to great effect. I used several pinpoint washes of Windsor & Newton Raw Umber oil paint varying in consistency to pop out details and further add to dust and dirt build up on the Coyote hull and turret. With the starkness of the white still present I used a highly thinned Raw Umber filters on some of the horizontal surfaces on the hull. This was particularly concentrated around the turret ring where layers of dust could accumulate.

According to my reference images, the Coyotes in Eritrea did not display any tangible amounts of paint chipping on the white paint. The exception was on the muffler and exhaust pipe on the right side of the hull. The white paint applied over the NATO green became heat scorched and discoloured. To replicate this effect, I used a combination of oil washes and then layers of brushed applied pigments ranging from light rust, brown, black, ash, and white to create the heat related paint discolouration.

Moving to ground level, the wheel hubs were painted with the base coat of Vallejo Grey Surface Primer. The tires were painted with Tamiya XF-69 NATO Black. As I wanted to replicate a weathered look on the tires displaying ingrained dust in the treads, I over sprayed the black with several layers of Tamiya XF-49 Khaki. I applied several washes of Raw Umber on all hub and tire surfaces to provide additional depth. To create the contrasting bare rubber on the surface of the treads I dipped a nitrile glove finger in black pigment and slowly traced the circumference of the tire. The result provides a unique look for the tires which blends with the dust build up on the lower hull. The weathering on the hull and turret was enhanced with the brush application of pigments to expand the airbrushed Khaki and fill in gaps on the white surfaces. The Coyotes in Eritrea varied with large deposits of dust to more sporadic areas, so I my goal was to create something in the middle.







FINAL TOUCHES

To complete the detailing and add some pops of colour, I used solid red and orange acrylics for the taillight and front signal lights. Applied over top were light coats of darkened Tamiya X-26 Clear Orange for the signal lights and Tamiya X-27 Clear Red for the tail lights.

The large, wing mirrors were finished by cutting silver metallic confetti to fit the frames. The result is very realistic for creating a mirror finish. For the driver's and turret periscopes I used a simple technique to finish the lenses. I cut black 35mm film negative (yes, it still exists!) to the shape of the periscope glass and simply attached them with PVA glue. The headlights were completed by attaching craft related silver epoxy dot products for the lenses.

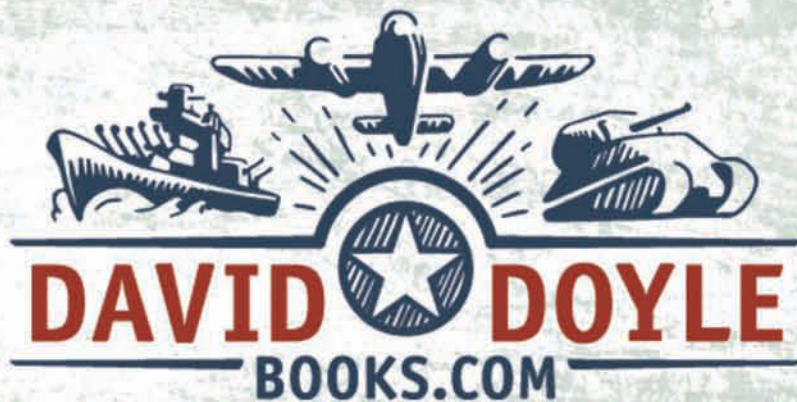
The turret sight optics took on a different approach. The turret sights on the Coyote have a visible blue hue. To recreate this, I painted the optics Tamiya XF-69 NATO Black. I then applied AFV Club Anti-Reflection stick on lenses on the sights. Overtop of the anti-reflection lenses I added blue clear styrene plastic. The result replicates the blue hue of the real sights very well and creates depth with the optics.

Finishing off the detailing included the addition of the Canadian Forces licence plates on the hull and the call sign boards on the turret baskets. The licence plates were created using Archer Dry Transfer Canadian licence plates applied to thin metal foil. To replicate the specific plate number for the Coyote I was modelling I used number decals produced by Echelon Fine Details in their Canadian Leopard C2 decal sets. The call sign boards were drafted on the computer by modifying the "Impact" font to accurately replicate the style used on the Coyotes in Eritrea. Once sized to 1:35 and printed, the call sign boards were attached to the turret bins.

ROLLING OUT

Building an UNMEE Coyote provided me with opportunities to use a well-produced conversion, adding multiple details to improve the accuracy level, and focusing on creating a realistic weathered finish on a white AFV using multiple techniques. I look forward to my next Coyote build which will take shape as a tan painted Canadian Coyote deployed to Afghanistan in early 2002.





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Model by Fabio Sacchi



OBICE

305/17 Garrone (R090)

KAREL SUTT RETURNS WITH
MORE OLD-SCHOOL TRICKS AND TIPS ON
SCRATCHBUILDING AND EXPERIMENTS
IN HEAVY WEATHERING





COASTAL DEFENDER

A couple of months ago I had to address a situation well known to modellers who scratch-build or make conversions presenting the problem of how to make a model's 'essential' larger components.

I bought Criel's resin kit Obice 305/17 Garrone (R090). The reason for my purchase was to use the Obice's barrel which I used for my previous scratchbuild project Obice 305/17 'De Stefano' (the article titled Mostro was published in AFV Modeller issue 113). Both, the Garrone 305/17 and its version 'De Stefano' have identical barrels, the rest is different. Well, the stolen barrel left the box and remaining parts such as the carriage leaving the question; the remains are too valuable for my junkyard. Concurrently I decided to make a new barrel, easy enough for a competent lathe-worker so armed with a sliding caliper I put the 'Mostro' on the table, took its barrel dimensions and did a simple sketch. A new identical steel barrel was created for me by an engineering workshop for around twenty bucks. A job well done and now nothing prevented me from finishing the cannibalized R090 model. Oh yes, I shouldn't forget couple of dress-up items. Having in my head a rough plan of how to display the 305mm coastal defender I gathered Criel's Loader & Ammo (R092),

WWI Italian Officer (The Bodi Miniatures), sheets of maps (Duplicata Productions) and finally a waterslide decal sheet of Italian imperial flags (Combat Miniatures) spread out on my desk.

The WWI theatre demonstrated the need for large-bore siege artillery in support of infantry assaults. In 1908 the Italian general staff analysed reports from the Russo-Japanese War of the large-calibre artillery. This led to the adoption of a powerful new gun, the Obice da 305/17. Obice da 305/17 was a stationary coastal defence gun but later adapted to a mobile siege artillery role. My previous modelling project (the mobile De Stefano version) was recently finished so time for the older, stationary version called 'Garrone'. Basic Obice 305/17 with Garrone carriage was used for the coastal defence at the Lido di Roma and in the harbours of Napoli, Catania, La Spezia and La Maddalena island. Two howitzers are still preserved today. One in the Turin Museum of Artillery and another at the De Henriquez Private Collection in Padriciano, near Trieste. For those who'd like to know detailed technical specifications I'd recommend Wikipedia as the best source available on-line.

The drawing shows a shaft assembly with the following dimensions and features:

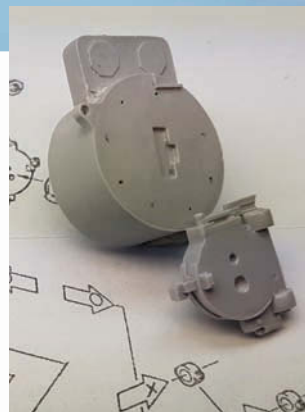
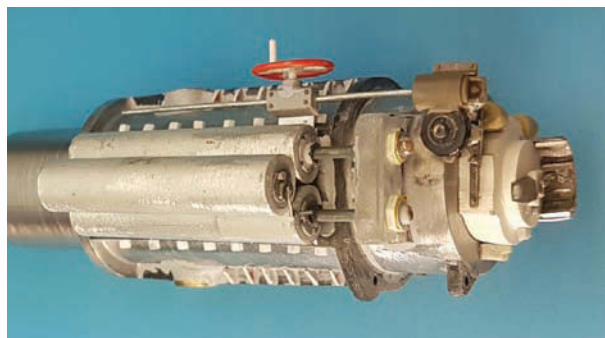
- Shaft Dimensions:**
 - Total length: 158
 - Section 1 (Left): Diameter $\phi 24$, length 23.
 - Section 2 (Middle): Diameter $\phi 16$, length 2.
 - Section 3 (Right): Diameter $\phi 14$, length 74.
- Pulley Dimensions:**
 - Inner diameter: $\phi 24$
 - Outer diameter: $\phi 85$
 - Width: 20
 - Mounting hole diameter: $\phi 4$
- Key Dimensions:**
 - Key width: 5
 - Key height: 2
 - Key length: 23
- Other Dimensions:**
 - Distance from left end to pulley center: 57
 - Distance from pulley center to key center: 118
 - Distance from key center to right end: 74



components and scratchbuilt parts as the work proceeded. When all was finished, the parts, like 'clothing' were attached to the housing's body with (CA) super glue. Of course a lot of Tamiya putty was finally used to rectify any unevenness.

I would like to draw your attention to an inaccuracy I found in the Criel instructions. The breech block at the breech plate is 180° horizontally inverted in contrast to reality...but don't panic. Fortunately that mistake is just in the instruction, the resin part is moulded correctly. I did not want to omit one of the Obice characteristics the barrel rifling. I spent some time to invent a method that I called 'kerfing'. I cut a piece

I inserted the bent rifled sheet in the barrel and glued into place. In summary, the following points must be respected; material properties, material thickness, distances and depth of the cuts. It is not so exact as in reality but better than nothing.



The next step in hand was the carriage. Assembling just these few parts was fairly easy so just three points I'd like to mention. The first part which I had to make was a new elevating arc and remade one of two plastic connecting rods. A piece of plastic card was cut and 'toothed' with a sharp razor. A small gear running over the arc was made in the same manner. One or two resin rods were distorted and replaced with a thicker copper rod.

Further adaptation was required with the trunnion beds. I had to decide how the gun attached at the carriage. The carriage sides where the beds need to attach were filled in so had to be drilled out. The trick to drilling the large hole required for the trunnion is to start with small drill bit and use progressively larger bits until you reach the proper size, in my case 5mm diameter. Successful production of two concentric holes requires great care especially when there's no option to use a vice to hold things in position.

With losing the original part I had to scratchbuild new U-shaped gun cradle.

This sub assembly consists the hydraulic buffers under the front; they slow the recoil of the cradle and then turn the gun to position by the combined action of the buffers and gravity.

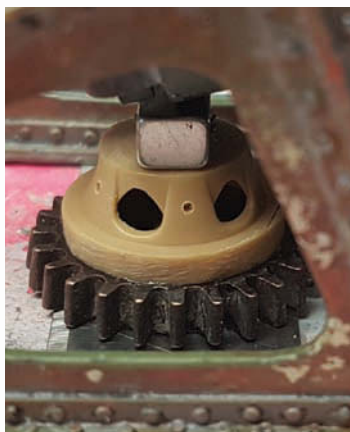
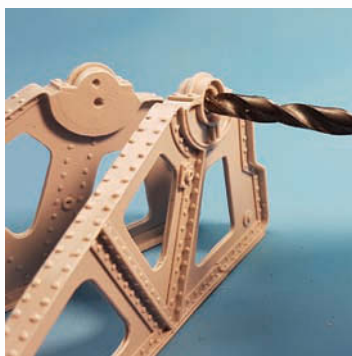
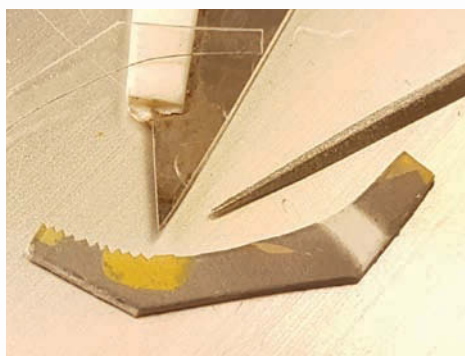
I installed the cradle with both buffers at the same time with gun mounted. But there was no end to my troubles...I had to replace another lost item, a trunnion cap, I had to engage my all scratchbuilding abilities. That day I would deserve the nickname 'loser'!

I had to face another 'slap' when the painting process was finished and the gun was assembled with the carriage via the trunnion shaft. I did not take into account when fully assembled where the centre of gravity might be, the end of the barrel was left in the earth! Similar to aircraft modellers avoiding a tail-sitter but in reverse. Super glue didn't work to secure the gun in the desired elevated position. All of the moving parts were a good tight fit and would not allow the CA glue to creep between them. I was stuck for ideas. My most creative ideas I always seem to find when sitting on the toilet waiting for nature's call. Some may find this strange,

disgusting or ridiculous but that's how it is for me in my moment of peaceful isolation.

Magnetic glue was my idea based on the cooperation between the steel barrel and a magnet. I scratchbuilt a sort of steampunk stop/lifting device as per my fantasy engineering which was fastened at the carriage floor, respectively positioned under the gun's breech block. Inside this device is hidden a little piece of strong neodymium magnet (magnetic power is like a glue) holding the steel gun at a suitable angle.

Lots of components for this crazy little project such as the magnet, utility knife blade, gears and the like I found in my junk parts box. One of the gear's shafts was joined to a box on the carriage. This box looks like a space for a transmission gear or similar. A hand-wheel seemed logical with the overall impression natural to me. With no existing references a little common sense had to prevail, weapons of this period are quite simply engineered.





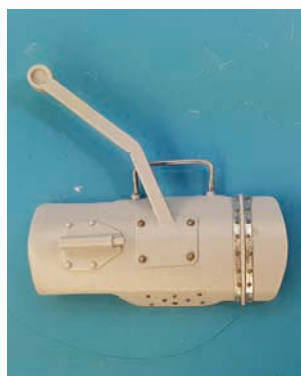
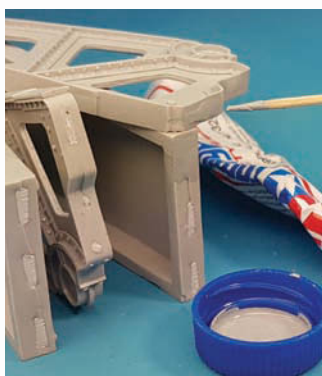
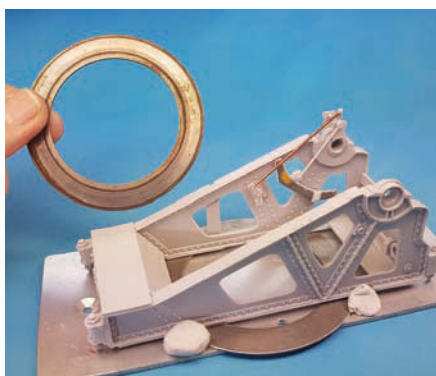
The hand-wheeled driving system on the carriage's right side converts torque via a chain as evident on an available reference photo. I was not satisfied with Criel's solution which looks like a pulley belt which I cut out and replaced with the tiniest chain I could find in my chain inventory. The next problem of this conversion was the lower shaft with a smooth pulley on. In my mind the pulley should be replaced with a sprocket. This fact I realized when the model was finished, much too late for reconstruction. Additionally have to admit I was lazy to create a tiny 2mm diameter toothed or link chain sprocket. The solution I found again whilst in the restroom as always. In theory most of the rotating parts

should be safeguarded with a protective shield, so why not to add this element over this turning point and everything will look fine at first sight. I found out a 'C' battery is the best source for my plan. Respectively it's upper positive contact point looks like a hump. It has desired $\varnothing 6\text{mm} \times 3\text{mm}$ size. I compared batteries these brands (GP Ultra, Duracell and Philips) and surprisingly note the humps are not the same. The biggest hump, closest to my requirement is made by Philips. With a 6mm round hollow punch I knocked out the hump and with a hand file create two notches for the passing chain.

My plan was to build the gun in a coastal defence role so this concept requires

rejecting the Criel kit's base plate (field type) and building a garrison mount which sits on a stone slab behind a parapet.

The mount consists of a pivot and two semi-circular shaped steel rails/races. According to the instruction sheet four carriage's wheels should be fitted at the frame with respect to turning with a pivot at the centre. I had to adapt it to my solution with the front side pivot and the races at the rear. Two of the four small wheels called 'trucks' (those on frontside) I carefully cut out with a razor blade.

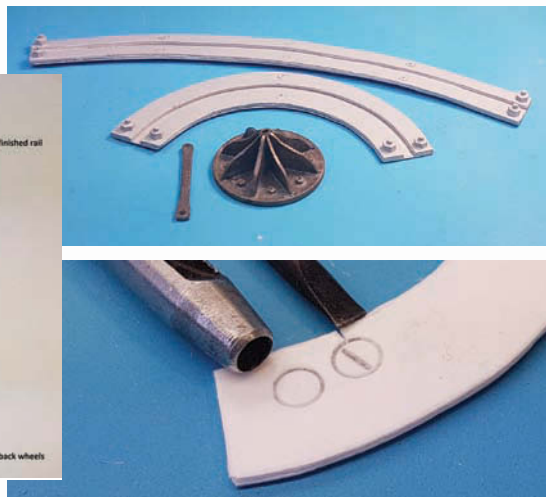
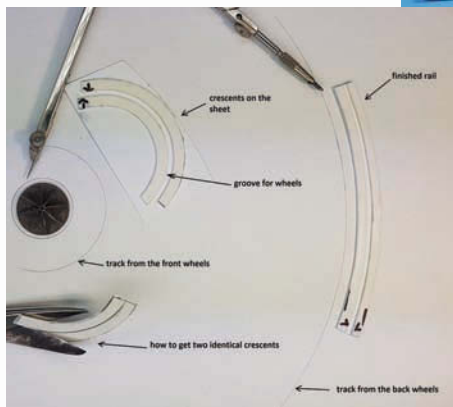


They were glued again in the same place but respecting a different, logical angle considering the travel of the wheels. I also removed the two humps on the carriage rear with a file. They are redundant due to the wheels and must be positioned lower to contact the track. The carriage frame must not be in touch with the ground when the howitzer moves sideways so it is necessary to calculate the wheel height

and the race's groove depth. A 1mm thick metal ring acted as a spacer to keep the geometry correct. When the wheels were firmly set in place the spacer was removed.

All preparation on the frame sections I did with Tamiya putty filling seams, gaps and unevenness of the surface. Projectile hoist pan was improved to add missing rivets and handle.

One of the garrison mount parts I scratchbuilt using an old copper coin, lead sheet cut into wedges and aluminium tubing. The pivot is firmly secured to the stone ground with foundation bolts for those I used sliced pieces of Plastruct 1mm hexagonal rod for the nut and Evergreen round rod, like a protruding thread.

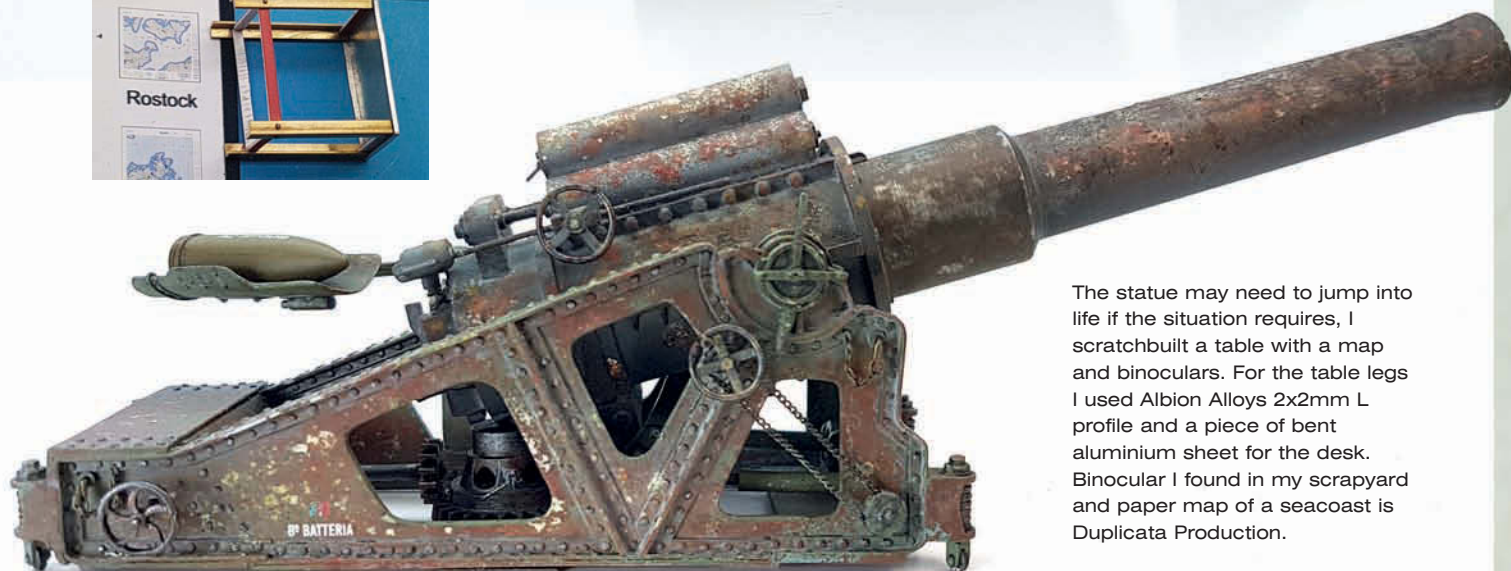


In respect of the distance between the pivot and line of wheels, I sketched two circles as the starting point of the arc shape. They were made of two, thin and thicker plastic sheets glued together leaving the groove for the wheels and fastened to the ground with eight foundation bolts. I created the fixings as I'd done with the pivot but in this case used Plastruct 2.5mm hex rod. Other countersunk screws I depicted by help of a

hollow puncher with just enough pressure to leave the impression of a circle. Slots of the screw heads I depicted with a flat screwdriver. Obice's bore cleaning equipment is poorly represented by the kit so time for improvement. Thinking 'in-scale' I used a piece of the real cleaning rod intended for my Walther 7.65mm pistol. Perfect! Dioramas and figures are not my strongest interest so I am willing just for a little

vignette with maximally one figure. As to add more interest for the viewer I also added some components around the gun such as a figure, desk, map, binocular, crane and ready-use ammunition. The Bodi Miniatures resin Italian Officer for this project is just to provide better scale between human and a military machine.

I found it sufficient reason to paint the figure simply like a bronze statue.



The statue may need to jump into life if the situation requires, I scratchbuilt a table with a map and binoculars. For the table legs I used Albion Alloys 2x2mm L profile and a piece of bent aluminium sheet for the desk. Binocular I found in my scrapyard and paper map of a seacoast is Duplicata Production.

THE VANTAGE POINT

My vignette was to depict a piece of coastal bastion where the howitzer is emplaced behind the crenellated parapet. For the base I used a black plastic Japanese lacquered tray. I like the tray's design and always find a suitable size for my intent. Soft sand (usually used for sandblasting) was poured onto the base and 'dripped' with 1:1 mix of Sidolux floor lacquer and Hercules PVA glue. When dry the sand kept a stone consistency. For the parapet's blocks I used pieces of lightweight silicate block which is very easy to cut. Their structure greatly imitates stone commonly seen at the seaside coast. The last eye-candy for the vignette is Criel's resin kit R092. A portable mobile hoist crane with couple of shells. After a

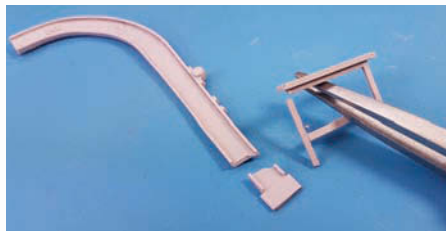
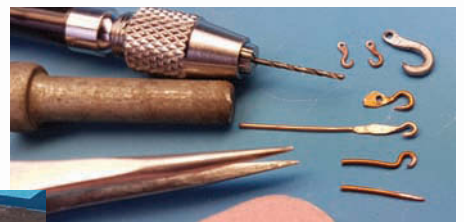
quick glance at the resin parts I realized that construction of this resin kit would be pretty straightforward. Be careful because the parts are extremely delicate, so fragile I had to glue two of them accidentally broken by me. To wind the rigid steel wire rope over the drum and then copy the crane's shoulder up to the hook block was a tricky problem. To anneal the metal cable in the flame for a while is good way to get better flexibility, but the wire must be red-hot. Straight shape is achieved again when the wire is rolled with downforce between two steel plates. The load hook for the hoist block was scratchbuilt from metal wire. Forging, bending, filing and drilling like a miniature blacksmith.

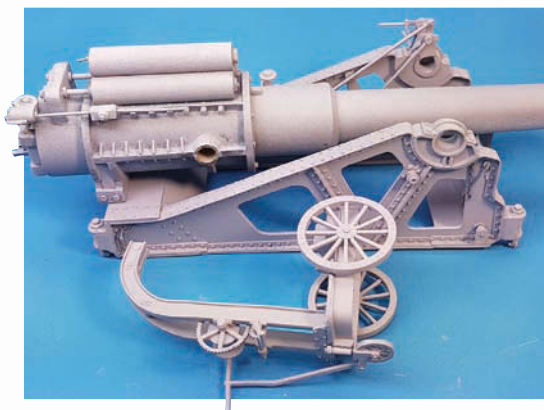
I think this little detail was worth the effort.

The base on each projectile body deserves more detailing so I depicted a missing fuze with 0.4mm drill bit and 4mm hollow round punch.

Between the pivot and the carriage is a connecting element (arm) in a T shape. A piece of sprue frame was the best start to sculpt it.

On the carriage frame each corner was attached by a hook and chain as per as a reference image. Scratch-built extras always enhance the overall look.





disaster! Certainly not a barrel of laughs!



Rescued...Phew!



PAINTING TRIAL AND ERROR...AND ERROR...

Before I could start painting I needed to mask the gun muzzle so a piece of rolled up napkin was inserted into the barrel. Once I had all of the major sub-assemblies finished, this included gun and cradle, carriage, ammunition and the crane, painting started with my usual primer Mr. Surfacer 1200. Any primer coat is the best way to prepare the surfaces for following paint steps when using multi-media and it will show up any scratches and faults that should be rectified before final painting. For better accessibility the gun and the carriage were separately painted before the mounting. My plan was to reproduce still operational but heavily weathered coastal gun exposed to the sea air.

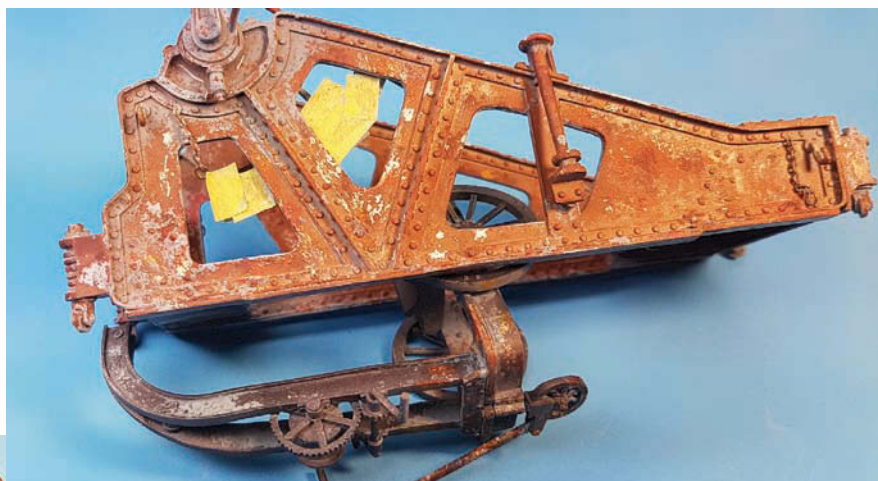
Using Tamiya paints the howitzer parts were basecoated differently. The gun and the crane with a mix of XF84 Dark Iron and XF63 German Grey 1:1. For the carriage I mixed XF64 Red Brown and XF79 Deck Brown 1:1 plus a few drops of XF6 Copper. I did not want to touch the

gun while it was drying so a glass jar served me like a 'handrest' for that purpose. After being left for a good 24-hours to dry I applied randomly a lot of multicolored blotches. I wanted to simulate the mottling and dirty look of the long term and harsh service at the coast where metal is afflicted with weather, salt conditions and lack of maintenance. To achieve that look I used a dabbing technique to create the illusion of a worn and weathered finish. A little piece of sponge clamped in Koh-I-Noor Versatile pencil jaws, large range of chemical potions such as AK Crusted Rust Dark and Light Deposits, AK Rust Streaks, Vallejo Splash Mud, Vallejo Rust Texture, mix of XF7+XF3+XF64+X26 and as the masking a sprinkling of rock salt.

The procedure was as follows: put a mask (rock salt), dab the sponge into the paint, blot off most of it onto the napkin and lightly press the sponge on the surface, let dry, masking (salt again but sparingly)

dab/apply the second colour more randomly than the first and repeat as necessary. When finished I wasn't able to remove the rock salt and the effect was partly destroyed, peeling away right to the metal surface. It was a disaster! AK Metal Burnishing was my saviour. I brushed it onto all the afflicted places on the steel barrel which gave a pleasing tarnished metal effect and I was able to retouch and blend the areas and saved the day!

I sat back to scrutinise the finished job and critically recognized among the multicolor stains the lack of white. I decided to use the hairspray method as a final technique. I sprayed the model with hairspray straight from the can. For the white-off paint I used Tamiya mix of XF2 Flat White + XF55 Deck Tan in 70/30 ratio, then randomly dabbed on the surface. Irregularity of the patches was achieved with moist brushes and a toothpick disturbing the layer of paint.



To further enhance my previous work I decided to add a filter of Abteilung 235 Intense Blue oil colour on the gun, crane and loading pan and Abt. 010 Yellow on the carriage. I have to point out just on certain parts and not overall. This boosted the colours pretty well. I now let the paint dry for several days and once dry I added an even flat clear coat to protect the paintwork.

I like to experiment regardless of risk. Not everything always works as I realized when tried a new masking style as seen in the last two painting steps. I had some issues using black sand (Tenerife beach origin) used as the first masking experiment. The sand did not prove to be good idea. I sprinkled sand over the hairspray layer but the hairspray gave a strong bond. I hoped the sand would be easily removed/crumble

off the surface. I used mix of XF23 Light Blue + XF8 Flat Blue + XF2 Flat White to get a bluish shade. That was airbrushed over the sand and left to dry. Removal of the sand did not work at all so I had to bath the carriage like a submarine and remove all hairspray with sand including paint. Fortunately some places poorly treated with hairspray kept the bluish colour remainders. The same process/steps I tried with the other masking materials; a mix of tiny resin beads with mixed Italian herbs laid under to last paint layer (XF67 Nato Green enlightened with XF21 Sky 80/20).

I applied the green paint just sporadically. In this case there was not problem to remove/crumble off the mask material. The sand had absorbed the hairspray and set like cement, the resin and herbs hadn't.

Once the last colour coat was dry I applied a coat of Mr Super Clear Gloss varnish to tone everything to a homogeneous appearance and prepare the surface for a colour wash and decals.

Decals are minimal. I did not find any decals inside the kit, fortunately I still had some left-over decals. The decal set from Combat Miniatures (Italian flags) was applied with the help of Gunze Mr Mark Softener to conform to the surface. Inscription '8ª Batteria' I had to make as a custom. The flag on the left carriage side was partly damaged most likely with AK047 Spirit going on the model within next wash stage. First of all I wanted to put new flag decal but then thought 'Why not? That looks more realistic'.

Well, the completed model was now given a pin wash. I prepared a quite dense mixture of Abteilung oil paints (dark for carriage and light for the gun) thinned with AK047 White Spirit and applied it to lift out the details such as lines and rivets. After about fifteen minutes of drying any excess colour-wash was removed using make-up sponge and a brush slightly moistened in clean white spirit.

To accentuate edges, rivets and gearing I mixed black and silver oil colours to get a metallic, but not too shiny hue which was applied with a 000 brush. I did not touch everything mentioned above but merely

half of the edges with the result rectified with make-up sponge slightly moistened with AK047 Spirit.

'Foaming' was randomly applied with a rough structured polyurethane foam slightly soaked in AK Rust Crusted Deposit and Vallejo Rust Texture. This method I described in detail in my article on the abandoned IS-3 published in AFV Modeller issue 111.

The two 305mm projectiles I painted with XF-49 Khaki and the shorter one with XF-73 Dark Green. Weathering was created by help of the hairspray technique. Rotation

bands, often made of copper, received a coat Tamiya XF-6.

It's not uncommon to see a written message on artillery projectiles. I decided one of the projectiles should be decorated with Italian "VAI ALL' INFERNO" translated meaning "GO TO HELL". For this purpose I used extra-fine 0.7mm 'Graph 'it' paint marker (Made in Japan).

The final step of my six month project was Mr Hobby Top Coat Flat-Matt spray. I use this always to unify and protect the model surface.

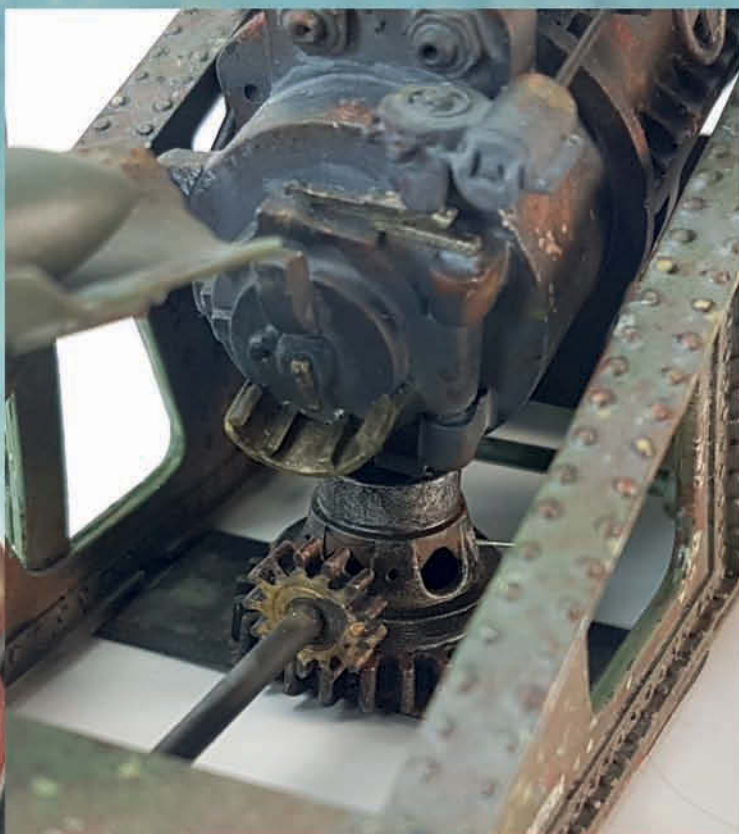


IT'S ALL OVER

The kit is quite straightforward to build and fit is generally good. The quality of the resin is superb, and detail is outstanding. If you are into heavy artillery and wish to add one of these to your collection I'd recommend this kit. The only point that will demand your attention is the fault in the instruction sheet. (as mentioned) Remember also that I used the kit barrel on another project meaning I had to scratch build this one.

Criel delivered a stunning model that deserves a prominent place in every WWI collection.





OBICE



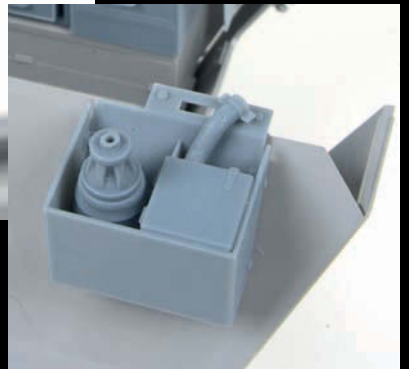
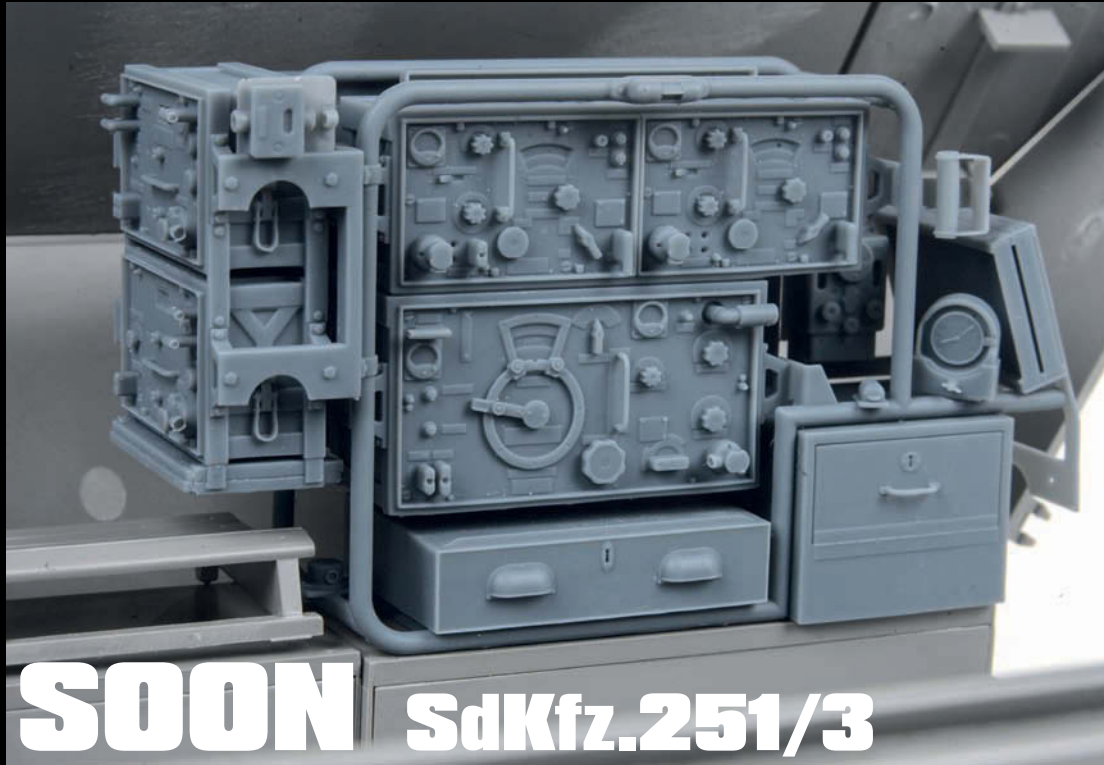
SdKfz. 251

www.afvmodeller.com

UPDATE PARTS

1:16

FOR THE DAS WERK KIT



SOON SdKfz.251/3

SdKfz.251/3 Radio Installation

Add some excitement to the interior of your 251 with this conversion to model the 251/3 radio version complete with additional antenna mounts.



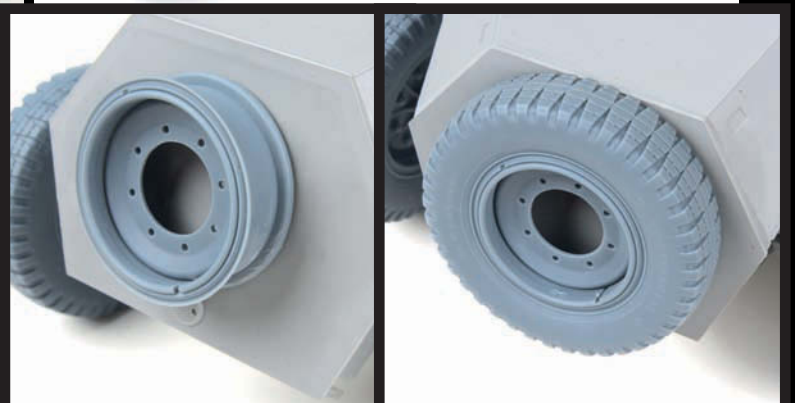
SdKfz. 251 Weighted Front Wheels

Set of two weighted front wheels for the Das Werk kit to replace the oversize vinyl kit tires

SdKfz. 251 Spare wheel rim

SdKfz. 251 Spare wheel

Often seen mounted on the nose plate, choose between the basic wheel hub or the complete spare wheel.



1:16

AFV modeller



SdKfz. 251 Corrected Sprocket

These corrected sprockets give you the correct undercut rim, correctly thinned reinforcement ribs, corrected hub cap and adds the missing cutouts where the track teeth engage.

MG42

Designed to be one of those eye-catching details on your 251 our MG 42 is incredibly detailed and printed as one piece with a choice of separate deployed or folded bipods.



SdKfz. 251 Corrected Front Seats

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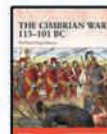
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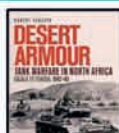
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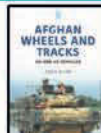
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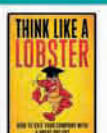
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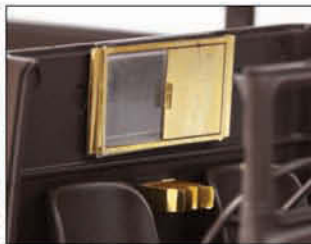


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Named in honour of General Philip Henry Sheridan the new

U.S. airborne tank was rushed into service in early 1969.

Designed to compete with the Soviet PT-76 light tank the new armoured, reconnaissance airborne assault vehicle immediately suffered from shortcomings. It's thin aluminum armour made it very vulnerable to mines, RPG's and could even be penetrated by heavy machine gun fire on the sides and rear. The two-part ammunition proved problematic also and it was not uncommon to have fouled charges littering the tank floor leading to a cook off should the tank catch fire or to see destroyed hulls with just a turret sticking up out of a pool of molten aluminum.

However, with all it's short-comings the crews and supporting infantry did find the tank useful. With good power and a smaller light size it performed well in the wet jungle conditions and could access areas where the larger heavier M48s would sink. Packed with a 152mm short barrel cannon It was great in close support firing canister rounds. Love it or hate it, this light M551 packing twin .50s and .30s with the 152mm main gun could certainly punch above its weight.

WES LANZ

MODELS THE
STALKING RHINO;
11th ACR'S M551
MOBILE FIRE BASE

1:35

BODY





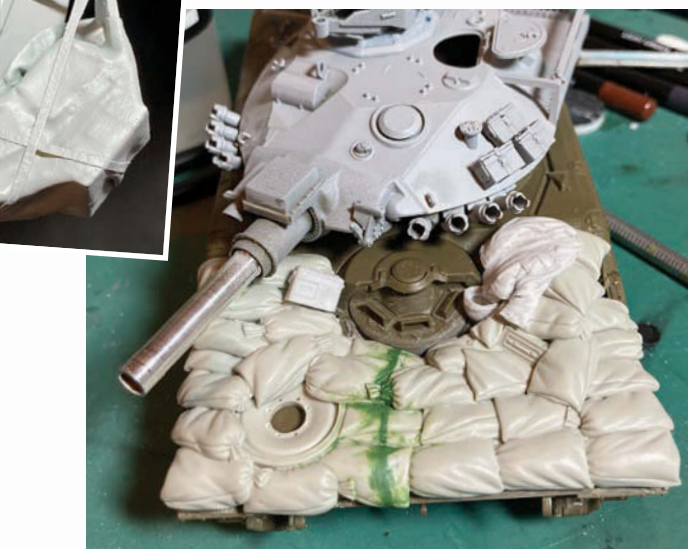
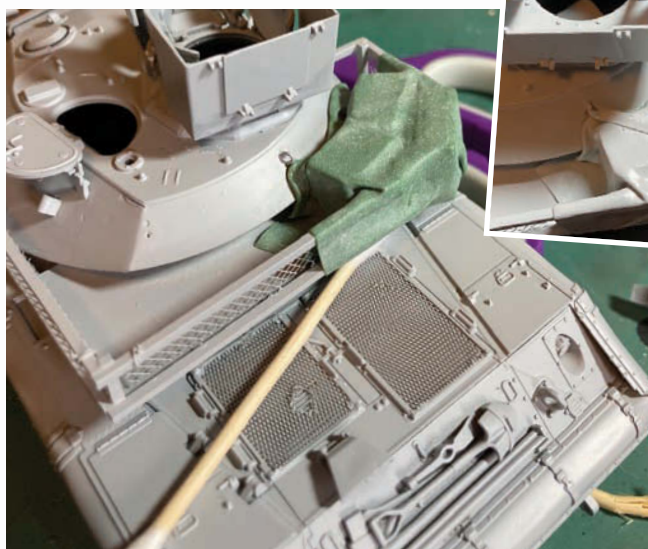
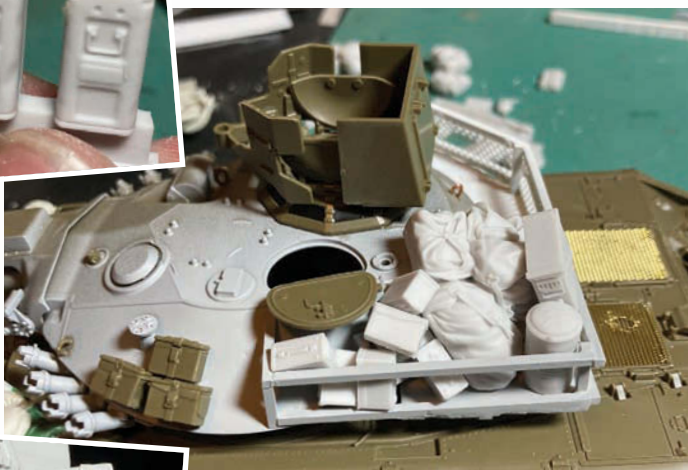
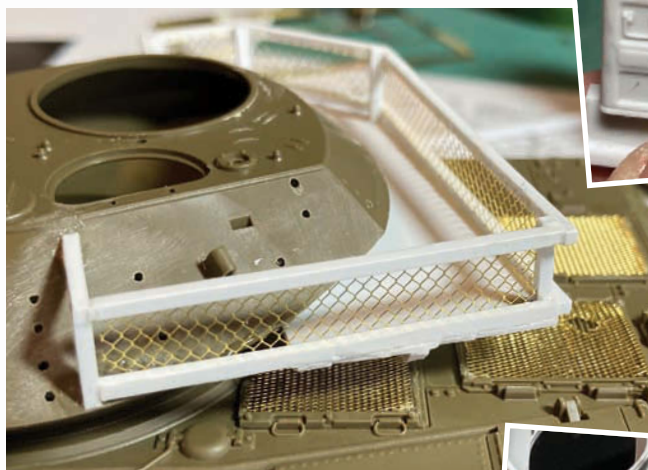
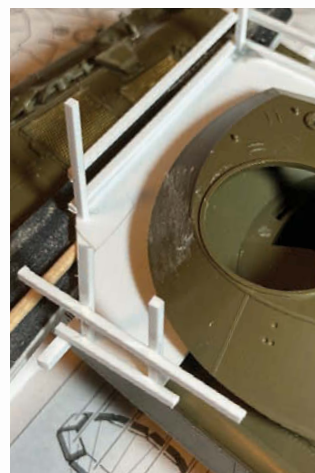
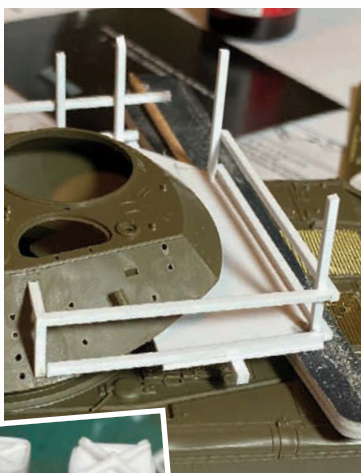
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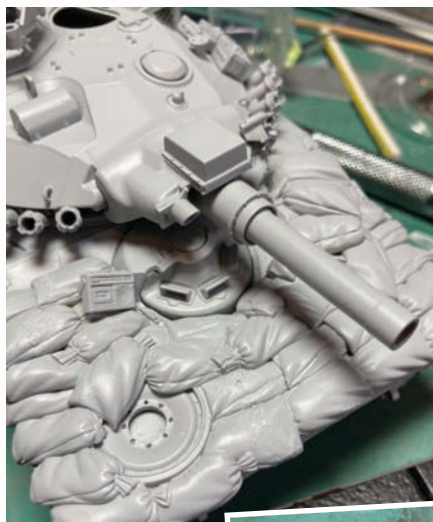


I knew as soon as I saw the news in 2019 that Tamiya were revisiting their Sheridan with a complete new tooling at some point I would need to do a no expense spared build on the kit. That time was spring 2023. I started with a out of box build but immediately replaced the barrel with a Voyager Models late war aluminum one and the grills got treated to a Voyager Models photoetch grill set. I wanted to depict a M551 from the 11th ARC I had seen a few pictures of them moving down a jungle road covered in mud all loaded for 'bear' with their twin .50s and twin .30s so that would be my inspiration. The lower hull was treated to the Panzer Art M551 sand bag hull armour, however it took quite a bit of work to make fit as I'm assuming it was for the Academy or older Tamiya kit. In the end I got it on there with a little sculpting to bridge a large gap. The biggest modifications would be to the turret; all of the 11ARC M551s I had seen have a

field made stowage bin on the rear so I decided to build one myself out of evergreen plastic and photoetch screen. Next was the twin .50s and .30s FC model trend are the only ones making anything like what I needed however I knew the guns would need some love from metal barrels and detail sets so after getting the guns in I used Pontos models .50cal and .30 cal detail sets on all four of the guns. I picked up a Legend Vietnam stowage set and used a good chunk of that filling the turret bin and adding overall stowage details throughout the vehicle. I also made a Green Stuff tarp to cover a chunk of the stowage.

Lastly I kicked up a few sets of master .50 and .30 shell casings and strategically placed them throughout the exterior of the vehicle and also replaced the tow cable with a homemade braided wire unit. Next up was painting!





After a coat of fine grey Tamiya surface primer I built up some basic pre-shading using some XF1 flat black and XF2 flat white and started laying on the green in this case XF62 olive drab in very thin coats to save some of my pre-shading. After I had a decent layer of green build up I started adding small amounts of XF78 deck tan and created some highlights with surface variation in some spots almost a marbling affect. The result was a decent looking paint job however it was a little desaturated for my taste so I shot a extremely thin filter of X25 clear green (one of my tricks when painig Vietnam war era vehicles). That brought back that deeper green colour. The road wheels and sprockets were painted the same way. The twin .50s and .30s where hit with

basic flat black and the kit tracks airbrushed with XF84 dark iron; a great track colour I must add. Next up was the stowage. After using double-sided tape to stick it all to bamboo sticks as temporary handles I started with the ammo cans which were shot with a few different Tamiya greens. The rest of the stowage like the bags and tarps where brush painted with various tones of Vallejo and Proacryl greens and browns then the entire model and stowage was hit with Vallejo urethane gloss. The Sheridan was treated to echelon 11ACR decals depicting the "Body Count" M551 and the ammo cans where hit with .50 and .30 text decals also.





Before getting too far into weathering I painted the tow cable with a mid grey and the sand bags with XF79 Deck Brown adding in XF78 Deck Tan for highlights. I also painted some chips and scratches using a light green and aluminum silver Vallejo acrylic. Next I hit the entire tank with a Abteilung 502 Burnt Umber pin wash and finished up the storage with various oil washes and then acrylic highlights using the appropriate Vallejo tones before I glued them all in place and sealed the whole model with VMS Matt varnish. I had just picked up a bunch of the VMS product line, so I wanted to use them for the majority of the weathering. I started by mixing Sandy Earth and Red Earth pigments together and cautiously applied them to the entire model. The trick with these is to cover the tank and then pull most of it off with makeup applicators and cotton swabs, soaked in their proprietary thinner. So after around 200 swabs later I had some pretty respectable results.

Next I went after the mud; for that I mixed a few VMS textured pigments together to get a orange soil colour then started adding their Alkyd Binder until I had a toothpaste consistency. This was slopped all over the lower hull and front sandbags adding some to the tracks and wheels also. After about a hour of drying time I went back with various tools and chipped a lot of it away revealing some pretty unique dry mud. Next the tracks and wheels were placed and I began blending everything together. The tow cable was hit with a oil wash and I added some soot to the exhaust outlet. The .50 and .30 Cal guns got treated to a soft lead pencil rub-over, as well as the hatches and edges of the upper hull. I touched up a few of the final details with acrylic paint and hit the brass shells with a black enamel wash.



The finishing touch was a few paper jungle leaves painted in green and yellow oils and that was it...I was done!

I had a blast building the new Tamiya M551.



Scale SCOTLAND 2023

Since the Edinburgh-based team approached us for some input on creating a fresh and more modern take on a model show we've always made the short hop across the border to Scale Scotland. Murrayfield stadium is a great venue with plenty of easy access free parking and lots of public transport, including plenty of visitors taking advantage of cheap domestic flights to experience the famous Scottish welcome and hospitality. Many visitors make the show part of a mini-break taking in all Edinburgh has to offer.

The show always achieves a laid-back and friendly atmosphere thanks to the team's dedication to making the day enjoyable for everyone with traders highly respected and well organised. If you like to participate in competitions there was close to 400 entries on display in the spacious well lit room with raised display plinths and some inspiring work on display and great trophies and prizes to be had. Judging model contests is something I get a little uncomfortable with but someone has to do it! The standards have increased year-on-year and a Scale Scotland award now holds some clout! thanks to the team for their time and tremendous effort- see you there next year, keep an eye on the Scale Scotland

Simon says...get yer'sel t' Scale Scotland!



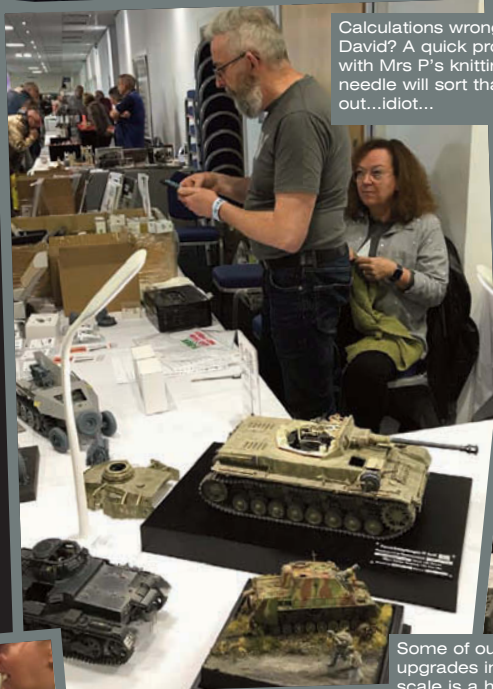
Edinburgh's own Wonderland Models are great supporters of the show and a 'must do' store for modellers visiting the capital... a free kit for junior visitors can only do good for the hobby.



With a steady stream through the door the team were kept busy.



Bookworld's Justin and Devon seemed as busy as ever!



Calculations wrong David? A quick prod with Mrs P's knitting needle will sort that out...idiot...



Some of our detail upgrades in action; 1:16 scale is a hot topic and when seen in the flesh it's easy to see why!

Foxhopp Models produce some beautiful 3D printed kits, this lady demonstrates how a fox actually hops.



Plenty of traders displayed some of the more unusual stuff to keep armour modellers happy (and empty their wallets!) D-Day miniatures do some superb figures.





Murray tries to use the force on Phil Stutcinkas but his 1:1 Star Wars scratchbuilds aren't for sale!



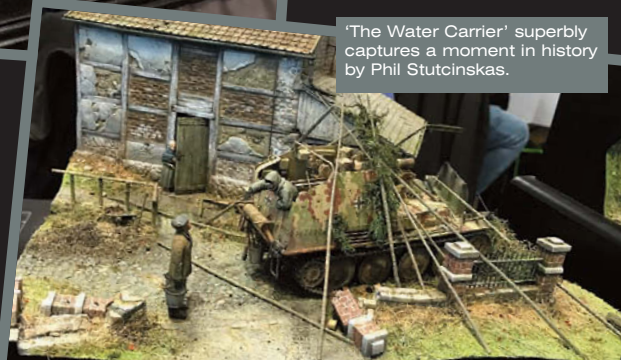
UK based 'Four Corners' have some seriously talented modellers; Phil and Lester were flying their flag with some of their superb work on display.



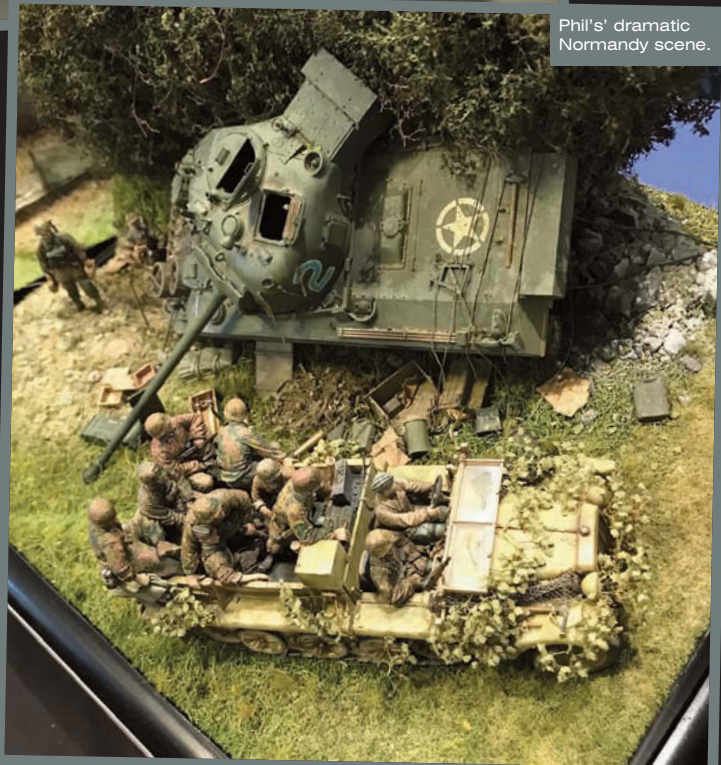
An 'Old Master' on display, always a pleasure and still as impressive.



...everything but the kitchen sink? Vespa and washing machine beats that...Lester Plaskitt; an AFV



'The Water Carrier' superbly captures a moment in history by Phil Stutcinkas.



Phil's' dramatic Normandy scene.



A great little slice of the 'Nam by Lester; love the clay pots and foliage.

Old-school scratchbuilding- LIVE!



Alan of AMS doing another cracking deal, be sure to visit them at UK shows or on-line.

Red Zebra were back at Scale Scotland with their excellent range of accessories.





A face to the name; Ian Barraclough will be a familiar one to readers of AFV and AIR. His "Tank Room" Facebook page display was fantastic, a modest guy who just loves his hobby!



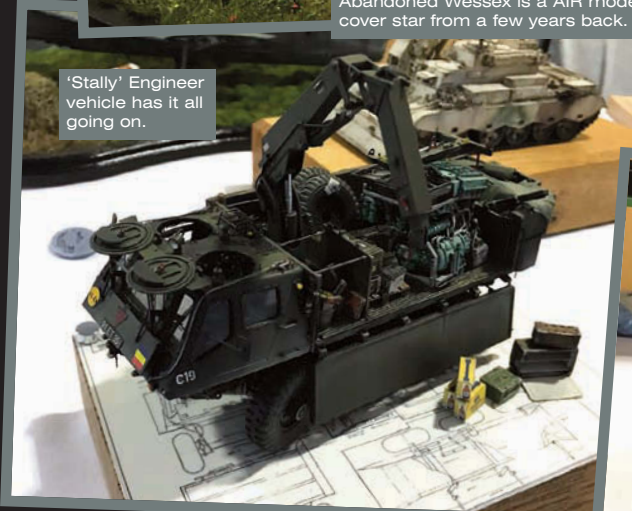
Ian's superb rendition of the 'Berlin' scheme; being an ex-REME guy he knows how an engineer vehicle should look.



Abandoned Wessex is a AIR modeller cover star from a few years back.



'Stally' Engineer vehicle has it all going on.



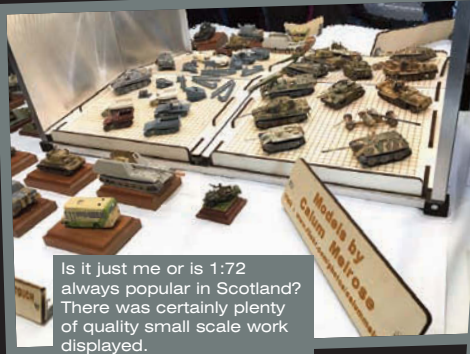
DUWK out of water...

Some of Ian's work contain some lighting tricks; this Finish AA conversion has moving turret and guns!



We recently featured this Scammell and Willich which scooped a gold medal in the competition and also our choice of favourite AFV of the

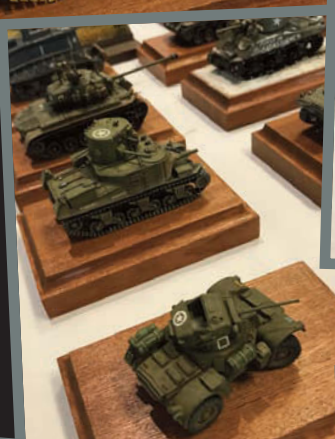
Scale SCOTLAND 2023



Is it just me or is 1:72 always popular in Scotland? There was certainly plenty of quality small scale work displayed.



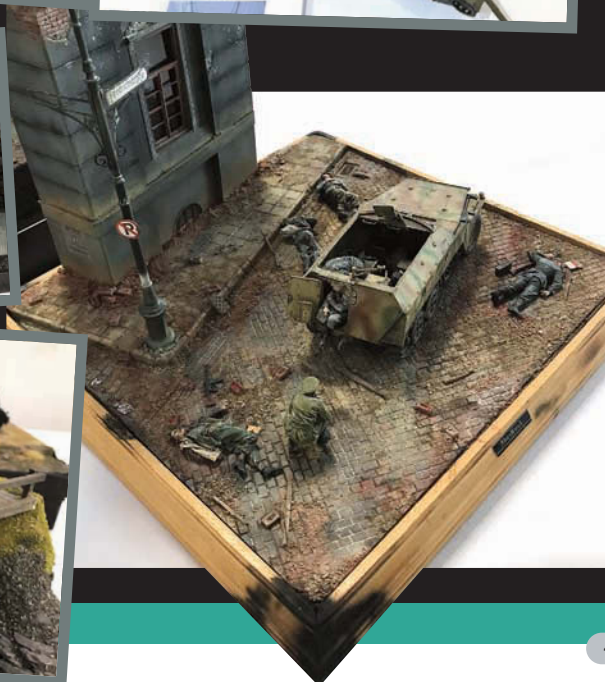
Gathering of the Clans; clubs from all over the country were



You can't mention 1:72 and not mention Alex Clark... medals-a-plenty for the regular AFV contributor



Nice dioramas on display in the competition room with a great mix of



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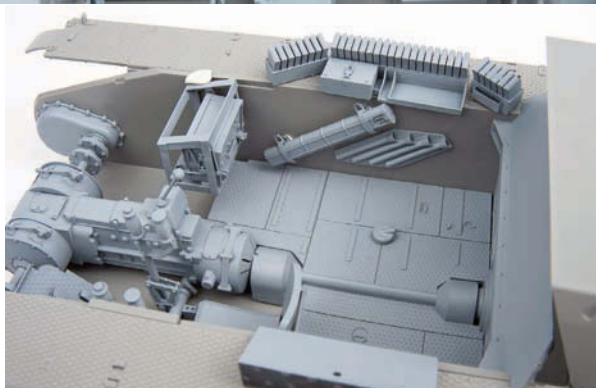
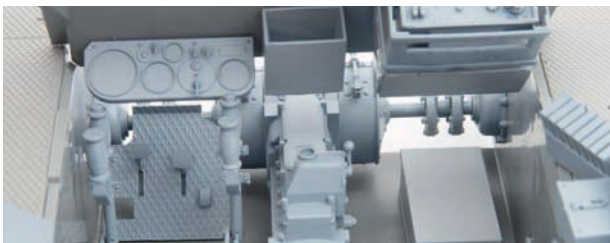


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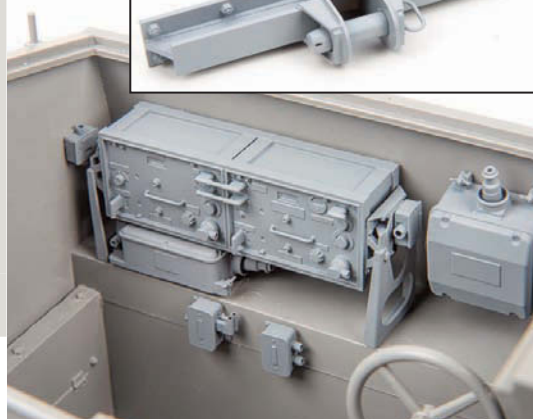
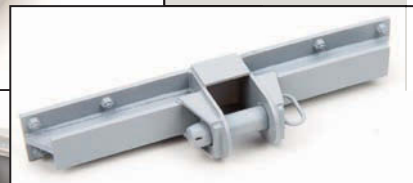
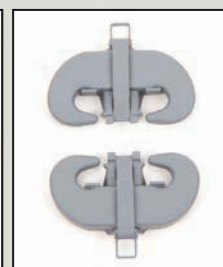
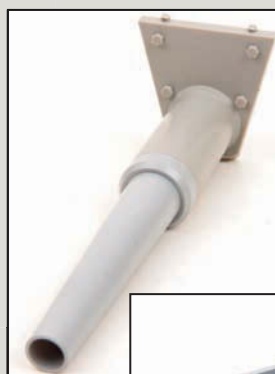
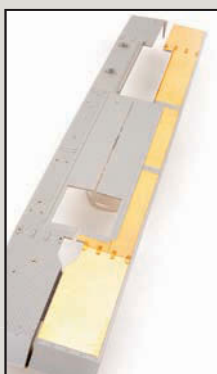
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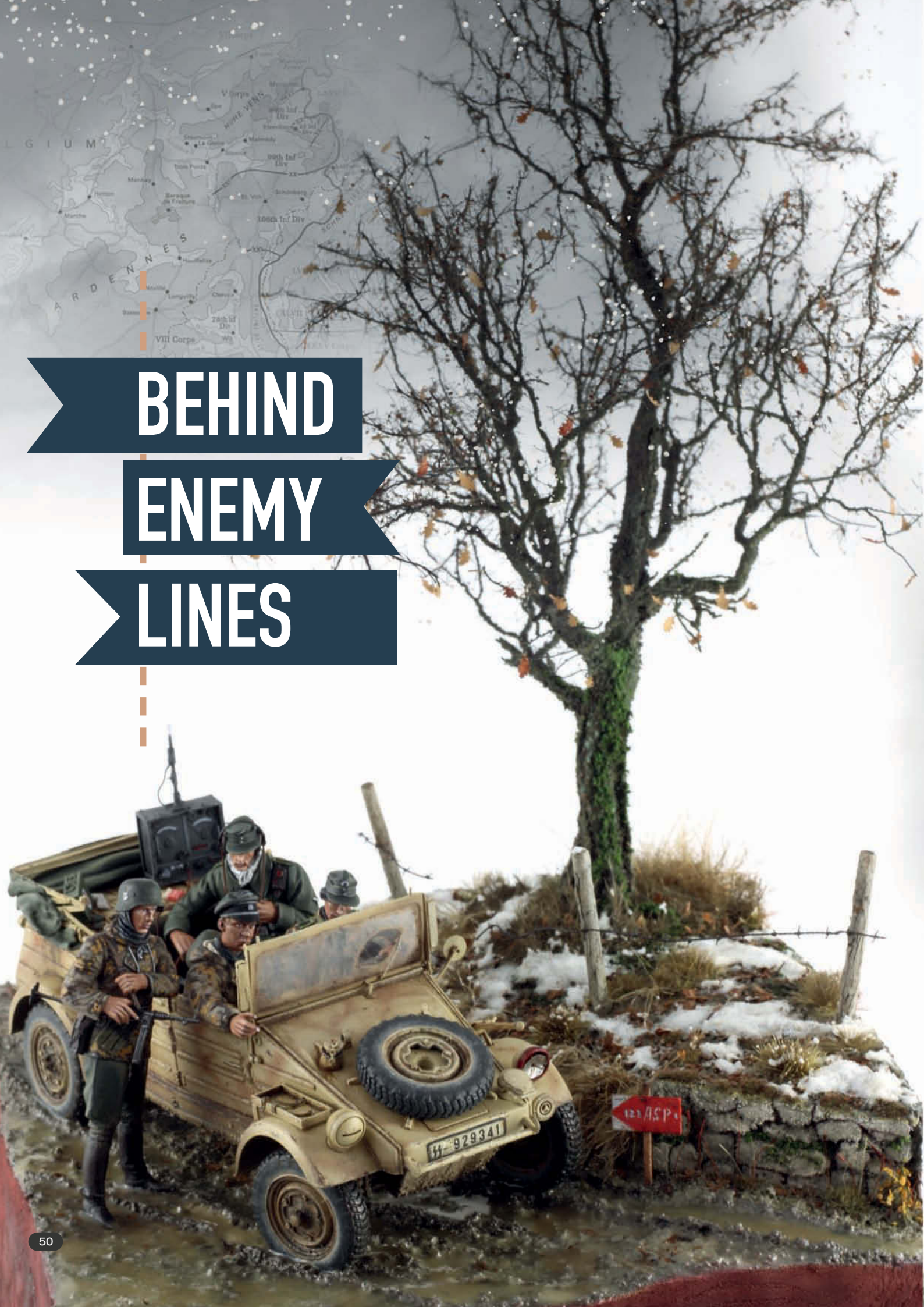
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BEHIND

ENEMY

LINES

1:35



Michael Wolff's Battle of the Bulge 'Bucket Car' is placed in a detail-packed chilly vignette.



Battle of the Bulge

The fate of the German Reich was sealed in 1944 when the turning point of the Second World War came in Western Europe and the Allies landed in Normandy. Within a few days, the German troops were pushed further and further back towards the Reich territory. In the Ardennes, where in 1940 the Wehrmacht started its campaign against France, one of the last major offensives of Hitler's Germany against the western led troops took place in 1944. Here they wanted to turn the tide in the already long lost war and stop the enemy with fresh troops. The 6th Panzer Army, which was newly established in the same year and to which the four SS Panzer Divisions: Adolf Hitler, Das Reich, Hohenstaufen and the Hitlerjugend belonged, was to intervene from the area south-west of Cologne-Bonn and to carry out the main attack on the northern flank with the goal of reaching Antwerp harbour. This plan if succeeded would cut the allied forces in half. On 16 December 1944, the operation "Wacht am Rhein" was launched, with a quarter of a million soldiers of various types of troops ready to attack.

Around 20 December, the second phase of the fighting action came into effect. After the surprise attack had succeeded at the beginning of the operation, the intention was to take a strategic junction and conquer an important fuel depot. Here the 2.SS Panzer Division "das Reich" had a big part in the success. They put the enemy under pressure at St. Vith and Vielsalm and opened roads to push the allied troops further into the defensive.

Reconnaissance Division 2 - as part of the 2nd SS Panzer Division- blocked the road from Vielsalm , La Roche near the village of Joubivale to cut off the retreat of the enemy forces from the east to the north and west.

The idea was to summarise these events in a small diorama so that the viewer could get an idea of the situation at the time. The weather had a great influence, due to snowfall, roads and paths were difficult or impossible to pass.



The kit that came on my workbench was a classic kit from Tamiya.

Although it is an older kit from 1997 is still convinces with a high fitting accuracy and many small details like the engine compartment in the rear of the Kubelwagen Type 82. In addition resin tyres from Quickwheel and photo etched parts from Aber were used.



For a correct reproduction of the original vehicle, the canopy was completely rebuilt with plastic profiles and etched parts. New screws and rivet heads on the roof and on the vehicle replace the incorrect ones of the kit.



The holder for a water or petrol canister was built entirely from Evergreen plastic profiles. It was detailed with lead foil from the spare box, which represents the retaining straps.



The canopy was modelled with Magic Sculp. The magic sculp was rolled out very thin on a glass plate. Talcum powder prevents the magic sculp from sticking to the glass plate.

Once the sheet was thin enough the fitting was done on the frame using a modelling brush moistened in some water. Make sure that wrinkles and folds are correctly formed during the process!



Tamiya Classic

The central vehicle of this Ardennes scene is a Tamiya Kübelwagen (Bucket Car loosely translated), which I assembled and painted some time ago. The assembly was very easy, only a few elaborately depicted etched parts from the extensive etched parts set of Aber presented me with some challenges. Among other things I had to rebuild the elaborately depicted hood and model the tarpaulin with Magic Sculp. After everything was clean and free of dust, the painting could be started.



Only in a few places gaps had to be closed with plastic putty. Otherwise the accuracy of the kit is very high !



Some areas of the wheel arch and bottom have already been worked in advance. A mixture of Mr. Surfacer and baking soda is applied with a brush. This creates a light structure before painting the model. The drying process can be accelerated with a hair dryer.



he model was first primed with the Ammo of MIG primer. The dark yellow base colour could be applied next. For this model I mixed Vallejo Model Air 71075 Sand with Vallejo Model Color 820 Offwhite and 837 Pale Sand. For a silky matt shine I also added some Satin Varnish from Ammo of MIG and sprayed it with the airbrush.



Next step will be adding the camouflage spots. As a base for the brown tone a mixture of Tamiya XF- 64 Red Brown and XF-10 Flat Brown is used. Afterwards the dark yellow base colour is mixed again in a very strongly diluted consistency and light misted over the model. This creates the impression of a faded brown colour. On the picture you can also see that the interior is painted and the individual areas have been finished. Also the weathering was created with products out of the Ammo of MIG range.



Personal equipment of the crew gives interesting details to the model. Note the cigarette box, map and headphones next to the radio.

As a primer I chose a mixture of Vallejo colours. The whole model was covered with several layers of paint from the airbrush until the base colour had sufficient coverage. The interior kept this base colour, outside fine camouflage strokes were sprayed with a brown shade, here I use a mixture of Tamiya colours. Afterwards the camouflage pattern is oversprayed once more with the strongly diluted base colour to give the vehicle a first dusty effect.

Inside the Kübelwagen the details were painted with acrylic colours as well as

brushes from Windsor & Newton Series 7 and afterwards treated with diluted oil colours. For an optimal shading and weathering I use sepia and some black.

The most important step in completing a model is the weathering process. Of course this was not only the case in the interior of the car, but also on the exterior. To create depth, the whole model was shaded. The oil paint is thinned with Enamel Odourless Thinner from Ammo of Mig, so that it can easily flow in and around the details.



After this rather time-consuming work, the damaged light, the canopy and other details received the appropriate colour. Acrylic colours from Ammo of Mig were used for this. To get more variety in the basic colour, some parts like the fenders received a filter. To achieve these effects oilpaint and filters from Ammo of MIG were used. In order to obtain a maximum effect one can exaggerate in some places.

Next step is subtle chipping on the worn places of the vehicle. For this I use the excellent Winsor & Newton series 7 brushes in a 00 thickness. In the selected areas not only chipping is painted but also scratches and paint damage. To achieve these effects I used a lighter shade of the base colour in this case Vallejo 837 Pale sand. Superficial scratches need to be fine and very subtle. With Vallejo 822 German camo black brown the deeper heavier damaged paint is simulated and again the key here is: less is more although some WW2 vehicles sustained some heavy damage.

The chipping phase on the vehicle was a very long and labour-intensive task but the next step would be a little easier. Due to wet environments vehicles tend to rust and the excellent Rust and

Dust set from Lifecolor helped me out a great deal to get the desired rust effects. These colours are applied with dabbing movements and repeated until a convincing result is achieved. In order to represent a vehicle in a winter environment, it inevitably has to fight with dirt and mud. To represent this optimally, I used the new splash and mud effects from Ammo of Mig. These have the great advantage that they shine after drying. These mixes were then applied wherever I felt it made sense to do so, such as the underside, running gear, and tires. After these colours had a few days to dry, some colour variations were mixed in with oil paints.

Finally, oil and fuel stains and some equipment belonging to the vehicle crew were applied to selected locations.

Figures- the cast!

I used figures from Warriors, Dragon, The Bodi and Masterbox as a base for the crew of the Kübelwagen. Some of them had to be rebuilt to find room in the cramped space of the vehicle. The adaptations are modelled with the help of Magic Sculpt. I made sure that the uniforms show a variety of different camouflage patterns, which were also worn in the Ardennes. For the selection of the heads, beautiful examples of Alpine were used.



The figures come from different manufacturers and were processed with Magic Sculpt. Their heads are from Alpine and Hornet, some etched parts were also applied. All figures are pre-shaded with black paint.

The skin parts were painted with Humbrol enamel colours, the uniforms however with acrylic colours from Vallejo.



Various camouflage patterns on jackets and trousers bring life to the scene. Different camouflage patterns were used in the Ardennes. Here you can see the oakleaf camouflage pattern. The finished radio operator is wearing some interesting equipment: Headphones, field lamp and reporting bag were attached.

Chilled-out

In order to make a winter landscape as multi-faceted as possible, a lot of research has to be done in advance. Countless walks in nature helped me here to get a better understanding of the winter landscape.

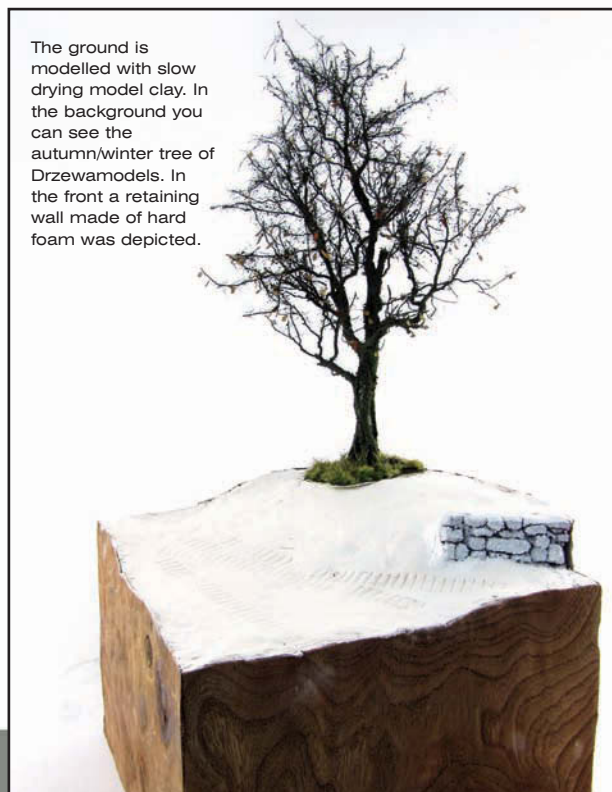
Once the starting point had been determined I decided, on the basis of my collected pictures, to build a slightly sloping field path with a small section of a discreetly snow-covered meadow landscape.

The rough structure of the landscape is cut out of Styrodur and covered with modelling clay. The material needs one day to harden, so that it can be worked further on afterwards.

First of all, tyre treads and shoe prints are placed in the still fresh modelling clay to create a starting point. The material can be formed very well with a little water, thus creating small uneven areas.

Afterwards a thin layer of Acrylic Mud from Ammo of MIG is applied, which gives the surface a nice soil-like structure. Different types of stones and sand are scattered into the still wet mass to give the surface a natural look. Underneath the turf, fine roots have also been placed on the surface.

As soon as the basic structure has dried, different colour variations are created in the ground, in which I spray in a final step everything with a mixture of grey tones. After drying, strongly diluted oil colours such as Raw Umber, Burnt Umber and Black give the diorama an additional depth effect.



The ground is modelled with slow drying model clay. In the background you can see the autumn/winter tree of Drzewamodels. In the front a retaining wall made of hard foam was depicted.



Before the clay is fully hardened, tracks and wheel profiles are pressed into the modelling clay. These marks will help later when we will position the finished model. Turned Earth Ground from Ammo of MIG ensures a perfect soil structure. The tree is clearly integrated into the soil and gives it a vivid appearance.



A mixture of sand, pebbles and roots is sprinkled into the still wet mass. Then I added more grasses from Wellberg Studios.



After everything has cured, the base is sprayed with a mixture of Ammo of MIG 0036 Old Wood and Ammo of MIG 0037 New Wood.



To avoid monotony, I use different types of grass. Here moss cushions of Mininatur are freely arranged.



After drying, the diorama is airbrushed with Tamiya colors in different earth shades. Good visible in the picture are more grasses, which are placed freely on the base.



Over the dried surface a gloss agent from Liquitex was painted with a brush. Clearly visible are the spots where the Kubelwagen will be put later on.



Leaves from nature were dried in an oven and then crushed in a mortar. Fine leaves came out, which were freely distributed around the tree. This adds to the autumnal landscape which is strengthened more and more!



the modelled fence is shown for the first time. It was made by the artist himself using balsa logs, Magic Sculp and RMG steel wire. On the bark of the very fine and lovingly designed tree, a layer of Turf from Woodland Scenics is applied. It should represent the moss growth!



Impressions of a winter landscape inspired me to depict old and wet grass. Especially in slightly sloping terrain such grasses can be found. Sanitary hemp from the do-it-yourself store is excellently suited for this. With some Transparent Water from Vallejo it is painted and bent down.



In order to depict snow, different products with different properties were used. This was very helpful in order to be able to work in several layers. The combination of these different products should produce an end result that is as varied as possible. A highlight is the Artificial Snow by Andrea Miniatures, which brings shine and glitter to the landscape.



Pasture fences can be found throughout the Ardennes region. They are symbolic of the rural region in southern Belgium.

The Epoxy Resin to represent the water surface was applied in several thin layers. I use Tamiya Colors for the dirt effect.

With wood glue I glued model grass in different growth heights onto the landscape. Also the tree is now put on the spot and integrated into the base. As this tree loses its leaves in autumn and winter, I distributed finely sieved scatter material to selected areas. In the lower part of the tree the bark could be enhanced with some moss.

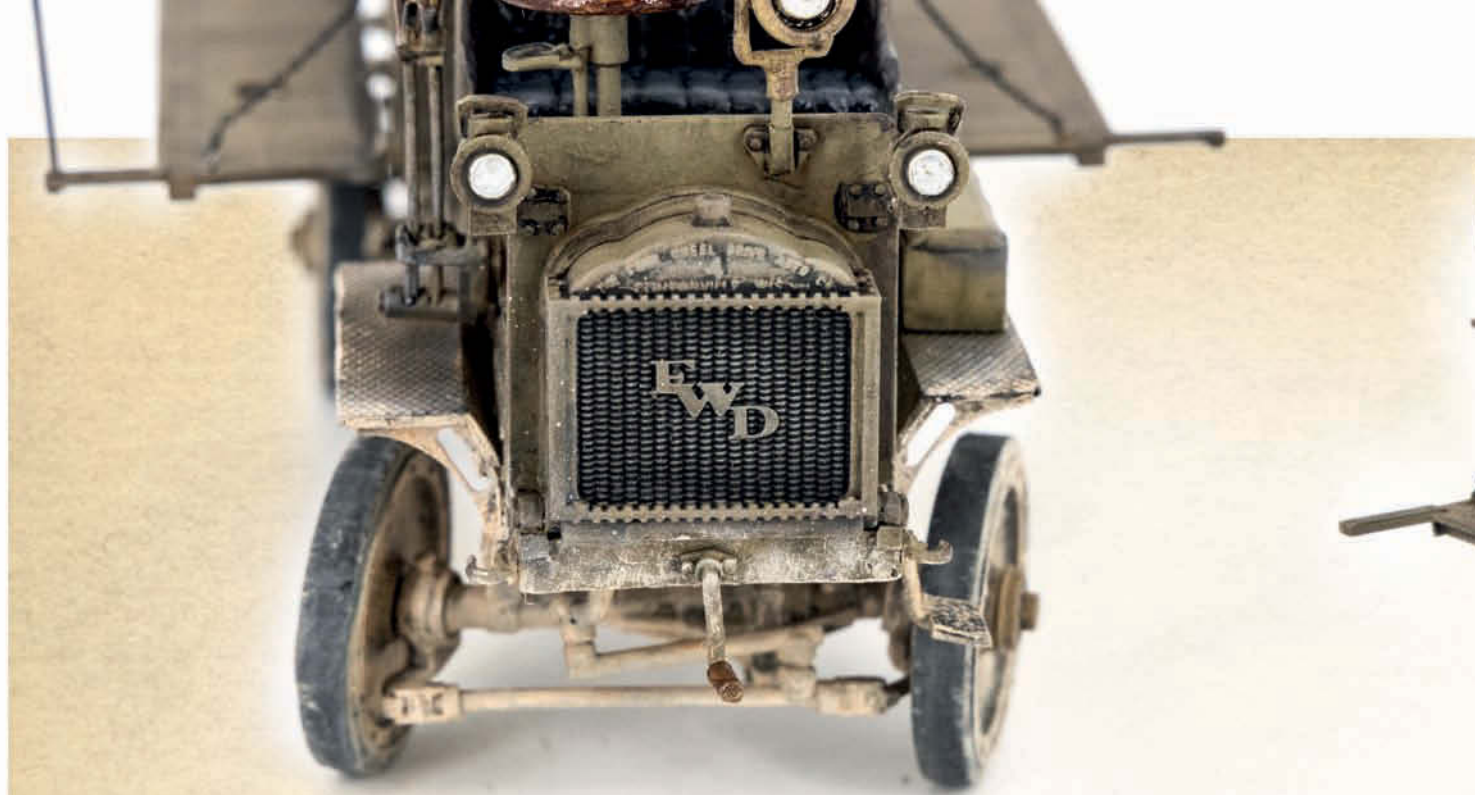
To give the landscape the winter influence, the surface has to be covered with some snow. As the weather conditions were changing constantly at this time, the fresh snow melted away and only a few snowfields remained on the meadows. To achieve an optimal result, I used a wide range of snow products available on the market. An outstanding product is the snow powder from Andrea Miniatures. It formed the shiny layer and the finishing touch to the snow presentation.

Finally, the dirt road is transformed into a muddy underground. From Voss Chemie I use an epoxy resin mass and mixed it with somewhat ochre brown colour. This gives the casting compound a natural look. With a pipette the liquid resin is distributed and the vehicle as well as the figure were put into place and positioned in this muddy water as well.

I would like to say thank you very much my friend Bernhard Lustig as well as Jörg Ruh and Jan Willem Stokkers for the support in the creation of the diorama.

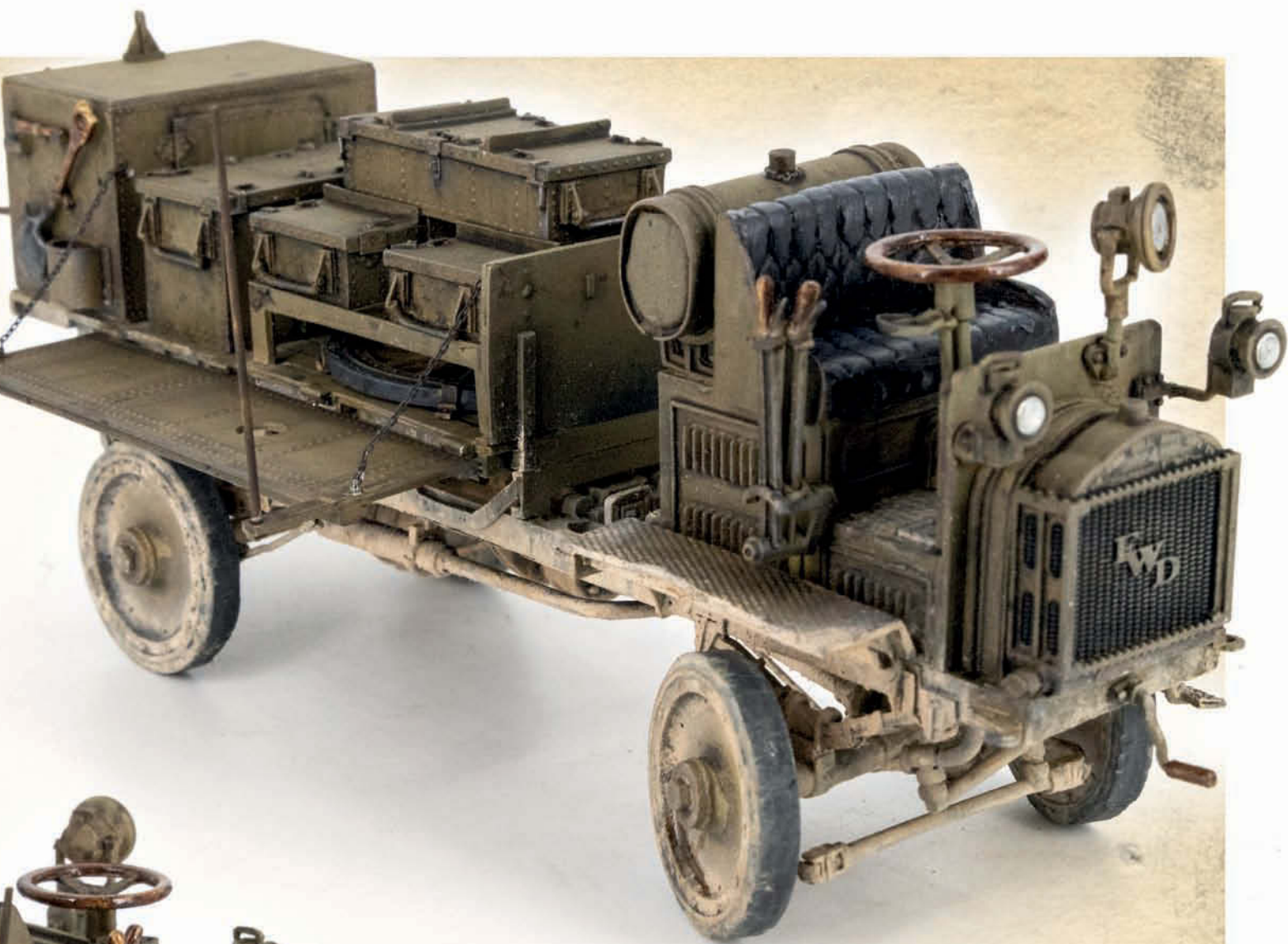






AS RESICAST GRACIOUSLY BOW OUT OF THE MILITARY MODELLING SCENE, CHRISTOPHE TREIZE BUILDS ONE OF THE EARLIEST EXAMPLES OF A U.S. ARMY TRUCK WITH THEIR 1:35 KIT.

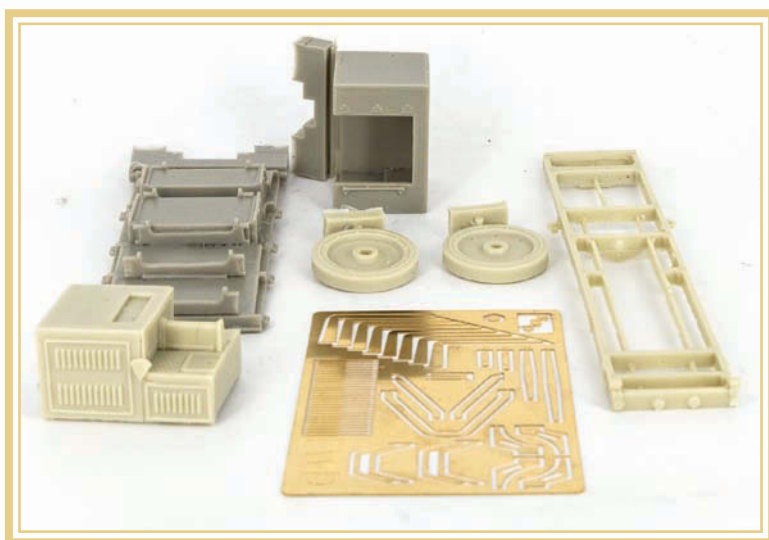




FWD

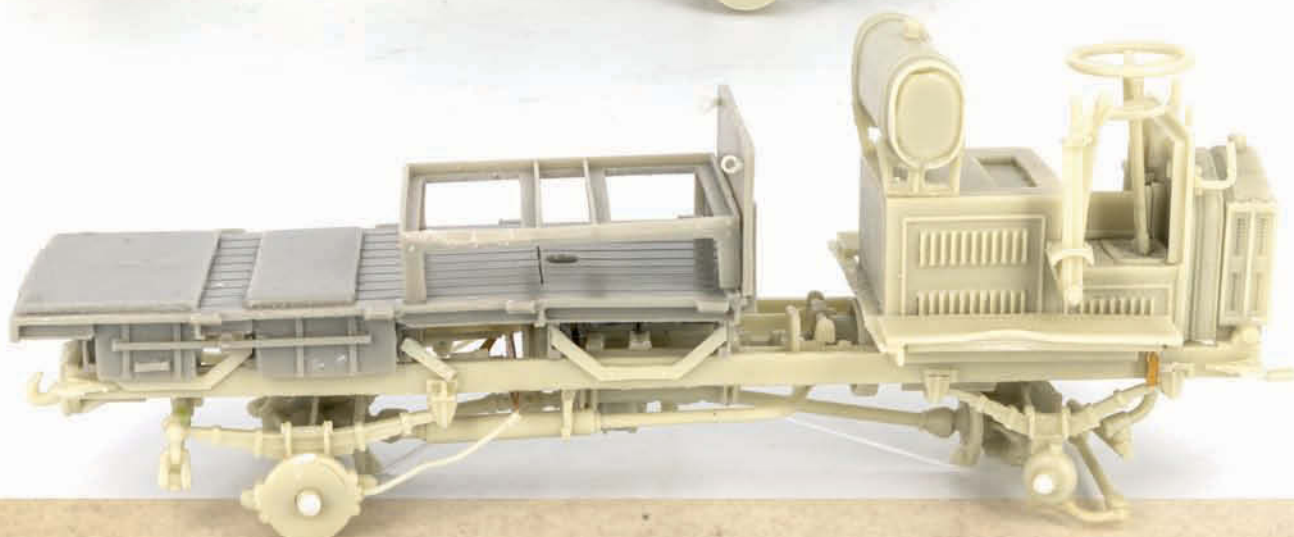
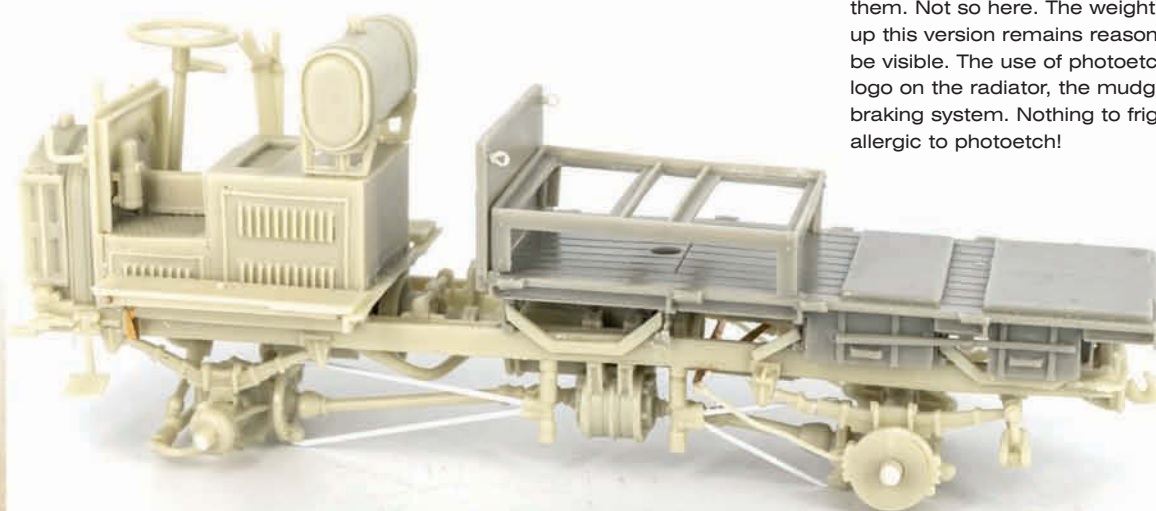
ONE • THIRTY • FIFTH • SCALE

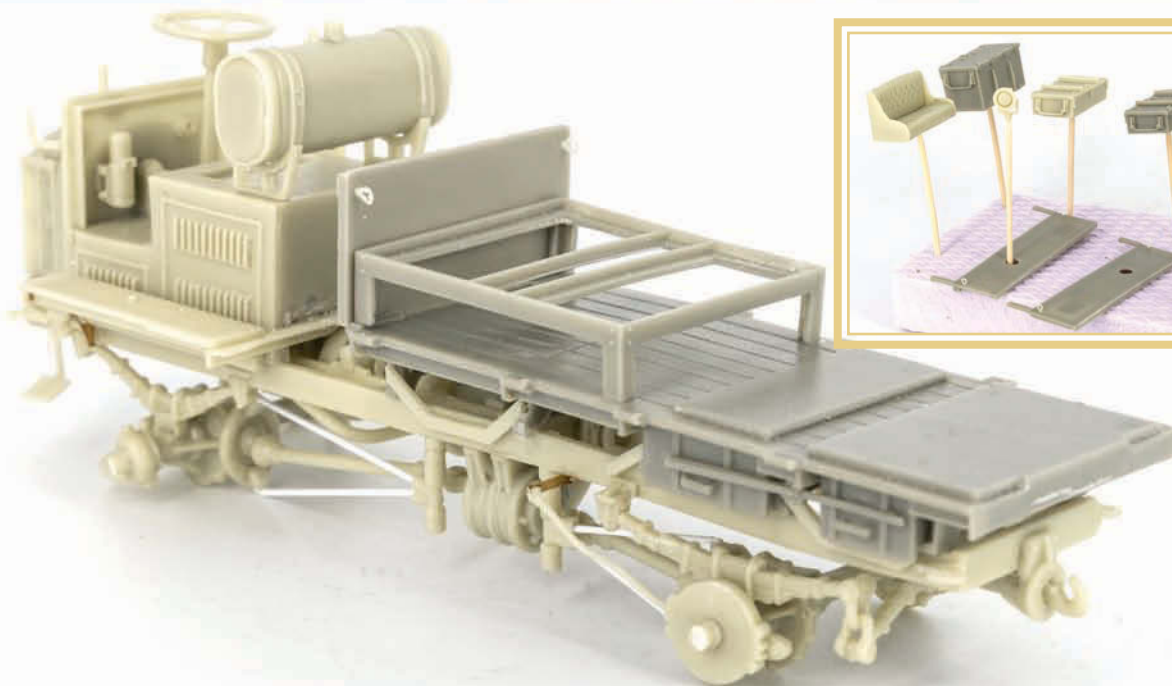
In 1918, the American army acquired a fleet of trucks for refuelling, maintaining and repairing guns and howitzers, as well as for artillery vehicles. Based on 2-ton Nash or 3-ton FWD trucks, the body was modified to carry a number of steel boxes and the various equipment and parts they contained. While the transport position of the boxes remains unchanged (one fixed, four removable), no fewer than 6 configurations are possible to cover the needs of campaign workshops. The contents of the boxes vary according to these configurations. You can find spare parts for trucks or guns, spare parts for optical instruments, telephones, control instruments, cleaning and conservation equipment, saddlery kits, carpentry kits, etc... A spare wheel for a gun is stored in the box under the trunks, and two others are attached to the body of the platform, along with shovels, picks and axes.



Resicast's FWD truck, released a few years ago, comes in this original version specific to the American army at the end of the First World War. It's a complete resin kit, complete with a photoetched fret (common to the craftsman's various FWD kits) from which very few parts are ultimately removed. The brand's usual greenish-grey resin is of high quality, bubble-free and requires very little preparation. The instructions, on a USB key, are clear and precise.

I started by damaging the rubber 'tyre' strip on the wheels to give them an operational look. To do this, I used a blunt X-acto blade and scraped the edges and tread. I prefer to work in sub-assemblies, particularly for the removable trunks, to make painting and weathering easier. Assembly isn't really a problem, but you do need to pay particular attention to the braking system, which is relatively visible if you opt for a configuration with the side panels up. In my case, with the side panels open, this part of the model will not be very visible. Like most resin truck kits, the chassis, steering and the various parts that make them up are very fragile and can sometimes be deformed by the weight-load of the various parts that are grafted onto them. Not so here. The weight of the parts that make up this version remains reasonable and no sagging will be visible. The use of photoetch is limited to the brand logo on the radiator, the mudguard supports and the braking system. Nothing to frighten novices or those allergic to photoetch!





I used white primer from Mission Model to undercoat the whole kit, to unify the different shades that make up the kit and to have a good base to prepare for the different painting phases that follow.

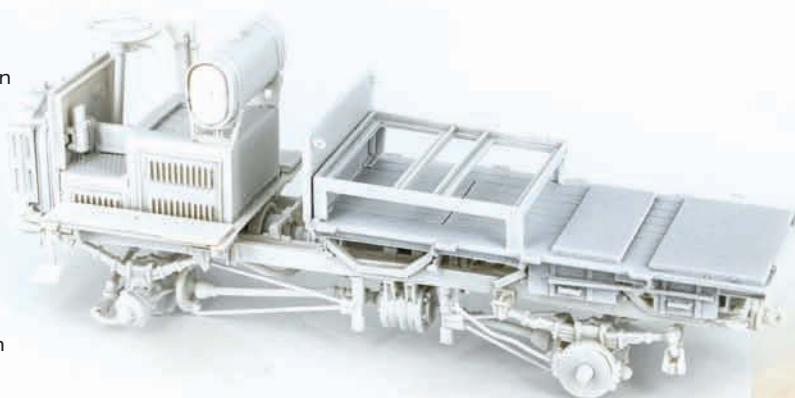
I airbrushed two thin coats of MMP-023 US Army Kakhi Drab FS 34088 over the whole model and the various sub-assemblies. This colour was gradually lightened with MMP-011 Dunkelgelb RAL 7028, zenithally. Three passes were needed to mark the different contrasts. Unlike the recent kits I've painted, this model doesn't have much of a surface that lends itself to mottling or spotting. I did try to apply it to some of the panels but the result wasn't what I'd hoped for. Two coats of VMS satin varnish were sprayed on before starting the ageing process.

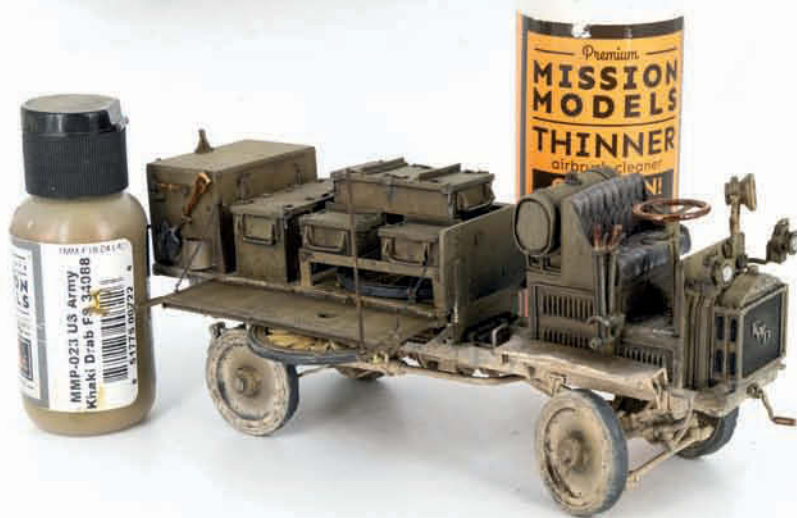
To add depth and contrast, I darkened some of the panels and recesses using Ammo Streaking Brusher Green-grey Grime. I then blended the effect with a brush soaked in thinner. This technique enriches a shade that may appear dull or too uniform. Scratches have previously been made using the sponge technique, with a brush and also with a 0.005 pen. Using these three techniques allows you to vary the effects and avoid the uniformity of the scratches. The radiator was previously painted a very dark grey.

After drying for a few days, I applied Ammo's Brown For Green Vehicles in the hollows and around the reliefs. The excess is removed with a make-up sponge or a brush soaked in thinner. On the lower parts of the truck, and more particularly on the chassis,

a wash of the same product but more diluted is applied. This time, the excess is not removed. Using the Streaking Brush Green-Grey Grime from Ammo, I made a few vertical marks on some of the panels, which I then blurred with a flat brush soaked in thinner, to simulate the marks left by bad weather. After drying, a subtle brushing with MMP-011 Dunkelgelb RAL 7028 is applied to the raised areas, in particular the numerous rivets on the trunks and the inscription on the radiator.

To give an initial dusting effect, a very dilute, low-pressure veil is sprayed using the airbrush, with MMP-043 British Portland Stone RAL 64, over the entire chassis and the lower parts of the vehicle.



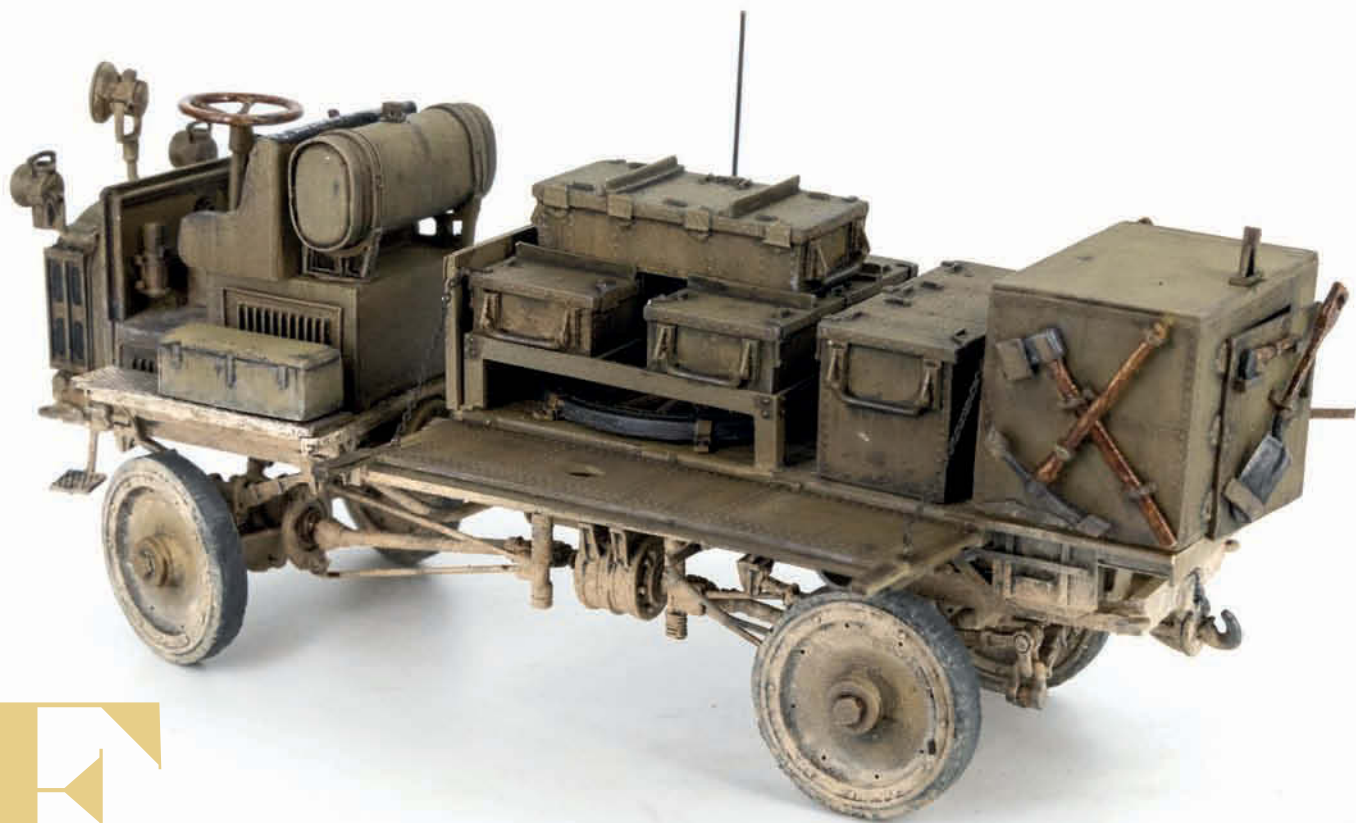


To simulate the mud, I decided to use just two shades of oil paint from 502 Abteilung. Using an old brush, I applied mostly Buff and a little ochre to vary the tones. The oil paint, diluted with a little thinner, will run into the hollows to simulate an accumulation of dust, but the application of paint straight from the tube will give a slight relief. The balance between the two techniques will enable the details of the kit to be retained and remain realistic in relation to the scale. The wheels, treated separately, have undergone the same treatment. Sometimes, the excess is removed with a make-up sponge, leaving a thin film of paint to simulate the accumulated grime. The wooden parts of the tools are first painted a light yellow, then the grain is represented with an extra fine brush using a brown tint. I then applied dark brown oil paint, thinned very slightly to soften the contrast.

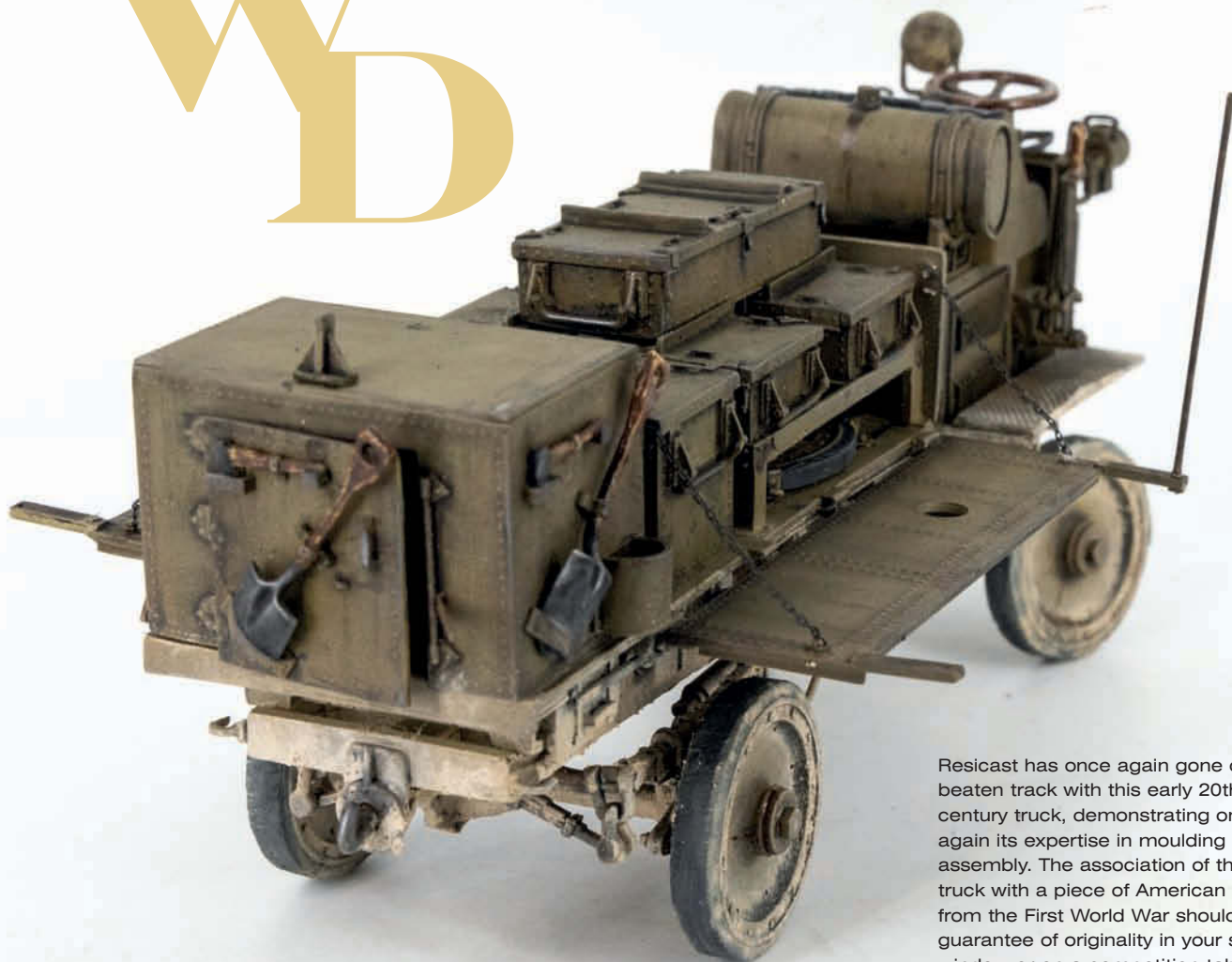


After rubbing down certain corners or parts worn by handling with Dark Steel pigments from AK Interactive and a blur, the various trunks are positioned on the body. The seat was painted with 502 Abteilung oils, using a light and shade technique. Although the chains are supplied by the manufacturer, for reasons of speed I used pre-painted chains from Trumpeter. The headlights are treated with a Molotow Chrome pen and a drop of VMS gloss varnish.



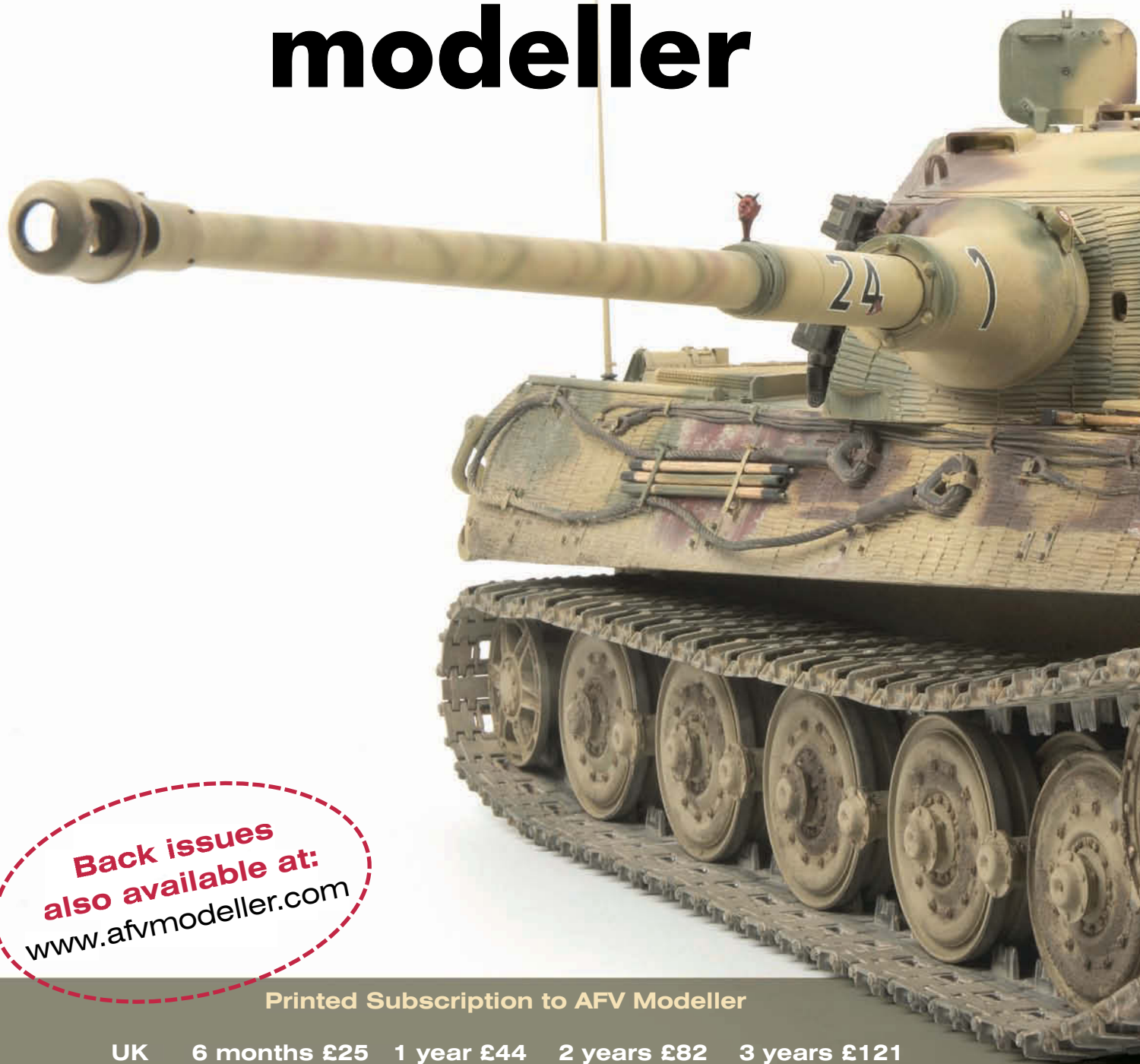


FWD



Resicast has once again gone off the beaten track with this early 20th century truck, demonstrating once again its expertise in moulding and assembly. The association of this truck with a piece of American artillery from the First World War should be a guarantee of originality in your shop window or on a competition table!

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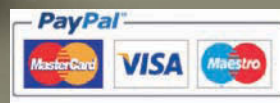
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