





## WEATHERING



MODERN WARFARE

## SOLUTION BOX

**SOLUTION BOX 02** is a complete and comprehensive set \( \) used to perform the complete process of painting and weathering your models.

Everything you need for the application of the primer and camouflage base colors, as well as each weathering effect including filters, washes, fading with oils, drainage, chipping, dust, and even dirt and mud.

WWIIL

me



SOLUTION BOOK WWII LUFTWAFE | A.MIG-1612 PLW GREEN BROWN A.MIG-0217 SLATE GREEN FILM 02 63 RLM 76 PALE GREY 046 MATT BLACK A.MIG-8212 AQUA GLOSS CLEAR

A.MIG-2055 MATT LUCKY VARINGS A.MIG-1609 BLUE FOR DARK GREY A.MIG-1613 PLW BLUE GREY A.MIG-3513 STARSHP FILTH A.MIG-3512 DARK BROWN A MIG-8621 SYNTHETIC FLAT BRUSH 6 A.MIG-8612 SYNTHETIC ROUND BRUSH 2/0

SOLUTION BOOK 02 is a simple and basic guide intended to help any modeler to easily achieve similar results to those shown in every example.

With this guide, you can paint any late war German fighter. Although we have chosen a Fw 190 D-9 as an example for this step-by-step guide, the same processes can be applied using exactly the same sequence and methods to any other Luftwaffe fighter dated to the end of the conflict. Simply grab your favorite model and start painting without further delay!



















THE WEATHERING MAGAZINE by AMMO of Mig Jimenez Copyright 2019





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### **MODERN WARFARE**

In this issue of The Weathering Magazine, we want to show you a representative cross-section of models from the modern battlefield. Not all types of weapons presented are state-of-the-art equipment straight from modern military and defense exhibitions. For example, the T-72 tank presented is a design from 1971, but it is still serving in numerous variations and modifications with over 40 countries from around the world. Most recent service includes actions taken by government forces during the tragic Syrian conflict. Next to this aged but actively used machine, you will see more or less exotic vehicles such as the M9 Armored Combat Earthmover, the ultramodern PUMA wheeled transporter, the BUK surface to air missile system and the fast CB-90 assault boat. Our goal is to show you the specific techniques used to make an accurate miniature of a modern combat machine. Those of you who build models of subjects from the second world war on a daily basis often face the problem of an inability to clearly identify colors, textures, discoloration, and other details of weathering. All this is due to the fact that most of your WWII archival photographs are black and white. Modern conflicts are recorded only in color and mostly in the massive resolution of modern DSLRs or 4K cameras, offering a truly realistic view of the subtlest effects visible on modern tanks or planes. Even if you are a fan of old equipment, making a miniature of a 21-century vehicle will be an incredibly fun project, filled with opportunities to accurately depict every aspect of weathering. The knowledge and experience gained will easily translate to any other era or subject while enriching your modeling skills.

Sergiusz Pęczek









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COMBAT BOAT 90 pag. 58





### Schützenpanzer PUMA Conversations regarding premier



**David Pérez** 

modern infantry vehicles undoubtedly involve firepower, speed, and protection against projectiles and other threats, among others. There

are many different modern infantry vehicles on today's arms market that meet these requirements, but if any of them can be called top-ofthe-line, it is the German Schützenpanzer (IFV) Puma.

A wealth of Puma reference photographs can be found throughout the internet, where the vehicle's wide range of capabilities can be seen on training ranges and in the field. These photos show a hull exceedingly dirty and covered in dust and mud, with the turret almost clean. This is my main weathering idea for this project - to represent a vehicle with dried mud on the hull sides in contrast with the turret which barely shows dust. In general, this weathering pattern is very common on modern vehicles being evaluated in proving grounds, crew training, or taking part in field exercises. Most importantly, the mud layer must be applied to localized areas in order to create a high level of contrasts between different areas of the model, both clean and filthy. This prevents the model from ending up with a monotonous and boring mud coating which would hide all the previous weathering work. Let's see how it is done!

















- 1 The single most important step when painting a model is to apply a primer coat which ensures optimal paint adhesion of the acrylic paint layers to follow. Start by spraying One Shot Primer Grey A.MIG-2024. For this application, I used the new Aircobra A.MIG-8625 airbrush, an indispensable tool for painting any model. We worked with a 1.5 bar/22psi air pressure, as you can see in the picture.
- With the model entirely primed in grey, specific areas can be pre-shaded using One Shot Primer Black A.MIG-2023. This effect is focused on the non-slip areas- and the recessed seems between panels.
- **3** After waiting 24 hours for the primer layer to dry, a standard NATO three-color camouflage was applied.

  The green base color of the camouflage was applied using NATO Green A.MIG-0084 acrylic mixed with Transparator A.MIG-2016 in a 50/50 ratio. The color was sprayed in a light coat over the green areas shown on the real vehicle. Thanks to the use of the Transparator product, the camouflage can be applied without completely obscuring the pre-shading effect from the previous step.

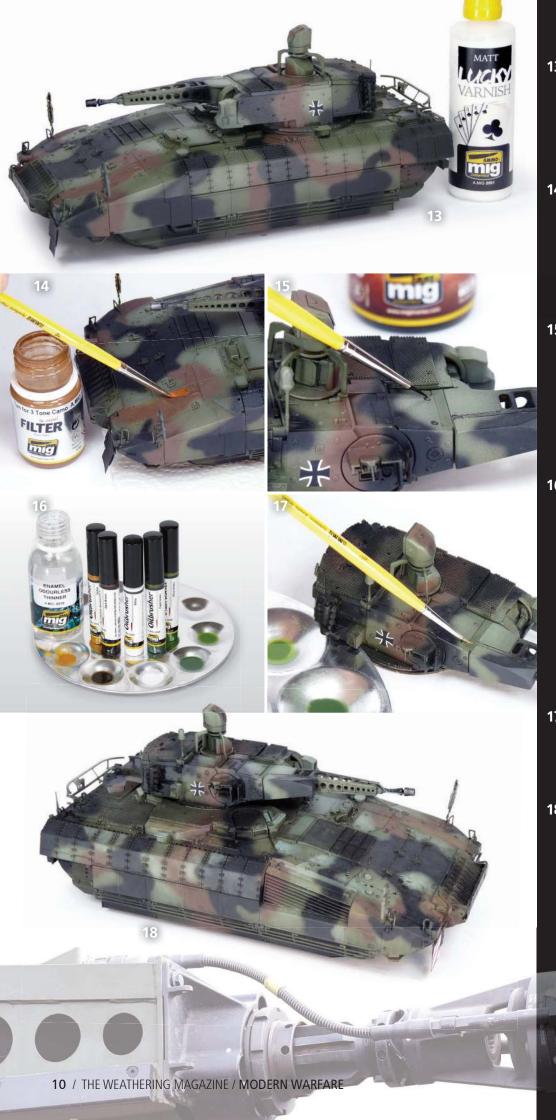
- **4** A few drops of Matt White A.MIG-0047 acrylic color was added to the previous mixture to create a lighter green tone used add highlights to specific areas and create more contrast within the green base.
- **5** For the black disruptive bands, Matt Black A.MIG-0046 and Transparator were used. The outline of the patches were airbrushed first. Once sketching the contours of the camouflage was complete, the patches were filled with black to achieve the desired result.
- **6** The camouflage application continued with NATO Brown A.MIG-0085 thinned with Transparator for the brown bands. The method used is the same shown for the black areas of the pattern, but more control and precision was required when contouring the area to avoid overspray effecting the black camouflage patches.



- **7** With the camouflage scheme application complete, a protective layer of Glossy Lucky Varnish A.MIG-2053 was applied. A couple light coats will be enough to seal the previous work, obtain a suitable surface for the subsequent weathering processes, and prepare the surface for the decals.
- **8** Let me introduce you to the new AMMO decal solutions. They can be used to fix and adapt all types of decals to the surface of your models.



- 9 To fix the decal onto the surface, start by applying Decal Set A.MIG-2029 using the built-in brush inside the cap. The setting solution is then applied on the area where you are planning to place the decal and left to sit for a few minutes.
- 10 Next, position the decal in its final location with the help of a brush.
- 11 The Sniper Brush is one of AMMO by Mig Jimenez's most
- recent and versatile tools. The tip has micro fibers that can be used for rubbing and chipping off paint, applying pigments, blending oil colors, and many other useful functions. In this case, the micro brush was used to carefully move the decals onto their exact position.
- 12 Next brush on a small amount of Decal Fix A.MIG-2030 over the decal using the built-in brush applicator. After a few minutes the decal conforms perfectly to the surface details.



- 13 Matt Lucky Varnish A.MIG-2051 is ideal to get rid of any possible shine on the decals and achieve a more natural painted on appearance. A couple of light coats were applied over the decals, and they immediately become perfectly integrated into the surrounding surface.
- 14 To tie in the three colors of the camouflage together and add a warmer tone to the entire model, a filter of Tan for 3 Tone Camo A.MIG-1510 was used. The filter was uniformly applied over the surface with a no.4 flat brush while preventing it from pooling or collecting in recesses or around details.
- hours, a pin wash was applied to the entire model. For this subject, Dark Wash A.MIG-1008 and a no. 0 or 1 brush was used to better control the application of the washes. Panel lines as well as raised and recessed details are emphasized with the washes, adding a more three-dimensional look to the model.
- 16 The Puma is among the most advanced modern AFVs and is composed of multiple materials including various metal alloys and advanced composites. But no matter how modern the materials are, over time exercises and exposure to the elements will end up degrading the paint of any vehicle. In my opinion there is nothing better than oil colors to represent this type of damage to the paintjob. In this case I diluted different Oilbrushers tones with Enamel Odourless Thinner A.MIG-2019 in a palette and used them for small localized filters.
- 17 Filters are applied onto specific areas with a light green tone. A dark green shade was also used to create contrast between green tones and an ocher tone used on the brown patches.
- 18 In this picture, you can see the model with the oil filters already completed. The application has created faded paint effects and highlights to different parts of the model, thus adding more visual interest to the finish.







- 19 Streaking products in a new container, another new range from AMMO by Mig Jimenez with the same type of bottle used in the Oilbrusher range. This new line includes an even finer brush which enables you to create thin vertical lines in a fast, clean, and easy way.
- 20 As mentioned, the built-in applicator brush in the cap is thinner and longer than its counterpart in the Oilbrusher series which offers better control during application. For this subject, vertical lines were added to the sides.
- 21 Once the streak lines are dry to the touch, they were blended with a flat brush moistened in enamel thinner, using vertical strokes moving from top to bottom to obtain an extremely realistic look of traces of dust and dirt running down the surfaces before drying.









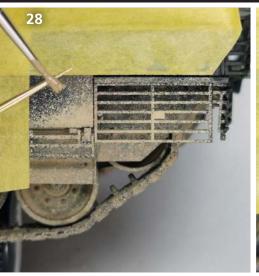
- 22 At this stage it was time to shift focus and add mud effects to the vehicle. Mud Thick Soil A.MIG-1701 enamel product was widely used to add dust and dirt effects to the model and begins with the wheels. The product was diluted with Enamel Odourless Thinner to the consistency of a wash and generously applied over the wheels with a round brush, this process can also be repeated on the tracks.
  - Once dry, the enamel creates an extremely realistic effect of dry mud.
- 23 The application continued with Thick Soil from the Heavy Mud range used directly from the jar to create a dry and thick mud covering. The product was applied with a brush to the lower areas of the Puma such as the side skirts.
- 24 Another example of the versatility of this product is that it can also be used to represent dust effects. The Thick Soil mud product was again thinned to the consistency of a wash, but this time a much thinner consistency than in the previous step. A fine brush was loaded with wash and a subtle layer applied to the areas where a dust accumulation is required. You can add more or less wash to taste, once complete the model was set aside to dry. Notice how the anti-slip areas start to stand out more thanks to this dusting technique.

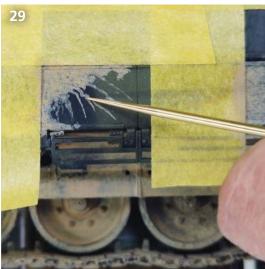


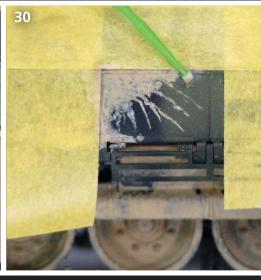




- 25 Even the turret can receive subtle dust applications. Here we can see how it has been done in three quick steps. Load the brush with wash and apply it onto the desired area.
- 26 This is the result once the enamel has dried.
- 27 In this case I used a makeup sponge to clean up the excess wash while leaving the paint accumulated in nooks and crannies, much like when using pigments.







- 28 The next step was to give some defining character to the model. Focused attention is given to specific areas individually while using different methods. The first step was to mask off the areas surrounding the zone where mud was to be applied. For this model, mud splashes were applied with a brush and a toothpick. The brush was loaded with slightly diluted Thick Soil and then the effect was flicked with the tip of a toothpick until satisfied with the result. I used another new simple and versatile tool from AMMO by Mig Jimenez, the high-quality turned Brass Toothpicks A.MIG-8026 are perfect for many modeling applications and techniques.
- 29 Mud applications continued on individual areas, this time depositing small quantities of enamel products from the Heavy Mud range on the corners of this panel, as you can see in the photo. Using the brass toothpick before the enamel dries, the mud was spread over the panel to simulate a dry trickle of mud on the surface.
- **30** Correcting, adjusting, and removing effects is easy, you can simply use a Sniper Brush and thinner.



Once the adhesive masks were removed, the result of the localized mud effects can be seen as shown in this photo. Some areas received more mud splashes, while others were exposed to thicker mud, streaks of dry mud, or even caked on surfaces combined with splashes.

Engine oil stains were represented with Fresh Engine Oil A.MIG-1408. The enamel product was applied with the airbrush onto the most logical areas to be stained by the exhaust gases.







Javier López de Anca

The F/A-18 Hornet is considered one of the most versatile and sophisticated carrier-based aircraft. Initially, the US Navy intended to produce two different versions: one fighter and one specialized in attack. Eventually both projects were combined to produce the current multi-role F/A-18 A/B. The requirements put forth were not easy to achieve, as the design would have to replace the A-7 Corsair II and F-4 Phantom in their respective roles, in addition to replacing the F-14 Tomcat in its role of defending the fleet. The prototype put forth showed promise beyond all expectations and would evolve to be utilized by both the US Navy and the Marine Corps. The F-18C also serves with the air forces of Canada, Australia, Spain, Finland, and Switzerland among others.

The Hornet I have represented belongs to the VFA-87 Golden Warriors, a squadron based in Oceana (Virginia Beach) that has been active since the Vietnam War through to more recent operations such as Desert Storm, Enduring Freedom and Iraqi Freedom. Specifically, this aircraft is placed in the year 2013 when the Golden Warriors served aboard the USS George W. Bush (CVN-77).

Working with this fine example of Kinetic's molding quality was a pleasure. The quality of its this kit makes assembly a joy free from complications. This allowed me to sink into the painting and weathering stages that I was really looking forward to. This kit is the best option when building an F/A-18 and is available in versions A, B, C or D.







vent creating a step at the edge of the mask.







- At this stage the excellent Cartograf decals included in the Kinetic kit were placed on the gloss surface. After loosening in warm water, the decal was transferred to the model with a clean brush soaked in Micro Set.
- Once all decals were placed, the next step was to varnish in matt using Marabou enamel varnish. This product will allow me to work on panels and seems using a pencil without it slipping across the surface.
- The varnish was left to dry completely before tracing over the panel lines with the pencil. This can be a boring task but the result is excellent.



At this stage I began to apply wear to the lower area by imitating the staining around gear bay doors and engine fairings. The foundation was applied with color Dunkelgelb AUS'44 DG III using the AMMO reference A.MIG-0012.



The next color used was Oil Ochre A.MIG-0055, which was applied towards the center of the stains applied previously. Shadow Rust A.MIG-0043 was added and thinned with Transparator to apply a fine line in the center of the stain.



The next step was to apply fine staining of various colors using the Oilbrusher range applied directly from the container. References show common staining patterns on the upper engine fairings of the F/A-18. To reproduce this effect, a small drop of Ochre color A.MIG-3515 was deposited to the area.



Using a flat brush dampened with Enamel Odourless Thinner A.MIG-2019, the staining was dragged towards the tail in the direction of airflow. If it is necessary to make corrections or intensify the effect, we can always remove the effect or apply additional layers.



















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# DIORAMAPROJECT AFV AT WAR Acción Press

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Diorama Project was born with the idea of learning how to make all the elements of a diorama, vehicles, figures and set design in a simple way.



Frederik Astier - Jari Hemila - Fabrizio Pincelli - Adam Wilder Fernando González - Shimpei Nohara

# MRAP KAMAZ-5 "Typhoon-K"



### **HISTORY:**

The Kamaz Typhoon (Russian: Камаз-63968 Тайфун) is a family of Russian built multi-functional, modular, armoured, and mine resistant MRAP vehicles. As of June 2018, the number of Typhoon-k in the Russian Armed Forces fleet is about 290 units.

The development of the "Typhoon" vehicle family began in 2010, when Minister of Russian Federation Armed Forces approved the "Development of Russian Federation Armed Forces military vehicles for the period until 2020" initiating the Typhoon MRAP program. In 2012 the first contract between Russian Ministry of Armed Forces and Kamaz to produce Typhoons was signed. By 2014, at least 12 Typhoons took part in Russian Victory Day military parade.

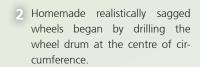


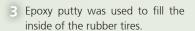












4 Before the epoxy was dry, I used screw driver to attach to the rubber tire to the rim to reshape the profile.

5 Recreating the sagged wheels was easy enough and the results far more realistically depict the weight of the vehicle.





Takom's Typhoon-K kit features really nice details and looks sharp with a photo-etched grill set placed on the roof top. Finally, the sagged weighted wheels were test-fit before painting began.

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Once the base colours were dry, weathering of the interior began using AMMO enamel weathering effects. One of my favourite weathering sets, the DAK set A-MIG-7406 which includes North Africa Dust A-MIG-1404 was used to recreate the dust effect and A-MIG-1001 Africa Korps Wash mixed with A-MIG-1201 Streaking Grime for DAK made the ideal colour of wash for grey base interior. A selectively placed Light Rust Wash was applied as a panel line and pin wash for realistic contrast.



Once the washes fully dried, I added earth toned pigments especially on the cabin and interior floor. This critical detail of human use was applied with Sand A.MIG-3012 and Dark Earth A.MIG-3007 soil toned pigments. Pigment Fixer A.MIG-3000 was used to adhere pigments to the surfaces.

Following the AMMO by Mig painting guide included with the Takom kit, I used Dark Green acrylic A.MIG-0915 for the base colour. By simply adding White, I was able to create lighter tones on the upper surfaces of the vehicle exposed to direct sunlight. The road wheels were base painted with Matt Black A.MIG-0046 for the rims and Rubber & Tires A.MIG-0033 for the weighted tires.





Once the base colour paints had fully dried, I wet the surface with Tamiya X20A and proceeded to recreate scratches and chipping using a toothpick and a needle. First the acrylic layers were weakened and loosened by the X20A thinner, then carefully a toothpick was used to create chipping revealing the metal and rust tones underneath. Once the process was complete, I sealed the model with semi-gloss clear.



Continuing with the exterior discolouration, AMMO by Mig Streaking brusher paints were applied. This range is so fun and simple to work with and can be applied straight from the jar. The colours Rust, Streaking Dust, Medium Brown, Green-Grey Grime, and Cold Dirty Grey were applied directly from the container using the built in brush. The colours were streaked and blended with a clean brush using vertical strokes to create the effect of streaked dirt and grime.



The Streaking brusher tones were blended using a flat brush dampened with Enamel Odourless Thinner. The application of these effects is much easier and quicker thanks to the built in brush and accuracy of colours directly from the container.



Again I added more layers of streaking dust, focusing the side skirt and lower hull using A.MIG-1258 Streaking Dust.



Next I applied various AMMO of Mig enamel effects to create some light dust over the rooftop, I also randomly accented key features with the darker brown tones A.MIG-1001 Africa Korps Wash mixed with rust tones.



By adding more A.MIG-1001 Dark Brown, the perfect colour for further panel line washes was created to distinguish the vehicles shape.



I began adding the first layers of dry mud effects on the lower chassis using a combination of textured enamel Dry Steppe A.MIG-1751 and Thick Soil A.MIG-1701 with Light Dust pigments moistened with thinner which was flicked and splashed from a brush.



A similar process was used to recreate a darker mud tone and splashed wet mud using Turned Dirt A.MIG-1753 and Wet Ground A.MIG-1755. The mix created a truly realistic textured effect of splashed wet mud on the smaller areas around the wheel wells.



The next step was to tie the road wheels into the weathering beginning with a light dust coating that covered the whole wheel using Dry Steppe A.MIG-1751.



The effect of streaked light mud radiating outward was added using Thick Soil from the Heavy Mud line of textured effects mixed with Light Dust to create realistic dry mud tones.



Once the mud layers had fully dried, I recreate more dust effects on the wheel surface closer to the centre of the rim. A layer of dry pigments provided a realistic look when blended with the mud effects from the previous stages.





- A MIGOST Back A MIGOST Light Dust modelling modelling modelling modelling in the state of the st
- 23 I replicated fresh wet mud on the outer tire tread surface using a pigment mix and then I applied Damp Earth A.MIG-1754 and more of the mud tones A.MIG-1702 Turned Earth for creating medium density damp and wet ground.
- 24 Final touches on the road wheels weathering process were added by following reference photos of the real armoured vehicle. Contrasting dampness was applied on the road wheels while keeping the effects random and always radiating from centre using A.MIG-2015 Wet Effects. This step created truly authentic high contrast between wet and dry areas.
- 25 Finally all of the road wheels were finished, the AMMO acrylic paints and Weathering sets were quite simple to use and the results very impressive.









- At this stage the focus returned to the armoured body of the Typhoon. I spraying the final dust application using both A.MIG-1751 Dry Steppe and the pigment Light Dust A.MIG-3002 diluted with enamel thinner to the approximate consistency of a filter. The dust mixture was airbrushed over the lower surfaces and allowed to dry for an hour, creating a subtly realistic and completely matt effect.
- 27 For another contrasting layer, Wet Effects was mixed with a little Streaking brusher colour A.MIG-1256 Green-Grey Grime and diluted with enamel thinner. A fine tipped brush was used to paint water marks in logical areas. I also diluted the Green-Grey Grime colour and placed the darker wetness into the seams which added volume to the wet effects. In the photo you can see the high contrast between the lighter toned pigment filter layer and the darker wet tones.
- 28 I also adding Wet Effects under the mudguard, lower hull, and the chassis to depict the effects of water and wet mud that has splashed and drained from the lower areas.
- 29 The same enamel Wet Effects were used to apply moisture around the roof details. When painting the wet areas, keep the effects placement and shape random and applied to logical areas.
- 30 Once all the road wheels were attached, the bulletproof glass windows were tinted with Crystal Green acrylic colour A.MIG-0092 and once dry, the small details were glued in place. Time to add the finishing touches. For the final weathering effects, I used Wet Effects mixed with a little enamel Dark Brown Wash for Green Vehicles A.MIG-1005 and applied the wash mixture as a panel line and pin wash to areas in need of further definition and contrast.









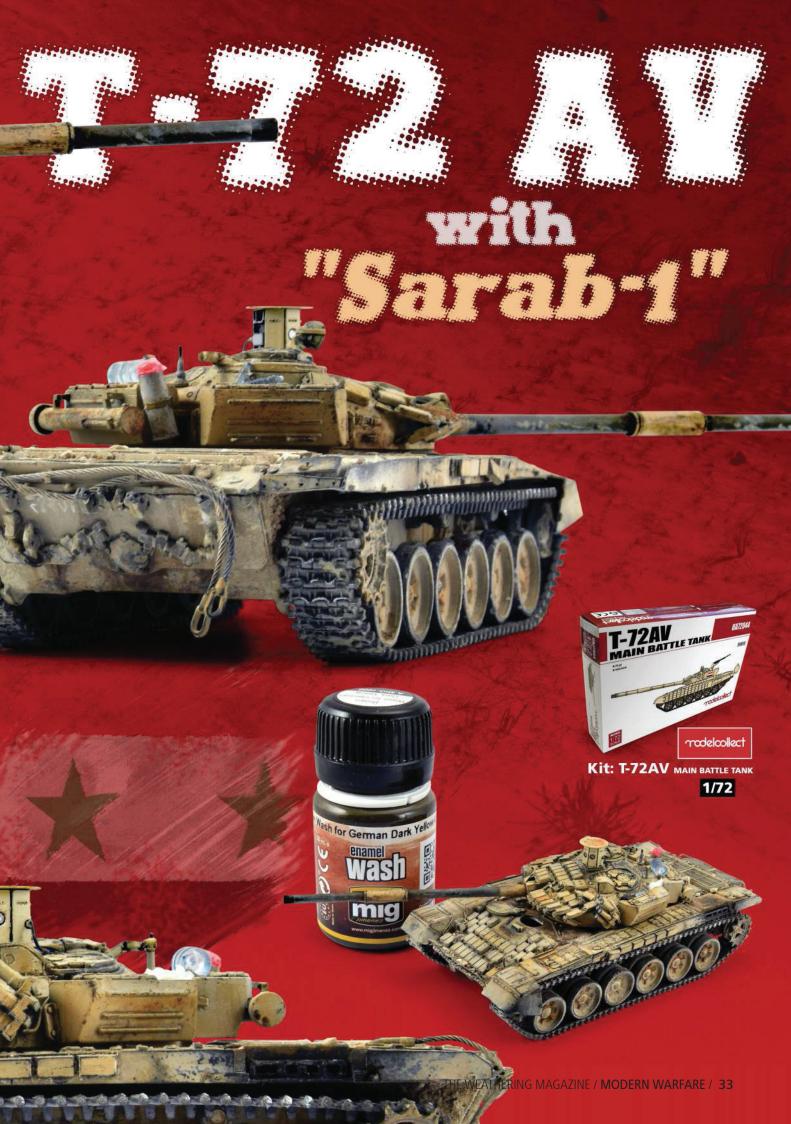






Sergey Golikov tal forces supplied by the US and other external influences. To counter the TOW-2, the Syrian army deployed the Sarab-1 defence systems which misguides the incoming missile. At the end of 2016, the second version of the Sarab was delivered which looks like a regular cooking pot with a high number of "windows" that increase the amount of disruptions. Now a new version named the Sarab-3 is in use and features advanced defensive capabilities. The inspiration to make a model of T-72 with the Sarab system had been with me for several years but I had limited time and could not find a suitable kit for the project. Finally, I received the new kit T-72AV from Modelcollect (ref:UA72044 and decided to build it with the addition of aftermarket components and scratch-built details.

Before beginning, I studied and analysed a large amount of reference material from Syria. While there are a lot of camouflage variants, the T-72AV often wear a plain sand colour with a distinct brown tint. To accurately recreate this colour, I mixed A.MIG-030 Sand Yellow tinted with NATO Brown A.MIG-085. Furthermore, I carefully planned all effects that I wanted to show on the model and how to go about applying each of them. To enrich the chipping of the top coat, I enhanced the black primer by adding protective green and some rusty areas. T-72AV has a very complex shape and it is hard to show streaking effects on such model. Therefore, I focused on contrasts and attention to various specific elements to deliver a dynamic finish. For finishing touches, I added water bottles, stones and rubble to reinforce the vehicle's setting to place it in the proper context.









At this stage the road wheels were installed on the model and rubber tires accurately depicted using A.MIG-0033 colour accurately named Rubber & Tires.



With base colours in place, the weathering of the lower hull and running gear first received washes and the streaked remains of corrosion and grime using Streaking Grime and Light Rust Wash enamels. The areas closest to the ground receive layered effects of Dry Light Soil textured enamel mixed and layered with Pigments Rubble, Light Dust, and contrasting Dark Earth.

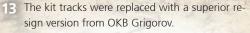




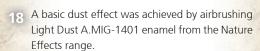




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- 14 Before painting, the resin was first primed with acrylic Tracks Primer A.MIG–2007.
- 15 Some features and surfaces of the links were detailed with Matt Black A.MIG-0046.
- Others with the accurate rust tone Rust Tracks A.MIG-0034 for contrast.
- To dampen the contrast and add depth to the track face, I applied Track Wash A.MIG-1002.



- On contact surface of the track, I removed the dust effect with a clean flat brush and enamel thinner.
- 20 Polished grousers were depicted with metallic
- pigment Gun Metal A.MIG-3009 applied to the outer most surfaces using a silicon pen/stick.
- Next, I added some realistically textured accumulations of earth using Heavy Mud A.MIG-1700 and a small wooden stick.
- Darker wet spots were added using the versatile new AMMO Streaking brusher colours Medium Brown and Warm Dirty Grey.
- Finally, the raised edges were highlighted with metallic acrylic paint Silver A.MIG-0195, once dry they were carefully installed.

















Shadows and deep dirt accumulations were shown on the hull and turret using Oilbrusher colours Black A.MIG-3500 and Dark Brown A.MIG-3512.



Enamel can also be applied by airbrushed to show dust accumulations, in this case using the colour Light Dust to be coherent with the previous effects.



Some areas require a bolder and pronounced accumulation of dust, for this additional layer I used a bit of pigment Light Dust and fixed it in place using Enamel Odourless Thinner.



The recessed areas of the engine air intake grids were treated with Oilbrusher colour Black A.MIG-3500 slightly diluted with enamel thinner.



Some areas were discoloured using Ochre A.MIG-3515.



Smaller chipping and rust effects were added with a sponge and acrylic Chipping Color A.MIG-0044.



Using darker enamel, I created striking contrast effects between The exhaust was first base coated with Matt Black acrylic. dusted areas with Streaking Brusher Grime A.MIG-1253.





And fuel staining and spills imitated with a special enamel colour Fresh Engine Oil A.MIG-1408.

On the exhaust covers, I added rust effects using enamels A.MIG-1004 Light Rust Wash to give the impression of an overall rusty patina. Similar rust effects were also added on the deep wading tube located behind the turret as well.





35 The Sarab system was painted using AMMO's Desert Sand A.MIG-0029 directly from the bottle. Optics were first painted using Silver from the Metal Acrylic Colors range and sealed with Glossy Varnish. This provides a smooth surface for the Dark Wash A.MIG-1008 to follow. A few subtle chipping effects were added and enhanced with a patina using Light Rust Wash followed by Dusty Earth Oilbrusher colour.

The critical detail of the vision blocks were painted metallic and then a very diluted dark blue acrylic was added as a filter using Crystal Black Blue A.MIG-0099.





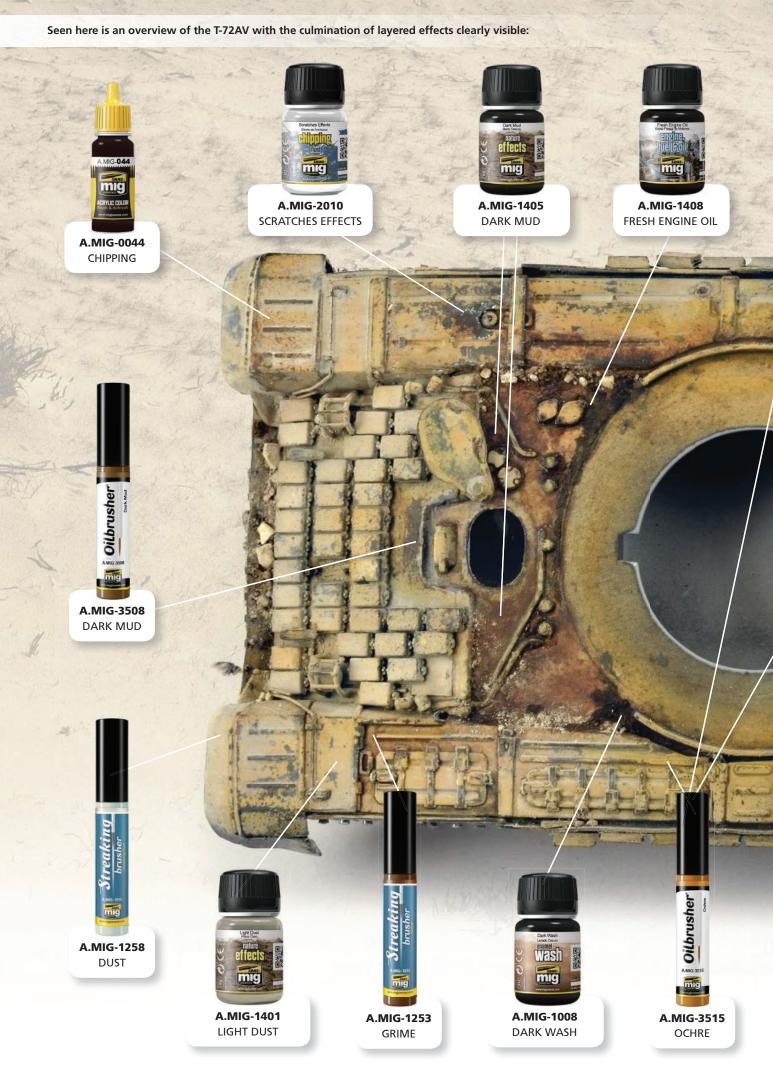




- 37 The authentic look of rubber was shown by rubbing Black pigment A.MIG-3001 onto the surface using a sponge.
- 38 Select areas received a layer of streaking dust effects using Streaking brusher products applied per references of active vehicles.
- 39 The prominent gun barrel was weathered with Oilbrusher colours to create dust accumulations, darken the muzzle, and suggest subtle oil and grease staining effects.
- **40** Worn edges were further highlighted with an ordinary pencil to depict exposed bare metal.
- 41 Rubble is a great effect for vehicles used in urban combat which end up covered in plaster and concrete dust and debris. To fix the smaller pieces of rubble in place I used diluted white glue, and for larger rubble I used AMMO's Sand & Gravel Glue A.MIG-2012.













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# DIRT DIGGIER

While I'm looking for my next model project, I tend to look for unusual or uncommon vehicles, and engineering machinery fits the bill perfectly and the M9 Ace with its very unconventional shape was ideal. Engineering vehicles fulfill a crucial role for modern military missions and are used in all types of conflicts and environments, which makes them an ideal choice for weathering and for a highly realistic scale replica. These machines are usually operated extensively, and you can find numerous layers of effects to reproduce which gives miniatures a visually interesting and dynamic look. This time I decided to reproduce a well-known photo with a 3 tone NATO camouflage which provides interesting contrast with the sandy weathering.





- this kit is really well detailed.
- 2 The painting began with Tamiya Linoleum Deck Brown which works well as a base color to be exposed by scratches and it is pretty durable.
- 3 The upper part of dozer was painted with Alclad Alc 105 Polished Aluminum, as reference photos show this area in a polished metal color.
- 4 Using sponge and AMMO by Mig Jimenez acrylics from the Rust Effect Colors A.MIG-7106 set, more rust tones were added to the areas that will be exposed by wear.
- face. Instead of removing the access as would be done with a wash, the color was blended into the surface creating an oxidation patina. Once this color was dry, two layers of Scratches Effect A.MIG-2010 were applied.
- 6 The base color was airbrushed next, for the green tone I used Tamiya NATO Green with a drop of Deck Tan. As I was working with HS technique, the color was thinned with water and airbrushed in several thin layers.









- 17 Next using a flat brush moistened with thinner, the colors were blended using vertical movements of the brush. Do not use to much or thinner or the effect will be removed completely.
- 18 A small amount of Dark Brown A.MIG-3512 and Rust A.MIG-3510 was applied over the scratches and later blended with thinner. This step was used to simulate rust over the larger and deeper scratches and by changing the blending method, some streaking can be added simultaneously.





- 13 For painting tools, I used the full range of colors included in the set Tools Colors A.MIG-7112. The process began with A.MIG-0036 Old Wood color, once dry, A.MIG-0037 New Wood was used to create wood grain and texture.
- 14. To emphasize details, a classic wash technique was applied using Dark Brown Wash for Green Vehicles A.MIG-1005 which emphasizes all details and recesses.
- 15 After about 15 minutes, Enamel Odorless Thinner A.MIG-2018 was used to clean the surfaces and remove any excess wash.
- **16** Using Buff A.MIG-3517 and Olive Green A.MIG-3505 colors from the Oilbrusher range of colors, I began by applying a few dots of paint onto the model.











- 19 Similar steps were repeated with the color Starship Bay Sludge A.MIG-3532. This time the paint was applied primarily in the corners and places were more dirt is likely to accumulate.
- 20 To add some polished metal on the dozer blade, I used the dry brush technique and Polished Metal A.MIG-0192 color for a realistic exposed metal effect.
- 21 I airbrushed a thin layer of enamel Buff from Tamiya over the model, with a heavier concentration on the lower areas.
- 22 To create rain mark effects on the vertical surfaces, the previously applied Buff paint was blended with flat brush moistened with Enamel Odourless Thinner. It's important to move the brush in a vertical motion and create a layered effect.
- 23 On the horizontal surfaces, the effect was blended with a smaller brush by using a tapping motion to create a mottled dust effect.



One of the best ways to break the monotony of dusty vehicles is to depict oil leaks. I applied Fresh Engine Oil A.MIG-1408 in few thin layers, each smaller than the previous one to create the effect of depth and both old and new staining.



The enamel effect Fresh Engine Oil A.MIG-1408 was also speckled from the brush using an old airbrush needle that gives me maximum control of the size and location of the effect.









- 26 Moving on to the undercarriage, I began by applying Dry Light Soil A.MIG-1700 with an old brush by using a tapping motion.
- 27 To add more texture with stiff short brush, some European Earth A.MIG-3004 pigment was tapped into the still wet effect in the places I wanted a darker mud effect.
- 28 To blend the effect, I worked the surface with a brush dampened with Enamel Odourless Thinner A.MIG-2018.
- 29 To add some fresher dark mud, I mixed the textured mud effect Turned Earth A.MIG-1702 with some Summer Soil A.MIG-3524 from the Oilbrusher range to change the color. Next the effect was tapped with short brush over the outer surfaces.



The same mix was used on the dozer blade which ensures the color of the earth effects are consistent across the entire vehicle. This time I applied the effect and then blended it with vertical strokes of brush.



To depict some loose sand and earth accumulated in nooks and on the horizontal surfaces, I used European Earth A.MIG-3004 pigment. It was placed mostly in corners and recessed areas.



Once the pigment was placed correctly and adjusted into the correct areas, they were permanently fixed with some Pigment Fixer A.MIG-3000.



The realistic enamel effect Engine Grime A.MIG-1407 was airbrushed over the exhaust pipe to accurately depict a little bit of soot that would accumulate over the area.





















- 35 Next my focus shifted to the tracks, this began with an airbrushed layer of Tamiya Hull Red which works well as a base for future effects.
- 36 Because I prefer not to use any enamel products with plastic workable tracks due to their fragile nature, I thinned rusty acrylics from Rust Effect Colors A.MIG-7106 with water and applied them as a wash over all the details.
- 37 Using Rubber & Tires A.MIG-0033 paint, the rubber track pads were painted.
- 38 To add a dusty look to the tracks which are constantly in contact with the earth, Dust A.MIG-0072 paint was thinned to the consistency of a wash and applied with a brush over the tracks.
- **39** With these quick and easy steps, I was able to create tracks ready to be glued onto the vehicle.
- **4.0** Weathering the wheels began by applying some Dry Light Soil A.MIG-1700 over each wheel.
- 41 Next using a brush loaded with Odorless Thinner A.MIG-2018 I blended it while placing the most concentrated effects into the edges and outer seams of the rim.
- 42 Using the same mixture shown earlier of Turned Earth A.MIG-1702 with some Summer Soil A.MIG-3524 from the Oilbrusher range, I add darker mud effects by tapping the surface using a brush with short stiff bristles.
- 4.3 Once the full undercarriage was assembled, some European Earth A.MIG-3004 pigment was placed all over and fixed permanently using Pigment Fixer A.MIG-3000.





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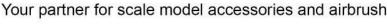




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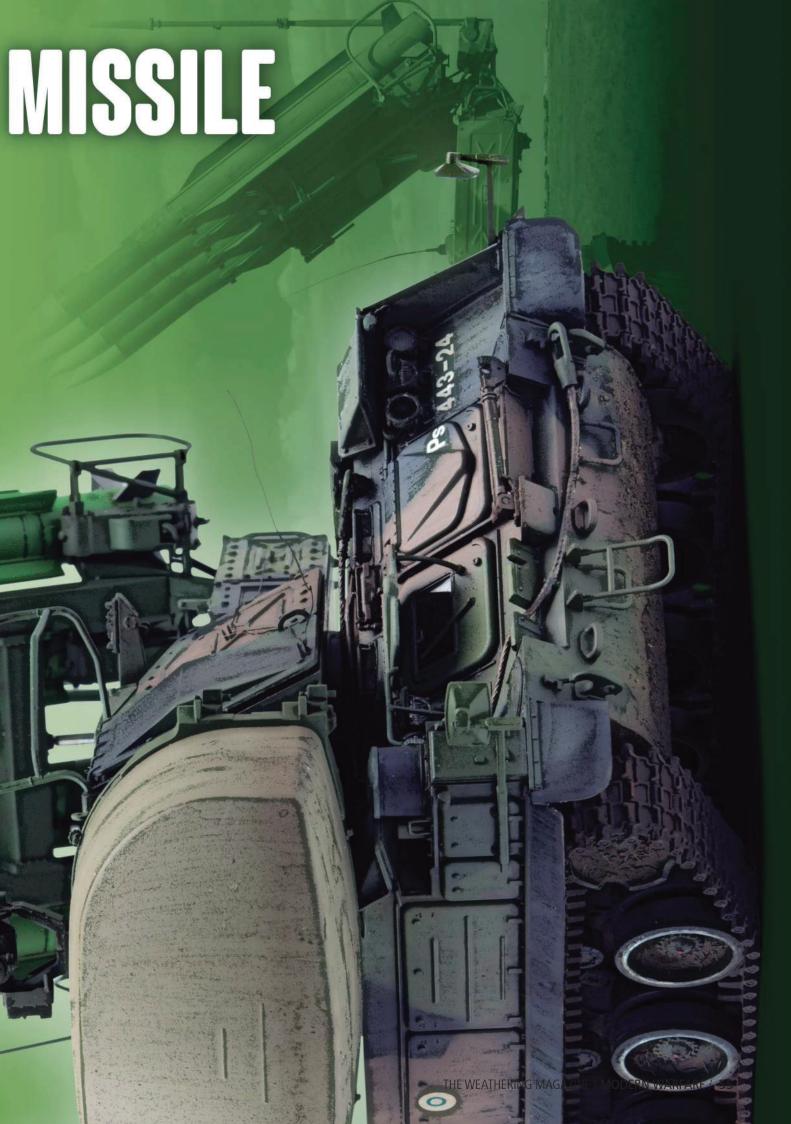
# E BUK AIR DEFENSE

The tooling of Meng's BUK is very fine and sharp. The only upgrade here was to replace a metal antenna. Because the suspension and track-links are workable, you can easily choose from a variety of postures. The camouflage scheme is from the Finnish forces and provides strong contrast. It is similar to but not the more commonly seen NATO tricolor and Russian tricolor camouflage. The maintenance for this type of equipment is usually perfect, so the weathering will be understated. Only subtle mud effects have been added to the chassis, while the hull received dirt and rain marks to suggest that it is operational.





Li Zhen Dong





This is the reference for all the paints used to airbrush this Finnish BUK camouflage: A.MIG-0035, A.MIG-0065 A.MIG-0060, A.MIG-0928 A.MIG-0064, A.MIG-0021 A.MIG-0032



Next, the Oilbrusher colors were used to unify and slightly discolor the whole vehicle by fading the base colors of the hull and reducing the color saturation of the camouflage.



Then the Dark Brown A.MIG-1005 was used to add washes to the details of the vehicle to highlight raised details and emphasize recessed areas. Be careful not to flood the models surfaces, this will reduce the vividness of the color.



The Rainmarks Effects enamel color A.MIG-1208 was used to indicate drainage on the vertical hull sides. Because it is a modern AFV, there will not be excessive streaking rust and grime effect, only carefully placed drained dust. Note that the brush needs to be drawn vertically towards ground in the direction of gravity.



# <



Sergiusz Pęczek

This project was a special challenge for me for two reasons. First of all, this is my first model ship that I have completed, secondly as an armor modeler I am used to the significant wear and dirt that cover most surfaces of the tracked vehicles. After reviewing the photographs of the CB-90 combat boat on the internet, it quickly became evident that the joy in applying the effects should be forgotten. The photographs show neither spatter of paint, dirt, or any traces of rust. The structure is probably made mostly of composites, aluminum, or well galvanized steel. Even such highly exposed elements as the cleats do not have any paint chipping!

Basically, only the bottom of the boat exhibits typical marine wear resulting from crustaceans, salt,





and algae. Effects of use on the rest of the vessel should have been shown subtly but in a visually interesting way. I decided to depict a boat belonging to the Greek Coast Guard with the designation number 136. To represent this specific ship correctly, I had to make new side strips without an anchor because this unit has markings other than those included in the kit. Additionally, I do not care for decals, specifically of this large size. My friend Krzysztof, who has been making laser cut masks for me for many years, came to my aide with masking for this project. The CB-90 in Greek colors and markings is perhaps not the most common with these flotillas, as there are only three of them. These are used by the Greek navy patrolling their coast, a popular destination for immigrants fleeing the war in Syria. In this role, the CB-90 serves in a vital role in modern warfare as a front-line defense against international terrorism.



The interior is very simplified, but contains most of the elements appearing in the original. I decided to paint and make details without any unnecessary work - just to mark their presence through windows or open hatches. The picture shows three windows - Greek boats have only 2 windows on each side. I had to correct the mistake and fill the middle windows.

When painting the cockpit, one should apply decals on the monitors - unfortunately the manufacturer forgot to mark this step in the instructions, but the screens can easily be matched to the appropriate elements.







A set of custom made masks were required to apply the unit number 136. The font size and style was based on scanned decals from the set.



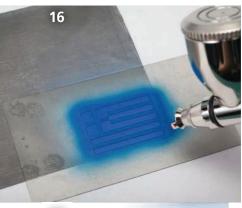
I carefully masked the placement of the white and navy blue stripes and began with the application of navy blue color using Mr. Color 326. A picture of this unit shows the difference in the color of the boat's bottoms and stripes. I then changed the layout of the stripes for masking and applied a white color.



Next, I painted the insignia of the Coast Guard and side numerals.



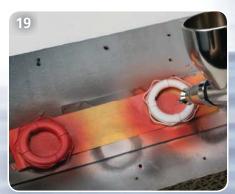
Using the Sniperbrush I blended the slightly convex edges formed after removing the masks.

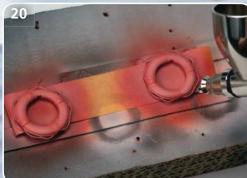




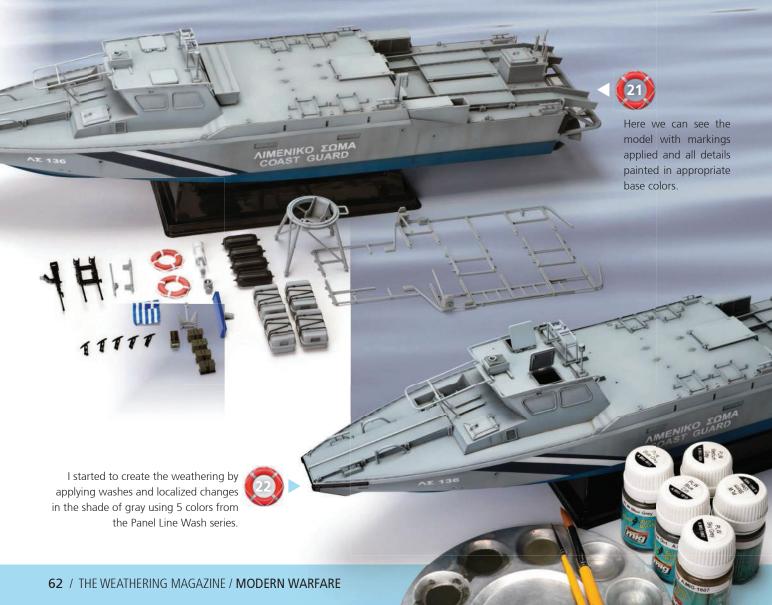


- 16 I also decided to make the stern flag with the use of a mask. Simply using decals wrapped around the mast could not give a realistic effect, so I used a sheet of thin lead foil. I painted a piece of the size of the flag in white, then placed the mask and applied a blue color.
- 17 The masking was gently removed while trying not to tear the thin lead sheet.
- 18 After completing the procedure on both sides, the flag was simply cut from the sheet.





- 19 One of the few elements that draw attention with color in this model are life preservers. I applied a White colored OneShot Primer A.MIG-2022 underlay and then painted the wheels with A.MIG-049 Red mixed with A.MIG-0036 Old Wood.
- Delicate discoloration was applied by adding a touch of white to the previous color.





Piece by piece, section by section, I applied various shades of gray enamels.



Then with a soft brush dampened in a thinner, I mixed and blended the transition between the colors.





I started painting the effects of exposure to sea water on the bottom of the ship by applying 2 layers of A.MIG-2010 Scratches Effects. After a few minutes, I applied masking tape along the waterline. Then I sprayed a thin layer of A.MIG-0036 Old Wood. Please note that the water line does not correspond with the blue of the lower hull!



Using a flat wide brush and water, I began to partially peel the Old Wood paint away irregularly.









- Using the Saw brush A.MIG-8585, I removed the paint leaving characteristic scratches that may occur when scrubbing the bottom during beach landings, and dirt streaks in the direction of the flow of water under the hull.
- 30 The effect was enhanced by spraying A.MIG-0073 Earth using the edge of the sheet of paper as a soft mask.
- 31 Here we can see the general appearance after applying the two previous procedures.
- 32 To visually combine the effects and give them depth and color, I reached for 3 colors from the Streaking brusher series including A.MIG-1258 Streaking Dust, A.MIG-1251 Cold City Gray, and A.MIG-1259 Starship Grime.
- Then, using a saw brush moistened with enamel thinner A.MIG-2019, I spread and smoothed the effect of streaks across the entire bottom.
- To add a greenish color caused by sea algae, I used 2 enamels from the Nature Effects series of colors A.MIG-1410 Slimy Grime Dark and A.MIG-1411 Slimy Grime Light.
- Using the same colors, I painted the effect of the algae tainted water line on the side of the hull. The reference image used showed a line of algae clearly lower than the layer of crustaceans and sea salt. This is probably related to the load or mooring of the boat under specific conditions and location.







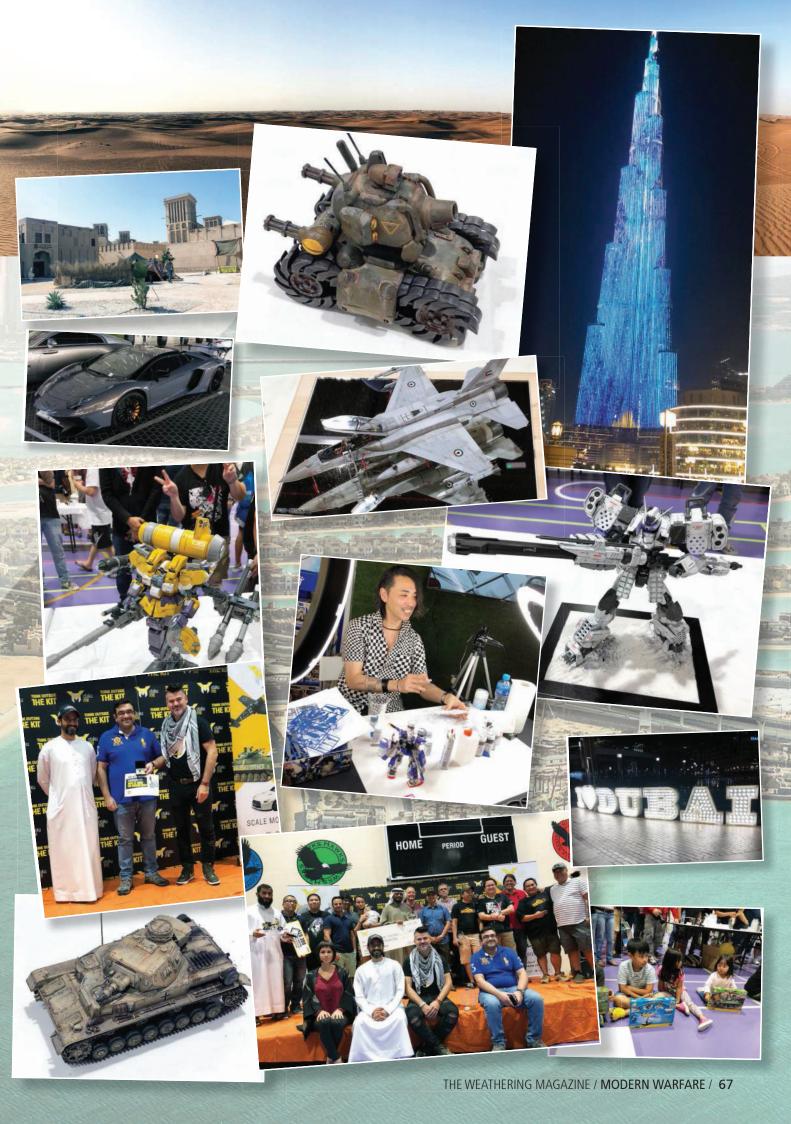


# POSTCARDS FROM THE WORLD DECEMBER 1997 POSTCARDS FROM THE WORLD POSTCARD FRO

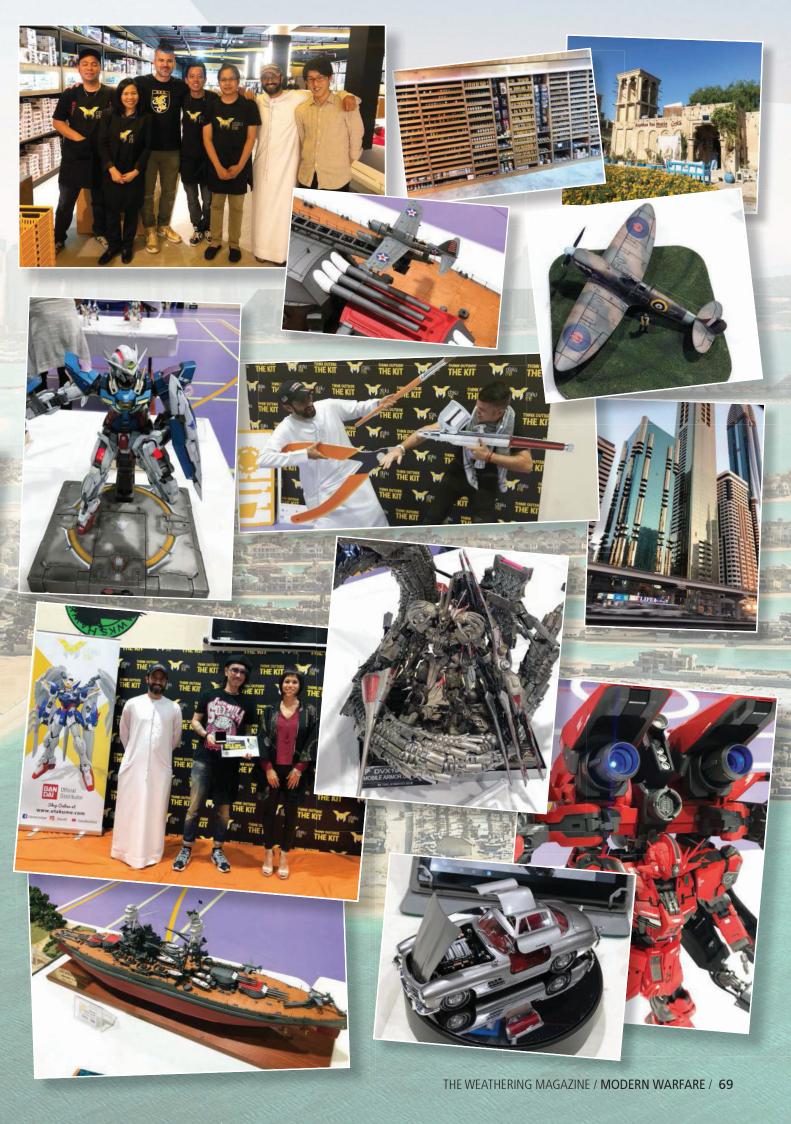
On December 7th, 8th, and 9th, the OTAKU ME Modelers Cup 2018 was held in the incredible city of Dubai, organized by Mr Quais and the great OTAKU ME modeling shop which gives its name to the event. Although the store and the event were born from the genre of MECHAS and themes of fantasy, little by little they have been opening this stunning event up to all themes including airplanes, tanks, and ships, and is quickly becoming the largest modeling event of the Middle East. Thanks to the international atmosphere of Dubai, modelers from all over the world participated and included guests from Europe, South Africa, Turkey, Lebanon, Syria, but above all a great majority from the Philippines along with the high level Emirati modelers. In fact, a local from Dubai

was awarded the Best Of Show for the event with a magnificent Mercedes in 1/24 scale. The OTAKU ME store is the closest thing to being in Japan, as it has an incredible assortment of high-quality Japanese products in a space of the distinctive luxury and exclusivity of Dubai with at European prices. All this thanks to one of the components of OTAKU ME, Yoshitaka Ninagawa. From AMMO we recommend all modelers to visit Dubai with your family or friends for a truly unforgettable holidays. Immerse yourself in an authentic desert environment which surrounds a stunning mega city that looks like from science fiction movie, exquisite dining, and the welcoming culture and security of a cutting edge country. Truly one of the best experiences that a modeler can live in this world. Thanks Dubai, Thank you OTAKU ME.









# IN THE NEXT ISSUE.

By Sergiusz Peczek

# RECYCLED

These days it's all about recycling your plastic...as well as your resin and phot-etch! If in the past you have slipped into the habit of not seeing your projects through to completion, then 2019 is the year for you to reclaim an old project or kit using the inspiration and knowledge you have gleaned from The Weathering Magazine. There simply is no good excuse for collecting unfinished or poorly painted models. With the next issue, we are going to guide you through the process of upcycling long forgotten kits into brand new modeling experiences! Because you are here to learn from The Weathering Magazine, it is clear that modeling is a source of joy for you. In the much-anticipated RECYCLED issue, we offer inspiration and guidance by reconditioning a 20 year old King Tiger painted with Humbrol enamels, in addition to a stream of restored old kits from the

world's most creative and skilled Gundam, civilian auto, and AFV modelers. We will even show you the proper and effective methods used to strip a model of base colours, a skill valuable for restoring old projects and rescuing a spoiled finish. Every shelf queen and long forgotten kit offers an endless range of possibilities and fertile ground for practicing new techniques and ideas. Each kit depends on you to bring it to life with the painting and weathering skills you learn from each issue of The Weathering Magazine. All kits begin as an opportunity to bring imagination to life and with the upcoming issue of The Weathering Magazine, the best modelers in the world will inspire you to reclaim your unfinished kits!









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With the Solution Book included in the package, you can accurately paint any olive drab-colored vehicle that operated in Europe. Although we have chosen an M4 Sherman tank as an example for this step-by-step guide, the same sequence and methods can be applied to any other US vehicle including trucks, jeeps, halftracks, or a tank or self-propelled gun. Now you just have to grab your favorite model and start painting without further delay!

Solution Box is a convenient and useful modeling set for novice and advanced modelers, By including tools and step by step guide for every aspect of your project, this set is ideal for both the experienced veteran and those eager to quickly learn how to create stunning models.









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AMIG-1408 FRESH ENGINE OU

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A MIG-2023 ONE SHOT PRIMER BLACK

AMIG-0046 MATTELACH

AMIG-0036 CLD WOOD

A MIG-0042 OLD RUST

A MIG-2016 THANSPARATOR

AMIG-3004 ELIROPE EARTH