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THE WEATHERING MAGAZINE

by **MIG Jimenez**



A MIG 4530 - Issue 31 BEACH

Beach

ENGLISH

234
PAGES

Illustrated Weathering Guide to WWII Late War German Vehicles



AMMO
by MIG Jimenez

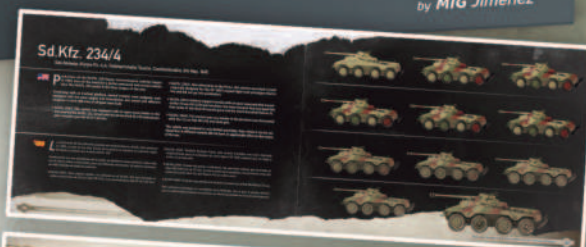
Illustrated Weathering Guide to WWII Late War German Vehicles

This illustrated guide is not a book about theory, rather it is a practical manual that will allow you to apply one of the steps shown each day, allowing you to see how the finish of your model unfolds as your painting and weathering skills improve.

After many years of experience researching and developing painting products and techniques, Mig Jimenez has designed this Illustrated Guide to clear up all confusion and doubts about some of the most popular camouflage patterns and applications. The late WWII German camouflage schemes and colours shown within these pages generate the most hesitation and doubt amongst AFV modellers, this title provides the clarity and confidence required to paint amazing results with ease.

The innovative format consists of large colour prints that clearly demonstrate the painting and weathering process in a very clear and simple way, as well as the proper order of application of the different effects and techniques used for each camouflage pattern.

This illustrated guide is the essential solution for all modellers seeking to hone their skills and learn new techniques used for painting and weathering late war WWII German AFV camouflage patterns



/MigJimenez

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THE WEATHERING MAGAZINE



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When we planned to release the "Beach" issue last year, our intention was for the magazine to hit store shelves in early June to commemorate the 76th anniversary of the Allied landing in Normandy. However, this did not happen... As we prepared to go to print, no one expected the global crisis of the coronavirus pandemic and the numerous socio-economic perturbations it caused. Many of us treated the information coming from China and television coverage with a grain of salt, hoping that the virus would not spread outside the territory of the Middle Kingdom. As we soon found out, the situation would unfold rapidly exposing every one of us to a greater or lesser extent. One of the more severe effects of the pandemic was social isolation, closed schools, shuttered shops, blacked out cinemas, locked museums, cancelled concerts and large gatherings including virtually all annual modelling competitions that the AMMO team was looking forward to. In most countries, the authorities introduced radical bans on leaving one's house or moving freely. This drastic measure likely contributed positively to limiting the spread of the new threat, but undoubtedly left its mark on the psyche and will remain in the collective consciousness for many years. During this quarantine and situation surrounding the pandemic, AMMO has remained focused on supporting the community and supporting this unique opportunity to enjoy the hobby at home. In this effort we have created online events to promote the hobby and provided quality content and live streaming demonstrations and tutorials in both English and Spanish, hosted multiple contests drawing high calibre entries from the AMMO community, as well as supporting charitable causes and community strength.

Although this period has been hard for everyone, one can also appreciate the amazing ability of the internet to keep us all connected: The AMMO by Mig Jimenez Facebook group is filled with your excellent models, works in progress, and hobby tips encouraging us all to enjoy the hobby while staying connected in the absence of modelling events and contests.

With modelling events on pause, we have been able to host several competitions online. The first theme was the "Funny Photo Challenge" which kept us all amused as hobbyists shared their most original and funny photos enjoying the hobby at home. Your photomontages filled with interesting narratives and models have successfully inspired the modelling community. Many of you

also answered Mig's challenge to show your skill with chipping effects by demonstrating a multitude of methods used to tackle this universal modelling technique. Finally, your models allowed us to commemorate the 76th Anniversary of D-Day with a mini modelling tournament on our Facebook Group. Throughout all, your purchases from AMMO by Mig Jimenez have directly supported charitable actions. In this way, your hobby has directly contributed to the battle against this illness.

Although the coronavirus pandemic continues, we look forward to seeing each other again at shows, events and contests soon. Until then, AMMO and The Weathering Magazine publications remain committed to supporting the global modelling community and inspiring you to enjoy the hobby.

Sergiusz Pęczek



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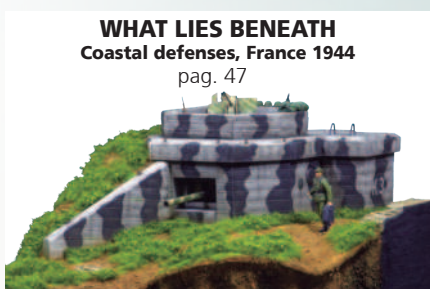


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BATTLE ON



KITS:

BANDAI MG 1/100 MSM-07 Z'GOK PRODUCTION.

BANDAI MG 1/100 MSM-04 ACGUY.

ZVEZDA 7422 1/100 M-109 HOWITZER SPG.

THE BEACH

To make this Gundam-style diorama depicting a beach fight, two of the mobile underwater suits from Bandai were used. The MSM-04 Acguy is positioned standing on the beach, sinking in the coastal sand under its own weight, while the MSM-07 Z'Gok damaged in combat lies partially submerged in water and beached. Apart from the characteristic effects of painting and weathering Gundam models which you know from my previous articles, with this project I focused mainly on obtaining a natural look of dry sand on the beach, wet sand where the beach connects with water, and the implementation of realistic effects of sea water, with waves and ripples on the water between the sandy beach and the wetsuit sinking in the sea. For this scene I also made a lighthouse model to give colour and a 1/100 howitzer model as a point of visual interest.



**Kreangkrai
Paojinda**



- 1 The high quality and excellent fit of the Bandai kit allowed me to assemble the model out of the box without glue. All joints are strong which allowed me to experiment with poses. Before the painting began, the model was washed with soap and water to remove any oils or dust from the surface.



2

The inner frame was painted with AMMO of Mig Jimenez acrylic colour Steel A.MIG-0191 mixed in various ratios with black to create different shades. The outer frame and body were painting by mixed various shades to design my own personal camouflage. The body's base colour was applied with a faded blue based in sea blue colour and sand yellow camouflage applied free hand to represent tones from a beach environment.



3

The natural faded and discoloured look of worn and faded colours layers was inspired by aircraft modelling weathering effects. A thin piece of sheet 3M Scotch-Brite was used as an airbrushing stencil. The base colour was tinted to both darker and lighter shades and gently airbrushed through the mask to apply natural discolouration using the base colour mixed with white and a darker tone.

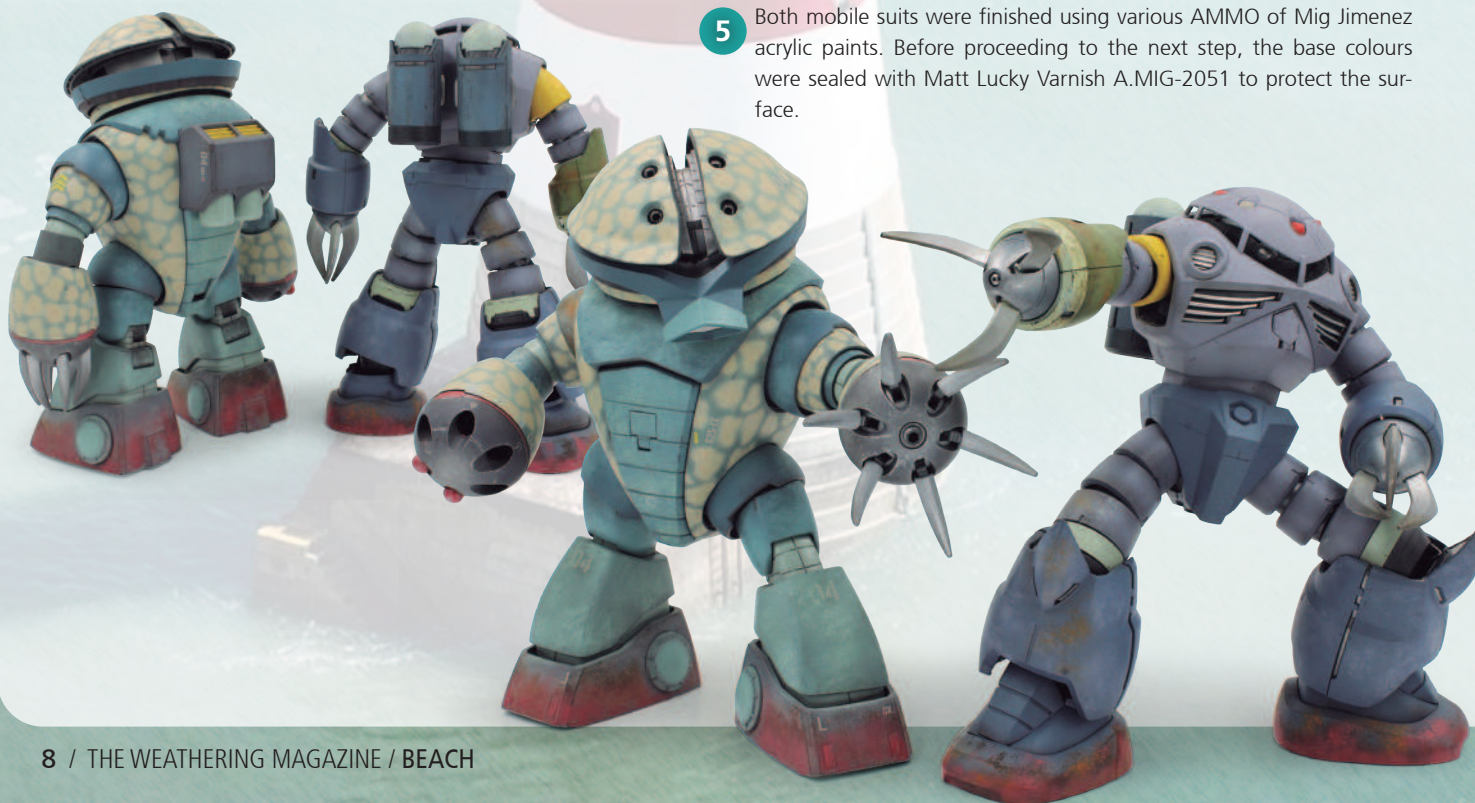


4

Here you can see a close-up of the result of airbrushing discolouration through Scotch-Brite used as a stencil. The result is impressive and the faded look very realistic when combined with shipping and weathering.

5

Both mobile suits were finished using various AMMO of Mig Jimenez acrylic paints. Before proceeding to the next step, the base colours were sealed with Matt Lucky Varnish A.MIG-2051 to protect the surface.



6

At this stage I began the layout design and composition to test the story and began the ground work. The base was quickly built from scratch using foam and each element correctly placed including the light house and mortar.



7

Returning to the weathering stage, a series of light toned enamel washes including Splashes A.MIG-1750, Dry Earth, and Neutral Wash A.MIG-1010 were used to create realistic streaks and rainmarks. For the areas where darker shades were required, a mix of US Interior Wash A.MIG-1003 and Filter Green for Grey Green A.MIG-1508 was used as a pin wash and to apply darker streaking effects.



9

Once the layers of enamel paints had fully dried, a silver pencil was used to draw chipping and polished metal edges focused on the edge of frame unit parts. Once again the model was sealed with Matt varnish and allowed to dry before proceeding to the next step.

8



Select parts received a flicked spattering of either earth or rust tones to create realistic nuance and splashed dirt. The realistically textured Dry Earth from the Splashes range was used for the feet, while Light Rust Wash was used for the shoulders.

10



This was an excellent opportunity to enjoy scratch building the light house. The main structure was carved from Blue-foam which was then sanded smooth with sandpaper before coating the surface with plaster, while the details were made of copper wire and plastic.



11 References were used to apply realistic colour choices to the lighthouse, all airbrushed with AMMO acrylics. The weathering was applied by blending Oilbrusher colours including Olive Green to impart a mossy and damp grime effect.

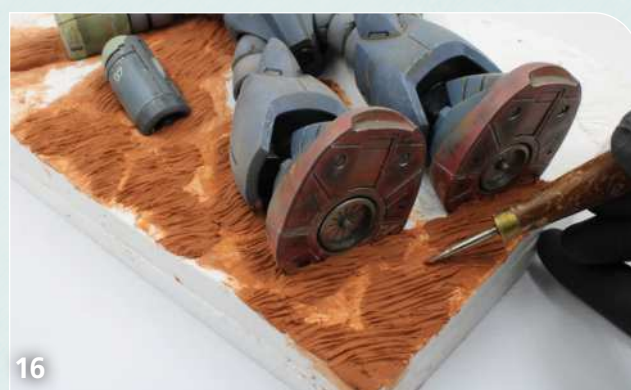
12 Here you can see the size of the MSM-07 Z'Gok when posed next to the lighthouse. Both are close to being finished but will require a few washes once set into the base. I really enjoy building 1/100 models as the scale is fun and simple to work with.



13 The ZVEZDA 1/100 kit M-109 Howitzer SPG was very easily built and airbrushed using Desert Sand with small scratches and chipping applied with a brass toothpick. Accumulations of dirty and grime were added with Neutral Wash A.MIG-1010 and Dry Earth once more to tie the different elements together.



14 Detail was added to the lighthouse with battle damage impact marks and the base tied into the earth tones before moving on to the exciting ground work stage.



15 For the basic ground work, the foam surface was coated with plaster putty. Once dry, brown craft clay was used to sculpt the dry sand areas of the base.

16 This image shows the sculpting of the rippled sand seen under waves. The MSM-07 Z'Gok is shown subtly sinking into the wet sand under its own dead weight.

17 The rippled sand was smoothed out and blended using water and a paintbrush.





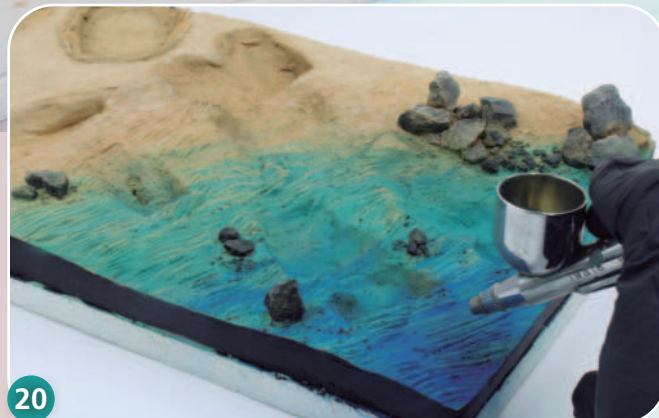
18

Here you can see each of the primary elements placed in their final location in preparation for the sand texture and rocks used to set the natural environment.



19

The acrylic texture medium Beach Sand A.MIG-2016 was applied with a few drops of water and mixed with acrylic colours to create various sand tones for a varied and realistic appearance before placing the stones.



20

Once the texture medium had dried, the base colours of the tidal blue sea were airbrushed in place with turquoise and ultra-marine blue lacquer based paints.



21

The next step was to create a realistic looking ocean water effect, clear 2 part epoxy A+B to create the layers and depth. The first layer received a few drops of A.MIG-098 Crystal Light Blue added to the clear epoxy to accurately replicate the illusion of deeper waters.



22

Exterior frame work was used to keep each additional layer square to the base. Once the first layer was fully dry, clear epoxy layers were added to create depth.



23

The realistic illusion of ocean water movement was added using the Acrylic Water product Clear Water A.MIG-2205 which was easily applied using a flat brush to recreate waves of appropriate size for 1/100 scale and allowed the product to dry for 24 hours.



24

The Clear Water product was used once again to make white caps and foam by mixing in White acrylic colour and carefully following the lines using a soft brush while focusing on the sandy beach areas.



25

While still working on the whitecaps on the waves, splashing was applied along the rocky coast.



26

Next the focus shifted to creating wet sand effects, enamel Wet Effects was mixed with Oilbrusher colour Ochre A.MIG-3515 which is ideal for recreating the subtly darker moist sand found at the water's edge.

27

With only these products I was easily able to create highly realistic moving water with depth and surface movement accurately imitating a natural environment.





28 Finishing touches were added to the MSM-07 Z'Gok using Fresh Engine Oil to apply leaking mechanical fluids.

29 The coconut palm tree received leaves sourced from architectural models while the new trunk was formed from metal wire wrapped in masking tape. The woody exterior textures were applied using Arming Putty Classic A.MIG-2040.



30 Adding simple to use and effective vegetation products supplies a convincing level of realism to the scene, Small Bushes A.MIG-8360 were ideal for 1/100 scale.

31

For the final step, the Mobile Suit Gundam Pilot was hand painted with acrylics from AMMO and attached each component to the base with cyanoacrylate glue.







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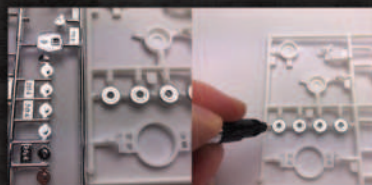


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**Ricardo
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After the infamous attack on Pearl Harbour on December 7th, 1941, the now obsolete Douglas TBD-1 Devastator was immediately called into service for both attack and defence missions. Some were quickly repainted in combat colours, as they were the only aircraft on hand at the time. At least one was modified with floats to be used in logistical and marine rescue missions covering the many small islands across the Pacific Ocean. The aircraft was prone to heavy combat damage as an extremely slow 3-seater torpedo bomber, it was almost defenceless against the attack of the significantly superior Japanese aircraft.

After the decisive Battle of Midway ranging from June 2nd through the 7th, 1942, the Devastators on hand were almost completely wiped out. The few remaining planes were withdrawn from front-line service with the few remaining aircraft assigned to logistical tasks, training duties, and service in the Atlantic.

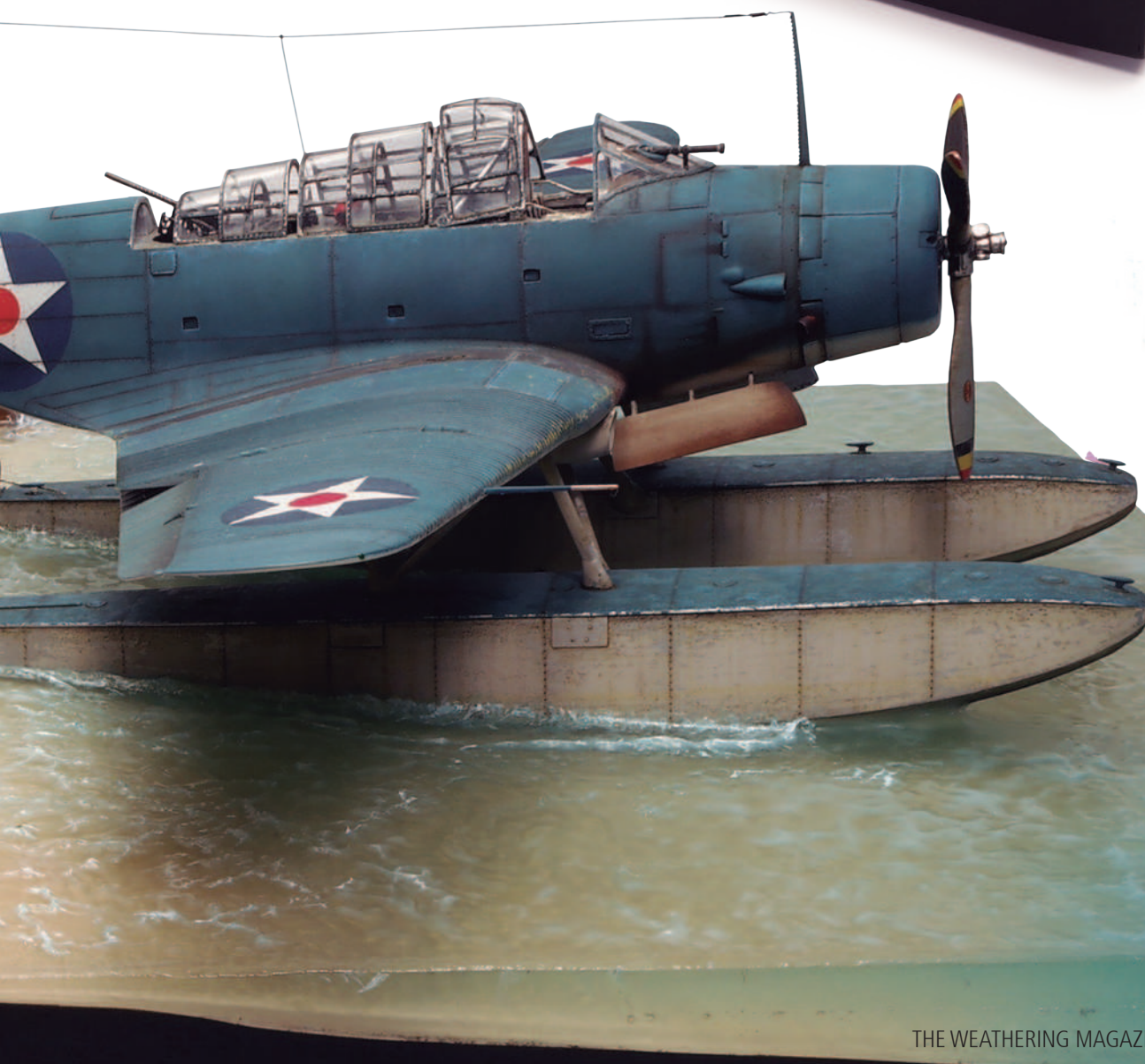


**DOUGLAS TBD-1A
Devastator Floatplane**

G.W.H.

1/48





STEP BY STEP:

A bare metal finish requires a primer coat of One Shot Primer - Black A.MIG-2023. Once dry, 3 types of Alclad II aluminium shades were applied to replicate different materials of the aircraft while adding variation and contrast. The metal finish was applied using the following shades: Aluminium ALC101 A.MIG-8201, Dark Aluminium ALC103 A.MIG-8203 and Polished Aluminium ALC105 A.MIG-8204.

1



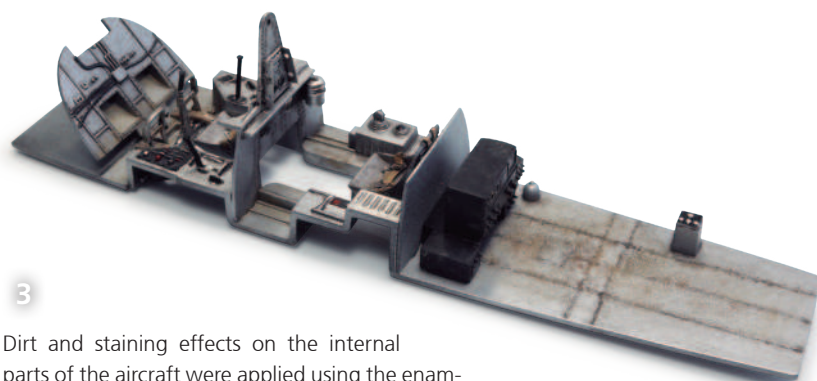
2

Localized applications of PLW Deep Grey A.MIG-1602 were applied and allowed to dry for a few minutes before removing the excess wash with a brush humid with Enamel Odourless Thinner A.MIG-2018/9.



3

Dirt and staining effects on the internal parts of the aircraft were applied using the enamel weathering products Damp Earth A.MIG-1406 and Light Dust A.MIG-1401. Both were applied randomly to select areas of the lower surfaces with a fine brush.



4



5



4 The floats were also primed using the One Shot Primer Black, the Alclad II colours can be airbrushed directly onto the black primer layer which enhances the brightness of the finish.

5 Once the primer was dry, the colour Aluminium ALC101 A.MIG-8201 was airbrushed and allowed to dry for at least 6 hours.

6 The aluminium colour was allowed to cure completely before applying a thin layer of Scratches Effect A.MIG-2010 using the airbrush.

6

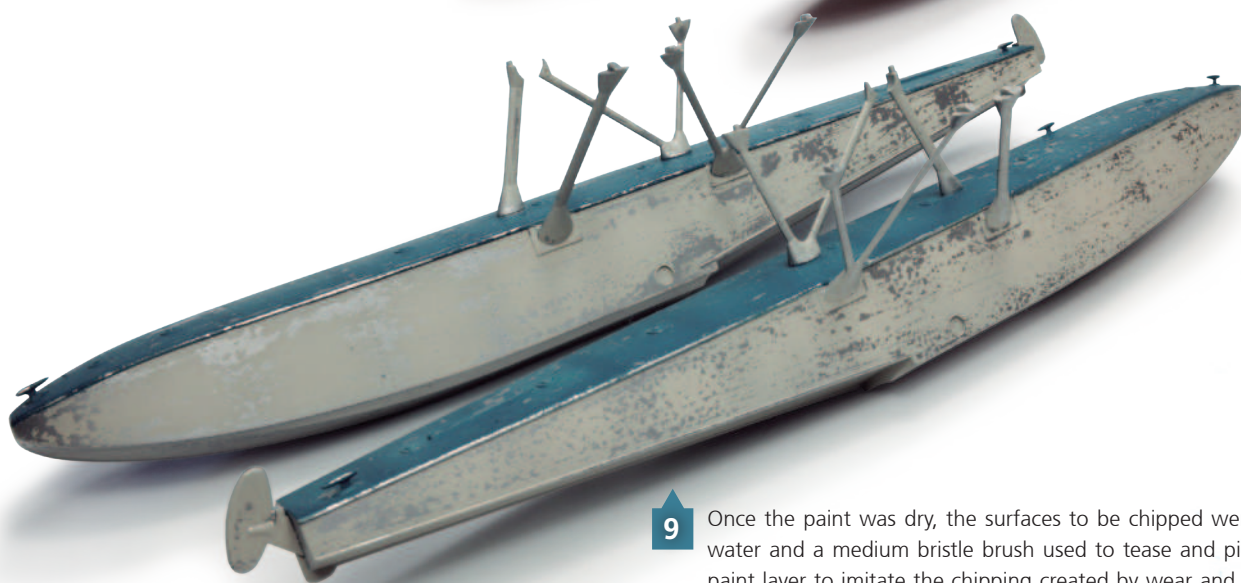




7 Next, a base colour of FS 36440 Light Gull Grey A.MIG-0241 was applied to the floats and they were set aside to dry for a few hours. The next step was to mask off the areas to remain this colour before applying the second tone. For the difficult to reach parts, Ultra Liquid Mask A.MIG-2032 was used, the remaining surfaces were protected with Masking Tape 4 (20mm X 25M) A.MIG-8041.

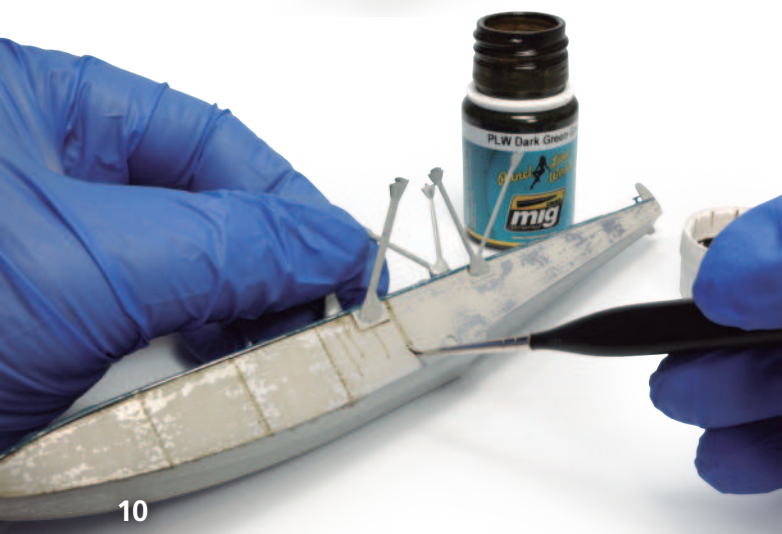
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The second tone was applied using a mixture of Model Air Blue Gray 71.109 (80%) + FS 36440 Light Gull Grey A.MIG-0241 (20%) to obtain an accurate shade.



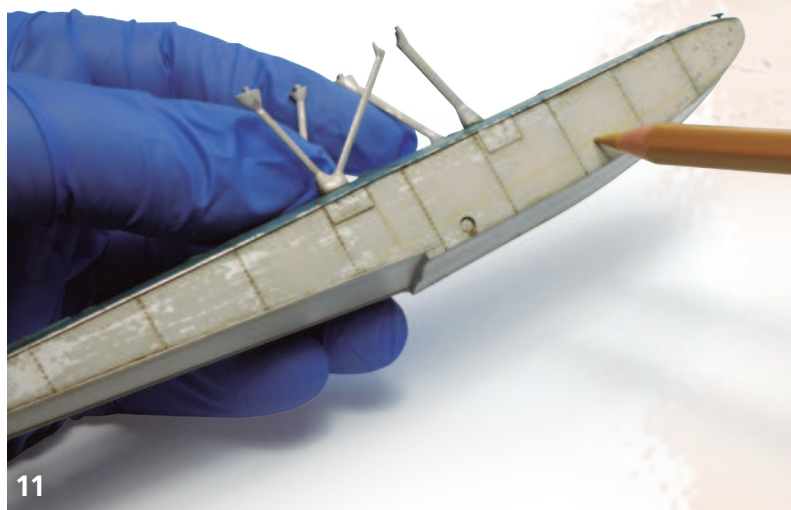
9

Once the paint was dry, the surfaces to be chipped were moistened with water and a medium bristle brush used to tease and pick at the topmost paint layer to imitate the chipping created by wear and tear. To accurately imitate scratches, simply use the reference Brass Toothpicks A.MIG-8026 by dragging the tip gently across the surface.



10

Once dry, the details were emphasized with a wash of PLW Dark Green Grey A.MIG-1608. The same colour was also used to create dirt streaks and stains for consistent effects. The enamel effects were allowed to thoroughly dry before proceeding to the next step.



11

In order to use Faber-Castell watercolour pencils, a layer of matt varnish must be applied as the pencils won't grip onto a glossy surface. The following range of colours: 8200-154, 146 and 147 were used for the dark colour and 8200-169, 173, 175 and 187 for the lighter tone.

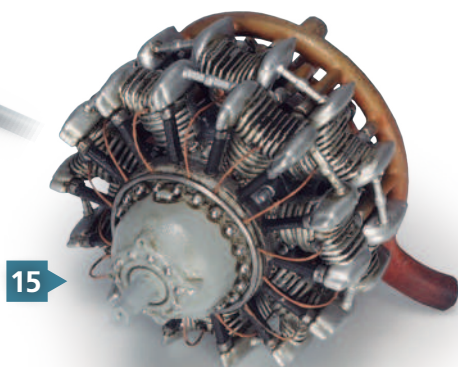
12



13



14



15

12 Before the realistic metal tone Pale Burnt Metal ALC104 A.MIG-8218 could be applied, a coat of One Shot Primer – Black was airbrushed as a foundation as shown with the previously applied metal tones.

13 At this stage I turned my attention to replicating rust effects on the exhaust using 3 highly diluted tones applied from light to dark with the airbrush while avoiding covering the previous tone completely. The colours used were: Light Rust A.MIG-0039, Medium Rust A.MIG-0040 and Dark Rust A.MIG-0041.

14 Once the previous step had dried, a matt clear coat was airbrushed with Matt Lucky Varnish A.MIG-2051 to provide some grip for the pigments to be apply next. To add a realistic texture and additional colour to the exhaust, a small amount of Medium Rust A.MIG-3005 pigment was applied before adding a touch of Black A.MIG-3001 to simulate the burnt metal surface and soot on the tip.

15 The engine was painted with the colour Matt Aluminium A.MIG-0194 over a layer of One Shot Primer - Black A.MIG-2023. Dark Wash A.MIG-1008 was then applied to the cylinders; the front part of the engine was painted with FS 36375 Light Compass Dark Ghost Grey A.MIG-0203, and the wiring with Red Brown Base A.MIG-0913.

16

For the greys and blues to follow, a primer coat was applied to the plane using One Shot Primer - White A.MIG-2022.

This area of the rudder received an additional layer of white paint. Even though the primer coat itself is white, I recommend applying Matt White A.MIG-0047 to reinforce the colour.

17



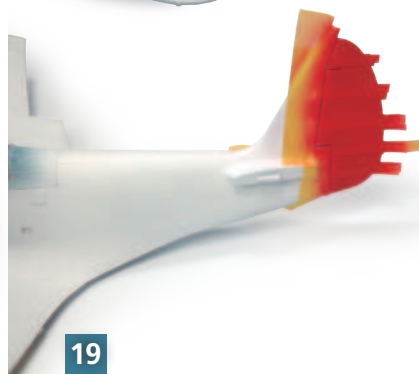
18 The widths Masking Tape 1 (2mm X 25M) A.MIG-8038 and Masking Tape 2 (6mm X 25M) A.MIG-8039 were used to mask off the surfaces. It is very important to be sure that the edges of the tape are perfectly sealed before applying any paint to ensure that the colours do not bleed underneath.

19 For this specific red colour, a mixture of Blood Red A.MIG-0121 (80%) + Red A.MIG-0049 (20%) was used.

18



19





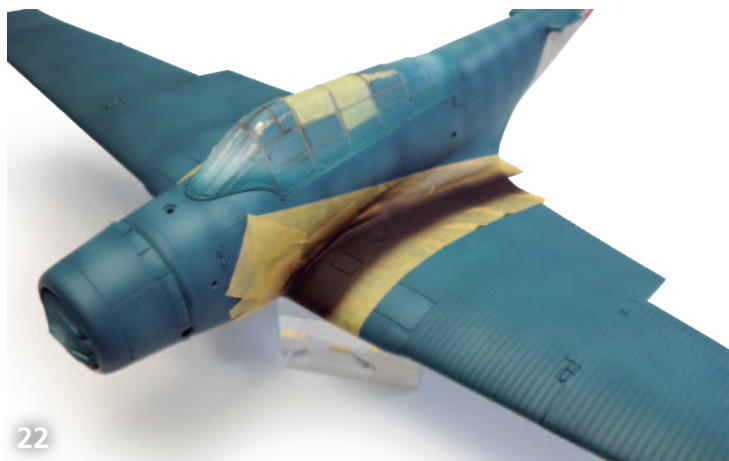
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The goal with this project was to imitate the look of a plane repainted in the field, this began by applying the distinctive pre-war yellow tone using a mixture of Yellow A.MIG-0048 (80%) + Gold Yellow (RLM 04 Gelb) A.MIG-0125 (20%). The mixture was only applied to the areas that will be chipped later.



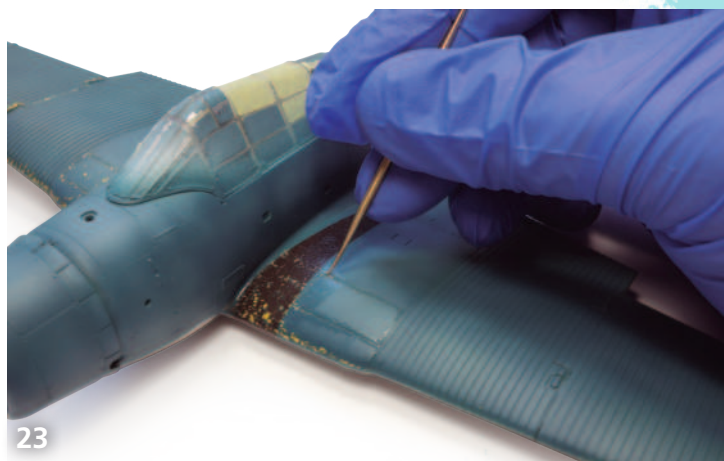
21

Before airbrushing the blue colour – a mix of Model Air 71.109 (80%) + FS36440 Light Gull Grey A.MIG-0241 (20%) –, the chipping fluid Scratches Effects A.MIG-2010 was applied with a sponge.



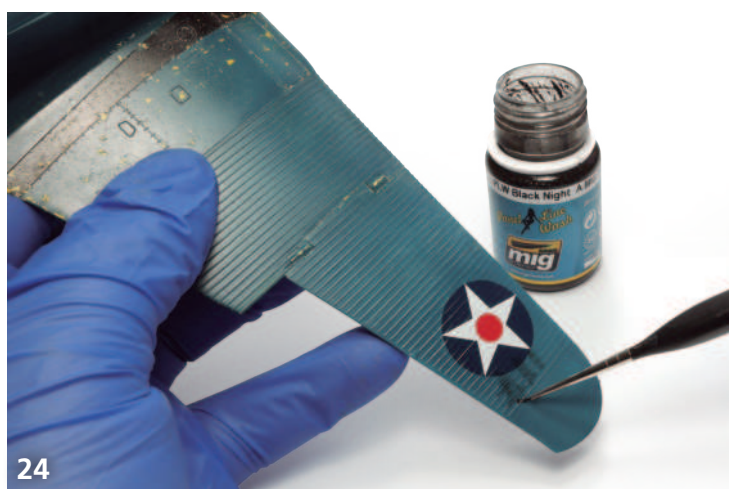
22

Once the blue was dry, the walkways were masked off using Masking Tape 4 (20mm X 25M) A.MIG-8041. Next, Scratches Effects A.MIG-2010 were applied with a sponge as before, followed by a mixture of Matt Black A.MIG-046 (70%) + Rubber & Tires A.MIG-0033 (30%).



23

With the walkways painted, the area to be chipped was wetted with tap water. Then all the chips and scratches were created using a medium-size hard bristle brush and the versatile tool Brass Toothpicks A.MIG-8026.



24

Before applying PLW Black Night A.MIG-1611, a coat of Aqua Gloss Clear ALC600 A.MIG-8212 was airbrushed in preparation for the decal application. For this critically important step, I trusted the decal solutions Ultra Decal Set A.MIG-2029 and Ultra Decal Fix A.MIG-2030. Once the decals had dried, a defining wash of PLW Black Night A.MIG-1611 was applied to all the dark blue areas.



25

Once the PLW application dried, the model was thoroughly inspected for any flaws to be corrected before sealing the progress with a topcoat of Matt Varnish A.MIG-2055.

26 Three blue tones of Faber Castell watercolour pencils were used for the dark blue colour including 8200-146, 154 and 247. Creativity ran free while adding the chipping and weathering effects all over the model.



Here you can see the appearance after using the watercolour pencils; it is essential to apply a matt clear coat with Matt Lucky Varnish A.MIG-2055 to protect and seal the effects. Then small quantities of the Oilbrusher Sky blue A.MIG-3528 were blended on the surfaces to emphasize the fading.

27

28



29



28 For the interior area, PLW Tan Grey A.MIG-1610 was applied over a satin surface. This colour provided subtle contrast and did not excessively darken the finish.

29 After applying the PLW washes, the foundation of dirt effects was applied with the new Shader range of translucent colours using Dirt A.MIG -0853 diluted with 70% Acrylic Thinner A.MIG -2000 to build up layer after layer until obtaining the desired effect.

30 Once dry, the process continued with a darker toned complementary layer using Starship Filth A.MIG-0855 highly diluted and applied in thin coats until building up the desired effect.



30



31



32



33



34



35

31 The staining on the exhausts required a multi-step approach using pigments beginning with the lightest shade Sand A.MIG-3012 which was applied over the largest surface area. The process continued while working towards the darkest shade which was applied to the centre of the areas and localized deposits.

32 A second layer of slightly darker pigment was added with the colour Rubble A.MIG-3013. It is extremely important to avoid covering the previous shade entirely.

33 The third pigment tone added was Dark Earth A.MIG-3007.

34 A fourth and final dark shade was applied using Black A.MIG-3001 pigment, lightly applied on the centre of the stain.

35 Finally, the effect was softened and blended with Light Dust A.MIG-3002 pigment.



36

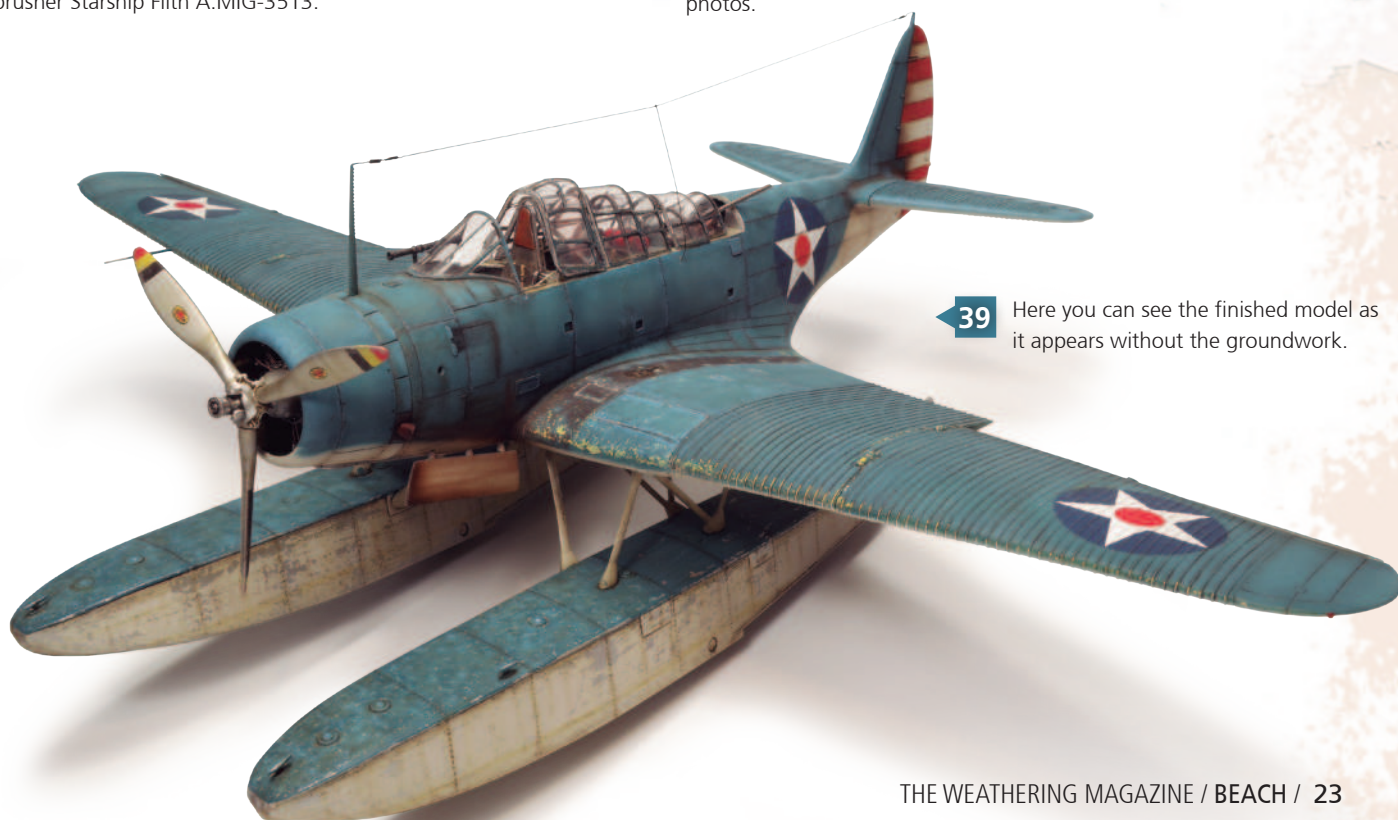
The streaking and the weathering on the lower surfaces of the engine and the belly of the aircraft were enhanced using Oil-brusher Starship Filth A.MIG-3513.



37

38

The moving parts also receive applications of discolouration with Rain-marks Effects A.MIG-1208 to simulate dust and dirt streaks. Once this first layer of colour had dried completely, Starship Filth was used to mimic the typical accumulation of dirt and gunk shown in reference photos.

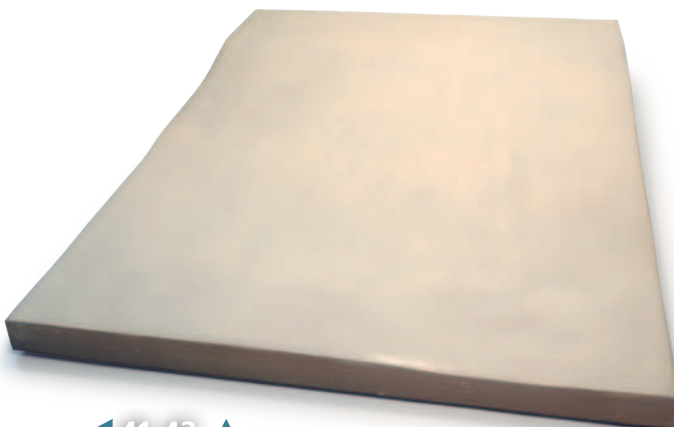


39

Here you can see the finished model as it appears without the groundwork.



40 For the Devastator's shore setting, a 5 cm thick Styrofoam sheet was used. After carefully planning the groundwork, I began roughly shaping it using a cutter and 180-320-grit sanding paper. Then the frame was built with 2 mm or 0.07" thick satin black acrylic sheet. It was attached to the base using general-purpose adhesive.



41 42 ▲

To make a foundation for the sand, a coat of DAS air-curing clay was applied. The clay was rolled into a thin sheet with a rolling pin, using talcum powder to prevent it from sticking to the work surface. Then a layer of PVA glue was used to attach the clay to the base, but before that, the black frame needed to be protected from damage and stains with Masking Tape 4 (20mm X 25m) A.MIG-8041.

43

Once the DAS clay had dried, a layer of One Shot Primer - Sand Flesh A.MIG-2027 mixed with One Shot Primer- White A.MIG-2022 was applied.



44

The process continued by adding tones to the sand surfaces; the lighter colours representing the dry sand were applied first using a 50/50 mixture of RAL 9001 Cremeweiss A.MIG-0017 + Satin White A.MIG-0047.



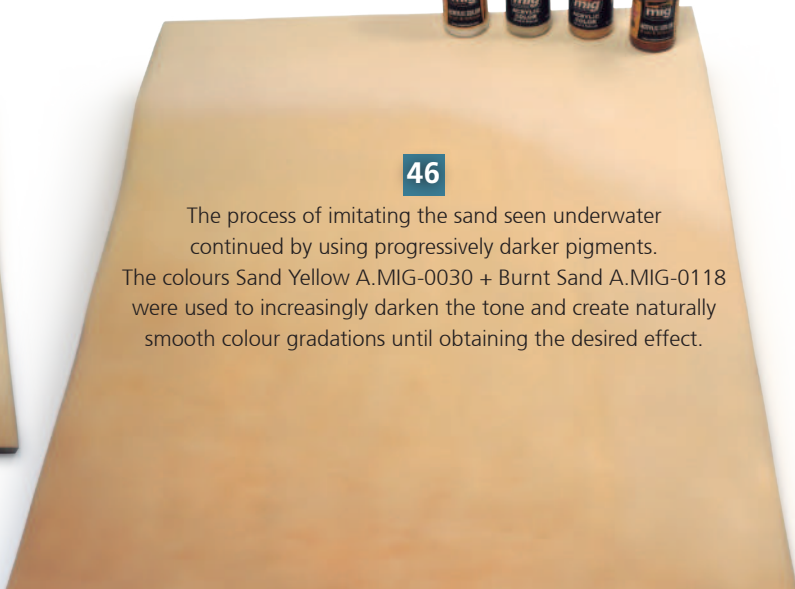
45 ▶

A wet sand effect was added in the centre of the base using a darker tone mixed from 50/50 RAL 9001 Cremeweiss A.MIG-0017 + Sand Yellow A.MIG -0030.



46

The process of imitating the sand seen underwater continued by using progressively darker pigments. The colours Sand Yellow A.MIG-0030 + Burnt Sand A.MIG-0118 were used to increasingly darken the tone and create naturally smooth colour gradations until obtaining the desired effect.



47

A variety of natural elements that bring a convincing level of life to the scenery were added such as stones, all while carefully planning the vegetation to be added in the following steps.

48

Before adding the water, a little more depth was added in advance by painting the area furthest from the shore with an aquamarine tone mixed with equal parts of Dark Grey Blue A.MIG-0229 and Deep Green A.MIG-0052. A fair amount of the mix was set aside to be used later for tinting the Acrylic Water for Dioramas product used to simulate the seawater.

49

Next a diluted Shader colour Dirt A.MIG-0853 was used to add shadows and various effects to the sand areas.

50

The area where grass will later be added was given a base coat of Forest Green A.MIG-0065, blending the edge bordering the sand.

51

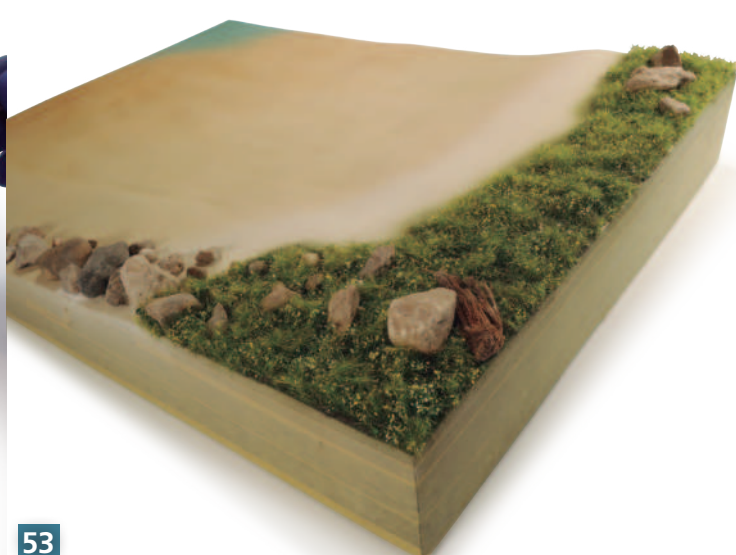
The products used to create the authentic natural aspect of this seaside setting are:

- Wild Meadow Ground A.MIG-8361
- Plants: Fern A.MIG-8450, Jungle Leaves A.MIG-8452, Tropical Fern A.MIG-8453 and Jungle Leaves (Version 2) A.MIG-8461.
- Shrubs and Bushes: Fine Bush - Spring A.MIG-8380 and Fine Bush Early Summer A.MIG-8381.





52



53



54

52 The Wild Meadow Ground A.MIG-8361 product from AMMO's Grass Mat range was cut to shape in advance using a paper template and fixed to the base with PVA glue.

53 With the Wild Meadow Ground in place, additional natural elements such as stone and branches were added while constantly checking and adjusting for scale and natural placement.

54 Depth and a lush layer were added by placing bushes using the reference Fine Bush -Spring A.MIG-8380. Each piece was carefully added, time was taken to blend each bush from every angle.



55

All the laser-cut plants and leaves were retouched before cutting them from the carrier sheet. Realistically natural tones of green and brown were used to get more varied effects and to mimic dry leaves.



56

More green tones were also applied to the ferns to bring a more varied and natural look to the vegetation. It is important to work each plant individually to obtain slight tonal variations.

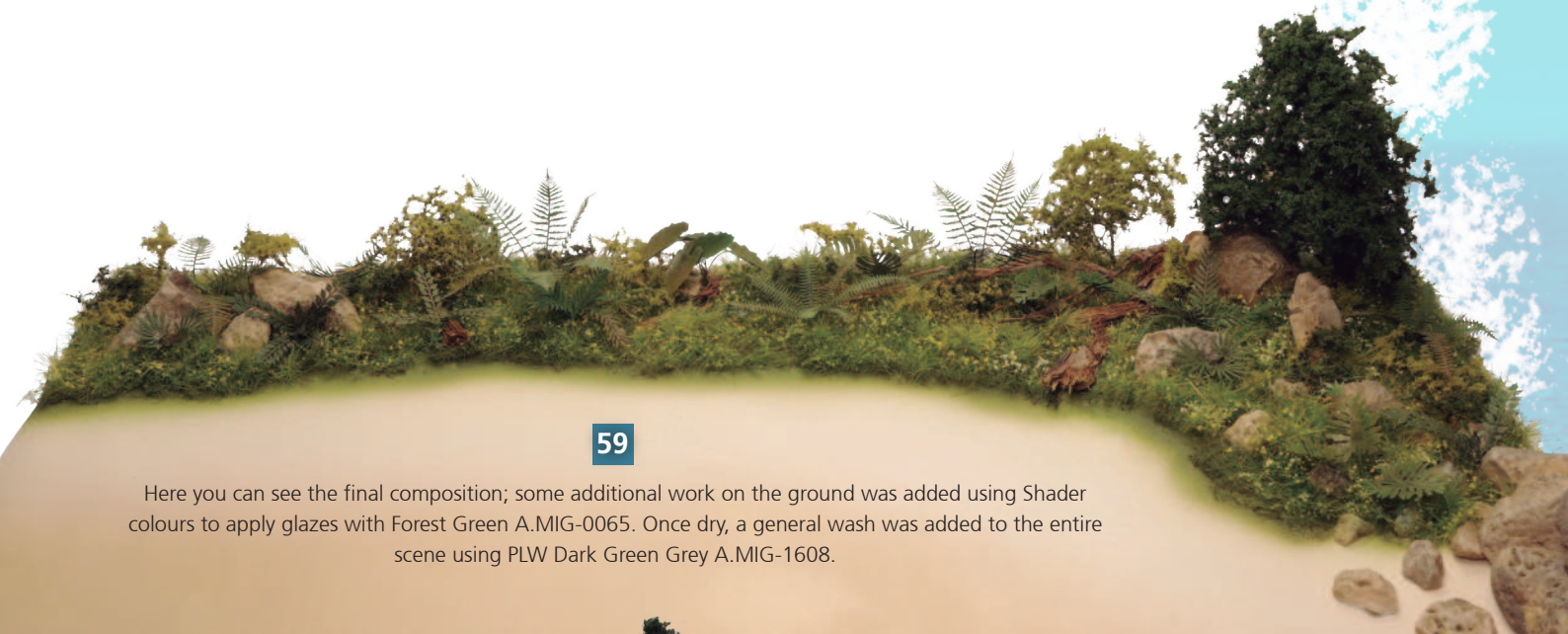
Shaders can be used to add even more tones and effects when applied with the airbrush. In this case the Shader colours Light Green A.MIG-0863, Dark Green A.MIG-0866, and Orange A.MIG-0850 were used individually as well as mixed together to create a multitude of different tones.

57

The different appearance of the plants before and after the application of paints and Shaders; the picture on the left exhibits a more realistic and natural appearance when compared to the photo on the right which shows the vegetation beforehand.

58





59

Here you can see the final composition; some additional work on the ground was added using Shader colours to apply glazes with Forest Green A.MIG-0065. Once dry, a general wash was added to the entire scene using PLW Dark Green Grey A.MIG-1608.



60

A hollow was added to depict water, into which the resin was poured after adding double sided tape between the base and the temporary walls to prevent it from leaking out. The corners were strengthened with Slow Dry Cyanoacrylate A.MIG-8013.



61

The layers of water were created using a product named Idepo epoxy reference EC 141, a product not intended originally for crafts, but rather for industrial applications. The very first layer was measured exactly to ensure that the plane sat on the water correctly before setting it aside to dry for 30 hours.



62

Next the model was fixed in place using PVA glue to prevent it from moving while pouring the second layer of resin.

For the sea water a two-part epoxy resin from Idepo was mixed 100/50. The mix was stirred well and a touch of the previously mixed aquamarine colour was used to tint the water.

63

It is of utmost importance to use the exact same proportion of tinting colour in the second layer. Let the resin rest for a few minutes before pouring it on the base, this will give time for the air bubbles to rise to the surface and escape.

64



63

64





65

Once the second layer of resin water was allowed to dry for 30 hours, a taller edge was added using Masking Tape 4 (20mm X 25M) A.MIG-8041.

66

The topmost layer of water was applied using the product Clear Water A.MIG-2205. Using a No.4 Synthetic Filbert Brush A.MIG-8595, the desired effect of softly moving seawater was formed on the surface.



67

The crest of the waves and small secondary waves were also added using the no.4 filbert brush. You can add a little tap water to the Acrylic Water for Dioramas range of colours if you need a more fluid application.

68

When the last layer of water had dried for at least 24 hours, touches of white were added to the foam using a 2/0 Synthetic Round Brush A.MIG-8612 and the colour Satin White A.MIG-0047 acrylic mixed with a small amount of Retarder AMMOF500 which extends the working time of the acrylic colour.









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THE BOAT THAT WON THE WAR

The LCVP, otherwise known as the Higgins boat has become one of the quintessential symbols of the June 6, 1944 landing of Operation Overlord and other landings in the European and Pacific theatres. Many of these simple wooden and steel plated transports saw action all of the way into the 1970's. Here, I've put together a generic landing scene using the Italeri LCVP kit. I wanted to make the boat look like it was tangled in German beach defences, and had been abandoned for many hours. The water could be made to suit almost any beach landing with a few colour changes. The boat would just need the appropriate markings to make it fit in nearly any invasion spanning 3 decades of the 20th century.

"Andrew Higgins ... is the man who won the war for us." - Dwight D. Eisenhower.

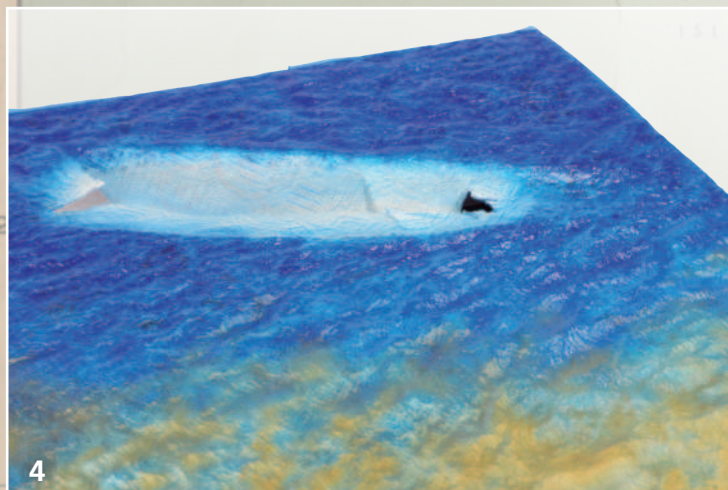


James
A. Powell

LCVP
ITALERI
1/35







- 1 I selected pink insulation foam for the base of the diorama and for the water base.
- 2 Using a drill with a wire wheel, I made troughs and valleys to represent waves. I painted the whole area where the water will be with dark blue acrylic paint just to cover the pink colour of the foam.
- 3 Over the areas where the water will be, I used gloss varnish and varnish as a thin glue to attach paper towels to the foam. Once in place, the entire surface was brushed with the gloss medium, soaking the paper until nearly transparent.
- 4 Over what will be the deepest water farthest away from the beach, I airbrushed Acrylic Phthalo Blue thinned with window cleaner. On the beach and about 1/3 of the way into the water, I airbrushed Khaki A.MIG-071 to represent the beach and shallow water areas.
- 5 I then made a mix of A.MIG-123 Marine Blue and A.MIG-046 Matt Black, and lightly brushed the troughs of the waves in the "deep" areas and near the LCVP. I made sure not to paint on the crests of the waves. As I worked my way closer to the beach area, I sprayed less and less colour into the valleys in between waves.
- 6 I wanted to add some texture to the beach area by placing impact craters from artillery rounds. Using an Exact-O knife I first cut the centre of each impact, then painted dark brown acrylic paint into each hole.





7 I wanted to add some texture to the beach area by placing impact craters from artillery rounds. Using an X-Acto knife I first cut the centre of each impact, then painted dark brown acrylic paint into each hole.

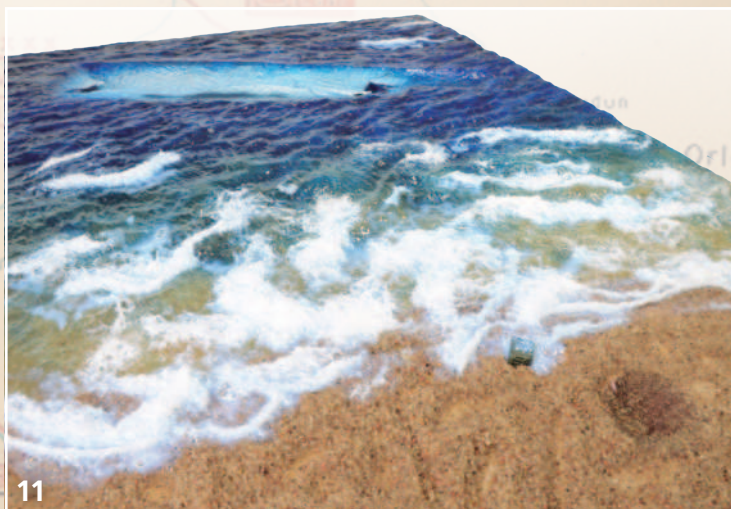
8 To simulate the whitecaps of waves and the sea foam areas around the beach, I use synthetic "poly-fill" as used in some inexpensive pillows. Cotton will not work for this, as it doesn't stay fluffy when wet and won't look as realistic. I pulled the fibres out into a small yarn, lightly wetting them with a bit of gloss medium between my fingers. Then I place them with an old brush along the crests of some waves and where the water would naturally foam.

9 The foam "lines" were placed along the dividing line between the sand and the water. This represents the areas where the tide last hit at its highest point.

10 The poly-fill can be placed in random swirls near the beach.

11 Any junk or debris floating at the water's edge needs to be added at this point.

12 I've recently found some pencils called "Twig Pencils" on Amazon.com that look very much like scale pine tree trunks. I wanted my Higgins to look as it was stuck on a beach defence, and these looked like they would work perfectly.





13

I cut a few pieces of pencils and glued them into the scene.



14

The boats positioning has a list to it, and the ramp is open. I wanted to make it look like waves from the open ocean were crashing up on the ramp by using more poly-fill contoured to the ramps profiles.



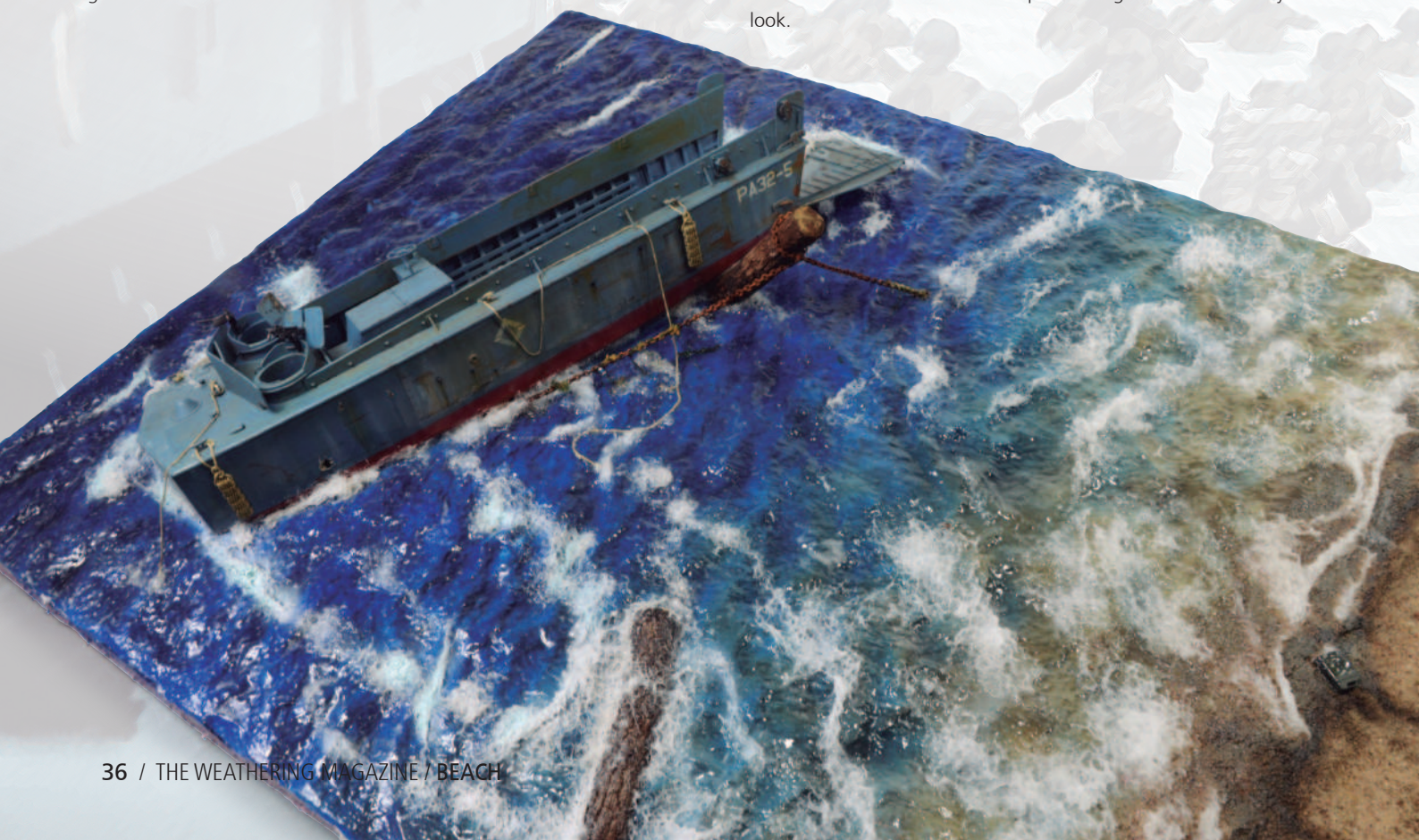
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Before I put more gloss medium onto all of the water, I wanted to darken the "wet" part of the beach. For this I used Matt Black A.MIG-046 and Khaki A.MIG-071 mixed to make a dark Khaki. I brushed this along the foam lines at the beach's edge to represent the wet and constantly draining sand.



16

I wanted to add some rope and other details to make the landing craft look as though it was floating, yet stuck and bobbing in the surf. I added a few pieces of rope attached to the mooring cleats and dropped those pieces into the water, giving them a slight sag. I used Real IDF Sand Grey 73 A.MIG-0132 to darken the rope and to give it a bit of a dirty and used look.





17



18



19



20

17 A cigarette lighter was used to heat a metal pick to punch a few holes into the hull side that faces the beach. In the holes that are on the "wood" part of the boat I lightly brushed on Old Wood A.MIG-0036 with a bit of New Wood A.MIG-0037 over top of it. This simulates the exposed wood that was blasted out by machine gun hits. I again used the lighter rust colours in the holes on the steel plates.

18 Since the boat has been stuck in these beach defences for some time, I added a bit more Light Rust Wash A.MIG-1004 lightly streaked downward to simulate new rust that has recently accumulated running from the bullet holes.

19 To make the boat look wet above the water line and to add some "splashes," I used Wet Effects A.MIG-2015. I made the water line uneven and added some splash marks. Wet Effects nicely darkens the underlying paint and makes it shiny.

20 To help make the scene more dynamic and to add the illusory effect of gravity, I wanted to make the boat look more entangled in the beach defences. I figured a heavy chain might do the part so I dug up an old brass boat model chain. First it was spray painted with plain metal primer followed by a bright orange spray paint. These first two colours gave me a surface to affix my AMMO colours to. I started by coating the whole thing with Track Rust Pigment A.MIG-3008 and Light Rust Wash A.MIG-1004 mixed together. Over that, I brushed on Medium Rust Pigment A.MIG-3005 and Tracks Wash A.MIG-1002.





21



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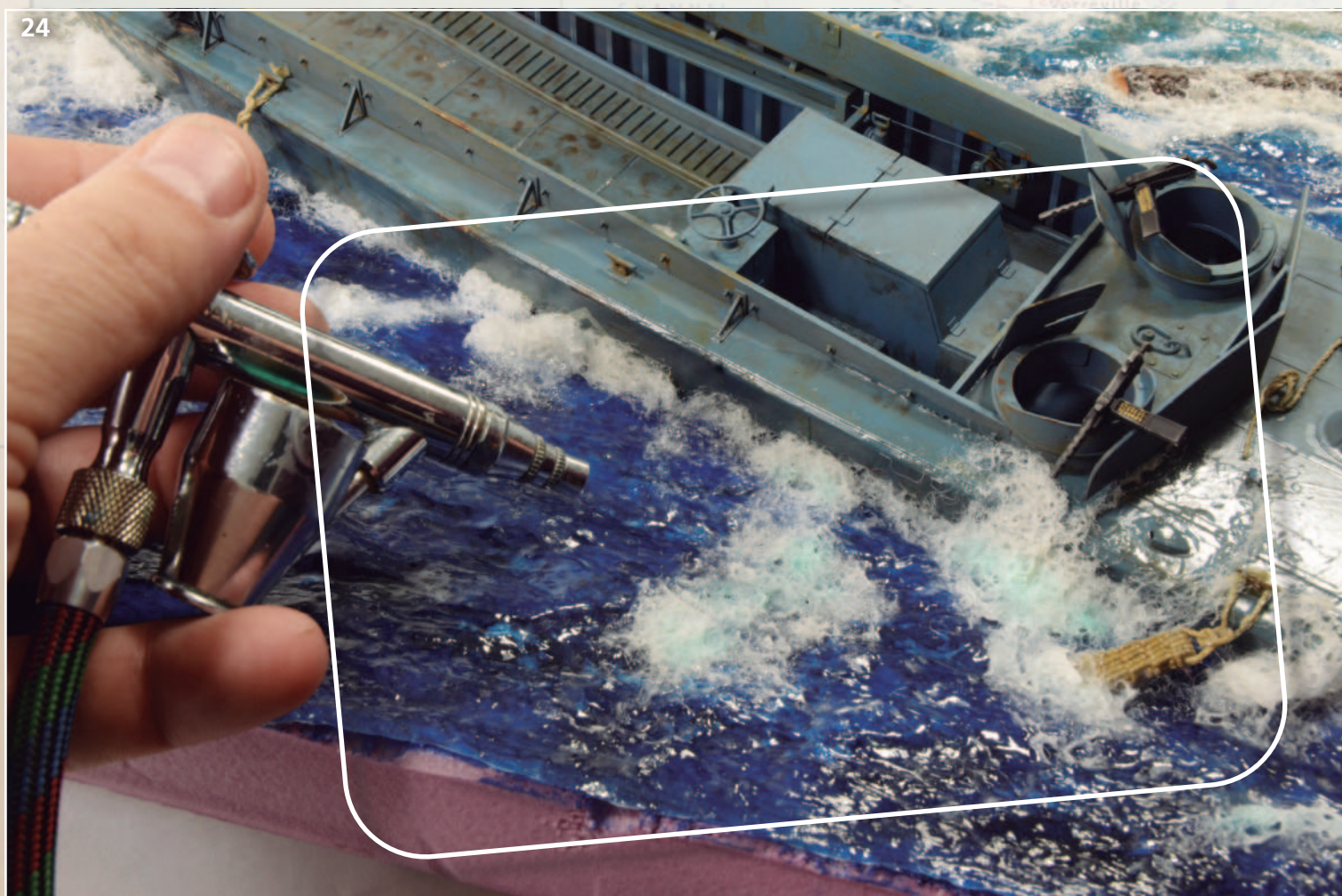
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21 After the washes and pigments dried on the chain, I glued it to look as if it was stuck under the boat, wrapped up on a log and then disappeared back under the water. I lightly brushed on more Light Rust Wash near the higher and drier parts of the chain, leaving the lower parts darker and more wet looking. I also added a bit of scenic foliage near the water to look like underwater growth draped over the lower links.

22 The chain adds some "weight" to the scene, as the boat appears to be pulling it and the log out from the depths.

23 To give some of the whitecaps a bit of depth, I added a bit of Bright Aqua Green to the larger ones.

24 The Aqua Green was mixed with glass cleaner and very lightly air-brushed into the middle masses of some of the whitecaps, followed by a bit of white sprayed on top.



24

- 25 Finally the entire water surface and all white caps and waves were coated with the gloss medium and varnish to remove any dull areas created during painting.



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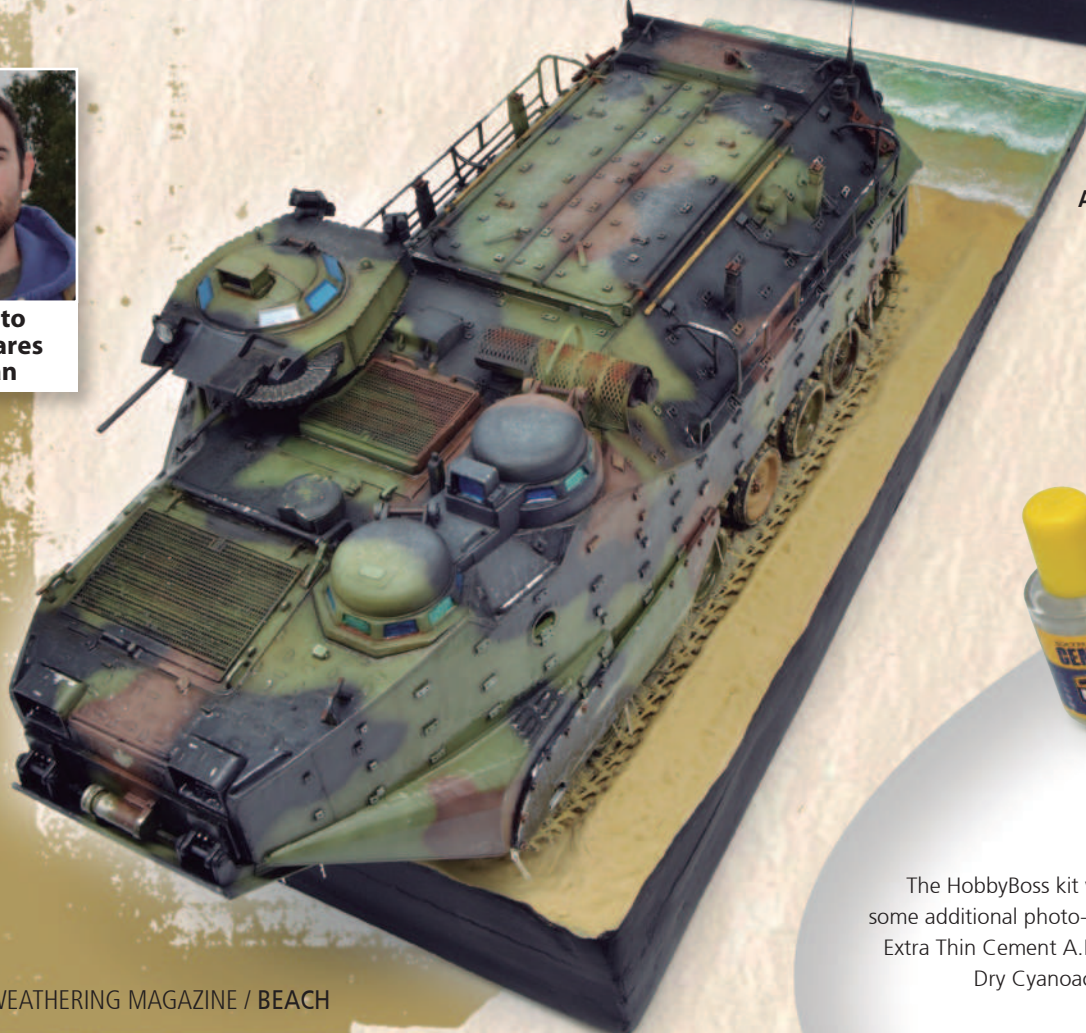
AAV-7 RAM

When discussing a project for the "Beach" issue of TWM, I immediately thought about making a model AAV-7 amphibious track hitting the sand. Thanks to the internet, a great deal of high quality reference information is available including photographs and videos showing how the weathering effects produced by sea water and sand blend together on the real-life vehicle.

An intriguing aspect of weathering this subject was the different textures and finishes generated by water with contrasts of matt for dry areas, satin and gloss for wet surfaces, and finally areas of water that reflect light like glass. In this article you will be shown how to add the sand that gets stuck within the tracks and wheels as this vehicle type emerges from the sea, as well as other weathering effects like paint chips exposing aluminium surfaces, water-streaking, and the unique weathering effect of vehicles operating on the beach.



**Alberto
Palomares
Durán**



**AAVP-7A1 RAM/RS
HOBBY BOSS
1/35**



The HobbyBoss kit was assembled with some additional photo-etched details using Extra Thin Cement A.MIG-2025 and Slow Dry Cyanoacrylate A.MIG-8013.

WRS



2
A coat of primer was airbrushed onto the entire model with One Shot Primer-White A.MIG-2022.



3



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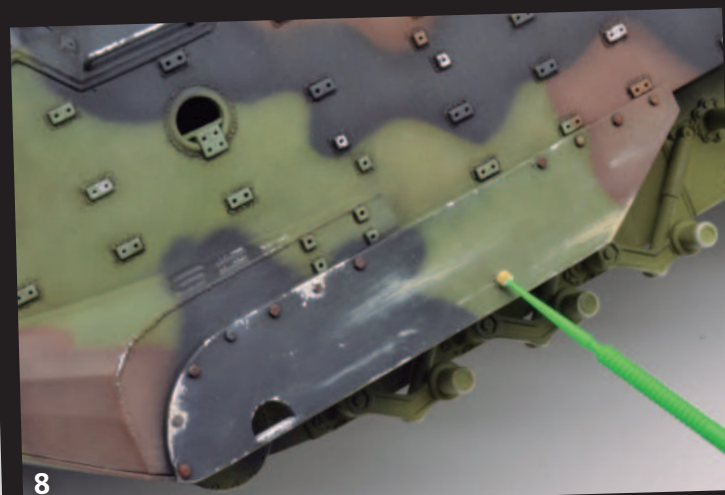
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8

3 The NATO camouflage was then sprayed freehand with the airbrush, diluting the paint with Acrylic Thinner A.MIG-2000 which allowed me to achieve the distinctive semi-hard edges of the scheme. Accurate colours were sourced from the set US Army Modern Color Set A.MIG-7159.

4 Filters are used to tie in the different camouflage colours together and to add more tonal variation to the finish. For this camouflage, the Filter Tan for 3 Tone Camo A.MIG-1510 and Oilbrushers Field Green A.MIG-3506 and Medium Grey A.MIG-3509 were used to harmonize the base colours.

5 The next step was to apply a few washes over the model using Dark Wash A.MIG-1008. When applying washes, take care not to overdo it as a wash has the power to excessively darken the surface.

6 In order to recreate dirt and grime streaks, vertical lines were first airbrushed with the Shader colour Dirt A.MIG-0853. Then the effect was emphasized with Streaking Grime A.MIG-1203 while keeping the streaks in scale and logically placed.

7 Several reference photos of these vehicles were studied to accurately reproduce the chipping effects on the model. Acrylic colour Matt Aluminium A.MIG-0194 was used to paint the chips that expose bare metal.

8 To make the scratches on the fenders, a mixture of the Oilbrushers Dusty Earth A.MIG-3523 and Medium Soil A.MIG-3522 was drybrushed with Sniperbrushes from the Sniperbrush Collection Set A.MIG-8570.



9

The next step was to add the effect of salt residue left by sea water on the "dry" upper surfaces of the model; this began by airbrushing several layers of Scratches Effects A.MIG 2010.



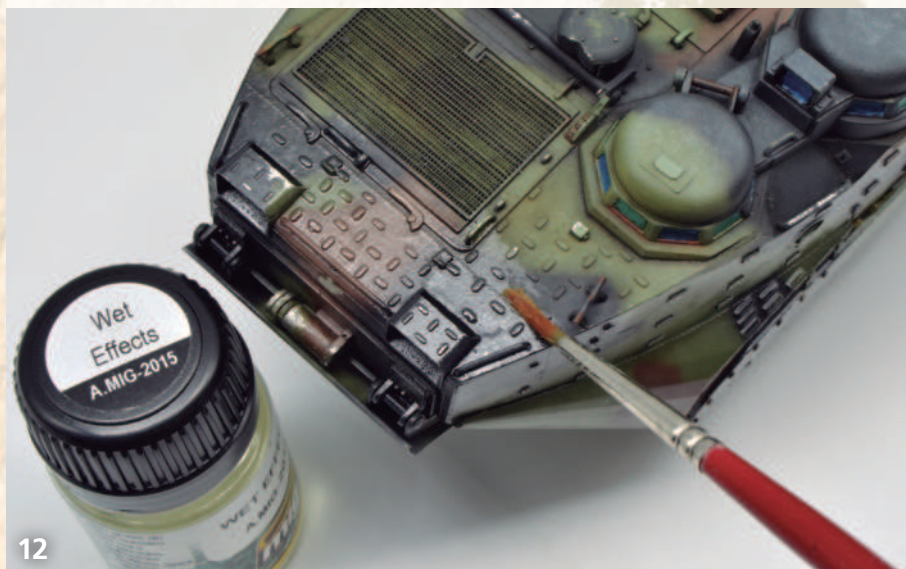
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Once the previous layer was dry to the touch and the surface appeared matt, a misted mixture of Light Dust Wash A.MIG-1401 (70 %) and Oilbrusher White A.MIG-3501 (30 %) was applied.



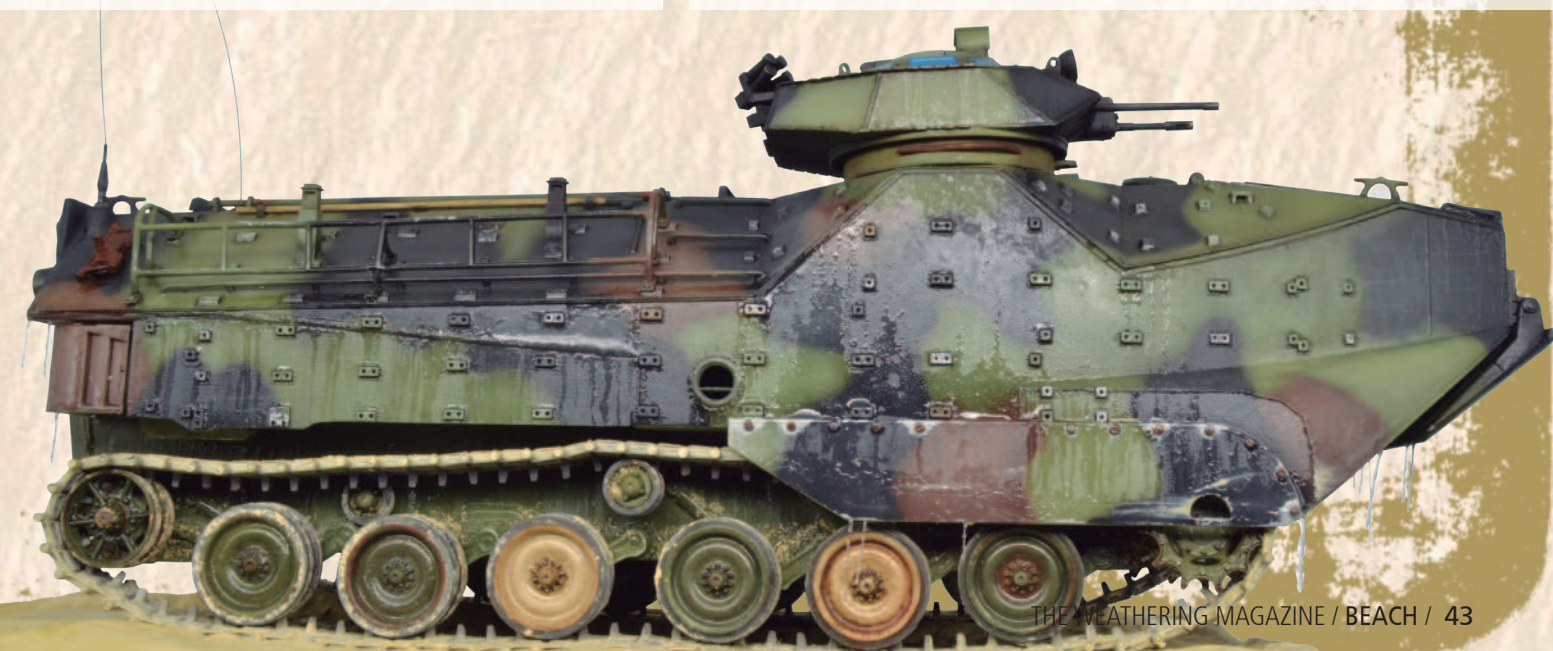
11

Once the Oilbrusher mixture had dried, the process continued by stippling the surface with a brush moistened with water to remove the colour little by little until the desired effect was achieved.



12

At this stage I began to create the defining water and moisture effects on the model, carefully selecting the areas that would have been in contact with the sea water. The highly realistic Wet Effects A.MIG-2015 was carefully applied just as a Filter is applied: in a thin uniform layer to prevent the enamel product from pooling on any surface.





13



14

13 Next, splashes were added on the topside areas closest to the waterline using a brush and Wet Effects A.MIG-2015.

14 A UV acrylic resin was applied to those horizontal and vertical areas where sea water would have collected to authentically represent water trickling down off the vehicle.

15 The same effect was applied all over the lower surfaces of the running gear, but much more vividly since a lot of water would have accumulated there on the real vehicle. Vertical lines were applied as if it were streaked dirt and left as is without blending.



15



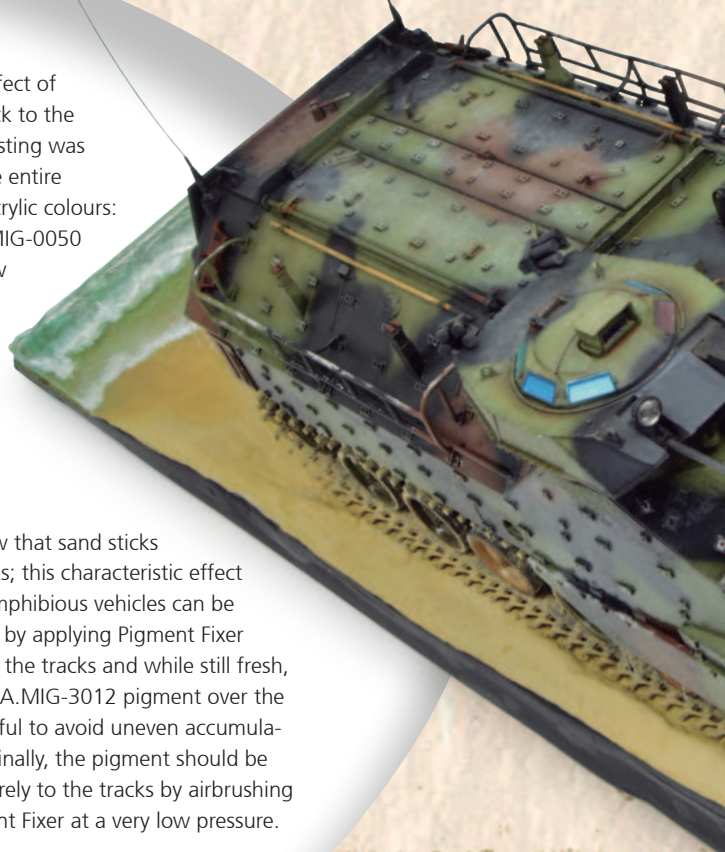
16

To create the effect of beach sand stuck to the tracks, a pre-dusting was applied over the entire surface using acrylic colours: Matt White A.MIG-0050 and Sand Yellow A.MIG-0030.



17

References show that sand sticks to the wet tracks; this characteristic effect often seen in amphibious vehicles can be easily replicated by applying Pigment Fixer A.MIG-3000 on the tracks and while still fresh, sprinkling Sand A.MIG-3012 pigment over the surface. Be careful to avoid uneven accumulation or lumps. Finally, the pigment should be fixed more securely to the tracks by airbrushing a mist of Pigment Fixer at a very low pressure.



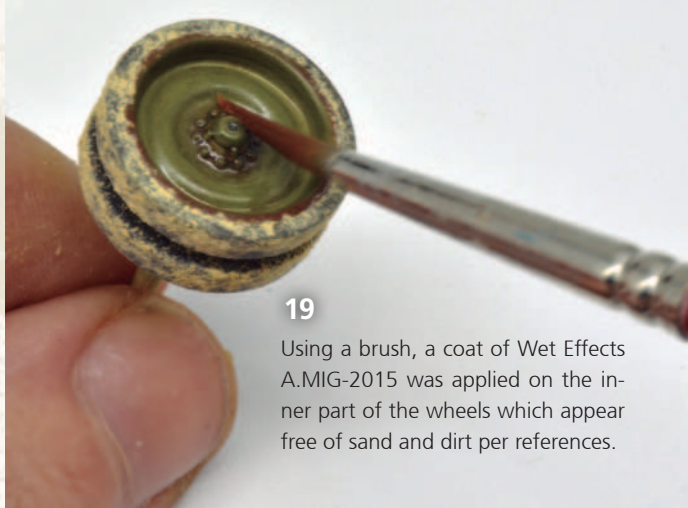
18

The same steps were repeated to represent the sand accumulated on the wheels, in this case applied by rolling the wheels over pigment deposited onto a paper napkin.



19

Using a brush, a coat of Wet Effects A.MIG-2015 was applied on the inner part of the wheels which appear free of sand and dirt per references.



20

A base for the vehicle was formed using Das Pronto air curing clay, the tracks were pressed into the surface to accurately depicted the weighted travel, and the sand textured placed. The base was then painted with acrylic colours similar to the tones used for the vehicle: for this example RAL1039 F9 German Sand Beige A.MIG-0027, Matt White A.MIG-0050, and Oil Ochre A.MIG-0055.

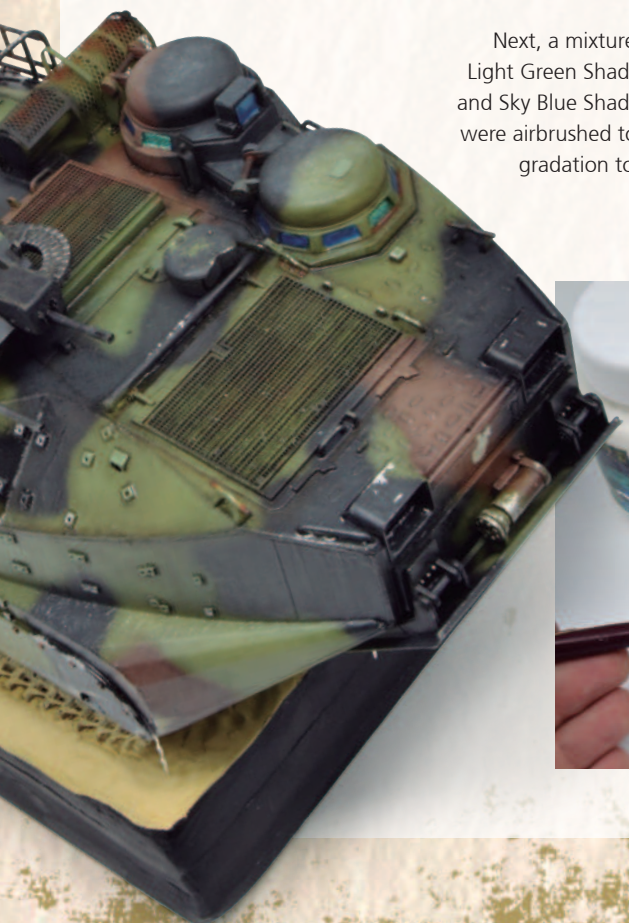
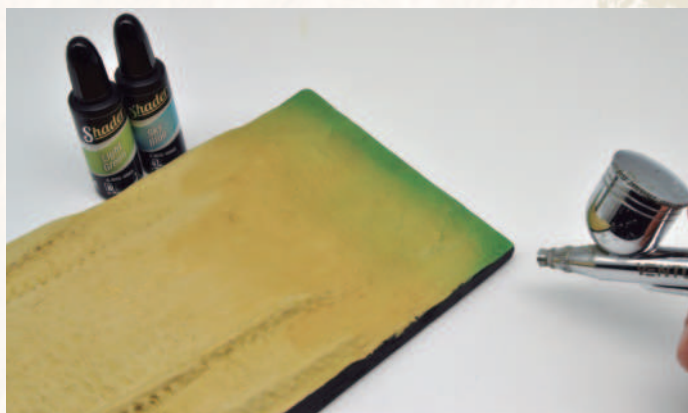


21

Oilbrusher Yellow Bone A.MIG-3521 and Windsor & Newton Naples yellow oil colour were drybrushed over the groundwork to highlight the sand, Oilbrusher Medium Soil A.MIG-3522 was used for the water.

22

Next, a mixture of the colours Light Green Shader A.MIG-0863 and Sky Blue Shader A.MIG-0860 were airbrushed to create a tonal gradation towards the top.



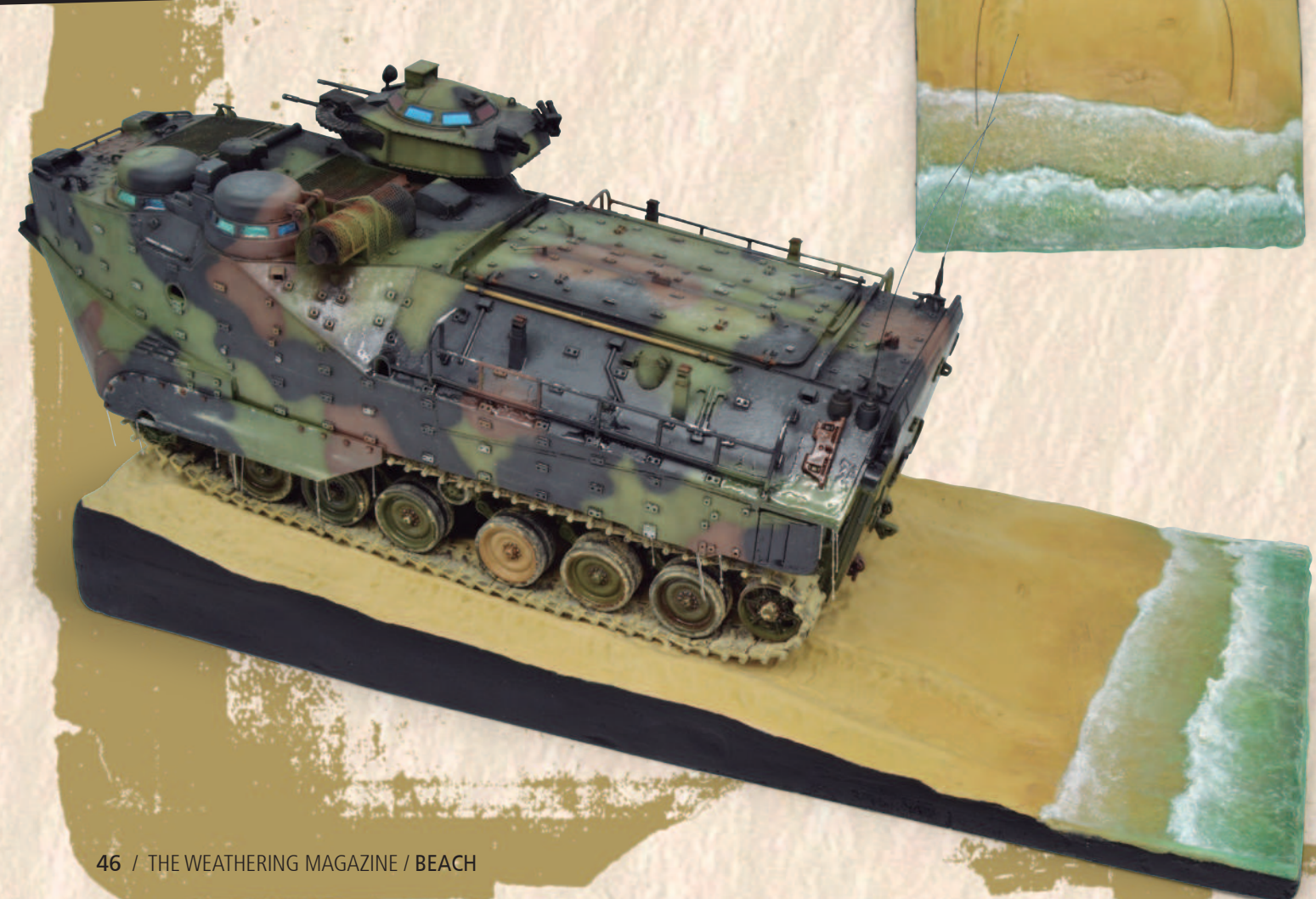
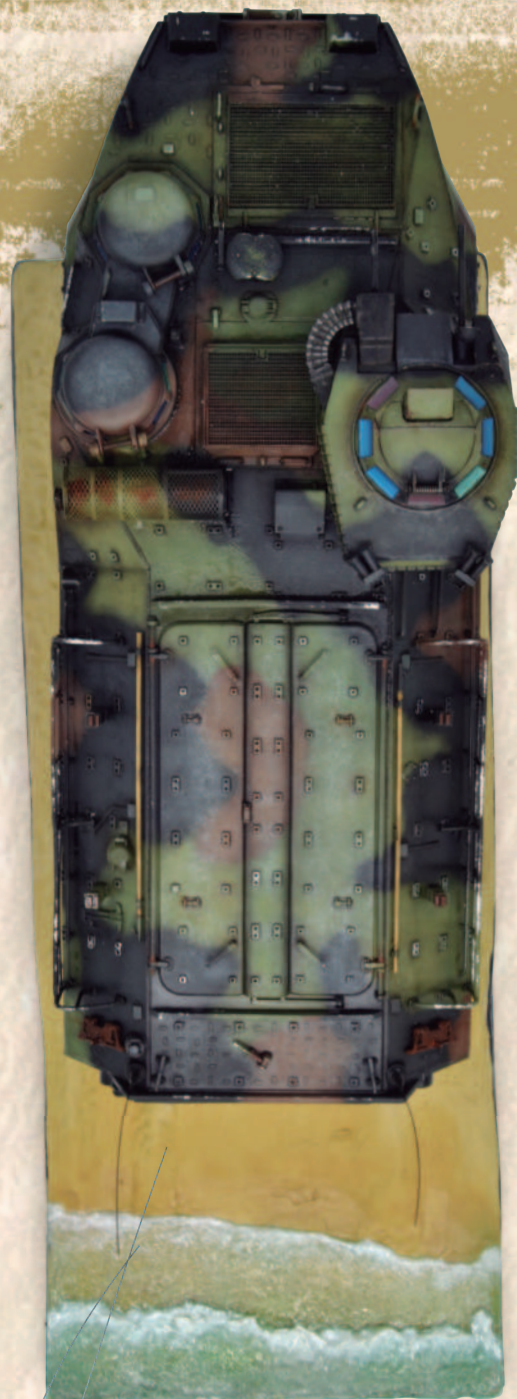
23 Next a mixture of the Shader colours Light Green A.MIG-0863 and Sky Blue A.MIG-0860 were airbrushed to create natural tonal transitions to appear from below the UV acrylic resin poured on the base to create an authentic looking water surface. Once fully cured, the acrylic product Clear Water A.MIG-2205 was tinted with a few drops of Sky Blue Shader A.MIG-0860 and applied with a brush to recreate the texture of the sea. The product was accumulated and built up to form the waves. gradation towards the top.



24 When the previous layer had dried, additional water texture was applied to increase the volume of the waves. Once dry, Satin White A.MIG-0047 acrylic mixed with a few drops of Aqua Gloss Clear ALC600 A.MIG-8212 varnish was stippled onto the crest of the waves.



25 For a final touch, stretched clear sprue and UV acrylic resin were used to depict some trickling water. These final effects were attached with Ultra Glue A.MIG-2031 to the areas where water can be seen draining off the vehicle in reference photos. Extra care was taken when gluing them in place, the water must be perfectly perpendicular to the ground and sea horizon, not to the vehicle.



WHAT LIES BENEATH

COASTAL DEFENSES, FRANCE 1944



In 1944 the Germans began to build coastal defences on the Normandy coast of France in anticipation of an Allied invasion of mainland Europe. Although the Germans were not convinced that the invasion would take place in this area, a series of bunkers, pillboxes, and trenches were built. The construction ranged from small fortified bunkers with small calibre guns to massive structures with long range cannons. Not all bunkers were for artillery use, many were built as observation posts, army command posts, and shelters for the infantry.

In this scene, a recently constructed bunker sits awaiting its defensive role as a flak and cannon bunker. The cannon in the lower area is well hidden inside the thick walls with a 20mm flak gun positioned atop the upper section to scan the skies. The defensive position is built at the cliffs edge and sits low in its surroundings to be well camouflaged within the terrain. The setting and atmosphere depicts the bunkers built in the area during the calm before the storm.

This diorama will be one in a series based on the "Elevated Diorama" concept, the purpose of which is to give the diorama and its surroundings greater impact. The basic idea behind it is to make it look as if it has been freshly plucked out of the ground and raised up. This concept emphasises an artistic approach to presenting a diorama and displaying different elevations, enjoy!

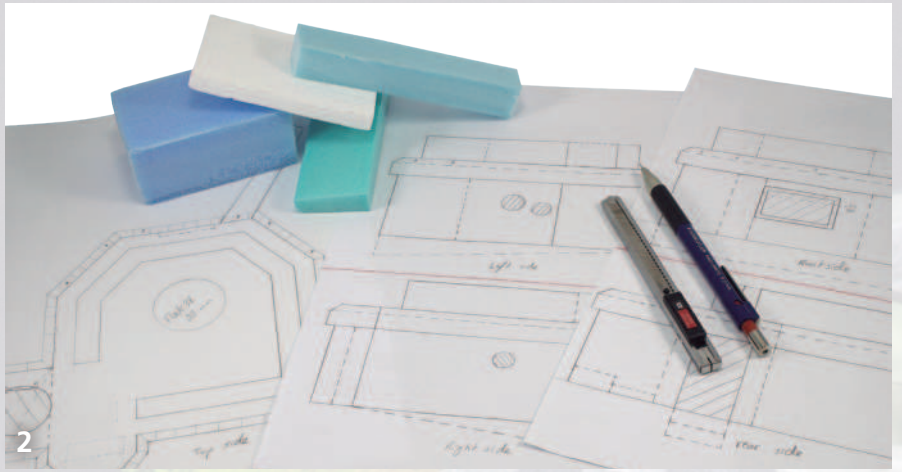


Bernard Bassous

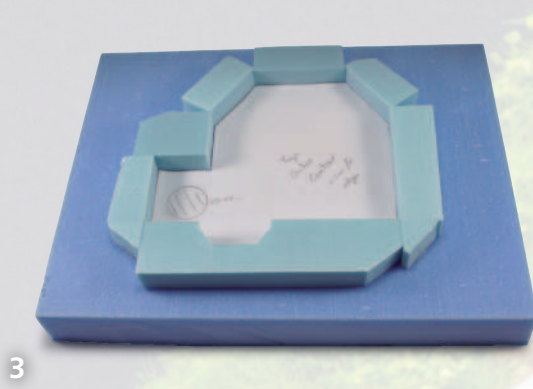




1 Building Dragon's 20mm FlaK 38 was a joy, this is an excellent kit with no need for extra detailing.



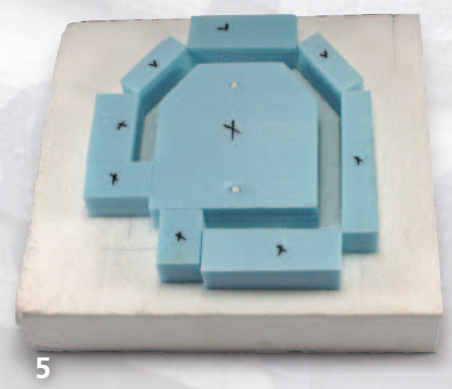
2 Plans for the bunker were drawn up in 1/35th scale to be used as a guide for the moulds.



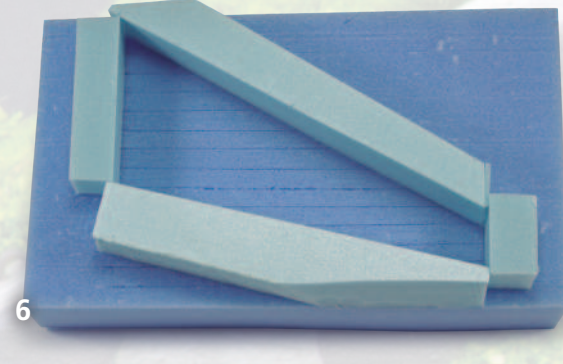
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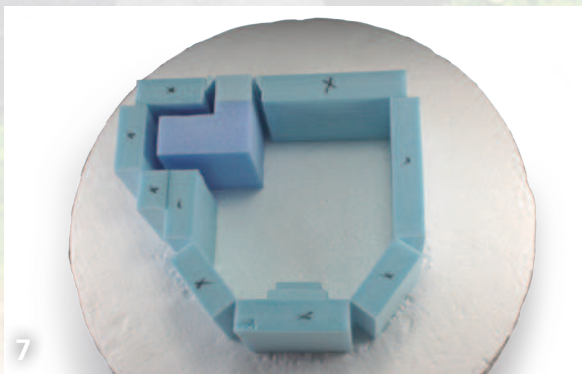
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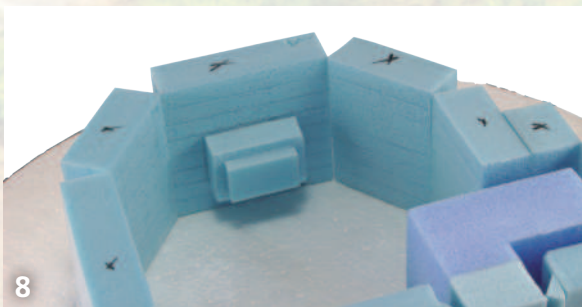
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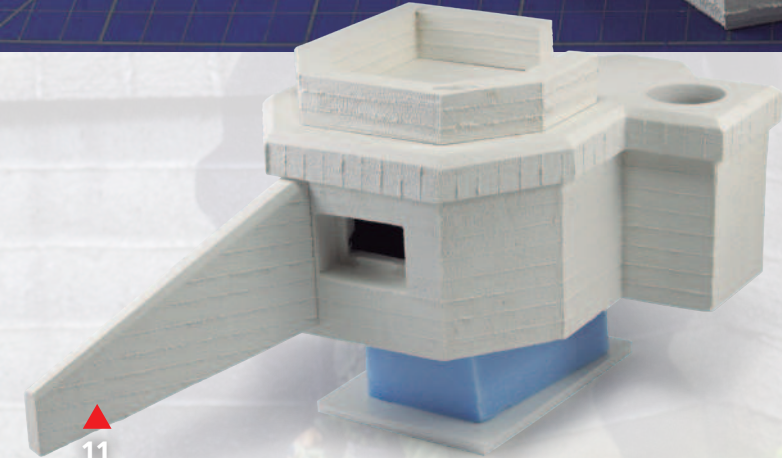
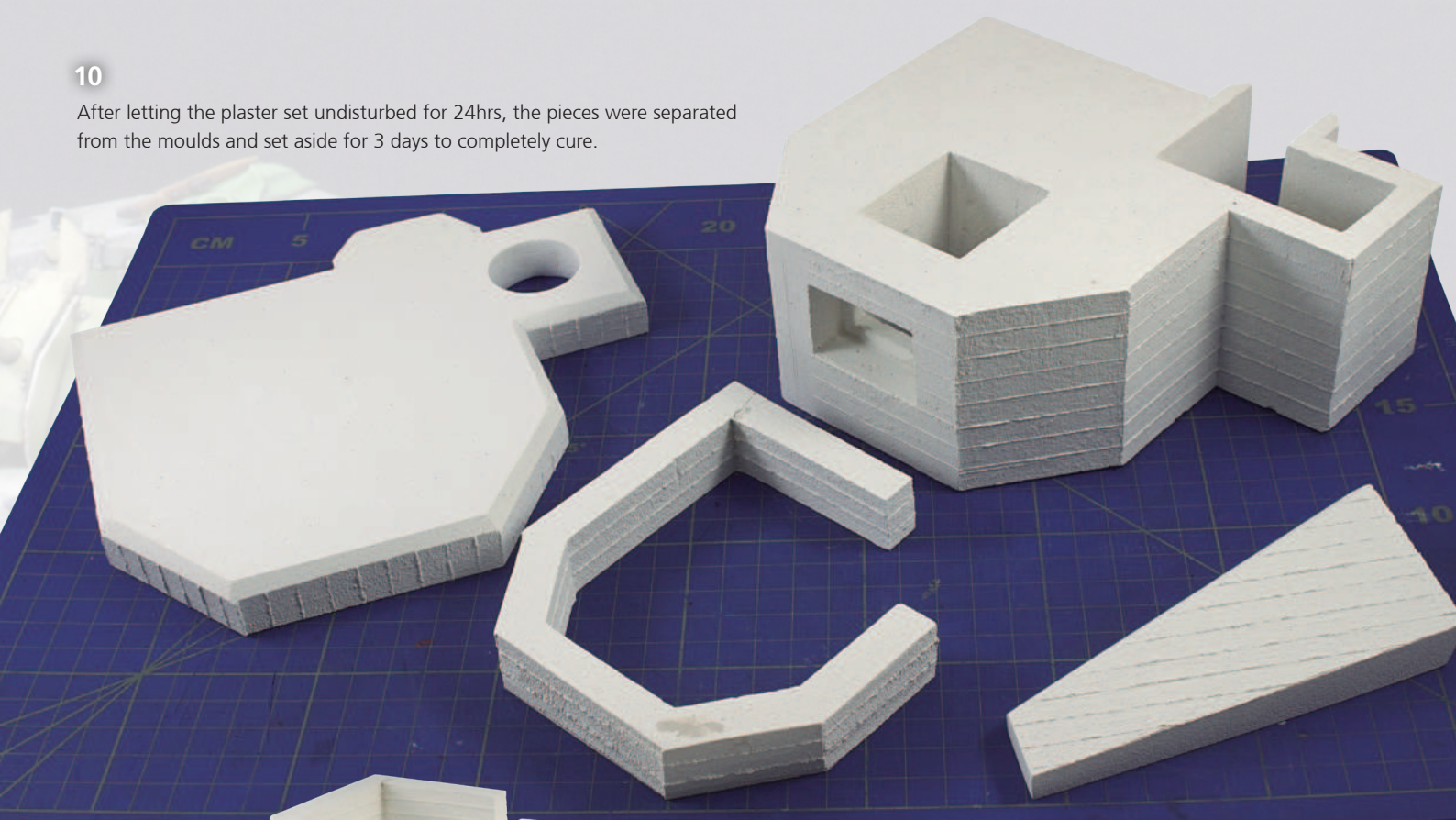
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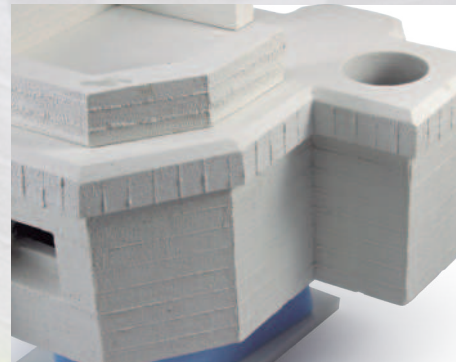
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After letting the plaster set undisturbed for 24hrs, the pieces were separated from the moulds and set aside for 3 days to completely cure.



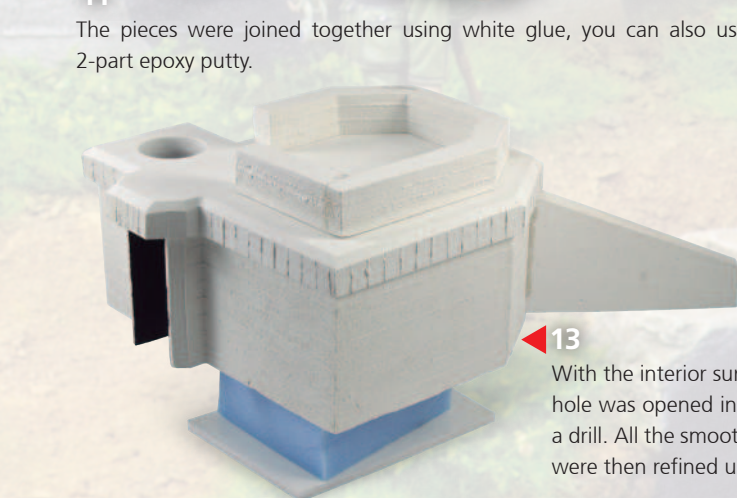
11

The pieces were joined together using white glue, you can also use 2-part epoxy putty.



12

Here you can see the authentic texture, if any surface detail appears unrealistic or out of scale, it can easily be cleared using your finger.

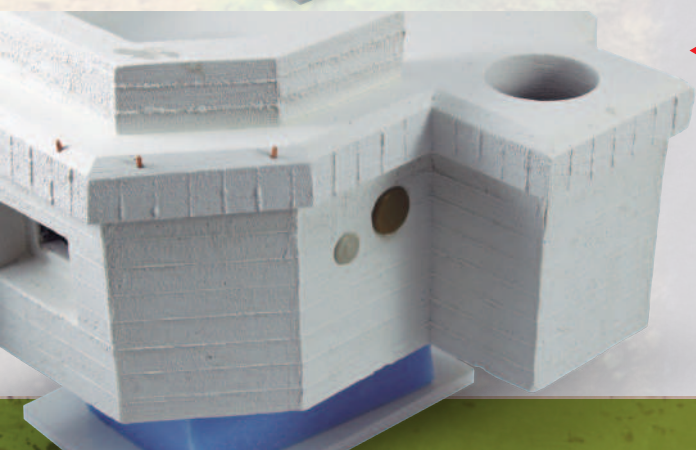


13

With the interior surfaces painted black, a hole was opened in the top section using a drill. All the smooth areas on the bunker were then refined using sandpaper.

Copper wire was used to add some details including the ladder used to climb to the upper section of the bunker.

14



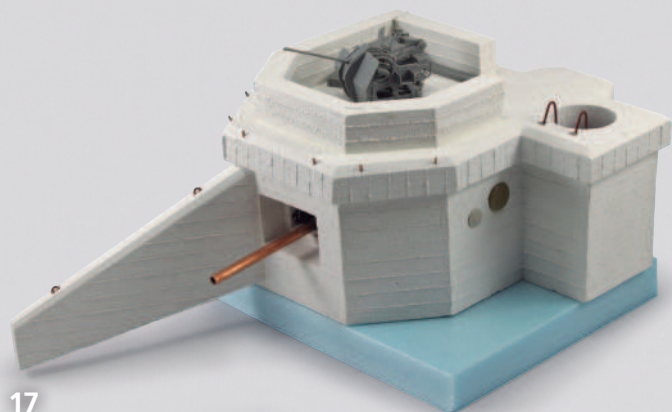
15

Other materials such as plastic were also used to create details for the bunker.

16

The ventilation fan was scratch built from spare parts and wire mesh.





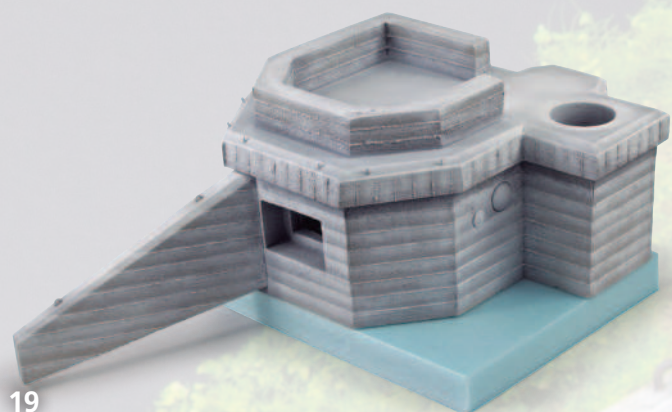
17

The cannon itself was scratch built from copper tube and plastic components. Acrylic putty was used to fill the small gaps between each part of the bunker assembly.



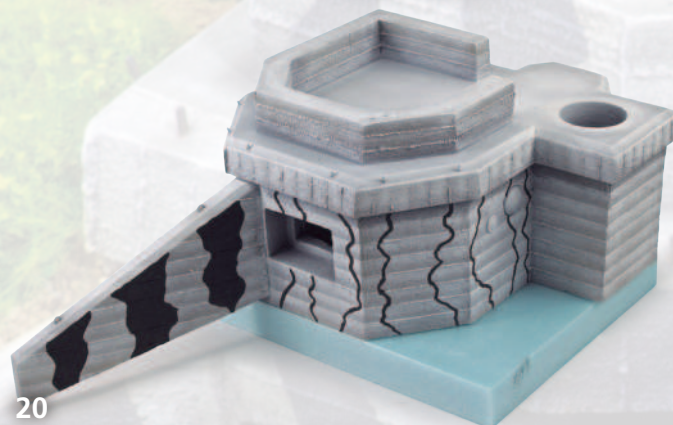
18

Here you can see the ladder tested and in its place.



19

The whole assembly was primed grey before adding highlights to the upper surfaces using white primer to give a convincing highlight and shadow effect to the concrete.



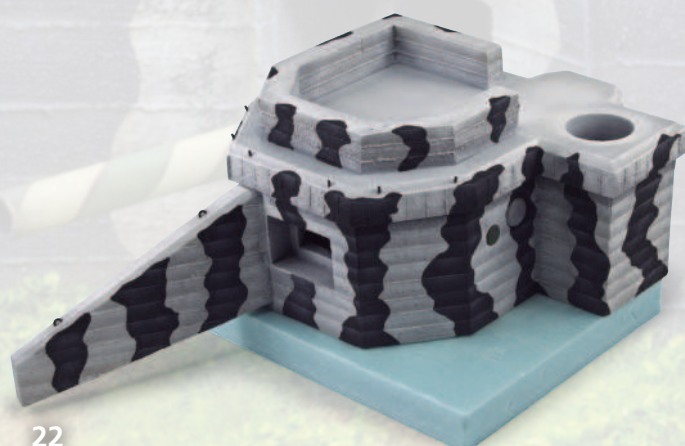
20

The camouflage stripes were first applied by hand to define the edges using a thin brush.



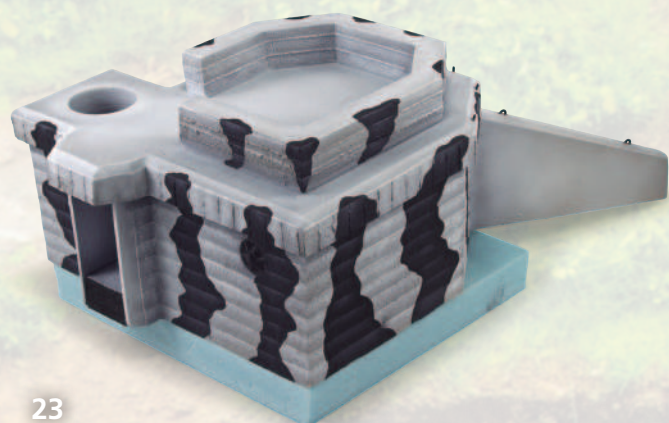
21

The centre of each stripe was then filled in using a wider brush, resulting in a clean camouflage pattern.



22

The camouflage stripes were then highlighted with white. An air-brush was used to highlight the edges of each wooden panel by using cardboard to mask each part.



23

The colour modulation effect lends an artistic touch, the effect will be toned down during the weathering process. The back of the bunker barrier wall was not painted since it will not be visible once finished.

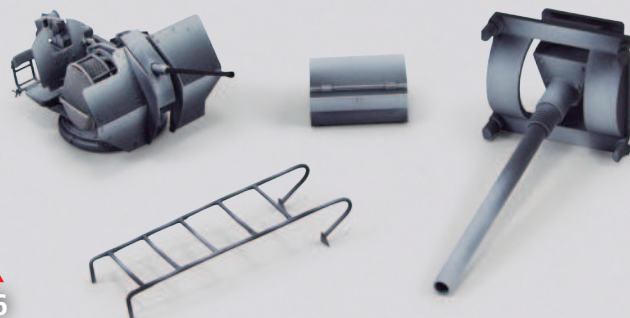


24

Oil colours and odourless thinner were used to apply filters over the whole bunker by mixing a light black-brown colour.



- 25 White spirit was used on the edges of the bunker to remove any oil colour to re-create worn edges.



- 26 At this stage the flak gun, cannon, ladder, and other accessories were primed and pre-shaded.



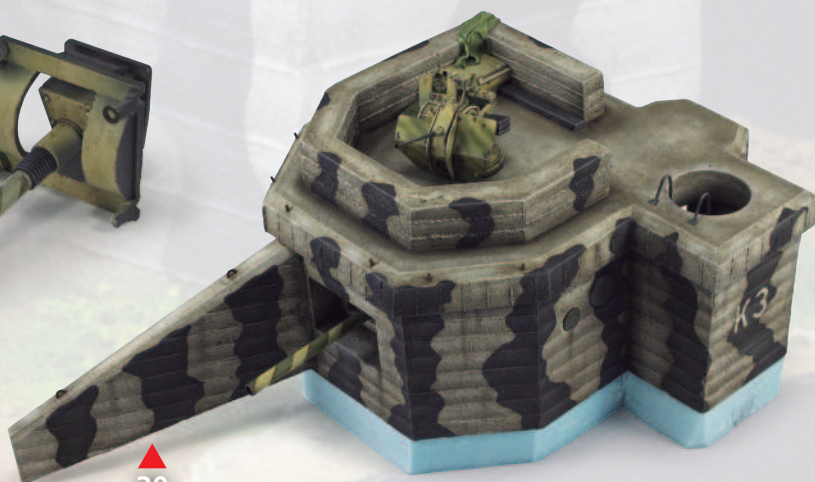
- 27 Here you can see the base colour and camouflage added to the flak gun and cannon. The camouflage on the flak gun was applied free hand, while masking putty was used to apply the green striped pattern on the cannon.



- 28 Next, I used a brown-ochre oil colour for filter, applied a wash using black-brown oil colour, and added some chipping using Tamiya hull red acrylic colour applied with a sponge.



- 29 Once dried, streaking was added and the remaining parts and accessories readied for the bunker.



- 30 At this stage, all parts were installed on the bunker. The identification K3 on the side was airbrushed in place using a stencil.



- 31 Additional filters were applied to select areas to simulate heavier weathering.



- 32 Blue foam was chosen for the base of the diorama, white foam was used for the upper sections as it is easier to shape and form than the blue foam.



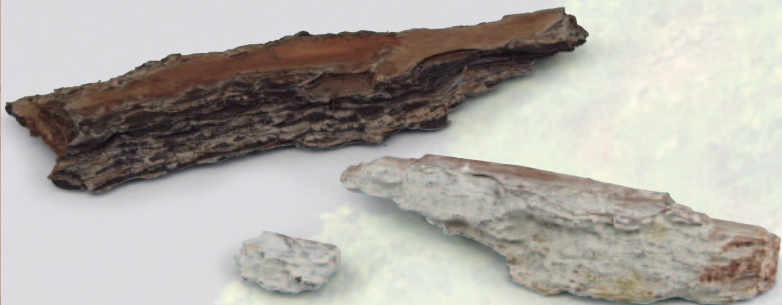
33

A mixture of 50% PVA glue and 50% water was used to brush the whole base, then the paper towel applied to the surface. After about 10 minutes the whole surface was brushed again with the PVA glue and water mixture.



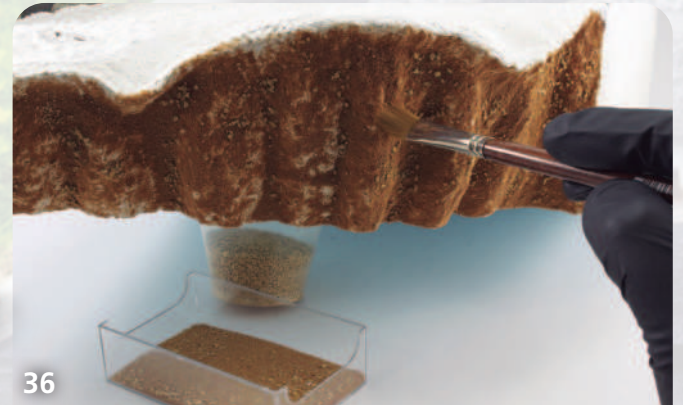
34

Once the surface had dried for 24hrs, a well diluted mixture of plaster and water was used to brush the whole scene which was then set aside to dry for 48hrs.



35

The outer bark from pine trees was used to place rock-like shapes on the diorama. The material was cut to the desired shape and brushed with the plaster and water mixture.



36

Again the PVA and water mixture was used to brush the cliff face thoroughly, then fine sand and small pebbles were sifted over the surface to establish the exposed dirt texture.



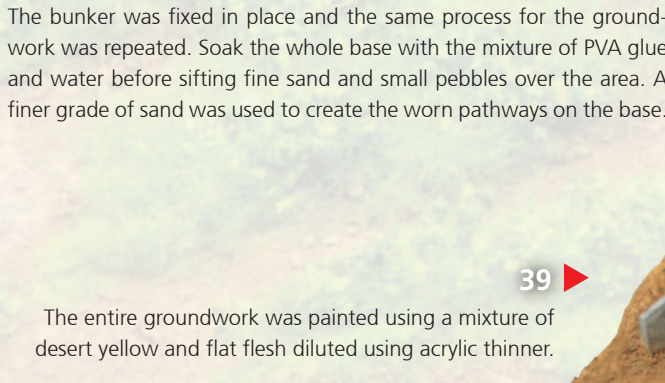
37

The bunker was fixed in place and the same process for the groundwork was repeated. Soak the whole base with the mixture of PVA glue and water before sifting fine sand and small pebbles over the area. A finer grade of sand was used to create the worn pathways on the base.



38

At this stage many elements were wet so the whole base set aside to dry for 48hrs.



39

The entire groundwork was painted using a mixture of desert yellow and flat flesh diluted using acrylic thinner.





40

The whole base was washed and filtered using a mixture of black-brown oil paints diluted in odourless thinner.



41 The whole base was given 2 to 3 layers of this filter, the edges of the diorama painted in matt black, and the scene set aside to dry for 48 hours.

42 At this stage I began working with the natural elements of the scene. First static grass was used to define the green patches and use them as a base for the greenery. Grass shrubs from Model Scene were placed over the green patches to create authentically natural grass patches. All materials were glued in place using PVA glue. Once dry, a highly diluted yellow-green acrylic colour was airbrushed in fine layers using low pressure.



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THE LONELY

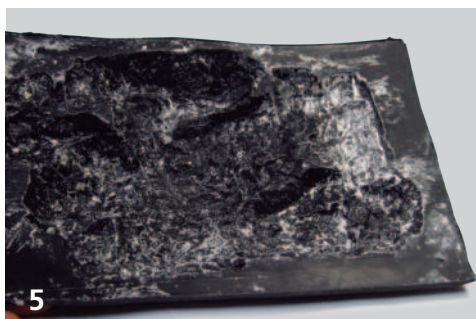
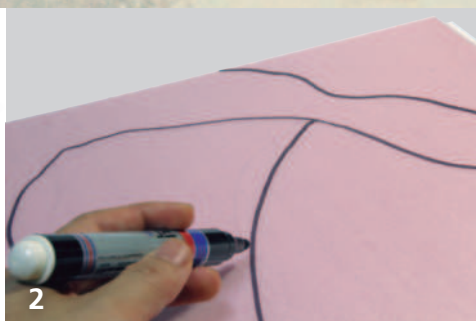


Won-Hui Lee

Although my primary focus is ship modelling, working with landscapes and vignette bases is a real joy that often works hand in hand with my 1/700 or 1/350 scale naval dioramas. Some of these techniques can also be transferred to military dioramas in 1/35 or 1/48 scale. For landscapes with beaches, the translucent depth of the water is critical and one of the most suitable materials used to create it is epoxy resin. Be sure to familiarize yourself with the properties of resins before you begin using this product. Because resins are so diverse, it is very important that you understand the unique characteristics including dry times and chemical interactions that may melt or discolour the other materials being used. Once you have control over the techniques shown in this step by step article, you will have the skills to create highly realistic seaside landscape settings.

BAY





- 1 The very first step was to cut an acrylic plate (2t) and a piece of Isopink Styrofoam to the correct size.
- 2 A permanent marker was used to outline the features of the terrain and trace the shoreline.
- 3 Using a hot wire foam cutter, the Isopink Styrofoam was carefully cut along the line to form the water's edge.
- 4 The surface of the terrain was created by spreading modelling putty using a metal spatula. This was then set aside to dry while addressing other aspects of the sea side setting.
- 5 In order to form realistically textured rock formations, a rubber mould was used to easily cast paintable stone.
- 6 Once the plaster was fully cured, the pieces were popped free of the rubber mould.
- 7 The larger cast stone outcroppings were broken into smaller pieces to better fit this specific scene and the scale of the seascape.
- 8 A specific clay named Snow Magic was used for the surface as it is very light and is easy to shape and add texture.
- 9 Once the clay was spread across the surface, the cast plaster pieces were pressed into the surface to impart realistic stone and rock textures.
- 10 Damp and wet environments will almost always take on algae and moss, these distinctly earthy greens were accurately reproduced using A.MIG-1206 Dark Streaking Grime, A.MIG-1410 Slimy Grime Dark, A.MIG-1411 Slimy Grime Light enamels to paint the rock outcroppings.
- 11 The colour A.MIG-1410 Slimy Grime Dark was used alone to apply the shadows to the deepest, darkest, wettest areas.
- 12 For the comparatively dry upper surfaces which are in direct sun light and less exposed to the tide, the reddish orange tones from the A.MIG-7403 Rusty Vehicles set were used.





13

A brush was used to apply all three enamel colours Streaking Rust Effect A.MIG-1204, Track Wash A.MIG-1002, Light Rust Wash A.MIG-1004 randomly for a natural appearance.



14

For the highlights, I switched from enamels to Oilbrusher colours beginning by sparingly applying White A.MIG-3501 for contrast.



15

The more tones used, the more natural the transitions, the colour Yellow bone A.MIG-3521 was also added to raised upper surface textures.



16

Followed by Buff A.MIG-3517 applied to the area of transition between the wet green tones and the dry earth tones.



17

The highlight Oilbrusher colours were then blended with a soft brush.



18

Both Dry Earth Ground A.MIG-2101 and Beach Sand A.MIG-2106 Acrylic MUD For Dioramas and Acrylic SAND For Dioramas were used to add convincingly authentic sand texture to the beach area.





19 This scene required a bright appearance to the sand, acrylic tan and bright yellow have been added to change the tone.

20 The opposite side of the acrylic base was then painted in dark blue as a colour foundation for the resin water to follow.



21 The epoxy resin and hardener were combined in a 2:1 ratio and thoroughly mixed, otherwise the blend will not harden. In order to authentically convey the depth of the water to the viewer, the colours sky blue, clear blue, and clear green were mixed into the resin in a 1:2:1 ratio. With a clear resin frame in place, the resin was simply poured onto the blue areas of the base.



22 A lot of small bubbles tend to occur on the surface, and over time they will disappear naturally. If these bubbles do not disappear, gently heat the surface with a hairdryer to remove them.



23 In order to prepare accurate seafoam and water teaming with bubbles, a separate batch of epoxy resin was prepared this time mixed with white paint. Small wispy pieces of cotton were wetted in the white epoxy resin and placed into the sea.



24 This convincing effect was placed around rocks and any place where the water would break against the sand.



25 This simple technique adds depth to the water and gives a dynamic illusion of movement to the viewer.





26 Once the resin has completely hardened, the frame can easily be removed from the resin by gently applying heat from a blow dryer.



27 Here you can see the results so far, Acrylic Water for Dioramas colour Clear Water A.MIG-2205 was used to create more movement on the water's edge.



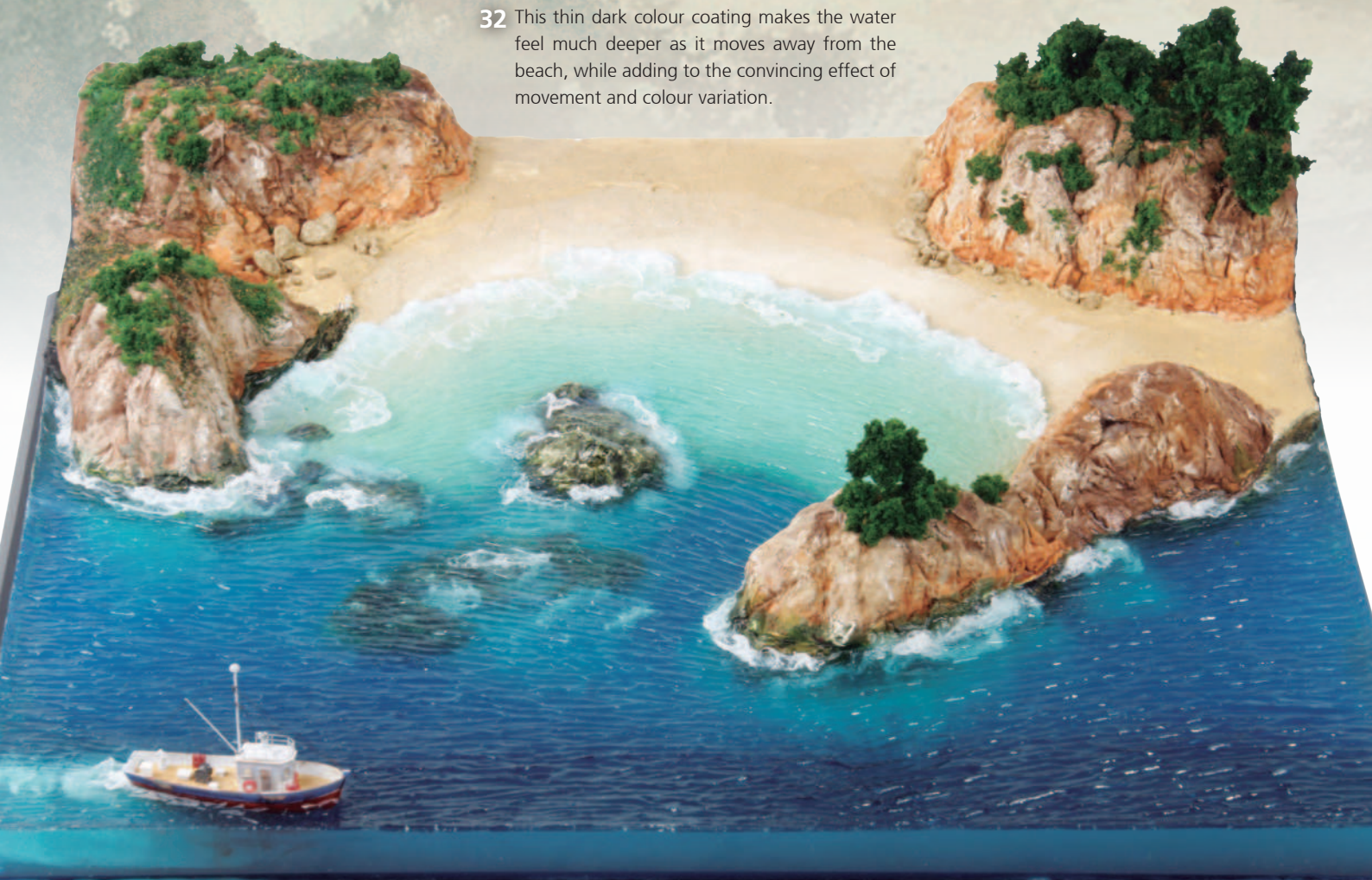
28 The brush should be held parallel to the water's edge to create a pattern in the correct direction. Failing to maintain this pattern will result in an unrealistic and messy look.

29 At this point, the previously placed wisps of cotton can be torn away little by little. The cotton can then be wetted in the white epoxy resin and attached over the rocks and in the surf where the sea foam would naturally occur.

30 The water-based diorama product line Acrylic Water For Dioramas is perfect for this type of base, the colour Deep Oceans A.MIG-2200 was used to add depth to the edges of the sea farthest from the shallows of the shore.

31 This colour was simply placed over the rippled surface of the resin water effect.

32 This thin dark colour coating makes the water feel much deeper as it moves away from the beach, while adding to the convincing effect of movement and colour variation.





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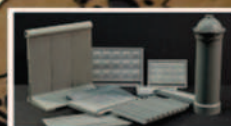
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WARDING SHERMAN

To support the D-Day operations a number of Sherman's were outfitted with Deep Wading Gear in order to be launched from a landing craft, tank (LCT). The twin stacks enabled the engine to operate while the hull of the tank was submerged. The stack nearest to the turret served as the air intake while the rear stack vented the exhaust. This Sherman variant is very different than the popular Duplex Drive (DD) Sherman that saw action on D-Day. The model covered in this article represents an M4 Sherman that belonged to C Company of the 70th Tank Battalion which became stuck on Utah Beach. Nicknamed Cannon Ball, the vehicle featured the unit's mascot 'Joe Peckerwood' on the forward applique armor panels. The moniker "Joe" represents the unit to this day and is stencilled on their M1A2 Abrams.



M4 SHERMAN
DRAGON
1/72



John Bonanni

- 1 Dragon's M4 Sherman with Deep Wading Kit was built straight out of the box with minimal issues. Unfortunately, the tracks were too short and required cutting, luckily they were to be submerged in the sand. The photo-etch wading stacks were tedious, but the end result was well worth the effort.



2

A coat of One-Shot Primer A.MIG-2023 was applied over the entire model to create a solid uniform finish and an adhesion layer for the following paint layers.



3 The first coat of colour was airbrushed using Olive Drab Base A.MIG-0927, a few drops of Transparator A.MIG-2016 maintained the paints opacity and aided in airbrushing. This coat was applied uniformly over the entire model and the resulting finish was semi-gloss.



4 Next, the modulation process began with Olive Drab Highlights A.MIG-0928 selectively airbrushed on the upper edges of vertical panels. Cardstock and strips of low tack painters' tape were used for quick masking.



5 The brightest highlights were added with Olive Drab Shine A.MIG-0929 by tilting the model and airbrushing at oblique angles. At first glance this technique seems to add excessive contrast, but after successive layers of weathering it will become toned down and create an attractive finish.



6 The last step in the modulation process was to pick out the details including periscope guards, tool attachment points, welds beads, and bolt heads with a fine brush using Olive Drab Highlights. The application does not have to be exact because washes will hide small mistakes.



7 The simple turret markings were airbrushed by using a combination of masking tape and pre-cut star masks. The black band was added first followed by the Olive Drab Base A.MIG-0927 star, not much time was needed to let the black paint dry before masking.



8 The kit provided decals were applied with the aid of Ultra Decal Set A.MIG-2029 and Ultra Decal Fix A.MIG-2030 to ensure the markings conform to surface texture. Before weathering, the underlying paint and decals were protected with a uniform coat of Satin Lucky Varnish A.MIG-2056. Once finished, the model was set aside to dry for 24 hours to fully cure.

9 Next up was the delicate task of picking out details that were not painted olive drab per references. The process began with first painting the handles in New Wood A.MIG-0037 while the metal heads were given a base coat of Black A.MIG-046. The road wheel tires and centre track blocks were accurately depicted using Rubber & Tires A.MIG-0033 followed by Chipping A.MIG-044 for the end connectors.





10

To further enhance details, a pin wash was added using Dark Brown Wash for Green Vehicles A.MIG-1005, which is an enamel-based product. Following application with a fine tipped brush, the excess wash was removed with a clean brush dampened with Enamel Thinner A.MIG-2018.



11

The chipping process was straightforward using Chipping A.MIG-004 acrylic paint applied using two different methods. The first was to use a piece of torn sponge placed in self-locking tweezers, which was then gently dabbed onto the model's surface. The second step shown here, was to speckle the paint on using an older brush. Out of scale chips were easily removed with a new #11 Xacto blade by gently scraping them off.



12

12 The base began as a generic small wooden box found at a local craft store. After removing the centre, it was filled with Sculptamold and the model was submerged into it. The model and base were set aside over night to allow the Sculptamold to fully dry.



13

13 The base was masked off and a layer of Acrylic Sand for Dioramas Sand colour A.MIG-2106 was added to replicate the fine sand of the beach surface. When spread thin, this accurately textured acrylic medium dried quickly.

14 The sand tone was adjusted with Light Sand Grey A.MIG-0067 acrylic paint, which also helped blend the green vehicle into the base.

15 The first layer of still water was recreated with Deluxe Materials Aqua Magic, a 1-part solution that took over 48 hours to fully cure.



14



15



16

Waves and ripples were added by stippling Acrylic Water for Dioramas Clear Water A.MIG-2205 in wave patterns. The paste dries crystal clear and within a few hours which is relatively fast.



17

Despite being beached, the Sherman needed more dust and to accomplish this Europe Earth Pigment A.MIG-3004 was added and blended dry.



18

White caps and sea foam were replicated by mixing a few drops of White A.MIG-047 acrylic paint with the previous acrylic water paste. The resulting finish was somewhat dulled, a thin layer of the acrylic water paste was added to restore the glossy appearance.



19

To simulate damp areas and fresh water streaks, Wet Effects A.MIG-2015 was first added with a fine tipped brush followed by speckling, adding Enamel Thinner A.MIG-2018 will create a variety of patterns and sheens.

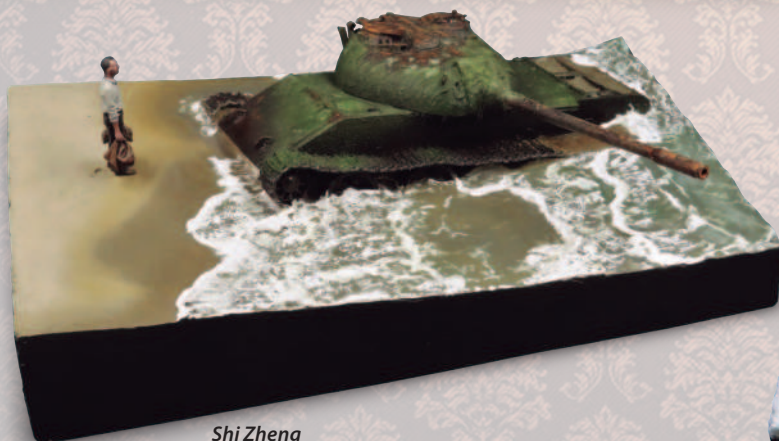


20

The final step was to use a rubber tipped brush to burnish the tools and edges of the vehicle with Gun Metal A.MIG-3009 pigment to accurately depict worn metal edges, a nice contrast to the surrounding elements of steel, wood, water, and sand.



Author's Gallery

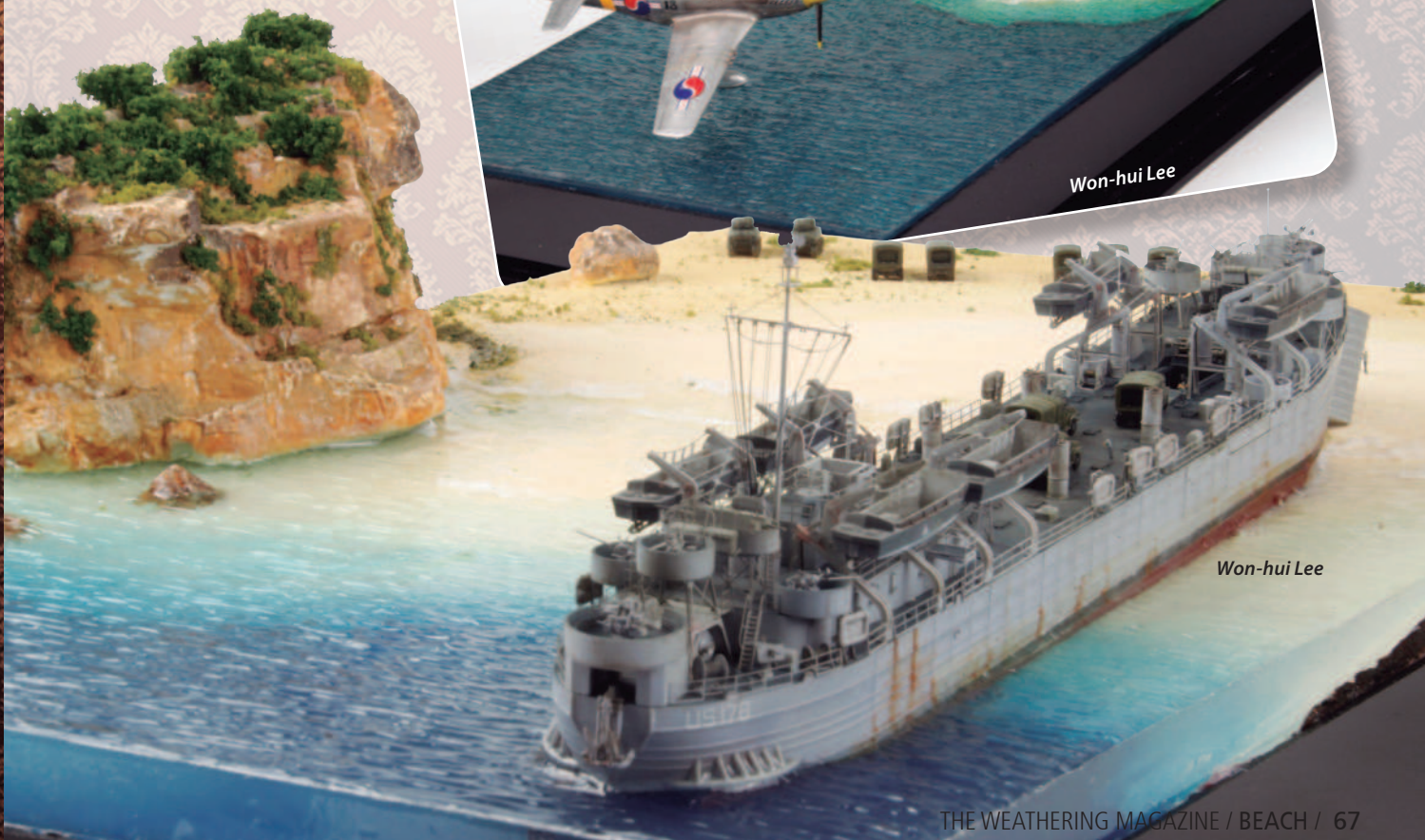




Javier López de Anca
&
Jorge Porto



Won-hui Lee



Won-hui Lee



D-DAY

75th ANNIVERSARY

When one visits Normandy, a deep-dive is taken into World War II. Many changes have taken place in the area over the decades, yet the houses, hedge rows, and fields look exactly the same as reference photos taken in the summer of 1944. There are few other things that excite a History buff focused on this hallowed ground more than attending some of the major anniversaries of WWII to be honoured on site. Last year was the 75th anniversary of D-Day, and I was lucky enough to walk through Omaha beach on the same date, the 6th of June 2019.

Perhaps the most noteworthy aspect of this type of visit is that in addition to visiting the most important museums in the area including those located on Omaha and Utah, or the well-known Airborne Museum in Sainte-Mère-Église and the Musée Mémorial de la Bataille de Normandie in Bayeux, among others – is that authorities and local organizations prepare a host of activities including parades, dances, camp tours, aerial exhibitions, incredibly authentic professional re-enactments, and memorials on the beaches. There is simply no time for boredom, it's really difficult to fit all of the activities into the agenda, because obviously you will not want to miss a single aspect of this well-preserved historical treasure. There'll be plenty of time to sleep when you get home!

The camps deserve separate mention. As you get closer to the area, it's not at all uncommon to find yourself driving your 21st century automobile behind a convoy composed of several Willys, a DUKW, and an M8. Near the locations of Camp Geronimo or Camp Arizona, you can see hundreds of WWII vehicles in one place, most of them in perfect

running condition – a real treat! Unlike many museums, the owners of the vehicles don't usually mind if you take pictures, no matter if it's the interior or exterior, even to the point of allowing you to get inside some of them. You will be happier than a child at Christmas time!

The camps, the re-enactment groups, and the setting itself turn villages like Sainte-Mère-Église and Sainte-Marie-du-Mont into true theme parks. The sound of the bands playing Glenn Miller tunes, the mourning Scottish bagpipes, and the authentic uniforms of various units moving from place to place... it is like travelling back in time. The group was even lucky enough to spot several celebrities including the protagonist in the movie *Fury*: the 'Easy Eight' Sherman. Let's face facts: Brad Pitt really was just part of the set.

Don't give it a second thought, you must experience this hallowed ground!

Javier López de Anca





IN THE NEXT ISSUE...

By Sergiusz Pęczek



ACCESSORIES

Military vehicles from every genre and in every scale are depicted with a human element, the accessories that make living in and operating AFVs possible. References spanning decades depict fenders of tanks covered in combat gear, various types of field kit, and details specific to each subject. The use of these critical elements can help provide a scale model with visual interest and serve to reinforce the vehicles setting. Combat vehicles are designed and manufactured with accommodations for jerrycans, vehicle tools, towing cables, canvas mantlet covers, ammunition crates, and sand bags that are often used for an endless variety of civilian items including critical details like blankets, sleeping bags, and furnishings. These defining details will become the heroes of our next issue where some of the world's most talented modelers will show you easy to use techniques that make painting these critical details a true joy and a game changer for your future projects. We know that many of you are terrified of painting and weathering accessories and the thought of doing so has ambushed many excellent projects. Enough compromises, shortcuts, or denying yourself the pleasure of adding accessories on models and dioramas for fear of spoiling the final effect. The AMMO modelling team will show you the most fun and effective methods used to paint and weather the accessories and unique details found on a wide range of your favourite subjects.





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DW35006 1/35
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 Douglas A-4M Skyhawk - Black Sheep



TAK02132 1/35
 M60A1 U.S. ARMY MAIN BATTLE TANK



VOLKSW16 1/32
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MBLT035177 1/35
 German Infantry, WWII era, Early period



BEL013 1/24
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RM2001 1/35
 Upgrade kit for Challenger 2 TES
 (RFM5039)



CP72014 1/72
 La-5 early version (ADVANCED KIT)



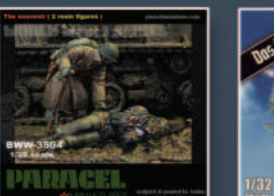
DWA015 1/35
 Zimmerit Set für Panther mid/late
 (DB pattern)



TAK08004 1/35
 StuG.III Ausf.G early production



TAK02131 1/35
 U.S. Army 1/4 ton armored truck



PARABW35 1/35
 The Souvenir



DW32001 1/32
 Ju EF-126 "Ellie" / EF-127 "Walli"



GWHS72002 1/72
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UA-60001 1/144
 CHINA PLA Type-59 Main Battle Tank



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