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ANNIVERSARY



p. 44

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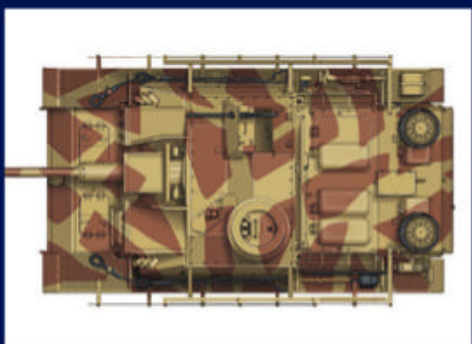
**BONUS
ONLINE
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Vol. 40 • Issue 2

StuG.III Ausf.G



1/16 StuG. III AUSF. G
(64009)



Germany manufactured more StuG. IIIs (Sturmgeschütz) than any of their fully tracked armored fighting vehicles. From its earliest design as a mobile, armored light gun for direct fire support of infantry, a series of modifications morphed it into a prolific tank killer. StuG. III saw action in North Africa and throughout Europe, including the Russian front. They were often referred to as the workhorses of the German army.

Gallery captures the StuG. IIIs low profile silhouette along with its other key features, including:

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- Armor side skirts
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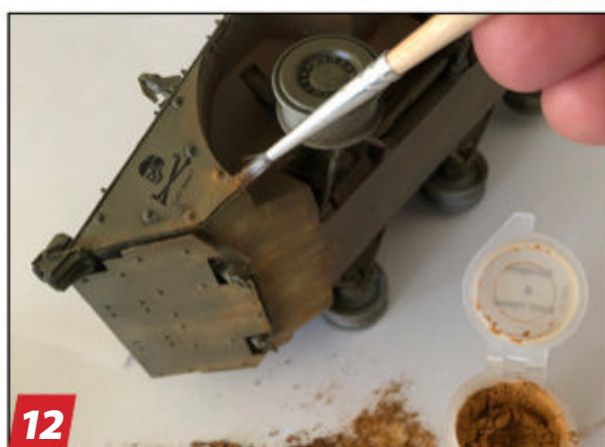
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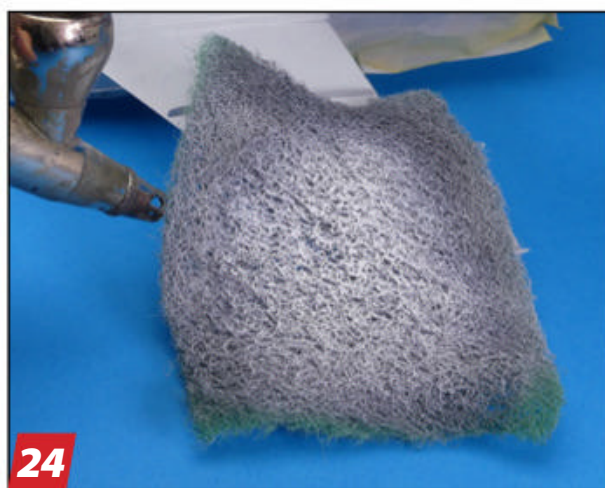
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By Aaron Skinner

Here's to a happy ending!

Me now: I love painting models! It may be my favorite part of a build.

Me two decades ago: I hate painting! No matter what I do, something goes wrong. The paint is too thick. The paint is too thin. It bled under the masks. And where did this grainy surface come from?

These internal conversations have been edited for space and to remove a few well-chosen expletives, but the gist is there. No matter how proud I was of the detail I put into a model, whether scratchbuilt or aftermarket, my painting consistently thwarted my modeling. My problems became even more apparent when I started attending shows and meetings and seeing the beautiful finishes on the models. The best featured scale-smooth surfaces, consistent sheens, sharply masked lines and camouflage, and not a single detail obscured by too much paint. Inspired by them, I set out to improve and am not too proud I am still learning today.

That's why I am happy that the second of *FSM*'s 40th anniversary-themed issues is all about painting. Every feature in this magazine focuses on tips and techniques for a variety of subjects.

Chuck Bauer shows you the painting and finishing techniques that have helped his ship model take home several awards. Raul Corral weathers modern armor and Ilya Yut replicates an aban-

doned fire truck in Chernobyl with layers and distressing. Aircraft builders should appreciate the neat ideas in Anders Isaksson's MiG-25 build and Kevin Ottens serves up an interesting finish on a TIE fighter. And I can't take my eyes off Jeff Bloomhuff's stunning Lamborghini; the hypercar's amazing finish is all in how Jeff uses masks.

. . .

Tim Kidwell and I are having a ton of fun planning National Build A Model Month. One of the major events of that will be a large online photo contest coming in November. So, start building today and stay tuned to the magazine and FineScale.com for information about how to enter as well as the other exciting events that will be part of *FSM*'s 40th anniversary and National Build a Model Month.

. . .

Also, if you are a subscriber, don't forget to download your February DLC, the all-digital edition that is packed with seven how-to stories from notable modelers, like Jeff Pollizzotto, Frank Cuden, and Tim Boyd. Nonsubscribers can buy the DLC at KalmbachHobbyStore.com in the Digital Downloads section.

Happy modeling!



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Salvadoran Cavaliers exposed

I am one of your senior readers who goes back way before *FineScale Modeler* — back to the days of wooden Strombecker kits. I have never written to any [magazine], but Marco Antonio Lavagnino's article in the October 2021 *FSM* on the Salvadoran Cavalier Mustang really jumped out at me.

I had the good fortune to work for Cavalier Aircraft in Sarasota, Florida, in 1968 and 1969, which included the period of the Soccer War. I had seen an article about Cavalier in a 1968 issue of *Flying Review International* and sent them a resume, not expecting a reply. I got along with a job. What a job!

When I started, FAS 404 and FAS 405 were under construction. I've included

several photos taken during their construction and delivery flight on a cold Saturday morning in January 1969 from Sarasota. Note, that when they left Sarasota they wore a glossy finish. I was told that the gunsights were from the Hawker Hunter, for what that's worth.

— David Bernshouse
Sumter, S.C.

Ed.: Wow, David! Those photos are amazing. Thanks for sharing them with FSM. Sounds like an exciting time to have worked in the aviation industry. — A.S.

Reigniting the flame

Thank you for reviving my modeling hobby. I had practiced it from 1991-1996, but it

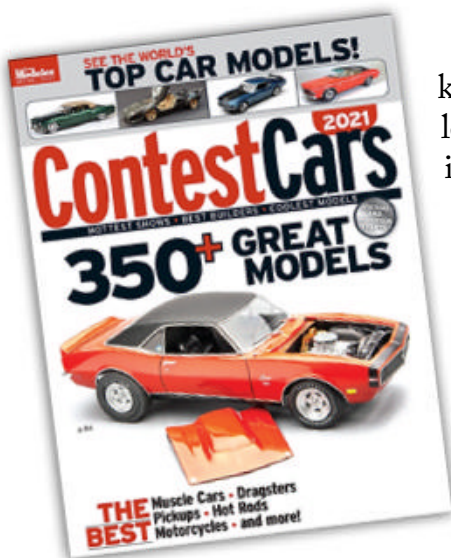
had lain dormant until recently. I was wondering if *FSM* would consider starting an Instagram account. Thanks again.

— Dipaprana Supriyatno
Depok, West Java, Indonesia

Ed.: You're welcome! We don't have plans to add Instagram to our social media channels at the moment. The best way to keep up with FineScale Modeler is to sign up for the email newsletter at [FineScale.com/newsletter](https://www.finescale.com/newsletter). — A.S.

Jazzed about Contest Cars

I wanted to thank you and your team for including my '47 Chevy in *Contest Cars 2021*. I received my copy today and the issue is as awesome as always. Please thank everyone involved putting it together. I



know there were a lot of challenges involved in getting it done. Thanks again and be safe!
— Tim Rhine
Tewksbury, Mass.

Ed.: Thank you for supporting Contest Cars and the kind words. And keep

building great models. We can't wait to see what this year will bring. — T.K.

How about track choices?

While I am impressed with the move to individual track links for armor. I've been building for years and have had luck making rubber tracks look as realistic as can be. But, now in my 70s, I find my dexterity, eyesight, and patience lacking. Why not include both types in a kit or even offer correct rubber ones as an aftermarket item?
— Mark Allen
Akron, Ohio

Ed.: It's difficult to beat individual-link tracks for accuracy and posability, but they can be challenging to assemble. Some manufacturers have switched to link-and-length tracks which are less fiddly but difficult to pose over terrain on a diorama. A few kits include both vinyl (rubber band) and link-and-length or individual-link tracks. I'm guessing the main reason more don't is cost. Some aftermarket vinyl tracks are available, most notably from AFV Club, but you are much more likely to find individual-link tracks there, too. — A.S.

FSM always good for info

I was surprised and a little saddened to read the announcement that *FineScale Modeler* is moving to a bimonthly publication schedule with the likelihood of more content moving to the web. Not to imply the digital copies or information are somehow inferior. I have purchased several of your digital how-to compilations and refer back to them regularly and have bookmarked many of the videos and articles published online.

However, being a lover of the printed word for so long, there is something that is viscerally rewarding about holding and turning those bound pages that no digital medium can reproduce.

Looking up and grabbing an issue from the shelf above my workbench for reference. The memories it triggers around the

excitement when seeing the new cover. The sense of discovery when thumbing through an issue for the first time. Deciding which articles to read first ... ah, the fond memories.

While Zinio is convenient, saves space, and provides a backup against spilled solvents, the experience is rather sterile and not as convenient when wishing to use multiple references. I do have a laptop at my bench, but I find it far easier to use print when multiple references are needed.

Case in point: I am still very new to weathering models and the several recent issues — September, October, and November/December 2021 — have been a treasure trove of information. I had a project that was stalled because I couldn't get a handle on it. These issues kicked it back into gear for me. I've had all three magazines on my workbench opened to various locations for quick reference. A lot of firsts in the project for me so having such expert advice easily on hand is invaluable. Unfortunately, I don't have the space on my bench for two more monitors to duplicate the experience with Zinio. Instead, my printer may be dusted off and perhaps I will treasure the issues I do get all the more.

Regardless of where the information lands, my thanks to the staff of *FineScale*



and the contributing modelers for sharing their expertise and inspiration. You all give us a glimpse of what is possible on the long and rewarding journey of scale modeling.
— Johann Graff
Port Ludlow, Wash.

Ed.: Glad to be helpful! The staff aims to continue providing the best information we can in print and digital formats. — A.S.



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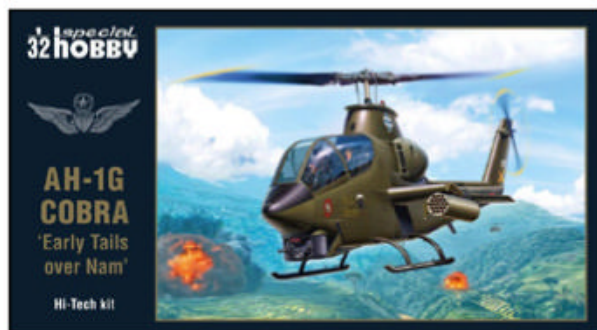
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NEW PRODUCTS

Compiled by Monica Freitag & Aaron Skinner

AIRCRAFT

1/32 SCALE



AH-1G Cobra Early Tails over Vietnam from Special Hobby, No. SH32082, \$76.40.

1/48 SCALE



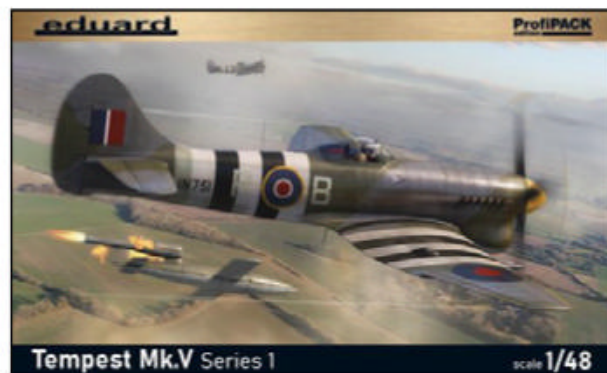
Reggiane Re.2005 Sagittario from Special Hobby, No. SH48206, \$32.40.



Z-226MS Trenér from Eduard, No. 82182, \$39.95.



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Tempest Mk. V series from Eduard, No. 82121, \$59.95.



MiG-21PF from Eduard, No. 8236, \$59.95.



Mitsubishi A6M2b Zero Tora, Tora, Tora Dual Combo from Eduard, No. 11155, \$97.95.

1/72 SCALE



AJ-37 Viggen Strike Fighter from Special Hobby, No. SH72378, \$35.70.



A.W. Meteor NF Mk.11 RAF Squadrons from Special Hobby, No. SH72437, \$35.70.



Jaguar GR.1/GR.3 RAF from Italeri, No. 1459, \$23.65.



DH.100 Vampire Mk.3 European and American Operators from Special Hobby, No. SH72453, \$21.10.



Messerschmitt Bf 109E-1 J/88 Legion Condor from Special Hobby, No. SH72459, \$19.10.

CORRECTIONS

The prices listed for 1ManArmy paint mask sheets (www.1manarmy.be/services) in the January 2021 issue were incorrect. Correct prices (US) are as follows:

Dauntless SBD5 No. 32DET014 \$33
F4U-1A Corsair No. 32DET005 \$35
Bf109 G-6 (early) 32DET023 \$33
Heinkel 219 UHU No. 32DET015 \$35

ARMOR

1/35 SCALE



T-55 Czechoslovak Production with KMT-5M mine roller from MiniArt, No. 37092, \$TBA.



Austin Armoured Car 1918 Pattern, Ireland 1919-21 British Service Interior kit from MiniArt, No. 39016, \$TBA.



StuG III Ausf G Feb 1943 Alkett Prod. Interior kit from MiniArt, No. 35335, \$TBA.



Laffly V15T (WWII French Artillery Towing vehicle) from ICM, No. 35570, \$64.99.



Soviet six-wheel Army truck with shelter from ICM, No. 35002, \$84.99.



BM-13-16 on G7107 chassis with Soviet crew from ICM, No. 35596, \$TBA.

FIGURES

1/35 SCALE



Totenkopf Division Kharkov 1943 from MiniArt, No. 35397, \$TBA.



American fire truck crew (1910s) new molds, from ICM, No. 35622, \$23.99.

1/48 SCALE



Vietnam USAF Airfield (Cessna O-2A, OV-10A Bronco, US Pilots & Ground Personnel (Vietnam War)) from MiniArt, No. DS4803, \$TBA. Contains five figures.

AUTOS

1/24 SCALE



Fiat 131 Abarth 1977 Sanremo Rally Winner, from Italeri, No. 3621, \$39.55.

1/25 SCALE



Speed Racer Mach V, from Polar Lights, No. POL990M, \$30.99.



Bruce Larson USA-1 Pro Stock Vega, from MPC, No. MPC828, \$36.99.

By Aaron Skinner

Weathered, but not too weathered

Painting a serviceable combat veteran

Weathering is perhaps the most subjective aspect of modeling. How much should you apply? How much is too much? Where is the line between realism and artistry?

Answers to these questions can be a function of the subject, especially where and when it operated. Aircraft operating in the Pacific during World War II took a pounding from salt, unrelenting sun, and tropical storms, so it's not unusual to see weathered U.S. Navy and Japanese aircraft at shows. Mark Danko nailed that appearance with his 1/48 scale Nakajima Ki-84 Hayate, a Japanese army fighter, known by the Allied reporting name "Frank."

He dressed up the kit with Eduard photo-etched metal (PE) and an Ultracast resin seat in the cockpit. Outside, he drilled the exhausts and lightening holes inside the flap bays underneath.

He painted the Hayate with Mr. Hobby acrylics, mixing 1 part Mr. Hobby Hobby Color Thinner with 2 parts paint. "One of the biggest benefits of using the [Mr. Hobby] thinner is that any leftover paint in your airbrush paint cup can be poured right back into the original paint bottle with no ill effects," Mark says. "I have bottles of (Mr. Hobby) in my paint stash that are 30 years old and are still like brand new."

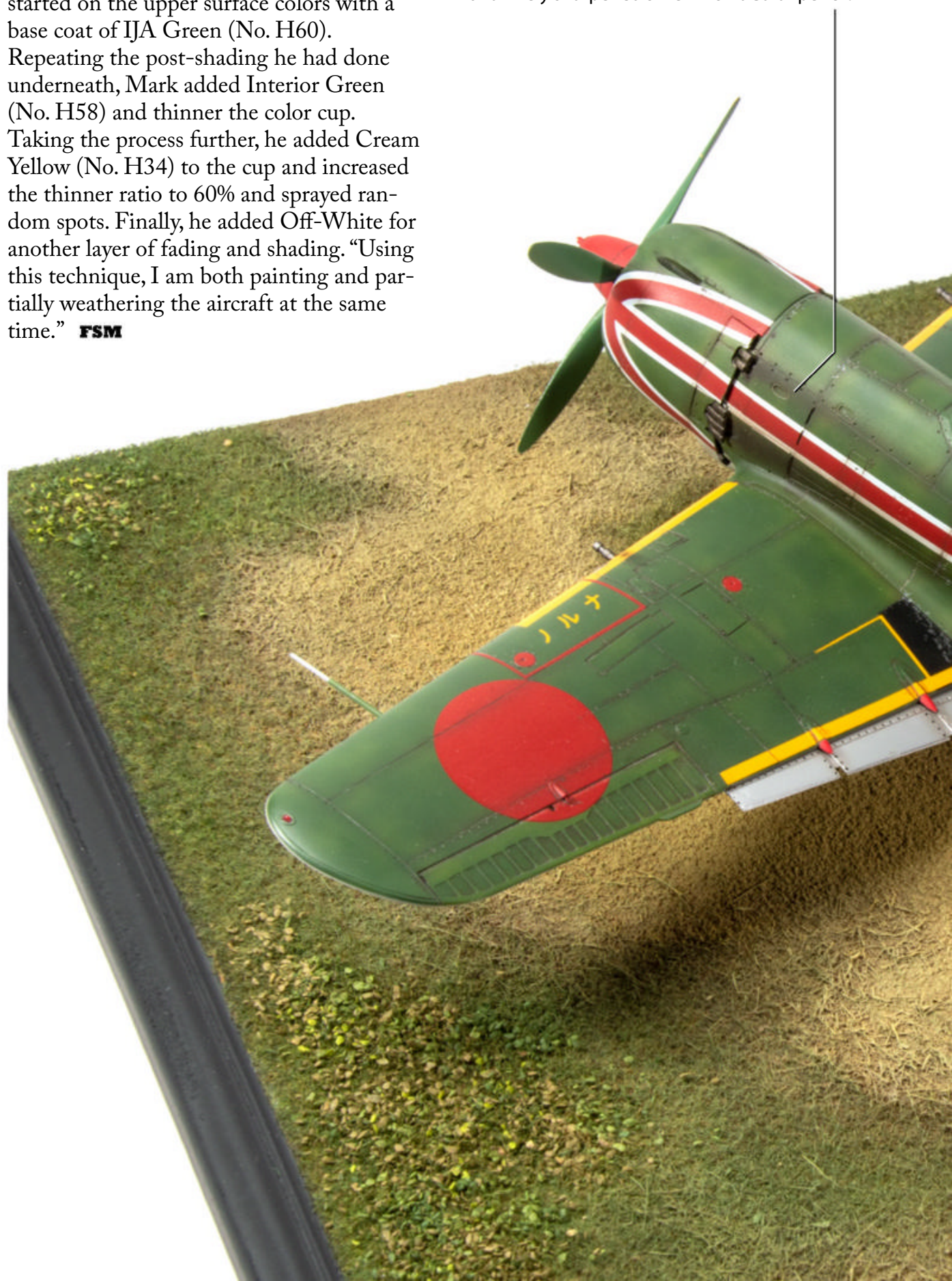
To power the Aztek airbrush he used on this model, Mark uses a Craftsman 6-gallon compressor and sprays at about 40 psi. This pressure is required for the Aztek brush fitted with the finest tip. "If I use one of my Paasche airbrushes, I only spray at around 20 psi," he says. Mr. Hobby acrylics have the finest pigments of any model paint, according to Mark. When properly thinned, he can spray with the finest tip at minimal risk for paint blobs and spattering.

He airbrushed the underside with Mr. Hobby IJA Gray (No. H62). Then, he added a little Off-White (No. H21) to the color cup and increased the thinner ratio to

50%. Using the finest tip on the Aztek, he faded and post-shaded panels.

After masking the lower surfaces, he started on the upper surface colors with a base coat of IJA Green (No. H60). Repeating the post-shading he had done underneath, Mark added Interior Green (No. H58) and thinned the color cup. Taking the process further, he added Cream Yellow (No. H34) to the cup and increased the thinner ratio to 60% and sprayed random spots. Finally, he added Off-White for another layer of fading and shading. "Using this technique, I am both painting and partially weathering the aircraft at the same time." **FSM**

Pastels: Using ground pastels and powdered pigments, Mark brushes on exhaust and gun muzzle stains and fluid streaks. After sealing that layer with clear flat, he drew on chipped paint with a finely sharpened silver PrismaColor pencil.



Meet Mark Danko

"I WAS ALWAYS FASCINATED with World War II and started building models at around 7," Mark says. "I continued building through high school, but then came college, graduate school, work, marriage, and starting a family, so there was little time left for modeling." He didn't pick it up again until his mid-30s. That was more than 30 years ago. His focus is 1/48 scale WWII aircraft, but occasionally he'll build a jet. An accountant for 45 years, Mark retired in July 2021. "So, now I finally have all of the time I want to build models and have been completing a new build about every 10 days since my retirement," he says. Mark is an active member of the IPMS Duneland Chapter in Porter, Indiana.



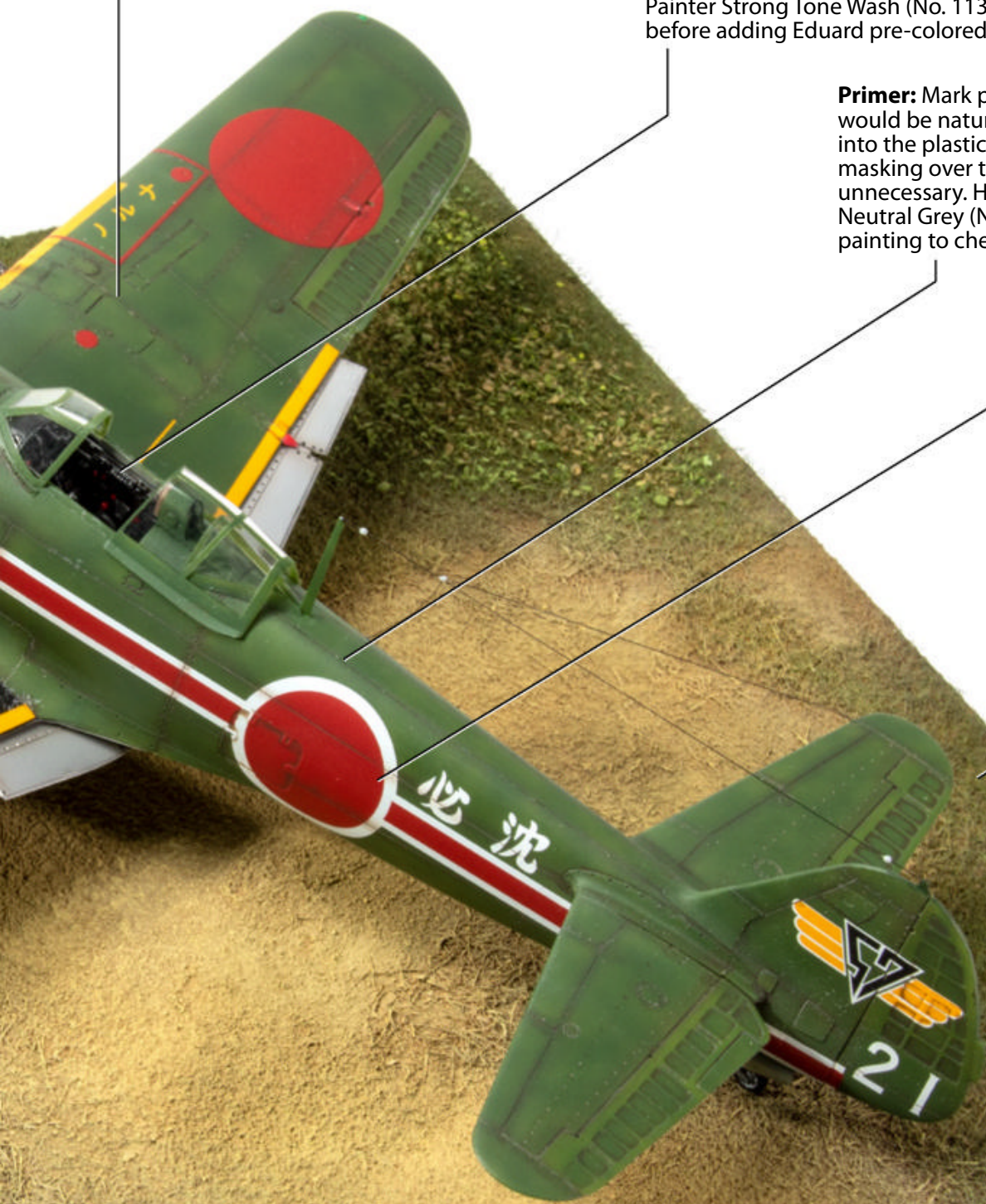
Washes: To pop recessed details and add to the weathering, Mark mixes equal parts Winsor & Newton raw umber artist oil and Model Master enamel thinner; he describes this as a sludge wash. Using a No. 1 liner brush, he paints this over panel lines, rivets, and other details working a 2-inch section at a time. After letting that sit for 30-45 seconds, he buffs away the majority of the wash with a an old 100% cotton T-shirt. This leaves a film of the material over the paint and adds depth to the camouflage. Cotton swabs refine the density of the wash and add streaks.

Cockpit: Since the cockpit was going to be natural metal and he used an UltraCast resin seat, Mark primed the parts with Tamiya Neutral Grey (No. XF-54). Then he airbrushed Mr. Color Silver (No. C8). To bring out details, he applied Army Painter Strong Tone Wash (No. 1135), an ink wash, before adding Eduard pre-colored PE.

Primer: Mark primed only parts of the model that would be natural metal. Mr. Hobby acrylics bite into the plastic extremely well and don't lift when masking over them, so he finds priming unnecessary. He typically airbrushes Tamiya Neutral Grey (No. XF-54) along seams before painting to check for flaws.

Markings: After airbrushing the models with Mr. Hobby Clear Gloss (No. H30), Mark applied decals from AeroMaster (No. 48-178) for a Hayate from Special Attack Squadron 57. He used Walther's Solvaset to encourage the decals to settle into surface detail. Once the decals were dry, he sliced through the decals across panel lines with a new No. 11 blade and applied more Solvaset. Another layer of clear gloss protects them from oil washes.

Base: To make a simple base, Mark stippled Durham's Rock-Hard Water Putty over a wooden plaque for earth, and then airbrushed it with various earth shades. Ammo of Mig Jimenez pastels added depth and variation before static grass and leafy debris foliage. The final step was a good layer of clear flat to seal the various materials and dull the static grass, which Mark says looks too shiny when first applied.



Perfect a Spanish **CENTAURO**

Painting and weathering Trumpeter's 1/35 scale armored vehicle

BY RAÚL CORRAL



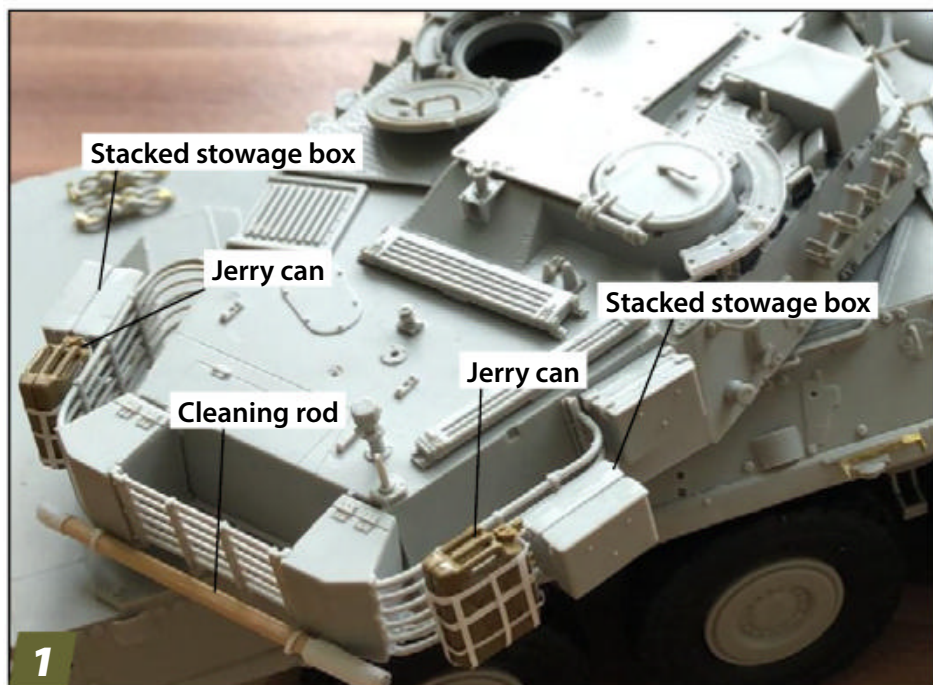
I knew nothing about the Centauro when I first saw the Trumpeter kit (No. 00388) several years ago at a discounted price in an online store. I bought it because it was cool looking — a modern tank with tires — and it is used by the Spanish army (Ejército de Tierra). When I told my friend, Angel, about it, he was excited. He serves in the Spanish army and that motivated me to start this project.

Designed for the Italian army, the Centauro (Centaur) is a family of vehicles deployed as wheeled tank destroyers, territorial defense, and

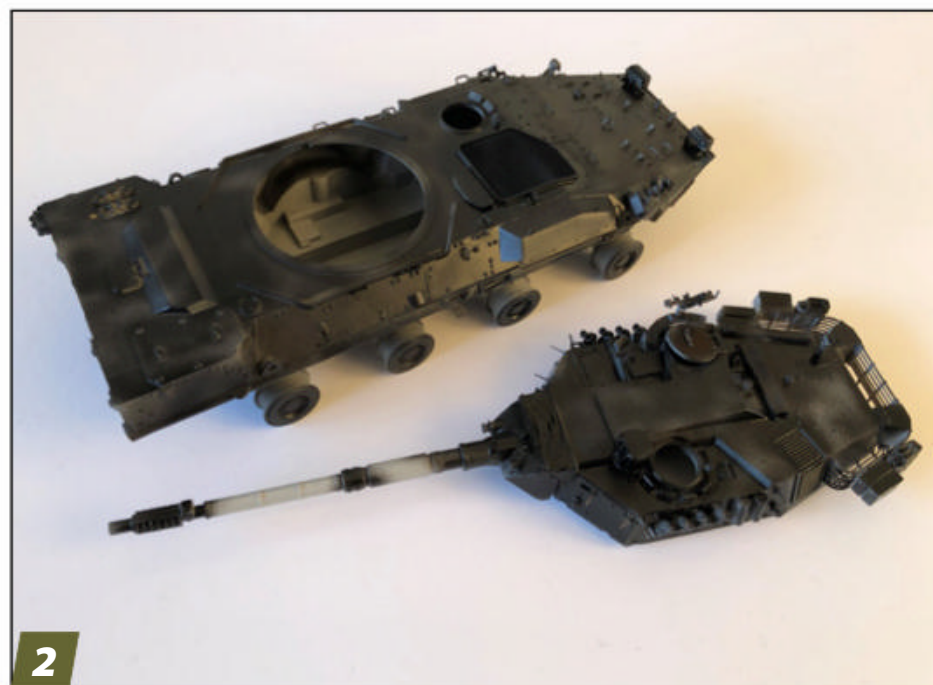


tactical reconnaissance. Spain has 84 Centauro B1s assigned to cavalry regiments and the cavalry academy. The vehicle mounts a 105mm gun and can travel at up to 100 kilometers an hour. Spanish vehicles feature some local mods, including a new thermal camera system, a second machine gun for the turret, and a compressed air intake.

Typically I build aircraft and this was the first armored fighting vehicle I've built in a long time. Research indicated that the Trumpeter kit needed modification to model a Spanish Centauro, so that's where I started.



1 Turret mods included relocating metal stowage boxes on the bustle rack to accommodate Italeri jerry cans in racks scratchbuilt from paper strips. A cleaning rod for the gun made from a toothpick and paper is mounted on the back of the bustle.



2 In preparation for painting, I airbrushed a pre-shading base coat of Tamiya Flat Black (No. XF-1), varying the density to add drama to the monochromatic camouflage to come.



3 Immediately afterwards, I sprayed light coats of Ammo by Mig Jimenez Spanish Green-khaki (No. A.MIG-031). This unique green looks different depending on the light.



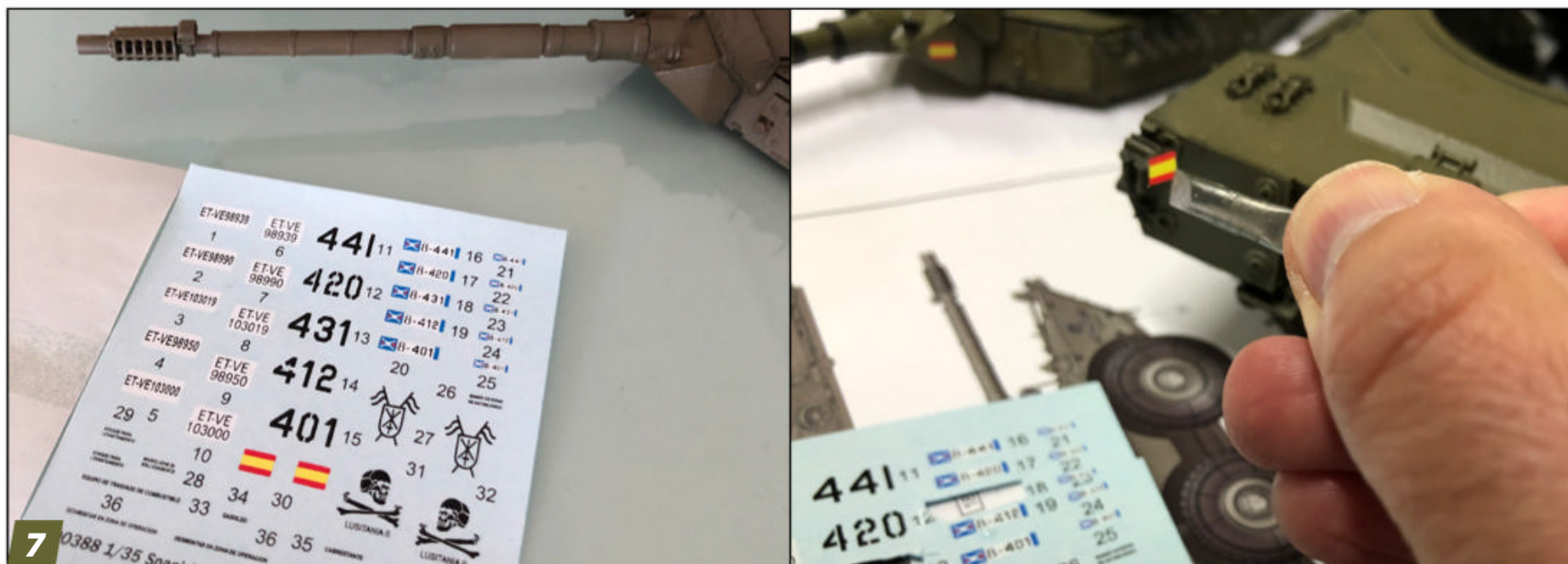
4 To add variation, I mixed a drop of Tamiya Flat White (No. XF-2) into the Spanish green-khaki and sprayed panel centers and upper surfaces.



5 I left some items separate to paint the turret surface underneath them. They included the standoff armor, hatches, and smoke launchers.



6 To pick out the mantlet cover's retaining cable, I applied Humbrol Gloss Black enamel (No. 21) with a needle. Enamels are much thicker than acrylics making them ideal for painting tiny details. I sealed the work so far with a coat of Tamiya Clear (No. X-22).



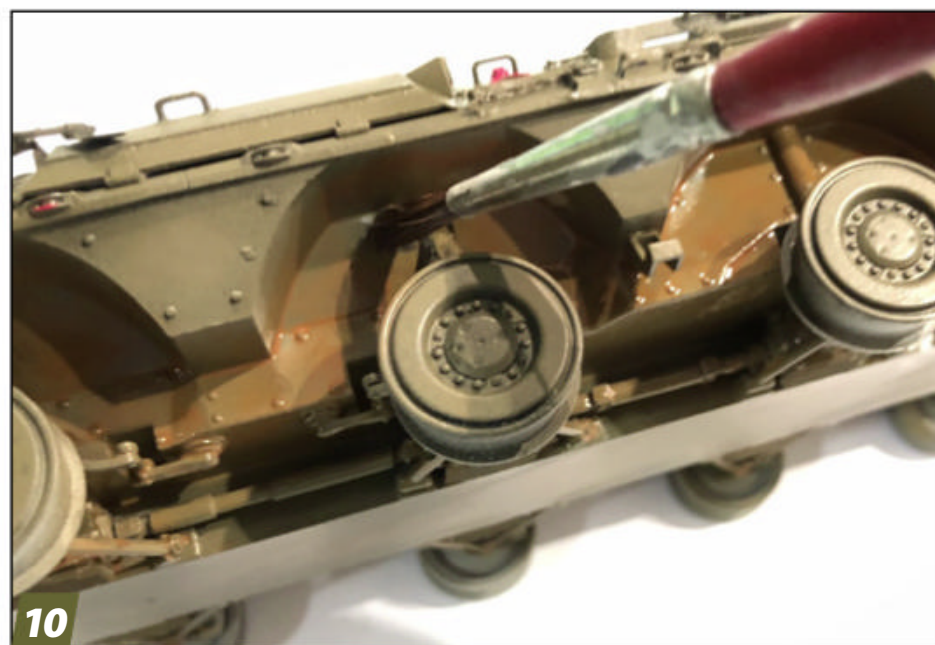
The kit's thin decals responded well to Microscale Micro Set and Micro Sol. The highlight of the decals is the markings for the Regiment Lusitania 8, with its singular skull-and-crossbones emblem. I sealed the decals with light coats of clear gloss.



I dry-brushed selected sections of the Centauro with Revell Dark Green Matt (No. 32139) and RAL 7013 NATO Olive (No. 32146) enamels. I find thicker enamels better for dry-brushing than acrylics. By using these shades over different parts of the tank, I obtained richer variations of the green camouflage, enhancing the pre- and post-shading. This step is not about highlighting every raised feature, rather I wanted to reflect use and repainting. To highlight raised details on the smoke launchers, I mixed dark green with Revell RAL9001 White (No. 32005).



To finish the beautifully molded machine guns, I applied Tamiya Gun Metal (No. X-10) and flat black for the stock. I highlighted raised details with dry-brushed Revell Silver Metallic (No. 32190).



I weathered the Centauro referring to photos of Spanish army vehicles on maneuvers in the dry terrain of Spain. I started by brushing thin Revell RAL8003 Mud Brown (No. 32180) over the lower hull. This blended with the camouflage and appeared dusty rather than caked.



11

For dust and soot, I turned to pigments from Revell's Weathering Set (No. 39066). Underneath, I brushed on sand yellow, perfect for light Spanish dust.



12

On the tires, I mixed sand yellow pigment with water and covered all eight of the tires — tread and side walls.



13

I let the pigment mix dry for a few minutes, then removed it with cotton swabs leaving it in the tread where it would be likely to collect on the real thing.



14

The great thing about this effect is that as the pigment mix continues to dry, it leaves the tires looking realistically dusty with more dust collected around features. More can be removed with wet cotton swabs if desired.



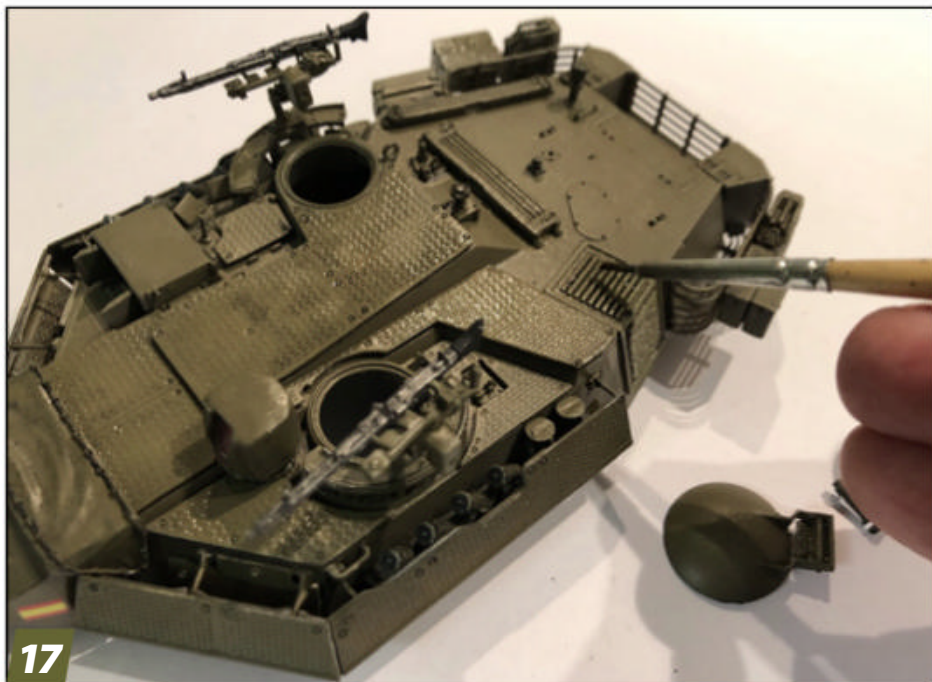
15

For dried mud deposits, I applied the same wet pigment mix behind the wheels and around the suspension. I let it all dry, rather than remove any with cotton swabs.



16

The muddy buildup around the suspension contrasts nicely with the dry-pigment dust and thin paint layer applied earlier to other areas of the hull.



17 To emphasize panel lines, vents, and other recesses, I flowed a pinwash of AK Interactive Wash for NATO Camo Vehicles (No. AK075) into the details and left it to dry for 24 hours.



18 Next came dry-brushing, this time to with Revell RAL6027 Light Green Matt (No. 32155) mixed with white to highlight raised details, like weld seams, hatch edges, and hinges.



19 Using a pencil, I defined some of the panel lines and added chipping with the graphite's metallic sheen.



20 I paid special attention to the panel in front of the driver's hatch by brushing on random marks of Ammo Spanish Green-khaki to imitate paint worn by the crew. It is interesting to see how the same color changes whether applied with an airbrush or by hand.

FINAL THOUGHTS

TO SEAL THE WEATHERING, tie together the layers, and dull the shine of the clear gloss, I applied Humbrol Matt Varnish enamel (No. 49). As a final step, I added camouflage nets to the stowage baskets. Trumpeter's Centauro produces a good-looking model of the cool tank with wheels. It is unique in my collection and marks a return to earth for my modeling. **FSM**

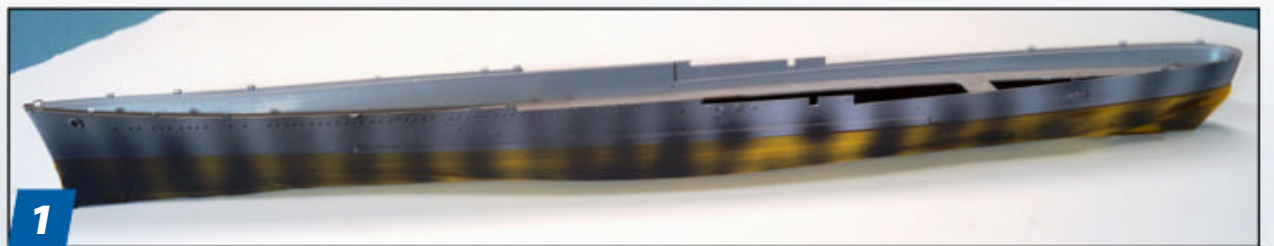


Detailing and finishing **WARSHIPS**

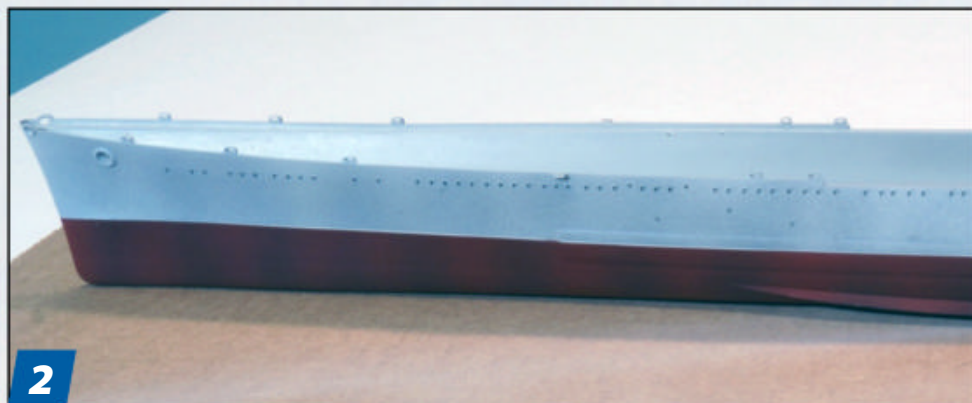
Part 3: Painting and weathering

BY CHUCK BAUER

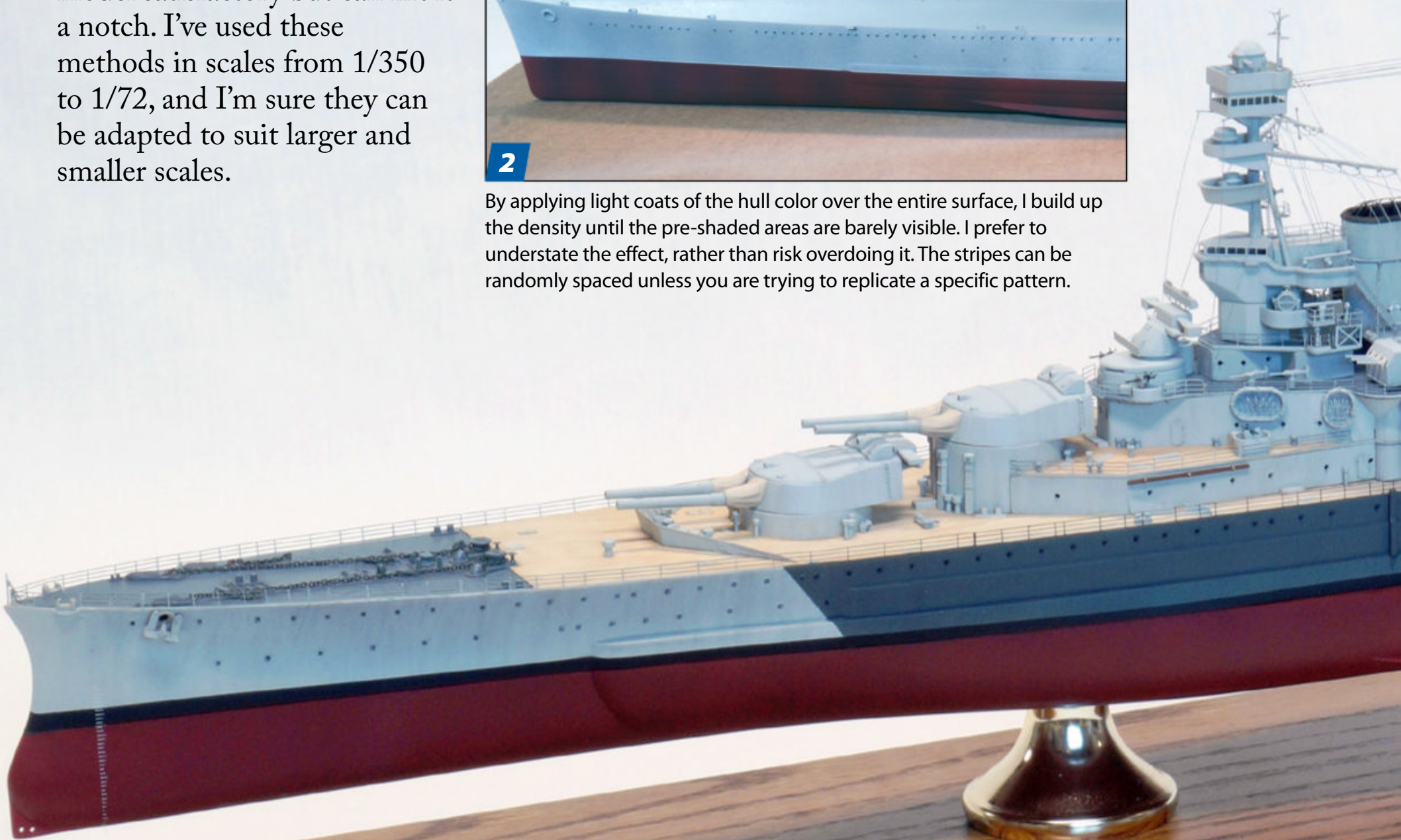
Painting and weathering can make or break the overall appearance of a ship model. All the time in the world spent adding details will be for naught if the finish is subpar. Never fear, in this article I will cover techniques I use that will not only make the model satisfactory but can lift it a notch. I've used these methods in scales from 1/350 to 1/72, and I'm sure they can be adapted to suit larger and smaller scales.

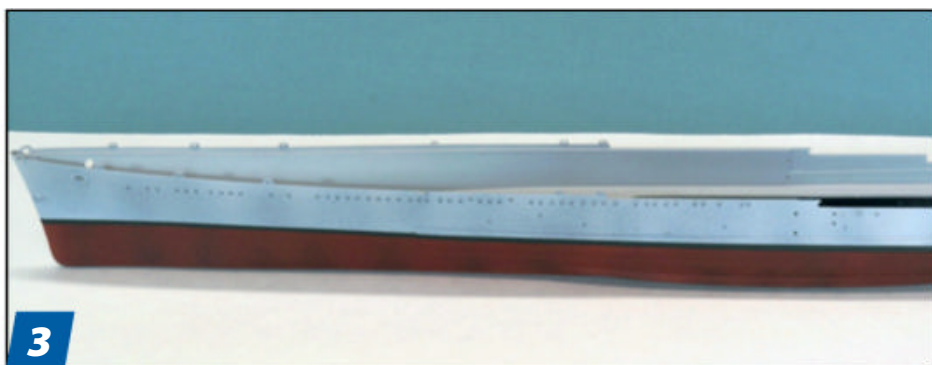


Oil-canning is the term used for the undulations in the hull plating of a ship caused by water pressure against the skin. I simulate oil-canning by airbrushing dark gray or black vertical stripes on the hull, either after priming or after the first coat of the hull color.



By applying light coats of the hull color over the entire surface, I build up the density until the pre-shaded areas are barely visible. I prefer to understate the effect, rather than risk overdoing it. The stripes can be randomly spaced unless you are trying to replicate a specific pattern.





3 I use the same technique on the lower hull and apply the boot stripe last, since it is a darker color. When these steps are completed, the large expanse of the hull is visually broken up and realism is added.



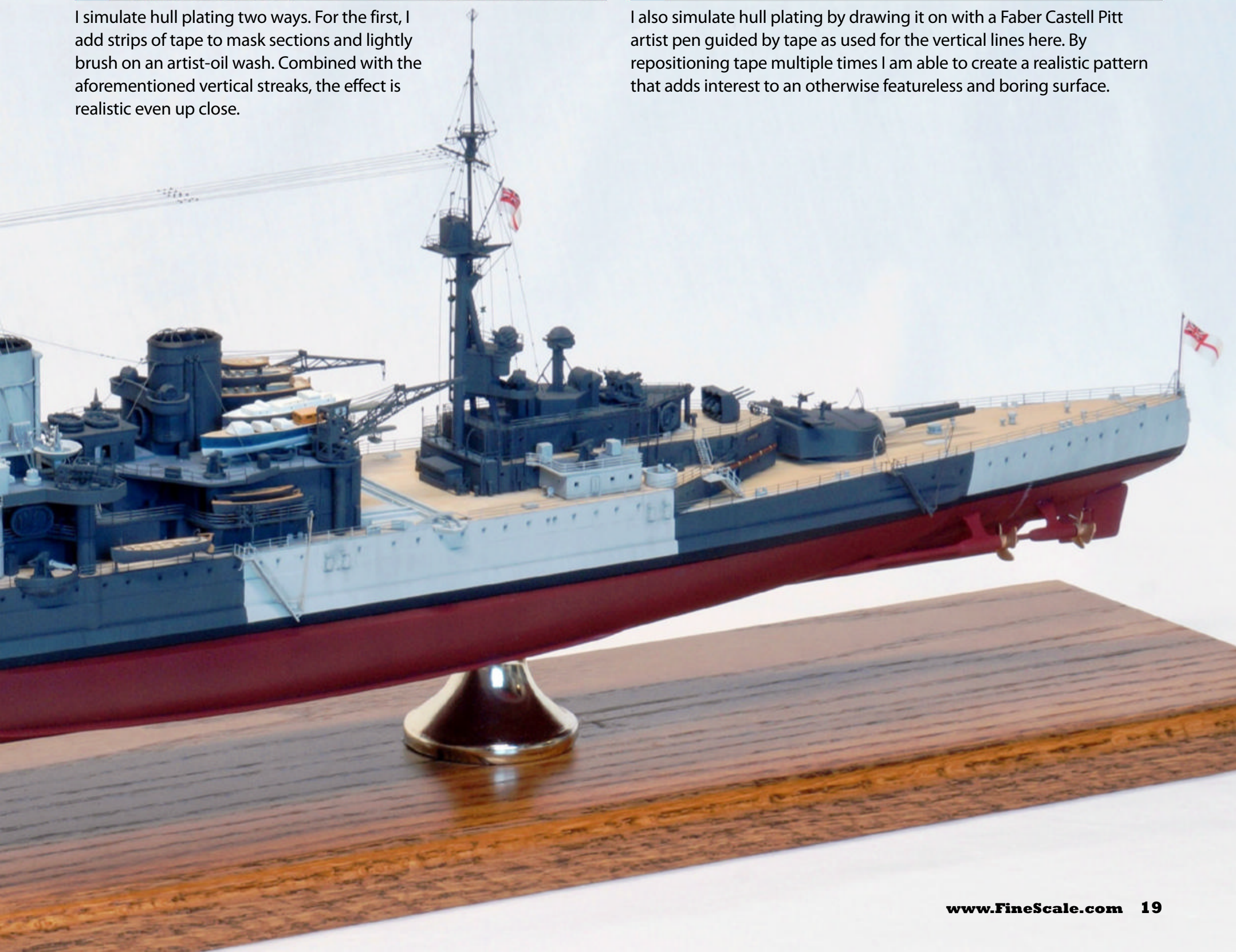
4 Another hull finishing technique I use is randomly applying a wash of artist oils and mineral spirits to the sides in a random vertical pattern. Using a wisp or fan brush is helpful for achieving a realistic effect.

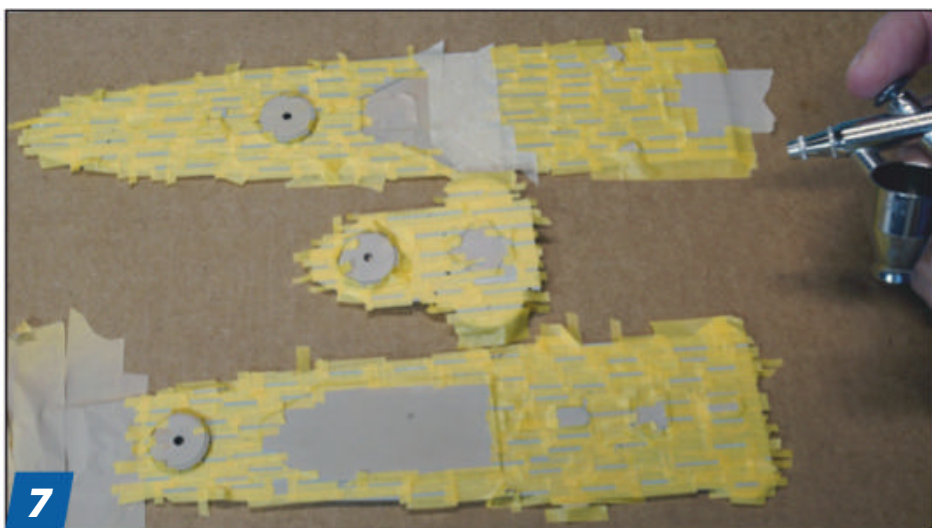


5 I simulate hull plating two ways. For the first, I add strips of tape to mask sections and lightly brush on an artist-oil wash. Combined with the aforementioned vertical streaks, the effect is realistic even up close.

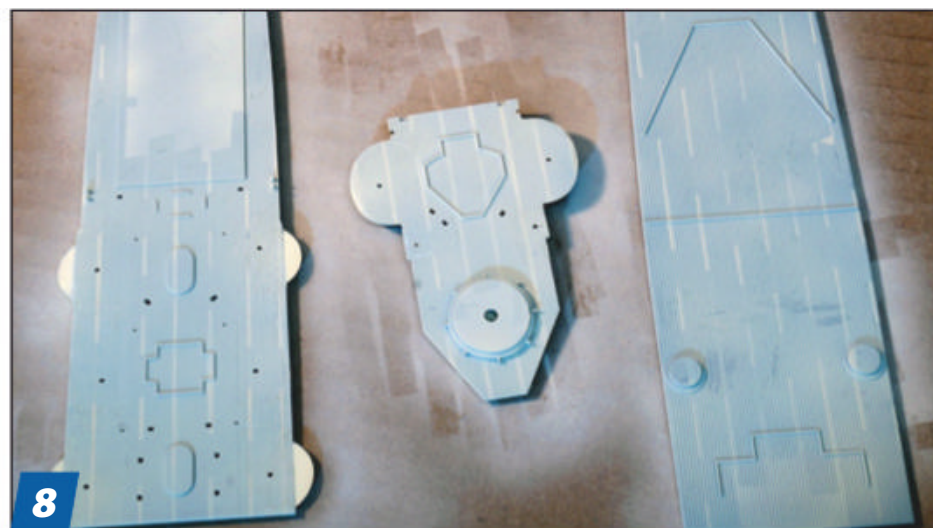


6 I also simulate hull plating by drawing it on with a Faber Castell Pitt artist pen guided by tape as used for the vertical lines here. By repositioning tape multiple times I am able to create a realistic pattern that adds interest to an otherwise featureless and boring surface.

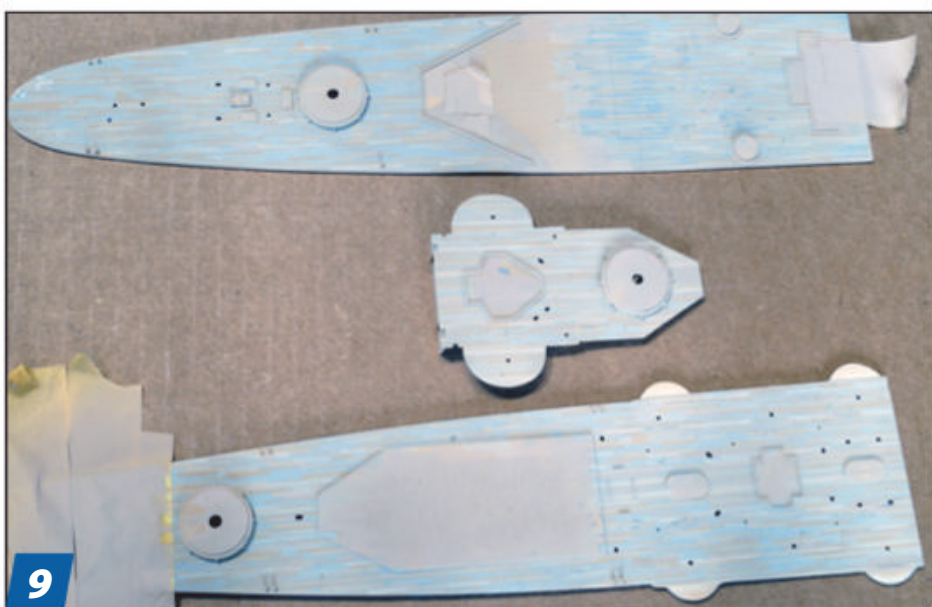




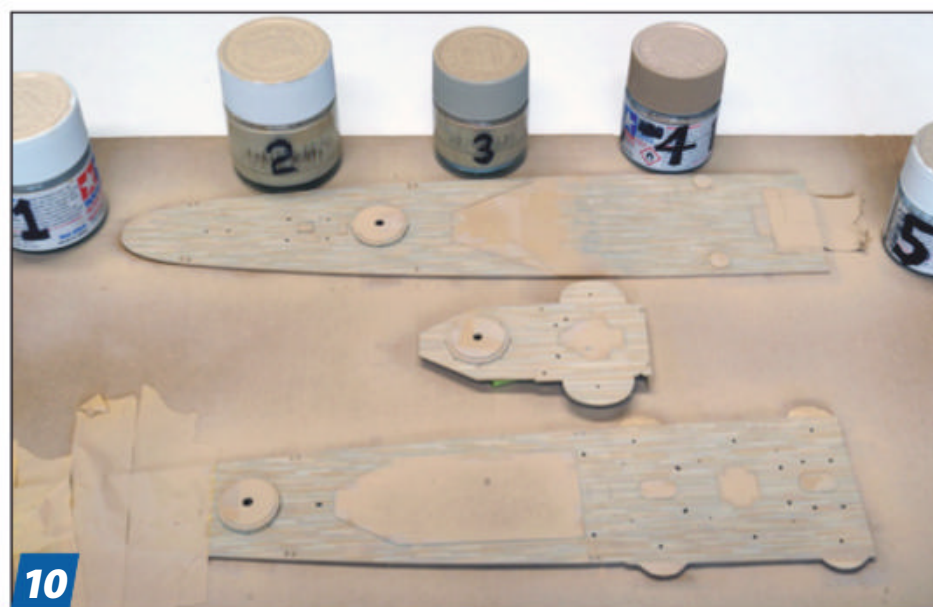
I prefer to paint the kit's plastic deck pieces rather than using aftermarket wood laminates. After priming the decks with a medium tan, I mask as many individual planks as possible.



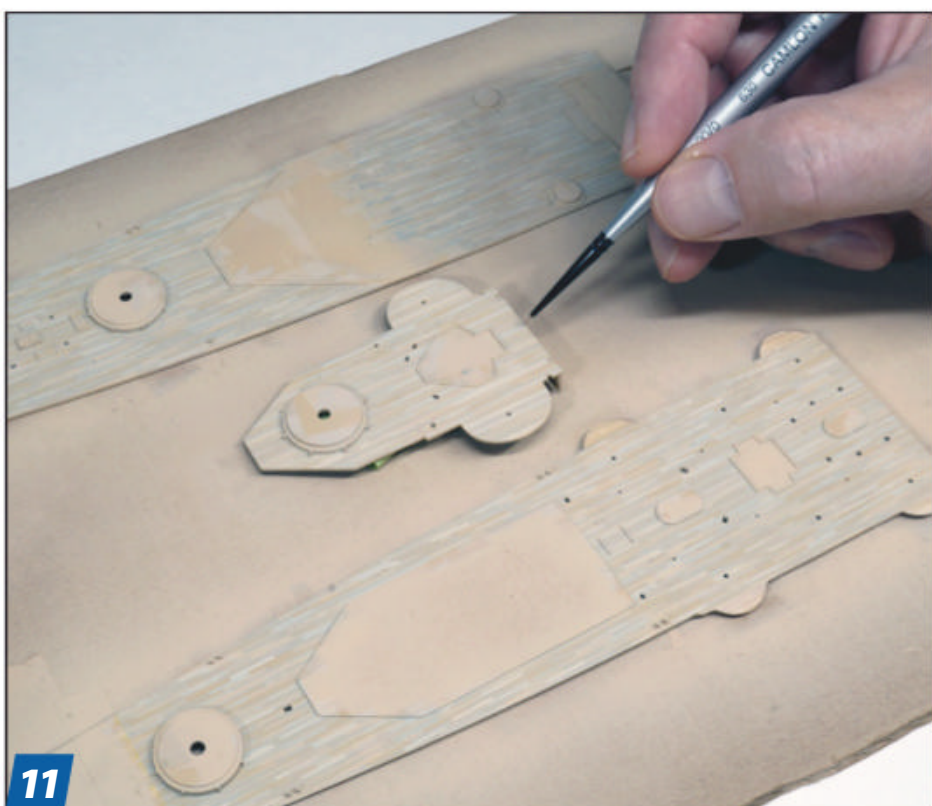
The exposed planks are then airbrushed with the first of several shades of tan. One application doesn't really do much, but it is a start.



Things look better after 10 masking and painting sessions. I will paint the turret barbettes and deck features after the decks are finished.



Ultimately, I masked and painted these decks 17 times to achieve 100% coverage. There is no correct number of deck colors; the important thing is for them all to be the same type of paint.



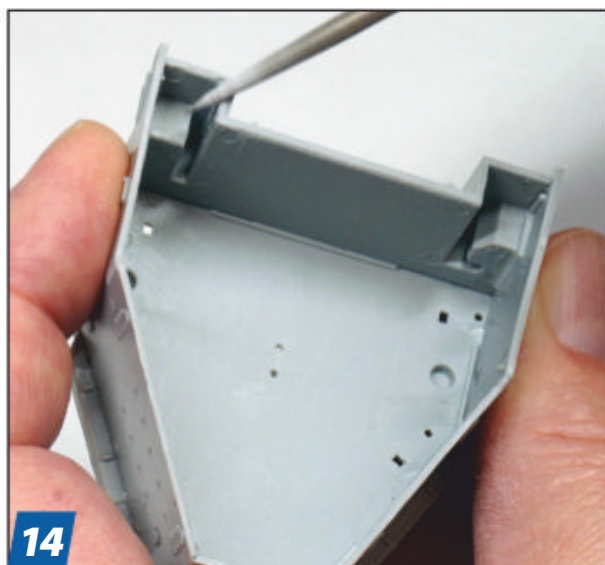
My final step when painting decks is flowing a pinwash of artist oil and mineral spirits into the spaces between the planks. Capillary action will carry the thin liquid quite a distance; it is not necessary to follow the lines, sometimes just touching a corner is enough.



I use an olive artist oil for the pinwash because it does not create as harsh a contrast as lamp black would. The subtlety looks good from any angle and distance.



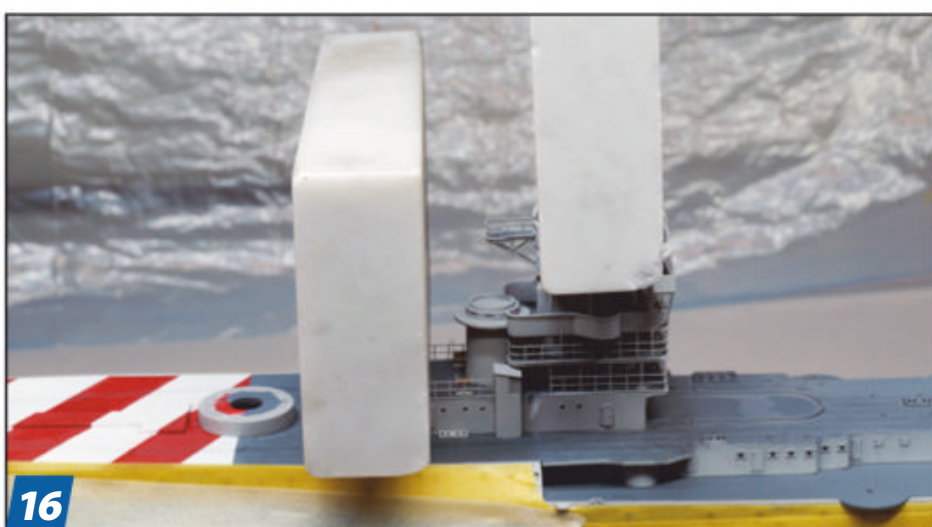
For structural parts, I paint everything I can as a subassembly and then put them under a dust cover until it is time to attach them to the ship.



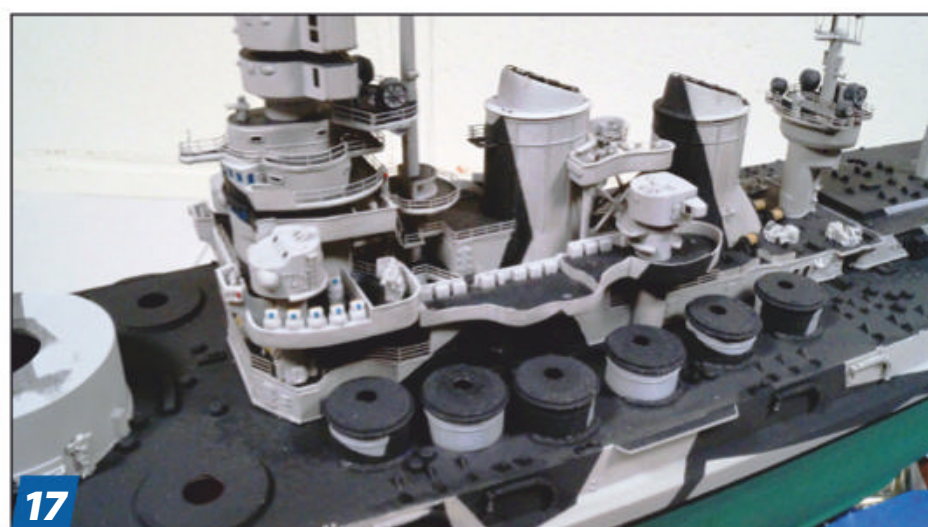
Before attaching subassemblies, I bevel the underside mating edge of the structure and dry-fit it to the deck as many times as is needed to refine the position before applying glue.



I attach subassemblies to the ship with a combination of white glue and model cement. By painting the assemblies before they are attached to the ship, I get excellent, crisp color demarcation.



Even with all the testing, I find it is sometimes necessary to apply weight to the assemblies as the glue dries to minimize gaps. This scary view shows how I use marble trophy parts to hold the superstructure tight to the deck overnight.



Splinter camouflage is easily and accurately done if individual components are masked and painted prior to attaching them to the model. Notice that the secondary gun mounts are all oriented differently and each has a unique pattern.



Most ship camouflage was asymmetrical, so it is important to have good references. I used a photo in Steve Wiper's *Warship Pictorial No. 37: RM Roma* (Classic Warships, ISBN 978-0-9823583-8-2) to paint my 1/350 scale model of the Italian battleship. It took a lot of time and plenty of Tamiya tape, but the result is a nice combination of accuracy and aesthetics.



A key part of my painting process is Testors Model Master Acryl Flat Clear (No. 4636). I hand-brush it into all of the joints between the superstructures and adjacent decks.



It dries flat and clear and fills microscopic gaps that may occur between the adjacent parts for a unified, clean appearance. It is an acrylic, so it won't adversely affect the underlying paint.



21

At random points in the project, I enhance molded surface details with washes of either Portland gray or lamp black artist oils depending on how light or dark the base color. This process adds depth, visual interest, and realism.



22

Shading these Italian identification stripes was a challenge. Lamp black was too harsh for the white, so I used Portland gray on them. By carefully watching the capillary action of the wash as it was applied, I was able to control where the black ended and the gray began. The last step was a third wash to suggest rust around chains.



23

Rust and other weathering would require a separate article. Here, I'll say that what little I do on most of my models I do with PrismaColor artist pastels. I use a paper plate as a palette and mix away.



24

The most weathering I have ever done on a single subject was on a resin *H.L. Hunley*. It was quite a fun project because, given the nature of the primitive sub, I didn't have to worry about overdoing anything.



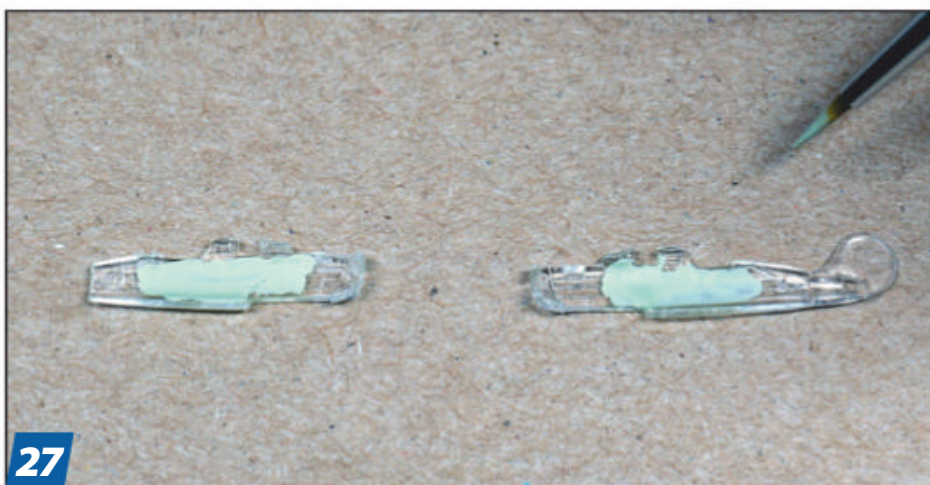
25

I weathered Revell's 1/144 scale German submarine *Wilhelm Bauer* by applying dots of rust-colored oil paint in logical places and drawing them downward with a brush dipped in mineral spirits. Make sure the surface is sealed with clear lacquer or acrylic before starting the streaks.



26

Magic in a bottle, Testors Dullcote lacquer does three things: First, it dulls the entire model, so I can use any sheen in prior steps. Second, it sharpens detail and color demarcations, like turning up the contrast on a digital photo. Third, it unifies the overall appearance of the model.



27

For ship aircraft — no matter if the plane is molded in clear or solid plastic — if it has an open cockpit, I paint the interior first.



28

After protecting the windscreens with Microscale Micro Mask, I paint the exterior. I've learned not to worry too much about the windscreens, because even if the masking fails, clear windscreens can be cleaned up and the shine restored when everything else is finished.



29

I finish aircraft like standalone models. The fuselage on this IMAM Ro-43 was airbrushed and a pinwash applied to panel lines before I added the decals. The prop and machine gun were painted by hand.

PAINT COLORS & BRANDS

A COMMON QUESTION MODELERS HAVE is about the kind of paint other modelers prefer. Obviously, what paint a modeler uses comes down to personal preferences.

I think it is important to mention that I don't prefer enamel or acrylics, nor am I partial to particular paint brands. I use what I feel most accurately depicts the real thing and looks good on the scale I'm working in.

The models in this story were painted with more than 100 different colors, including shades from Testors, Model Master, Tamiya, LifeColor, and Polly Scale. The pinwash on the natural wood decks is Utrecht Olive Green artist oils, and washes were made from Winsor & Newton and Royal Langnickel oil paints.

FINAL THOUGHTS

These techniques have served me well for all my ship builds, including Trumpeter's 1/350 Italian heavy cruiser *Zara* (left) and battleship *Roma* (lower left), and, from another era, the *Pinta* in 1/75 scale from Heller. **FSM**





Mastering a

MiG

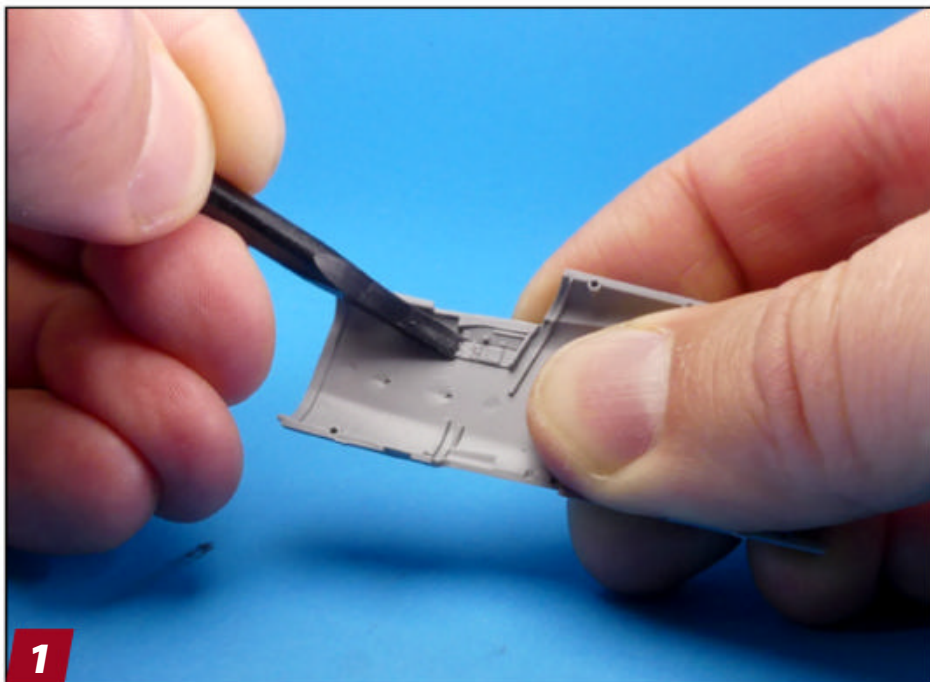


The MiG-25 “Foxbat” started life as a high-speed interceptor to counter high-altitude spy planes and aircraft like the American B-70. Much of the airframe is built from stainless steel to protect against the heat generated by speeds nearing Mach 3. Although the prototype reportedly hit Mach 3.2, operationally the Foxbat was restricted to Mach 2.8 to minimize engine damage. The high-altitude interception role became obsolete when those threats failed to materialize, so the MiG-25 was repurposed as a high-speed bomber and reconnaissance platform.

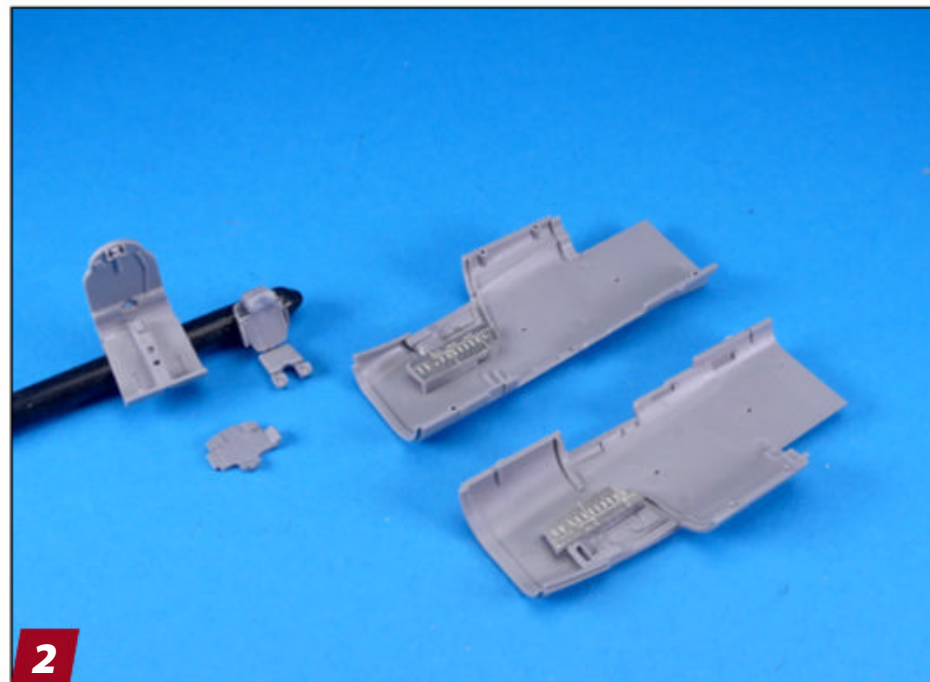
I’ve always liked the Foxbat, so I was keen to build one of ICM’s 1/72 scale kits when they were released. I tackled the MiG-25RBF electronic signals intelligence aircraft (No. 72174).

Paint ICM’s 1/72 scale Foxbat as an operational Russian aircraft

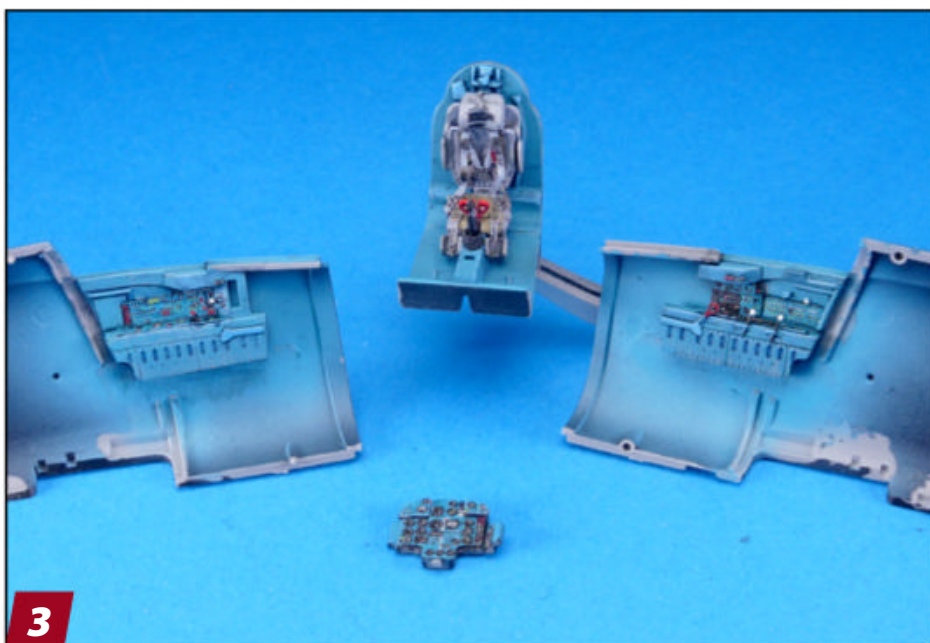
BY ANDERS ISAKSSON



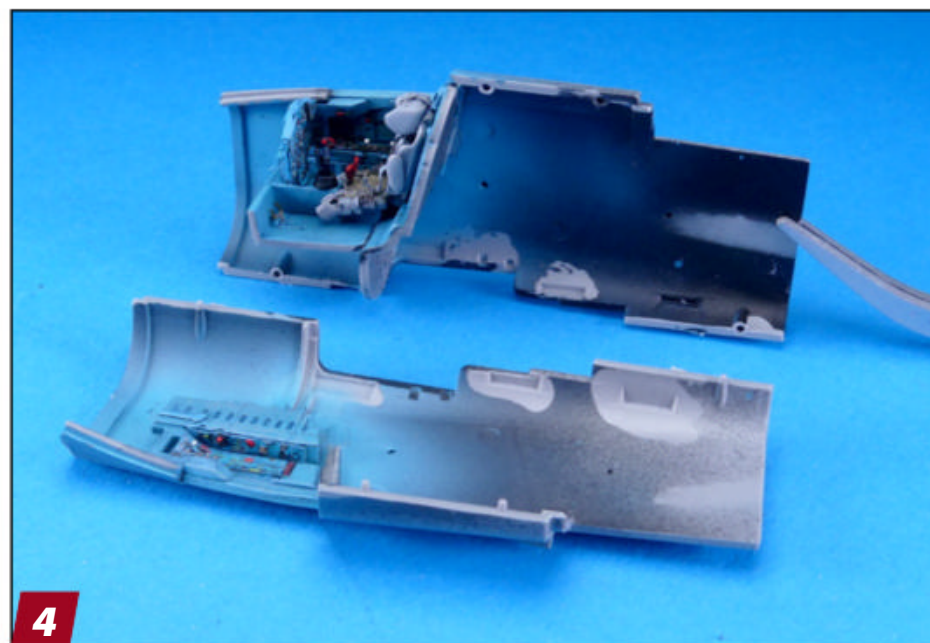
I planned to use Eduard's photo-etched metal (PE) Zoom set (No. SS649) in the cockpit. Regrettably, that required shaving off the nicely molded panel detail on the walls, so out came a micro-chisel. At the same time, I assembled the nose gear bay since it shares the cockpit rear bulkhead.



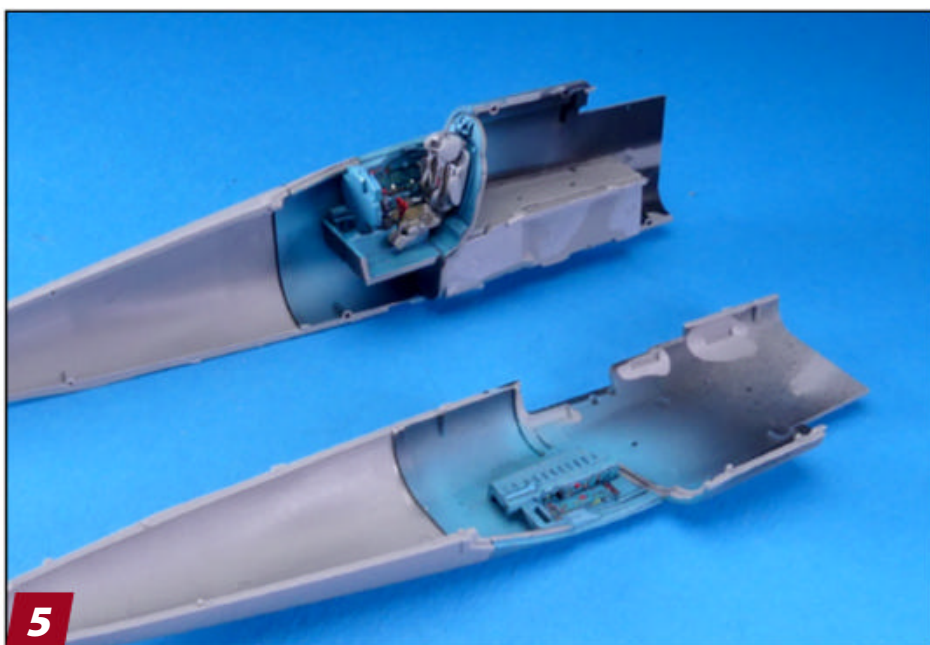
The cockpit builds from a rear bulkhead that mates with the floor to which the seat is added. It took guesswork and test-fitting to determine the height and alignment of the floor, but attaching the side panels sorted it out.



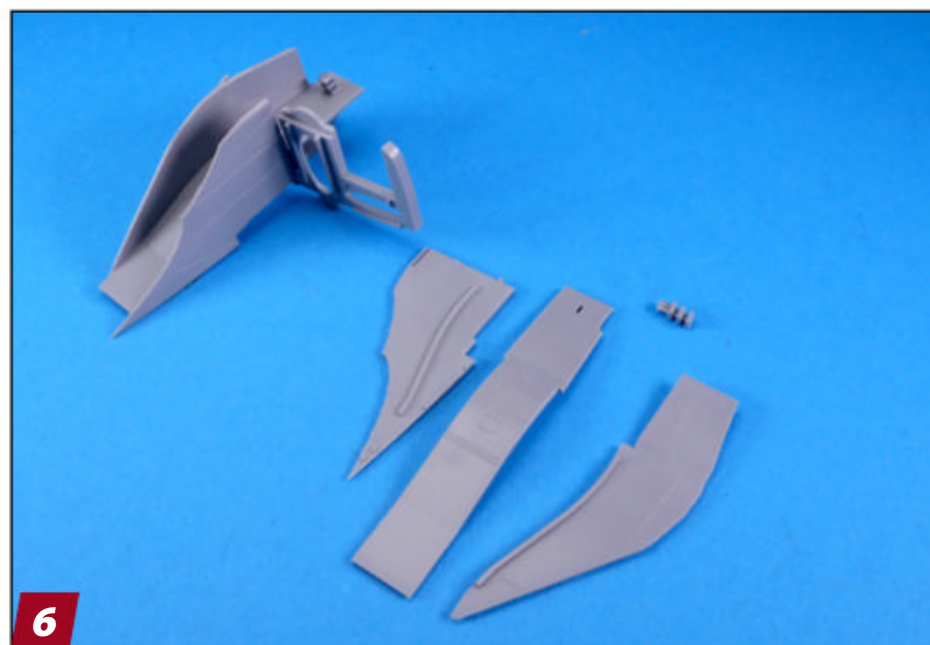
I mixed a little blue into MRP Russia Turquoise Cockpit Matt (No. MRP-001) lacquer to match the pre-painted Eduard PE panels in the cockpit. I think the adjusted color is a bit too blue, but I understand the actual shade varied between manufacturers and types of aircraft.



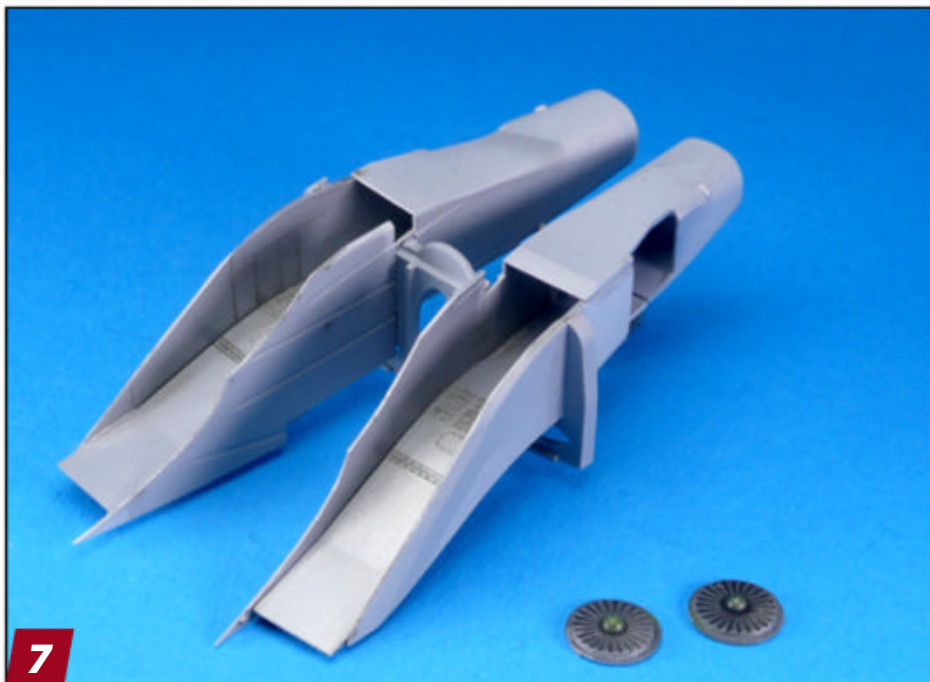
As a final step, I thinned a few dark shades of Ammo by Mig Jimenez Oilbrushers and applied them as washes to accentuate details and add dirt and grubbiness to the cockpit.



The nose gear bay fit perfectly behind the cockpit. The instructions would have you add the nose gear leg, but I left this delicate part off for the moment. It is best to attach each half of the nose to its respective fuselage part before mating the halves for easier alignment.



Rather than adding the intakes to the forward fuselage, I assembled both front to back as a separate unit that would later be attached to the main fuselage. Given the number of parts, the key is dry-fitting them all and thinking through each step before adding glue.



7 The painting instructions for the intakes are vague, but I settled on natural metal. I sprayed the trunks with MRP White Aluminium Metallic (No. MRP-009) and the fans Steel Metallic (No. MRP-030). It appears the fan hubs are green, so I sprayed MRP Green for Wheels (No. MRP-032).



8 I added the main gear bays and, despite my best efforts to avoid doing so now, installed the main gear legs. After assembling each leg, I painted the with MRP Light Grey (No. MRP-186) and weathered them with oil washes. The rest of the fuselage components fit like a puzzle.



9 I used MRP Anodized Aluminium (No. MRP-081) and Exhaust Metal (No. MRP-148) separately and mixed on the nozzles for tone variation. Streaks of MRP Tyre-rubber (No. MRP-173) inside each nozzle replicate traces of soot and I brushed thin black oil paint for weathering.



10 I appreciated ICM's unusual but clever design choice to mold the vertical and ventral fins with the rear fuselage sides. It sets the angles for the fins and makes for sturdy attachments.



11 Before paint, I attached the windscreen and protected it and the separate canopy with masks from New Ware (No. NWAM0605). The set also masks the thin sealant that runs around the frames canopy and windscreen; I sprayed MRP Russian Cockpit Sealant (No. MRP-355).



12 Before applying Tamiya spray-can primer, I masked the landing gear bays, intakes and exhausts with chunks of sponge and tape. I fixed any problems revealed by the primer and touched up the base coat in preparation for the camouflage to come.



13 Several rear fuselage panels around the engine are natural metal, so I sprayed more mixes of MRP metallic lacquers. The instructions are vague about the extent of the panels and the exact outlines, so I relied on photos to get them right.



14 For the overall color, I airbrushed MRP Traffic Grey (No. MRP-189), which has the right bluish tinge that is common for the MiG-25 and MiG-31 airframes. I left the stabilizers and flaps separate for painting. After consideration, I decided to add some variation to surfaces.



15 Concentrating on upper surfaces, I airbrushed darker and lighter shades of traffic gray through a Scotch-brite scouring pad. The pad serves as an irregular template, producing a random pattern for a weathered finish. I picked up this technique from a YouTube video and it works great.



16 Using the New Ware set, I painted the various dielectric panels with MRP Dark Gray Radio Antenna (No. MRP-047) and the antiglare panel on the nose MRP AMT-6 Black (No. MRP-017). To seal everything and provide a good base for decals, I applied of MRP Super Clear Gloss (No. MRP-048).



17 The kit provides two small decal sheets that include a ton of stencils. Overall, they were robust without being too thick and settled with little need for decal softener. I sealed the decals under another layer of clear gloss.



18 I flowed in a wash mixed with dark gray and black oil paints thinned with odorless turpentine to define panel lines and create depth and shadows. A few rounds of washes on the bare-metal areas of the engines gave them a more weathered appearance.



19 To simulate dirt streaks from rudder hinges and selected panels, I used a Post-it note to mask the panel edge and airbrushed narrow lines of thin, dark paint in the direction of airflow.



20 For subtle paint chipping on gear doors, leading edges, and around panel lines on the antiglare panel, I lightly dabbed Vallejo gray or metallic acrylics on those features with a chunk of sponge held in tweezers. Then I airbrushed MRP Super Clear Matt (No. MRP-127).



21 The wheels were assembled and painted in short order thanks in part to New Ware's masks for the hubs. I experimented with a technique to add tread when none is molded on the tires. After spraying MRP Tyre-rubber, I applied thin strips of tape and airbrushed lightened tyre-rubber.



22 When the tape was removed, it revealed a convincing radial tread pattern. I painted the rims with MRP Green for Wheels. Dark wash and dry-brushing popped molded details and I applied light green mixed from Vallejo acrylics with a fine brush for chipping.



23 By slowly moving the model across sandpaper on a hard, flat surface, I created slight flat spots and the illusion of weight on the tires. After removing the masks from the windscreen and canopy, I detailed the latter with Eduard PE mirrors and installed it in the open position.



24 Each fin featured a pair of molded-on static dischargers, but as soon as the first one broke off, I removed the rest. I replaced them at the end of the build with bristles cut from a paintbrush and superglued in place. The lump at the end of each was built up with blobs of Vallejo paint.

FINAL THOUGHTS

FOR THE LAST DETAIL, I replaced the kit pitot tube with a metal one from Master Details (No. AM-72-113). That finished my Foxbat. Attaching all the small parts is both rewarding and frustrating — for every detail added, the more challenging handling the model became. But the result is sharp and I am looking forward to building more ICM Foxbats. **FSM**



◀ **ANDREW SCHAFFERT**
YUBA CITY, CALIFORNIA

This odd-looking model is an Allied Pounder from the Dust Tactics line of miniatures. Andrew added the tarp on the back, and created the snow base. The finish is a combination of airbrushing, hand-painted details, sponging for the micro-textures, and oil paints for the streaking. Stencils were used to paint the numbers and markings.



◀ **MICHAEL WINTERS**
VICTORIA, BRITISH COLUMBIA, CANADA

Michael finished Takom's 1/35 scale mid-production M3 Lee with Model Master enamels and Star Decals as a tank from the 3rd Carabiniers, a British cavalry unit in Burma in March 1945. Extra details include Panda tracks and parts from Ultracast and Tiger Model Designs, as well as parts from his spares box and ample scratchbuilding. He says Apoxie Sculpt worked wonders for stowage.



**HENRY LEE
CHELSEA, ALABAMA**

Henry built the USS *Guam* from a 1/350 scale Iron Shipwright resin kit with photo-etched metal railings, radars, anchor chain, rigging, and flags and painted it with Model Master enamels. *Guam* was the second of the two vessel *Alaska* class. These heavy cruisers with a length of 808.5 feet, a maximum displacement of 34,260 tons, and a main armament of nine 12-inch naval rifles would have been classified as battle cruisers by most other navies of the day.



◀ **PEDRO FUSTER
MADRID, SPAIN**

To improve Special Hobby's 1/72 scale AH-1G, Pedro added Eduard photo-etched metal, CMK resin seats, an AZ Model main rotor, Brengun intakes, and scratchbuilt replacement rocket launchers for better scale fidelity. He painted it as a 1st Squadron, 9th Air Cavalry Regiment Cobra lost over Cambodia in December 1971.

▶ **CHUCK STEWART
NORTON SHORES, MICHIGAN**

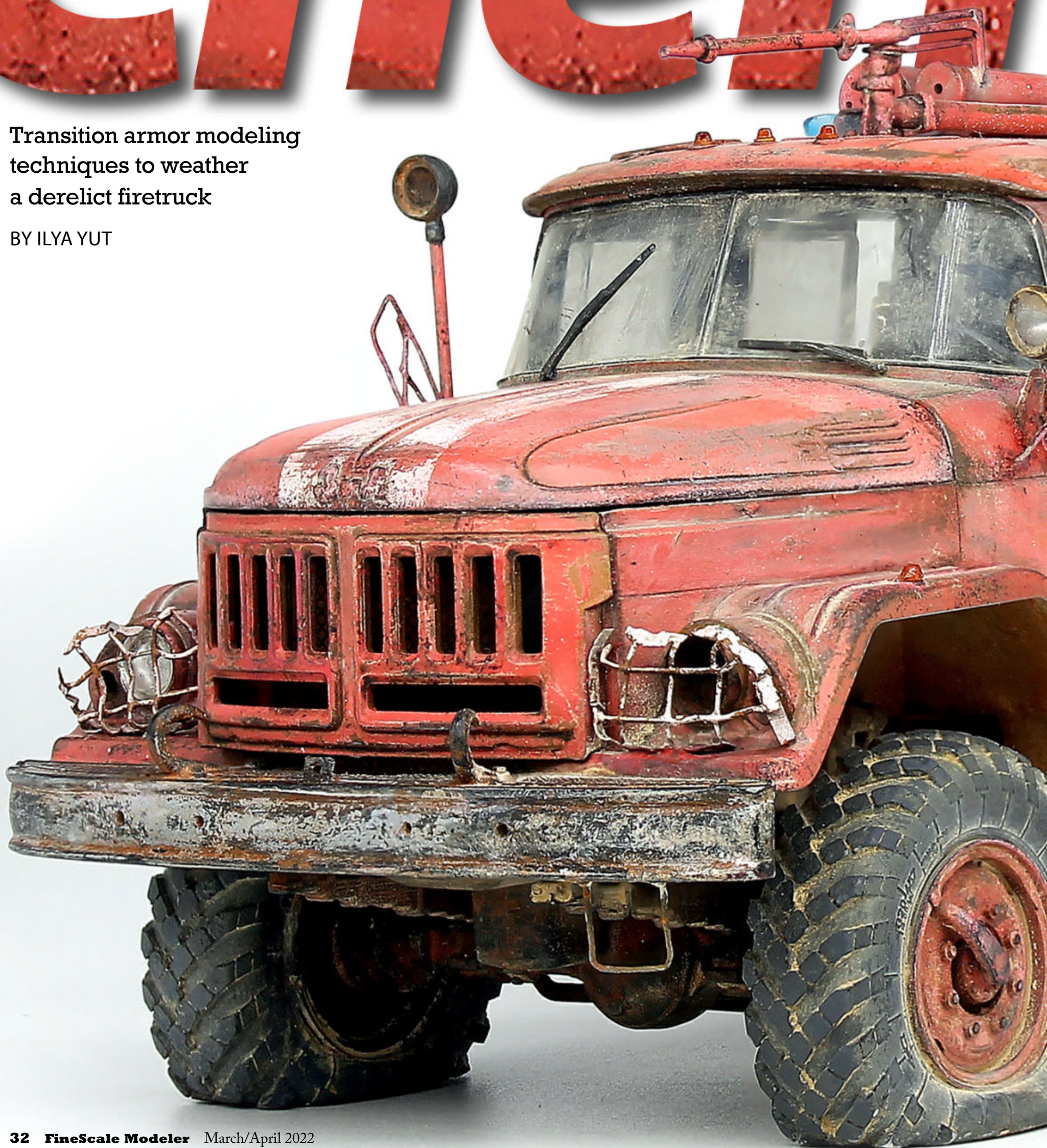
Chuck built Heller's 1/24 scale Ferguson TE-20 tractor and calls the kit a challenge worth the effort. He wired the ignition and painted the tractor with Mr. Color, Tamiya, Vallejo, Floquil, and Andrea colors. Calling the finished model cute, he put it on a base with static grass and JTT trees.



After Chern

Transition armor modeling techniques to weather a derelict firetruck

BY ILYA YUT

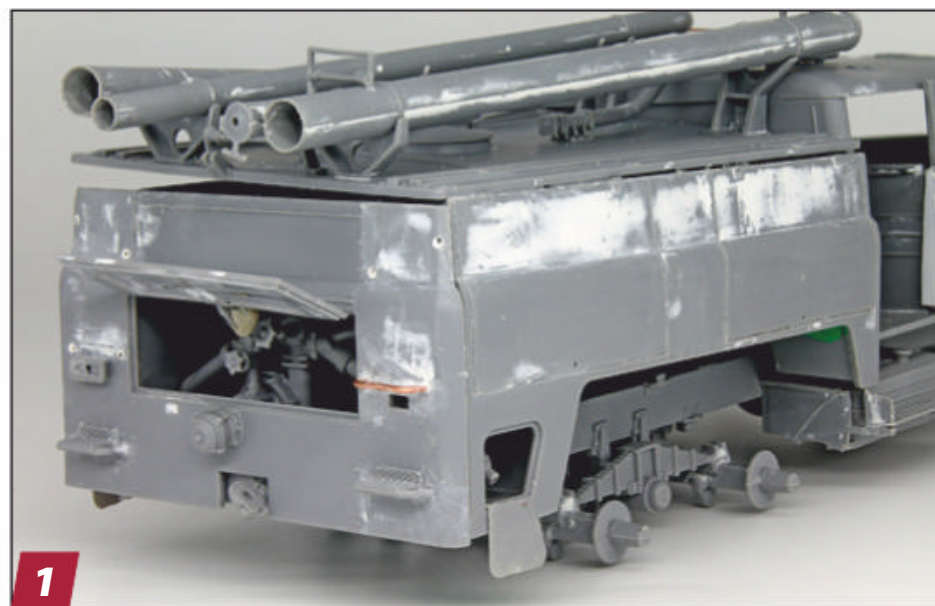


Modeling



The Chernobyl nuclear disaster in 1986 remains the largest reactor meltdown in history. Thousands of people worked to contain the damage from the catastrophe, many of them dying or suffering long-term severe health problems resulting from radiation exposure. And it's no surprise the local firefighters were among the first to lend a hand.

The history of Chernobyl intrigued me. I'd seen photos of vehicle graveyards from the incident, and when ICM released its 1/35 scale AC-40-137A Soviet fire truck, the choice was made for me. As an armor modeler, I found the subject both fascinating and challenging. The ICM kit is good, but not perfect, and the solid rubber tires were the worst. I replaced the kit's wheels and tires with aftermarket resin parts from Armor 35 and Miniarm, but that was only the beginning.



Before I could get to painting and weathering, I had to perform some surgery. First, its doors were molded as part of the body. I scribed along the panel lines to open some up or completely remove them.



There wasn't much detail behind the storage hatches. I scratchbuilt the interiors from styrene sheet using photo references as guides.



Up front, I soldered together light guards and mirror mounts from copper foil and wire. With these details out of the way, now I was ready to paint.

I had determined early on that I would use hairspray to get the chipping effect. But first, I needed an appropriately rusty undercoat to work with and airbrushed the whole model Tamiya Brown (No. XF-10) and NATO Brown (No. XF-68).





As you can see, I airbrushed additional rust tones over the brown base coat. While it looks good, the step turned out to be almost useless because later procedures practically obliterated any rusty nuances. At least it was fast and easy to do.



Separating the chassis from the other subassemblies, I sprayed a couple of coats of hairspray on it and followed up with acrylic flat black. When the black had dried to the touch, I chipped it by lightly scrubbing the paint with stiff brushes wet with water.



To accentuate the rust, I went over the chassis with a liberal amount of Ammo by Mig Jimenez (Ammo) Light Rust Wash (No. A.MIG 1004). This is one of my favorite rust products because it is easy to work with and provides excellent texture and tone.



With a coat of hairspray over the body's rust colors, I first sprayed pink and then red over it. I used slightly different shades on different panels to mimic fading. The chipping of the red and pink was again done with tap water and brushes.



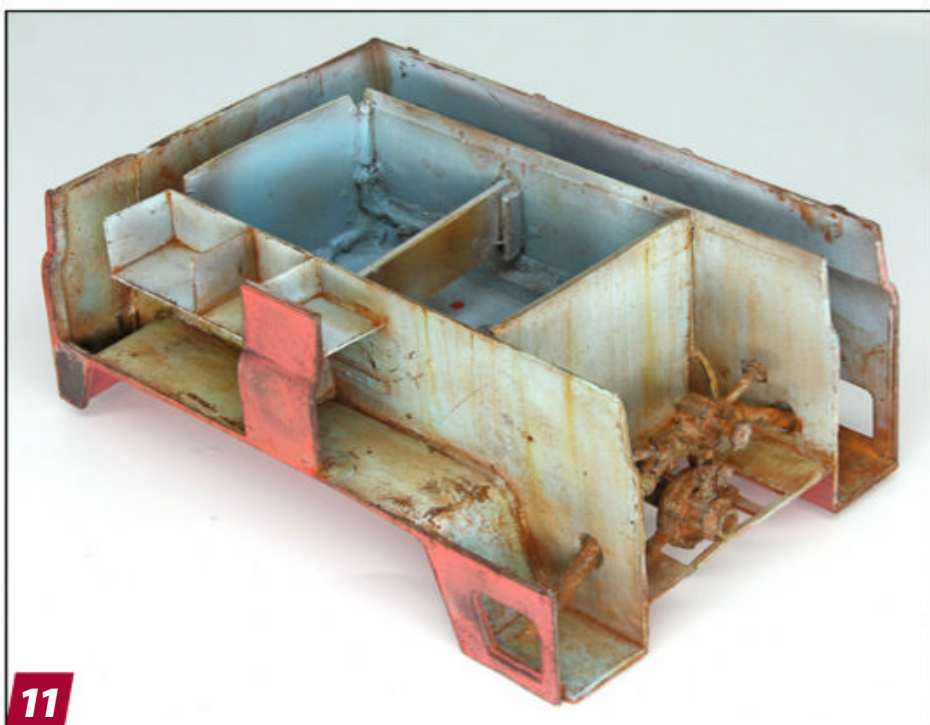
9

Reference photos showed some fire trucks had a green color under the white on their front doors. I copied the look, and it provides an interesting visual break. The white doors and stripes were also painted using hairspray and acrylic paints.



10

Inside, the front half of the cab was painted green, while the rear half received light blue. In addition to the hairspray chipping, I weathered with washes and rust and dust pigments. Note Quinta 3D decals decorate the dash.



11

I painted the storage compartments in back much the same way as the cab: hairspray over the base followed by light blue. After chipping, I applied rust washes and rusty streaks with enamels and artist oil paints.



12

After airbrushing Tamiya Clear (No. X-22) diluted with alcohol for a satin coat, I applied artist oil pinwashes. Pure black would have been too dark for the job, so I used dark grey, black-brown, and buff.



13

I used red, brown, dark gray, and buff oil paints at corners and along panel lines to create fading and shadows. Fine brushes deposited the paint, which was then stippled or blended with round or flat brushes. The paint dried overnight.

APPLY
oil paints to
cardboard first to
draw out the
linseed oil



14

Adding vertical streaks is one of my favorite weathering steps. I applied dark rust and buff oil paints and enamels in thin streaks and then blended them with a paintbrush damp with enamel thinner.



15

At this point, I glued the frame and the large upper subassemblies together. The underside received a layer of dust with airbrushing and pigments. I didn't go overboard because the area won't be particularly visible on the finished model.



16

I used glue specifically made for transparent parts to attach the windows. No glue residue was left and there was no chance of fogging the parts. Again, an oil paint wash dirtied up the glass.



FINAL THOUGHTS

I PLAYED AROUND WITH alignment and deformation of several details to add an even more abandoned feel to the model. With all the small details and the wheels and tires added, I felt satisfied with the results. An unusual departure for me, I brought many of the techniques I use for armor builds to this derelict Chernobyl fire truck. In the end, I think they worked. **FSM**

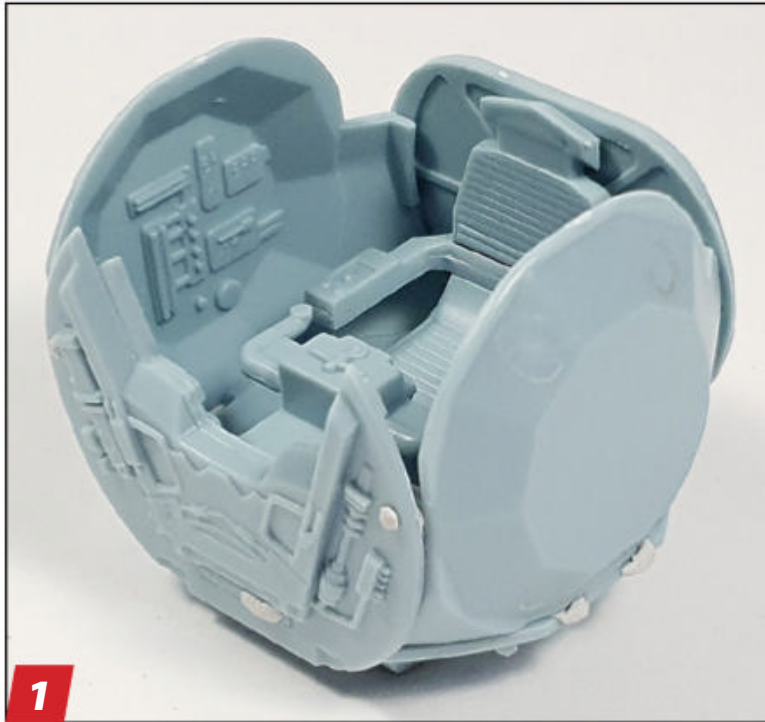


*Have fun
painting a*
TIE F

Color modulation and layers make for a striking *Star Wars* ship

BY KEVIN OTTENS

Revell's 1/65 scale TIE fighter has been around since 2011 when it came pre-painted as part for the EasyKit range. Most recently, it has been boxed together with the company's 1/57 scale X-wing (No. 06054). I was really looking forward to building the TIE, the mainstay of the Imperial fighter fleet and wanted to use color modulation to add visual interest to it.



Since the kit is designed to snap together I built the various subassemblies to see how it went together. This is the cockpit with the parts snugged together with poster putty.



The big parts hold together fine without the putty. I was starting to form a plan to paint the Imperial fighter. It took me about two hours to achieve this, so this kit is ideal for beginners.

PAINTS USED

Vallejo Surface Primer: Black (70.602)

Vallejo Model Color: Black Grey (70.862); Natural Steel (70.864); Red Transparent (70.934); Blue Transparent (70.938); Black (70.950); White (70.951)

Vallejo Model Air: White (71.001); Light Gray (71.050); German Grey (No. 71.052), Panzer Black Grey (71.056); Black (71.057); Fire Red (71.084); Light Gull Gray (71.121); BS Medium Sea Grey (71.307)

Vallejo Varnish: Gloss (70.510); Clear Gloss Varnish, Polyurethane Satin (26.652).

Abteiling 502: Black (ABT-110)

AK Interactiv: Neutral Grey Wash (AK677)

Ammo by Mig Jimenez Pigments: Black (A.MIG-3001); Russian Earth (A.MIG-3014)

IGHTER



3

Before proceeding, I masked the front and top glass.



4

Because the TIE is overall dark in appearance, I base-coated it with black primer.



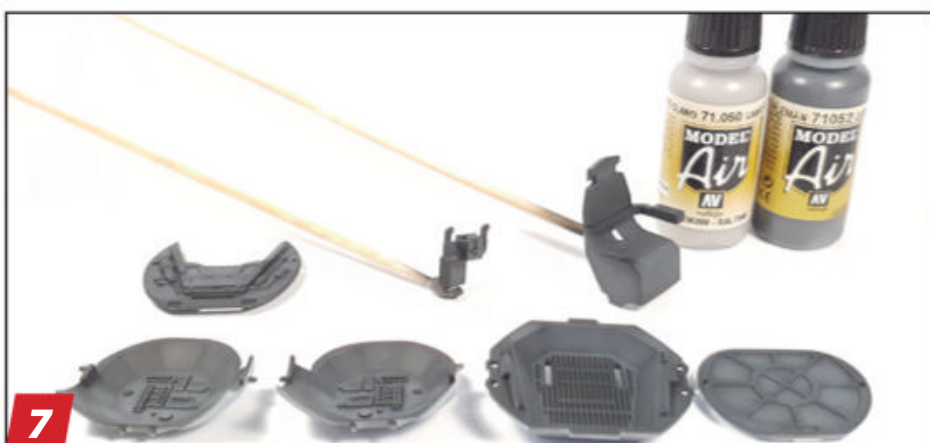
5

Then I applied a dark layer that will double as shadows in the cockpit with a mix of equal parts black gray and black.



6

I mixed equal parts black gray and German grey and airbrushed it on panel centers.



7

For the mid-tone on the panels, I mixed equal parts German grey and light gray and sprayed a tighter pattern inside the panels.



8

For the lightest shade in the center of panels, I airbrushed straight light gray. Note that for each layer, I added a few drops of gloss varnish to make increase transparency and blend it with the underlying shades.



9

I painted the pilot with black then highlighted him with dry-brushed light gray.



10

I picked out cockpit details by hand-painting them with shades of red, blue, and white.



11

I applied the kit decals to detail the cockpit and pilot, then sealed everything with gloss varnish.



12

To accentuate details, I applied a wash of black oil paint thinned with odorless thinner. It flowed easily thanks to the glossy surface.



13

I added extra depth with AK Interactive neutral gray wash selectively applied to panel lines and details. Using a fine brush moist with thinner I stippled the wash toward panel centers to produce a smoother transition between shades.



14

At this stage, I assembled the cockpit to check my work and made any adjustments I thought necessary.



15

After assembling the rest of the TIE around the cockpit, I primed the exterior with black.



16

To ease masking, I painted the solar panels first using Model Air black. Adding a few drops of Vallejo Retarder Medium (No. 70.597) slows paint drying and minimizes tip drying.



17

A layer of satin varnish gave the solar panels the proper sheen. I masked them before proceeding to paint the body.



18

For a dark base color, I mixed equal parts German grey and light gray, and airbrushed the body and solar panel frames.



19

I mixed German grey and Panzer black grey equally to pre-shade panel lines and detail edges.



20 For the main body color, I airbrushed medium sea grey. Rather than completely covering the surface with a uniform coat, I sprayed individual panels and details with a random pattern like marbling.



21 I sprayed a mix of equal parts medium sea grey and light gull grey in the same kind of random pattern on panels and details on the upper three-quarters of the body and solar panels to simulate an upper light source.



22 Continuing the color modulation, I mixed equal parts medium sea grey and white and airbrushed splatches over panels and details on the upper half of the fighter.



23 For the final layer, I mixed 1 part medium sea grey and 3 parts white to accentuate the uppermost panels and details.



24 Before emptying the airbrush reservoir, I used the final color and hand-brushed it on small details to add contrast and make them pop.



25 I masked the canopy frame and airbrushed it with German grey, then protected the paint with satin varnish.



26 To paint the laser cannons, I brushed on Model Color white followed by several thin layers of fire red, which gave them a lightly translucent appearance.



I flowed a wash of black oil paint mixed with odorless thinner into recessed panel lines and around surface details.



28

Just as I had done in the cockpit, I accentuated the washes with neutral gray wash lightly stippled from the panel lines inward using a fine brush slightly moist with thinner.



29

Finally, I applied streaks of black and Russian earth pigments with a fine brush. I wanted to give the effect of the fighter flying through explosions and flying debris. I kept the effect subtle as TIE fighters have a relatively short service life and are well-maintained. **FSM**



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Lamborghini has become synonymous with hypercar. Jeff Bloomhuff shows you how to turn a resin kit into a one-of-a-kind 1/24 scale Lambo of your own.

HYPER



perBull

*Audacious color choices and a variety of masking techniques
create an unforgettable Lamborghini*

BY JEFF BLOOMHUFF



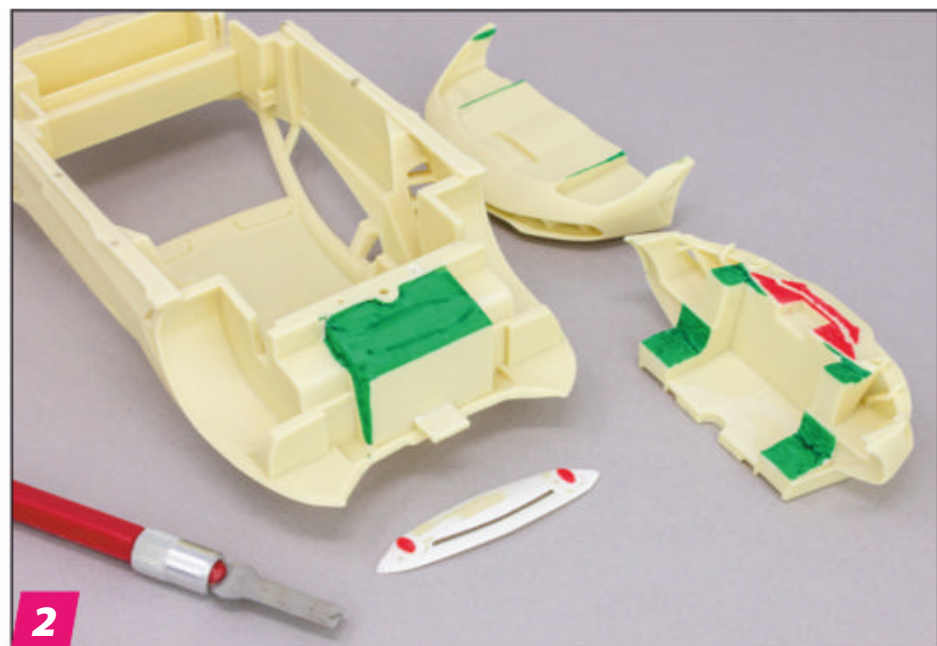


To commemorate the 100th birthday of Lamborghini's founder Ferruccio Lamborghini, the company released the Centenario LP770-4, an all-wheel drive hypercar based on the Aventador powered by a 6.5-liter V12 creating 770 hp. With only 40 built — 20 coupes and 20 roadsters — customers were given a plethora of personalization options. At \$1.9 million, who would buy this car? Well, if you're young, wealthy, and looking to grab attention, this loud and extremely limited Lambo is for you.

Alpha Models' 1/24 scale resin Centenario definitely brings this attitude to car models. The company focuses on European supercars and hypercars and the kits come with extensive photo-etched metal (PE) parts and decals for detailing. And seeing that this was a car built for a special occasion, I didn't want to give it a run-of-the-mill paint job.



Out of the box, the rear wing is presented in the up position. To convert it to the down position, I test-fit it to the body and tightened gaps on the sides. I attached a piece of .020-inch styrene sheet to each side and filed it smooth until I was satisfied with the fit.



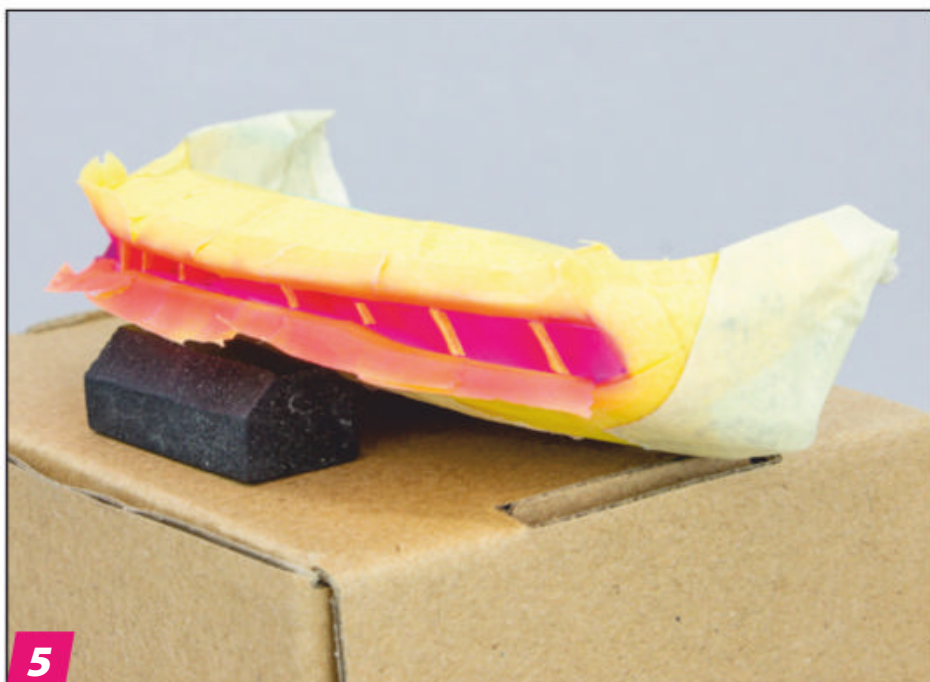
The body is engineered with separate nose and rear bumper sections. Test-fitting revealed some resin material had to be removed for a tight fit (highlighted in green). The areas in red needed to be removed because of the flush-fit wing conversion (Step 1).



Many Centenarios are highlighted by gobs of yellow accents covering almost everything. Rather than use the kit's 118 yellow accent decals, I used paint and opted for an even louder color: pink! Choose colors that are complimentary and consider compatibility when mixing paint types.



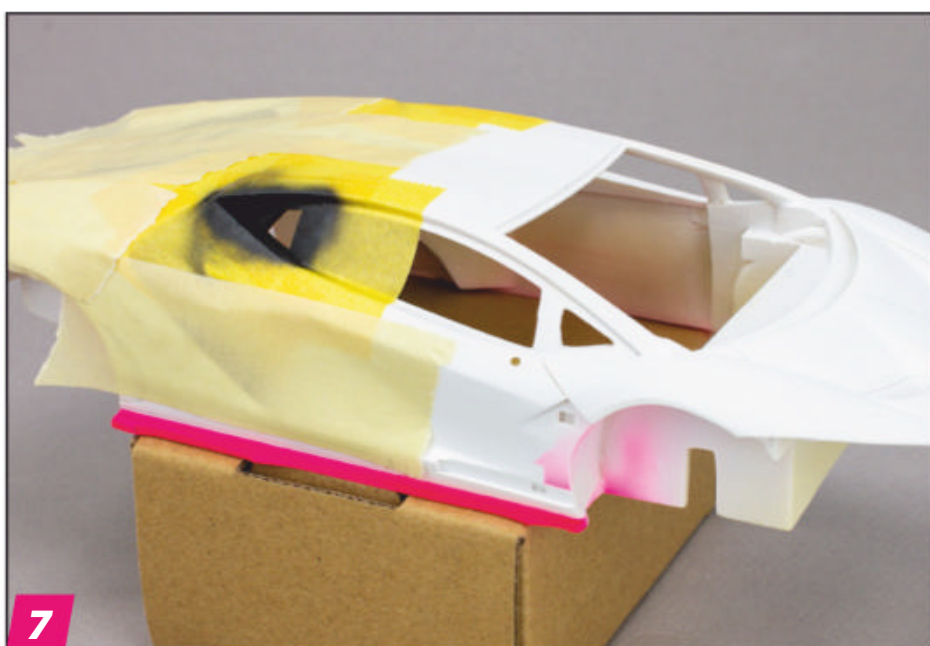
With my accent color chosen, I primed the body white and then masked everything except the accent areas. This Model Car World (MCW) Neon Pink (No. 2117) was shot in two light coats through an Iwata HP-CS airbrush at 15-18psi.



Next, I masked the pink accents. Here the vertical bars of the intake are covered with thin strips of tape. The same was done to the body's massive side intake vents and aerodynamic winglets. I airbrushed these recessed areas Tamiya Rubber Black (No. XF-85).



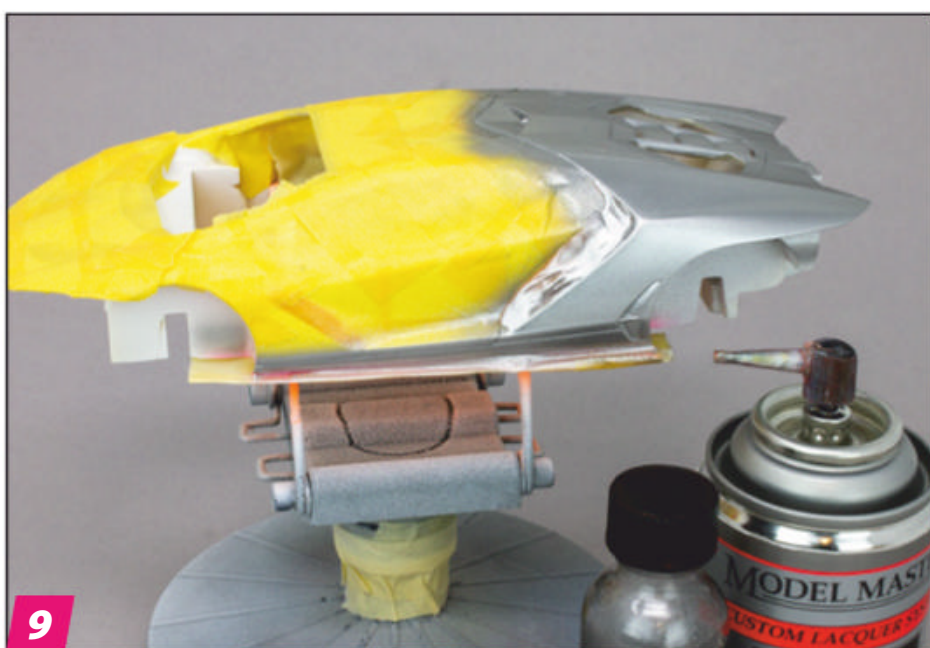
Tape is not always suitable for masking complex curves. Humbrol Maskol is a latex-based mask agent. Apply it with a brush to the ridges of the splitter and the vertical bars of the chin spoiler. It creates an even line just like tape, dries in minutes, and peels off without residue.



Before removing all the masking tape on the body sides, I made sure to address the quarter windows, which are tucked away in alcoves. These, too, were painted rubber black.



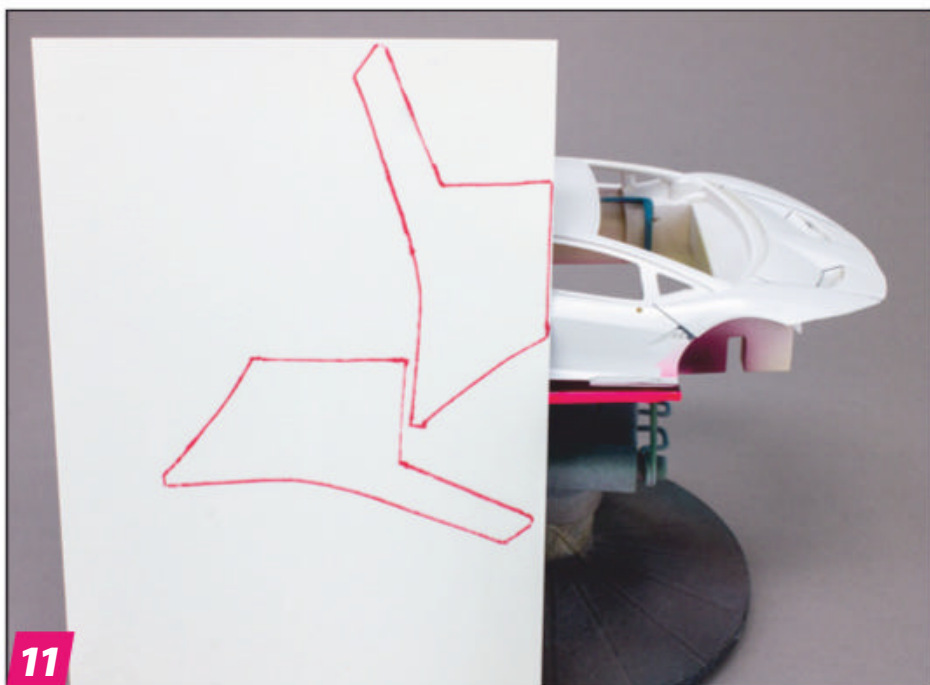
I masked the rubber black intakes and scoops. Masking such irregularly shaped areas would be difficult with masking tape and would require an exorbitant amount of liquid mask. Instead, I turn to Silly Putty for an easy, shapeable, and inexpensive masking solution.



I base-coated the body Tamiya Pearl White (No. TS-45). When the pearl white had dried, masked the front of the body leaving only the rear shell exposed. I decanted Model Master Platinum Metallic (No. 28140) lacquer and applied two light coats.



After spraying three light coats of Splash Paints Viola Ophelia (No. SP-077) over the platinum base, I removed the masks. Vallejo London Grey (No. 70.836) applied with a brush darkened panel lines. I let it dry 10 minutes and removed any excess with a thinner-soaked cotton swab.



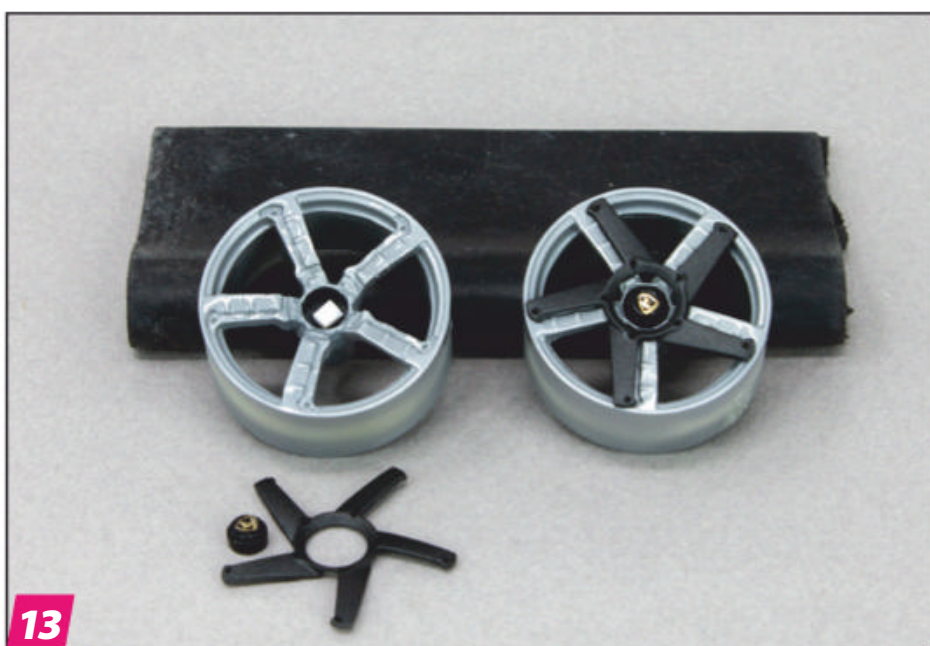
11

On the real car, the grain of its carbon-fiber roof panels runs at a 45-degree angle on one side, with a mirror image on the other side, creating a V-shaped pattern in the center where they meet. To get this look, I made a rough template of half of the Centenario's roof.



12

I traced the template on the back of the Scale Motorsports Carbon Fiber decal sheet (No. 1024), flipped it over, and traced it again, ensuring the grain of the two decals would align to make the proper V pattern.



13

Alclad II Dull Aluminum (No. ACL-117) and Model Master Metalizer Exhaust (No. 1406) worked well on the resin wheels and appliques. I inserted a .040-inch thick piece of styrene sheet beneath the central caps so they would sit more prominently from wheel.



14

With the wheel inserted into the tire, I attached a tire marking template with white glue and airbrushed a light coat of white lacquer primer. I kept the airbrush close to my work and set the pressure to 10 psi. After 5 minutes of drying time, I sprayed the neon pink in the same manner.



15

The side skirts have four small delicate winglets cast as separate pieces. Once all the paintwork and carbon fiber had been applied, I used more Silly Putty to help steady these pieces while attaching them with superglue.



16

After completing all the masking, painting, carbon-fiber decals, and winglet attachment, it was time to cover it all in clear coat. Any imperfections can be polished out, starting with 4,000-grit sanding cloth.



17

Remember when I said the masking was complete? Wrong! The carbon-fiber roof and engine cover will stand out from the rest of the body if given a different sheen. I taped off the rest of the body and applied a mist coat of Model Car World 20% Flat Clear for a semigloss sheen.



18

The center console panel has nice engraving and includes a decal for the infotainment screen. After a base-coat of Tamiya Rubber Black, I dry-brushed Testors Silver enamel (No. 1146TT) over the console to bring out the details.



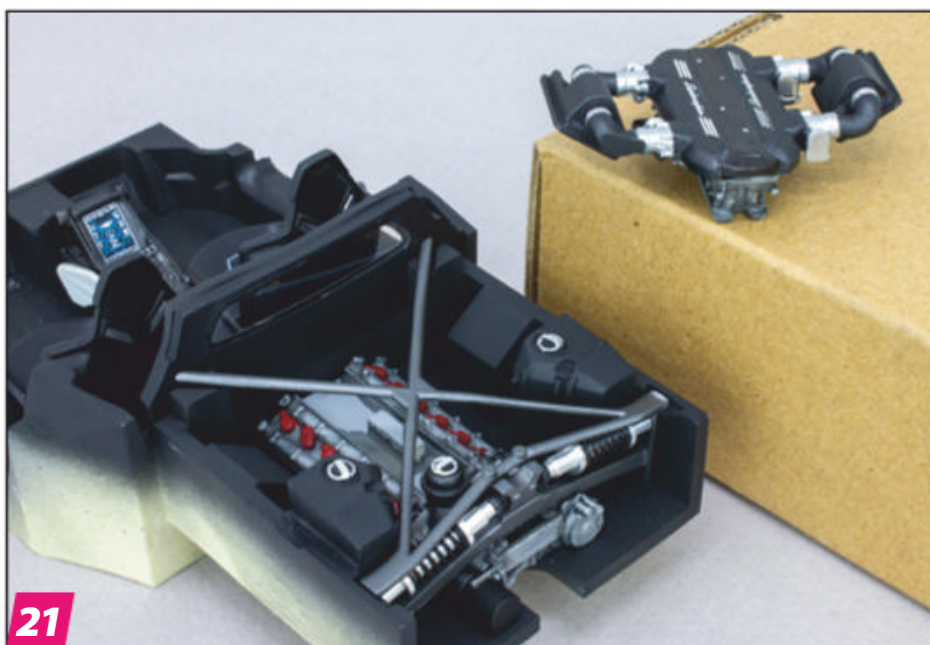
19

Before attaching the nose, the headlights and lenses need to go in. The clear lenses went on first with a strong, non-fogging superglue — Bob Smith Industries Super-Gold+ (No. BSI-127). I added a little white glue to the lights to ensure a strong bond.



20

A Lamborghini's telltale start button is enclosed in a red hexagon cover, and Alpha Models didn't forget. I brush-painted it gloss red. You can finish the rest of the interior to taste and references. Just remember that carbon-fiber grain follows the same direction as on the car's exterior.



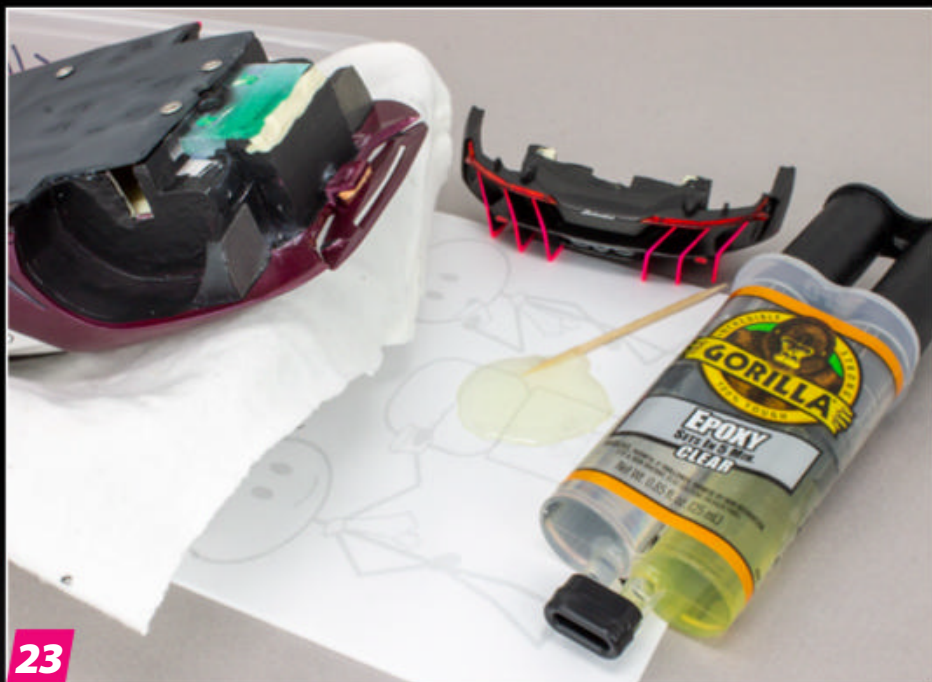
21

In the engine bay, the kit includes turned-aluminum shock housings and chrome decals for the intake manifold. However, you won't see a lot of the detail through the engine cover. If you choose to open the engine cover, you'd have a great place to start superdetailing. I passed this time.



22

The chassis plate holds the interior and engine assembly inside the body and is secured via six screws. I tapped each of the predrilled holes with a screw to remove excess resin before final assembly.



23

The completed model weighs 10 ounces. Compare that to Revell's 1/25 1969 Nova SS rolling in at 4.1 ounces. The lesson: Resin isn't light. The rear diffuser assembly needed some extra hold, so I got out the two-part epoxy to make sure it stayed put.



24

The thin, precut windows all came printed with a black frit band. I applied a sparing amount of BSI Super-Gold+ to the window opening and gently pressed the windows in place. The side windows included a PE frame that needed to be shaped prior to installation.





FINAL THOUGHTS

A WILD HYPERCAR like the Centenario makes a perfect canvas for an unconventional paint scheme. To pull it off, you'll have to make use of your masking skills with tape, liquid mask, and Silly Putty. But once you have those in your toolbox, set your imagination loose! **FSM**





Tamiya M18 Hellcat

Tamiya is the master of well-engineered and molded kits that are easy to build and have enough detail to satisfy most modelers.

The new M18 Hellcat epitomizes that characteristic. As an open-top vehicle, it needs interior features. Straight from the box, the turret and fighting compartment look appropriately cramped and busy, so you can really appreciate how tight the crew spaces were on the full-size Hellcat.

The kit includes a well-sculpted figure, link-and-length tracks, and clear parts for periscopes and headlight lenses. There are subtle differences between the two M18s included in the marking options, so you need to decide early — at least before Step 13.

The fighting compartment includes a floor with molded hatches and diamond tread, a firewall with molded mechanicals, and an electric motor. The kit doesn't include driver compartment detail, but the gun and its associated equipment block the view in that direction. However, the hatches in that area are posable and have detail inside, so modelers may want to add those features.

The suspension and running gear went together easily. Polycaps leave the drive sprockets movable, a helpful feature when fitting the tracks. I left the wheels and tracks separate for painting. Fitting the tracks after the fenders are on is possible but leave the idlers off until the top run is in place.

The exhausts were molded with the upper hull. They, along with the compartment around them,

will need to be painted before the rear plate and grille are attached. Only the seam at the nose between the upper and lower hulls need filler.

The instructions call out decal locations, and there are a couple that should be applied before some tools are added. Don't fit the shovel to the rear plate, the pry bar on the port side, and the stowage baskets on the turret until after painting and decals or you'll have to remove the parts. Trust me, I know.

Despite the number of parts and the tight quarters, the turret went together without issues. The three-part plastic mantlet dust cover looks great, but the gun's elevation is not posable. Take care removing the scale-thin handholds and the brush guard that runs over the turret. The latter is particularly fragile, and I had trouble eliminating the sprue attachments. Further, I broke that part twice during decal application and weathering.

I painted the M18 with AK Interactive Real Color Olive Drab (No. RC023) and post-shaded with a little Olive Drab Faded (No. RC024). The decals went down beautifully over a layer of Mr. Color Clear Gloss (No. C46).

The sharp surface detail, including weld seams, popped under washes and dry-brushing. Using a fine brush, I dabbed olive drab on to chip the decals, especially the national insignia and the big, bright vehicle ID numbers.

The figure fits together well and has a nice, relaxed pose. I painted it with Vallejo and Andrea acrylics.

The instructions include a 1/35

scale map to cut out, fold, and place in his left hand. He wears binoculars around his neck, but it lacks a strap. I used thin strips of tape painted black to represent it.

After getting the model together and photographed for the review, I realized I forgot to attach the tow cable, which is provided as a piece of string with separate molded ends.

Tamiya has given modelers a terrific Hellcat that is a blast to build. I spent about 20 hours on mine, a little more than a typical 1/35 scale tank because the open interior complicates painting. The result is a terrific addition to my display shelves, and I heartily recommend it to anyone with a couple of armor models under their belt.

— Aaron Skinner



Kit: No. 35376 **Scale:** 1/35 **Mfr.:** Tamiya, tamiya.com (Sample courtesy of Tamiya America, tamiyausa.com) **Price:** \$54

Comments: Injection-molded plastic (olive drab, clear); 333 parts (2 vinyl, 1 string); decals **Pros:** Outstanding engineering and fits; decent interior; sharp decals; good figure; nicely molded mantlet dust cover; link-and-length tracks **Cons:** Delicate, scale-thin handrails and dust guards are difficult to clean up



ICM B-26K Counter Invader

According to the National Museum of the United States Air Force, the Douglas A-26 Invader saw use as an attack bomber during World War II. Redesignated B-26 in 1948, the aircraft performed similar duties during the Korean War. Pulled from service in 1958, the U.S. brought them back as tactical bombers in Southeast Asia in 1961, and finally took them off active duty in 1964.

However, that wasn't the end. In 1966, the U.S. government brought the 40 B-26s out of retirement and converted them to B-26Ks with rebuilt fuselages, strengthened wing, reversible propellers, and other improvements. Redesignated A-26A, Counter Invaders performed ground-attack missions along the Ho Chi Minh Trail and served in Vietnam until 1969, and then later retired from service.

ICM has manufactured the earlier A-26/B-26 Invader and ends up supplying most of the parts, so end up discarding a lot of plastic, including whole upper and lower wings. However, this is the only 1/48 scale B-26K on the market, and you'll be happy to know it lives up to the ICM's past quality.

Construction starts with the cockpit: good detail, but not too busy. The seats could use photo-etched metal (PE) seat belts or a decal equivalent, but none are provided. I made seat cushions with Milliput to fill ejector-pin marks in the seat bottoms. Color call outs for the main cockpit are "Lime Green" or zinc chromate. However, upon further investigation, it should be ghost gray or neutral gray. (This was the only color discrepancy I saw.) The color guide calls for the use of ICM, Revell, or Tamiya paints; I used Tamiya predominantly in my build.

Once you've cemented the fuselage halves together, assemble the nose section containing the eight .50-caliber machine gun barrels. The kit's barrels look like thick plastic rods sticking out of the nose. I replaced mine with spares I had from a Monogram B-25J and drilled the tips. After doing so, I realized those guns were fitted with blast tubes, so the kit parts are correct.

Speaking of the nose, you'll have to add a lot of weight up front to prevent your B-26K from sitting on its tail. The tail weighs 40 grams, so I added more than that to make sure. Don't worry about the landing gear — the legs are strong and look realistic with separate tires and wheel hubs for easy painting.

You can opt to model the bomb bay doors open or closed with different parts for either provided. The single-piece clear canopies can't be opened, unless you're braver than I and cut them apart.

The multipart engines with separate exhaust pipes look great when complete. However, you don't see much of them when everything is closed up. Interestingly, exhausts are molded as a single part, but look accurate and to scale.

ICM's B-26K goes together quite well and quickly. Painting is straightforward. The instructions provide templates for window masks, and I used poster putty as a mask in some cases. On the other hand, the decals were the most finicky I've used. Super thin, they tended to form a small crinkled ball after I removed them from the backing paper. I had to use the walk ways from another variant in the kit, so my model is inaccurate compared to the real bomber. Further, my sample kit didn't contain any weapons. The kit provides colorful painting instructions and decals, but there was no plastic to be glued.

ICM did a great job with this kit. I've always wanted a 1/48 B-26K, so I was ecstatic when it was announced. It will look awesome next to my AU-23, O-2, and other Vietnam-era aircraft.

— Caleb Horn

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- Airfix 1/72 scale Avro Vulcan
- Academy 1/35 scale PzKpfw II Ausf F
- HobbyBoss 1/48 scale F/A-18E Super Hornet ▼



Kit: 48279 **Scale:** 1/48

Mfr.: ICM, icm.com.ua (Sample courtesy manufacturer) **Price:** \$107.99

Comments: Injection-molded plastic (light gray, clear); 345 parts; decals

Pros: Ease of assembly **Cons:** Delicate decals; my sample missing weapons



NuNu Porsche 935 K3

We all have ideas of iconic cars that for whatever reason seem to have been overlooked by the kit manufacturers. For sportscar fans, the 935 K3 (Kremer Type 3) has to rank up there at the top of the list. Thankfully, the wait is finally over! NuNu/Platz new release is basically a modified reissue of the K2 kit that came out a couple of years ago with new parts to update it to the K3. (You can find reference photos for your K3 build at Canepa.com.)

The majority of the chassis is identical to the K2 with the main change being the upgrade from a single to a dual turbo-charger setup. I did find it necessary to notch the engine front (Part A4) so the exhaust pipes would align with the turbos. The lower part of the engine is molded to the chassis; I cut it loose just to make painting easier. I used Tamiya NATO Black (No. XF-69) for the chassis to add a little

contrast, along with a variety of silvers from Alclad II and Testors. The remainder of the assembly went smoothly.

NATO black was used as the base color for the interior as well. I assembled the roll cage and painted it as a unit with Tamiya Bare Metal Silver (No. AS-12). The kit contains decals for the instruments, but the white printing on my set was off register. (I have a second kit, and they looked fine in it.) Decals are also used for the seat belts, but I'd recommend replacing them with aftermarket items for a better overall aesthetic. Everything fit perfectly, and although spartan, it depicts the real car well.

There are several versions of the K3 planned, and each variant had slightly different ducting in the rear fenders. NuNu molded those as separate multiple parts and they were a bit of a pain. Most of the time I spent building this kit was assembling and removing seams from the rear fenders. While the fit is pretty good, make adjustment prior to attaching them to the body. The multipart rear hood and wing require the same attention to get right.

I sprayed three coats of Tamiya Pure White (No. TS-26) on the body.

Be cautious of paint buildup: Some of the body parts don't have much wiggle room and paint will affect fit.

The decals were excellent. The most difficult to place is the hood stripe going over the louvers. I applied the decal as normal, making sure it was aligned perfectly, and then just let it set up for a while. Once it had dried enough that it wouldn't slide around, I used a sharp new hobby blade to slice along the trailing edge of each louver and then applied some Micro Sol to settle them in. That was the only place I used setting solution.

We may never know why some of these cars take so long to finally come out in kit form, but maybe the wait makes the release just a little sweeter. Is the NuNu/Platz Porsche 935 K3 a perfect kit? No. However, it builds up well with just a little effort and captures the look.

I'd recommend it to modelers with at least a moderate amount of experience. The work required for the rear fenders would be daunting for a novice. Overall I'm extremely pleased with the final result and look forward to seeing more versions.

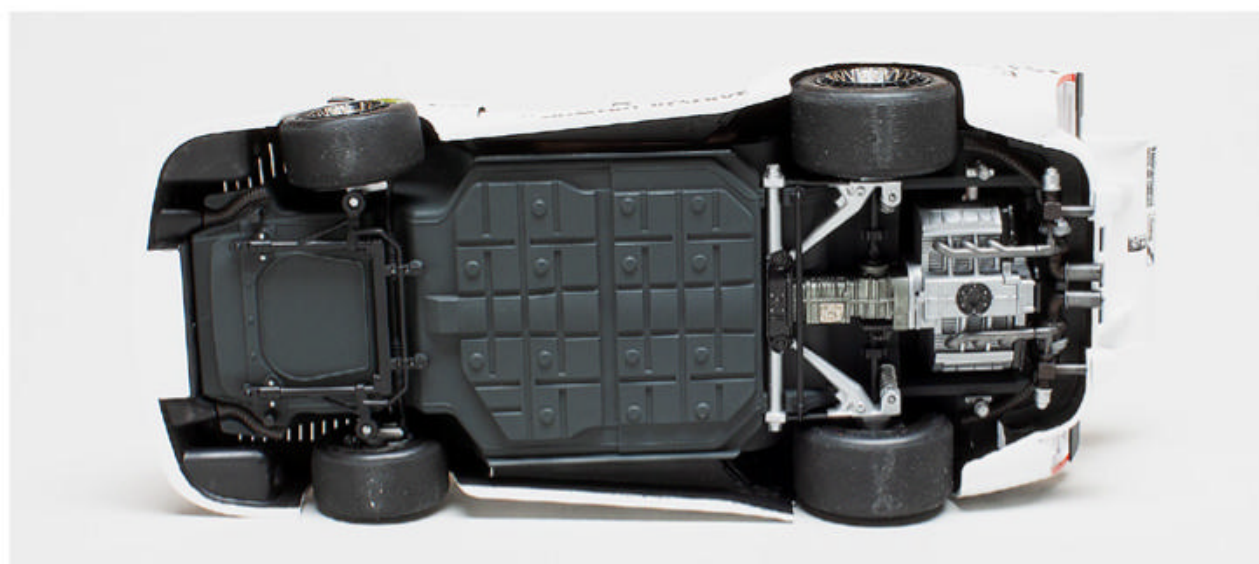
— Mike Klessig



Kit: 24006 **Scale:** 1/24 **Mfr.:** NuNu Models, nunumodelkit.com

Price: \$89.99 **Comments:** Injected-molded plastic; 135 parts (8 rubber); decals **Pros:** Excellent decals; only plastic scale model kit of this subject

Cons: Multipart rear fenders tough to get right



Polar Lights *Star Trek* USS *Voyager*

Whenever a new *Star Trek* movie or show premieres, one of the first things I want to see is the ships. I usually like what I see (except for the *Enterprise-D*), but I was especially drawn to the USS *Voyager* from the series *Star Trek Voyager*. It's sleek and different from other ships seen up to that time.

While Monogram produced a 1/677 scale kit of *Voyager* when the show was new, the arrival of the Polar Lights 1/1000 scale kit is great because it fits with the rest of the brand's constant-scale *Trek* kits and gives a sense of the ship's size compared to others in that universe; it's bigger than I expected.

Molded in light bluish-gray plastic that matches the ship's hull color and designed to snap — or more accurately push — together, *Voyager* is accessible for new and

less-experienced builders.

Good painting instructions with detailed color information are on the sides of the inner tray and the extensive decal placement diagram is a separate sheet. Sharply printed, the decals provide some of the larger windows, lifebuoy covers, various hull plate, stripes and registry numbers, and a bunch of stencils. Come to this project prepared to spend plenty of time adding decals, because there are many.

Assembly is straightforward with large tabs and overlapping joins for a mostly-clean finish. However, I had to use plenty of filler and sanding to eliminate the seam between the upper and lower halves of the primary hull. It is front and center, so take your time making it as good as it can be. Pay special attention at the rear of the pri-

mary hull where the gap moves underneath; it is difficult to sand after the secondary hull is attached.

The warp nacelles have clear inserts for the Bussard collectors and inter-coolers. Sandwiched hinges allow the nacelles to pivot about 45 degrees to display the ship going into warp. I left the engines separate for painting.

Using a masking set from Aztek Dummy (No. AD-73), I painted several areas with Tamiya Light Gray (XF-66). After adding masks, I airbrushed AK Interactive Real Color Light Sky Blue (No. RC240), then masked panel edges and sprayed MRP Light Sky Blue (No. MRP-397), which is a hair darker and sprayed feathered lines to match the filming miniature.

— Aaron Skinner



Kit: No. POL980M **Scale:** 1/1000
Mfr.: Polar Lights, round2models.com
Price: \$55.99 **Comments:** Injection-molded plastic (blue gray, clear); 45 parts (1 metal); decals **Pros:** Easy build; posable warp engines; good decals **Cons:** Gaps need cleanup

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In this DLC, Greg Kolasa shows you how to build a better short-body Huey by grafting a HobbyBoss nose and tail onto a Monogram UH-1 body. Anders Isaksson finishes Arma Hobby's 1/72 scale Hurricane as a North Africa theater fighter. There is also a terrific Tiger story from newcomer Arnaldo D'Orazio and a singular *Star Wars* diorama from Luke Easter. Download your DLC copy today at [FineScale.com/Dec2021DLC](https://www.finescale.com/Dec2021DLC).



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CA, VENTURA: MODELFEST '22. Sunday, February 27, 2022. 8:30am-3:00pm. Plastic model contest and swap meet to be held at Seaside Park / Ventura County Fair Grounds. 10 W. Harbor Blvd., Ventura, CA 93001. Admission \$10 per person. State parking fee \$8. For more information contact Vernon Morseman at 805-658-8138

IL, WHEATON: 79th ILLINOIS PLASTIC KIT & TOY SHOW. February 27, 2022, 9am-2pm. Dupage County Fairgrounds, 2015 W. Manchester Rd., Zip: 60187. Adults: \$5.00, children under 12 yrs: \$2.00. 150 tables available, BUY/SELL/TRADE OR JUST BROWSE. Come out and have a great time. Cars, Trucks, Airplanes, Trains/Military, Fire/Police, Muscle Cars. Re-live your childhood memories. Past-Time Hobbies, Inc. 630-969-1847

LA, NEW ORLEANS: IPMS Flying Tigers. Saturday, April 2, 2022. St. Jerome Knights of Columbus Hall, 3310 Florida Ave., Kenner LA 70064. 9am - 5pm. Tiger Fest 27, model contest and show "That's Entertainment." \$10 first model, \$2 (admission only). Contact Jay Andry: jayandry42@gmail.com or 504-495-8814. Facebook: IPMS Flying Tigers

*All listed events were confirmed as active at the time of press.
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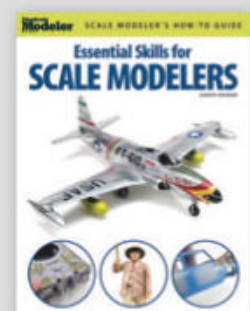
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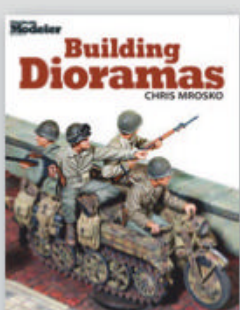
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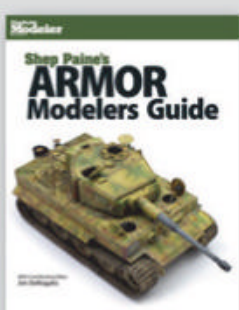
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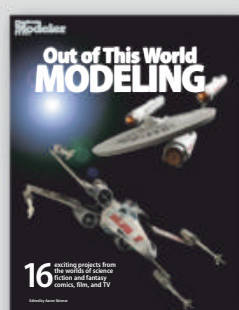
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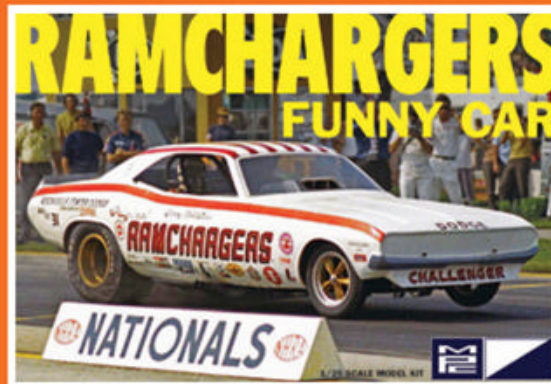
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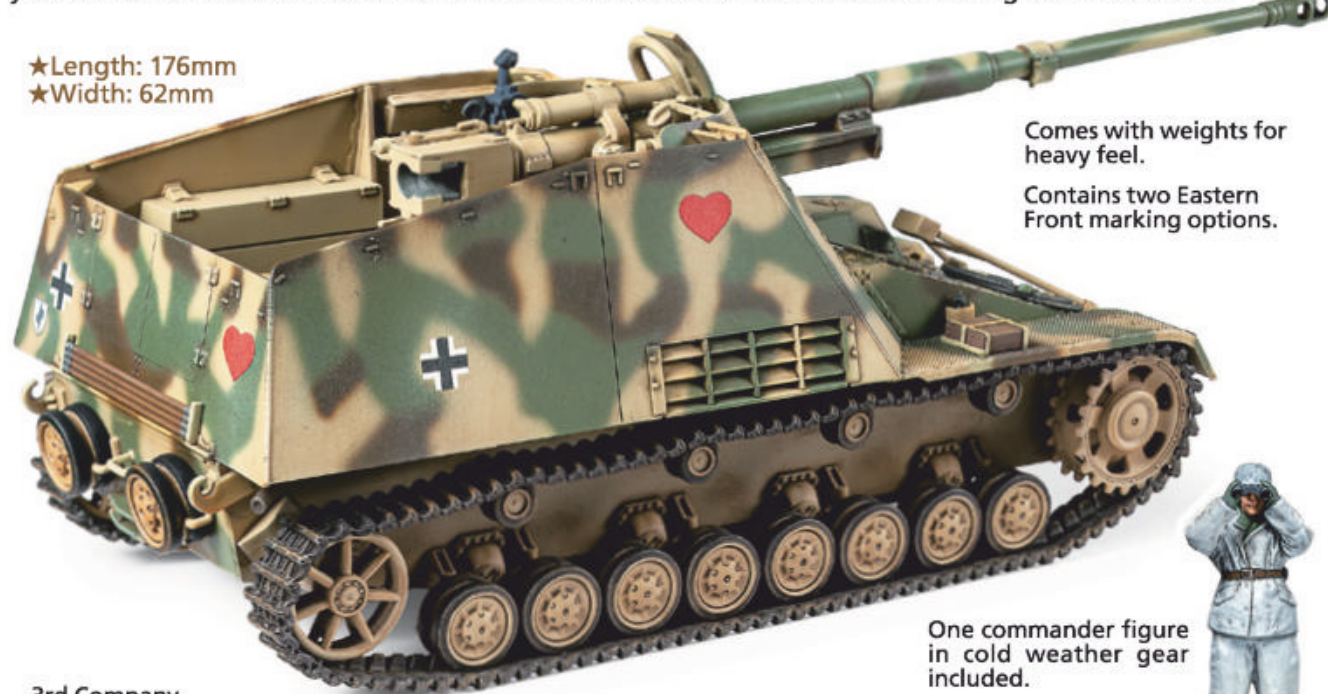
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