GO BIG AND LIGHT UP A SPINDRIFT

FineScale.com

FineScale Modeler®

40TH 1982•2022 ANNIVERSARY

December 2022 DLC

p. 18

DOWNLOADABLE DLC CONTENT

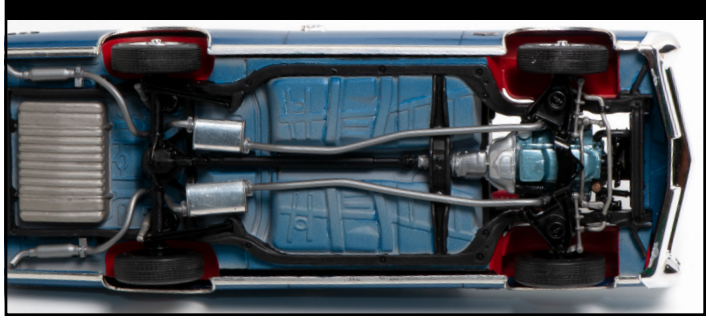
BUILDING OUT OF THE BOX DOESN'T MEAN SIMPLE MODELS

PERFECT A BIG THUNDERBOLT p. 4

BASIC TECHNIQUES, ADVANCED RESULTS

POLISH UP A GRILLE SPG p. 26

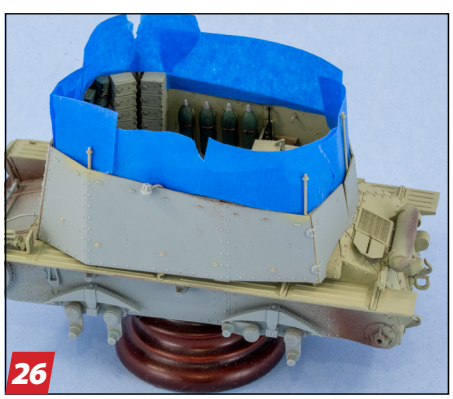
DETAIL A CAR CHASSIS WITH PAINT p. 34



CONTENTS

December 2022 DLC /// No. 005

FEATURES



By Aaron Skinner

Be part of your magazine

The end of *FineScale Modeler*'s 40th anniversary is upon us, and, as I look back on it and the 39 years that preceded it, I can see the changes the magazine his undergone.

Many of those changes reflected developments in the hobby. In 1982, as now, injection-molded plastic kits were the norm, but early *FSM* stories covered white-metal and vacuum-formed models. Both of those have largely fallen by the wayside. In their place, *FSM* stories, modern kits, and the aftermarket abound with photo-etched metal and resin. Increasingly, modelers are turning to 3D-printed parts, a development seen in the magazine and on FineScale.com.

One thing that has not changed is the origin of most of the stories published by *FineScale Modeler*. From its inception, the majority of the magazine's stories have been written by readers just like you. In his first editor's note, founding editor Bob Hayden invited readers to contribute. That is still the case. While *FSM* staff members have always built, there's no earthly way we alone can produce enough stories to fill six print and four DLC issues a year — so we rely on contributors to share their modeling knowledge.

"But I've never written before, and I'm not a professional modeler," I hear you say. Sure, over the years, the magazine has attracted some well-known names, including Francois Verlinden, Bob Steinbrunn, Steve Zaloga, and Tony Greenland. But just as significant are the hundreds of lesser-known but just as creative and talented modelers whose work and writing has graced the pages of the magazine and, increasingly, the website. All of them got up the nerve to send in photos and stories for the editors to consider. Some of those first-timers have become regular contributors.

Yes, quality photos are essential and the ability to put thoughts into words good — we can help you with both of those — perhaps the most important thing for an *FSM* contributor is willingness to share. Sure, we want to see a quality model, but how did you get there? Show us and describe your assembly, painting, finishing, and weathering techniques. In many cases, the best *FSM* stories focus on two or three of these techniques, rather than trying to show an entire project from box opening to display case closing.

An easy way to get into writing an *FSM* story is take photos of your build as you go, pick the ones that best illustrate the techniques involved, and write captions describing what you are doing in each image. Before you know it, you'll have a story you can submit.

We have submission guidelines available for download at the "Contribute to FSM" link under the "About Us" tab on FineScale.com. If you have questions or want to run a story idea by us, email me at askinner@FineScale.com or Tim Kidwell at tkidwell@FineScale.com. We are here to help.

As you read this, Build a Model Month is in full swing. Get to the bench, build with someone else, and share your models and experiences.

Happy modeling!

editor@finescale.com

FineScale Modeler

Editor Aaron Skinner
Editor, Scale Modeling Brand Group Tim Kidwell
Assistant Editor, Digital Kendra Bell
Assistant Design Director Scott M. Krall
Editorial Associate Monica Freitag

ART & PRODUCTION
Design Director Tom Danneman
Illustrator Kellie Jaeger
Production Coordinator Sue Hollinger-Klahn

REGULAR CONTRIBUTING MODELERS
John Bonanni, Tim Boyd, Paul Boyer, Andy Cooper, Raúl Corral, Chris Cortez, Marcos Cruz, Frank Cuden, Chuck Davis, Jonas Dahlberg, Walt Fink, Tom Foti, Phillip Gore, James Green, Caleb Horn, Ted Horn, Joe Hudson, Jim James, Mark Jones, Mark Karolus, Andy Keyes, Rick Lawler, Rafał Lebioda, Ulf Lundberg, John Maher, Chris Oglesby, Jeff Pollizzotto, Bill Plunk, John Plzak, Darren Roberts, Chuck Sawyer, Mike Scharf, Cookie Sewell, Bob Steinbrunn, Don Suratos, Karel Sutt, Matthew Walker, Jim Wechsler, Adam Wilder

KALMBACH MEDIA
Chief Executive Officer Dan Hickey
Chief Financial Officer Christine Metcalf
Senior Vice President, Consumer Marketing Nicole McGuire
Vice President, Content Stephen C. George
Vice President, Operations Brian J. Schmidt
Vice President, Human Resources Sarah A. Horner
Circulation Director Liz Runyon
Director of Digital Strategy Angela Cotey
Director of Design & Production Michael Soliday
Retention Manager Kathy Steele
Single Copy Specialist Kim Redmond

EDITORIAL
262-796-8776

ADVERTISING DEPARTMENT
888-558-1544
Advertising Sales Representative
Michael Wieloch, Ext. 625
mwieloch@kalmbach.com
Ad Production
adservices@kalmbach.com

RETAIL, TRADE ORDERS, AND INQUIRIES
Selling *FineScale Modeler* magazine or products in your store:
Phone 800-558-1544
Outside U.S. & Canada 262-796-8776, Ext. 818
Fax 262-798-6592
E-mail tss@Kalmbach.com
Website retailers.kalmbach.com

CUSTOMER SALES AND SERVICE
Phone 877-246-4847
Outside the U.S. and Canada 903-636-1125
Customer Service
customerservice@FineScaleModeler.info

SPECIAL E-MAIL & WEB ADDRESSES
Ad Sales adsales@FineScale.com
Letters to the Editor editor@FineScale.com
New Products mfreitag@FineScale.com
Reader Gallery Contribute.Kalmbach.com
Reader Questions questions@FineScale.com
Reader Tips tips@FineScale.com

 Printed in the U.S.A. Allow 6 to 8 weeks for new subscriptions and address changes. Single copy: $7.99 (U.S.). Print + digital subscription rate: U.S.: 1 year $52.95. Canadian: Add $8.00 postage. Canadian price includes GST, payable in U.S. funds. All other international: Add $16.00 postage, payable in U.S. funds, drawn on a U.S. bank. BN 12271 3209 RT. Not responsible for unsolicited materials.

Kalmbach Media

Please Recycle This Magazine

Build a better

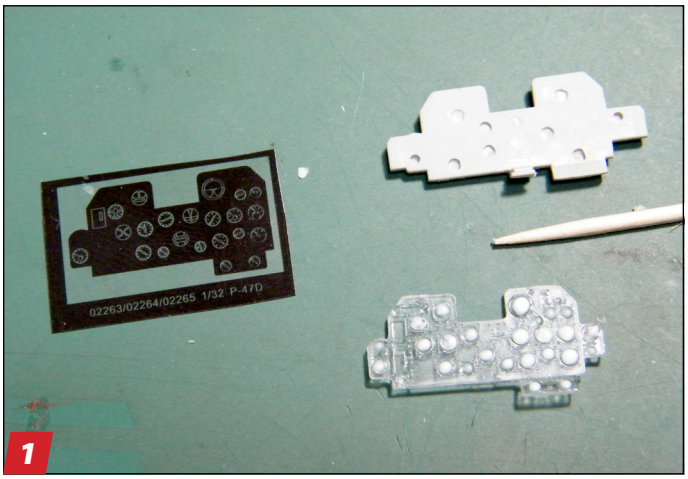
Capt. Fred Christensen was the fourth highest scoring ace of the famed 56th Fighter Group, known as Zemke's Wolfpack, one of the U.S. Army Air Forces' highest scoring fighter units in World War II. Among his 21½ kills were six Ju 52 transports he shot down in less than two minutes on July 7, 1944. He went on to serve as with the Massachusetts Air National Guard and then the Air Force Reserve before retiring in 1981.

I wanted to build one of his personal aircraft, a Republic P-47D-25-RE named *Miss Fire/Rozzie Geth II*. To do it justice, I grabbed Trumpeter's 1/32 scale bubble-top Thunderbolt (No. 02263), which features outstanding surface detail and construction options so the project was all about a clean build and finish.

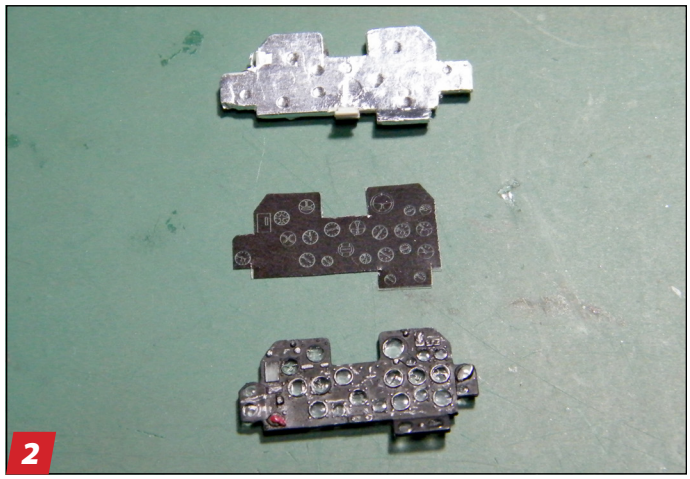
Miss Fire

Basic techniques perfect Trumpeter's 1/32 scale P-47D

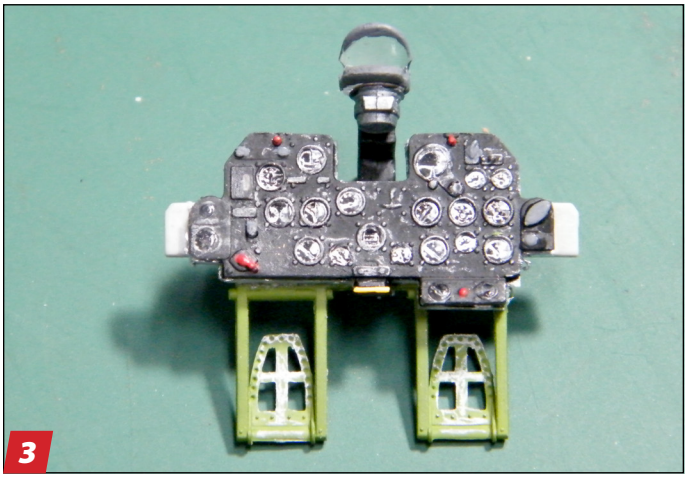
BY JOHN C. BACKENSTROSS



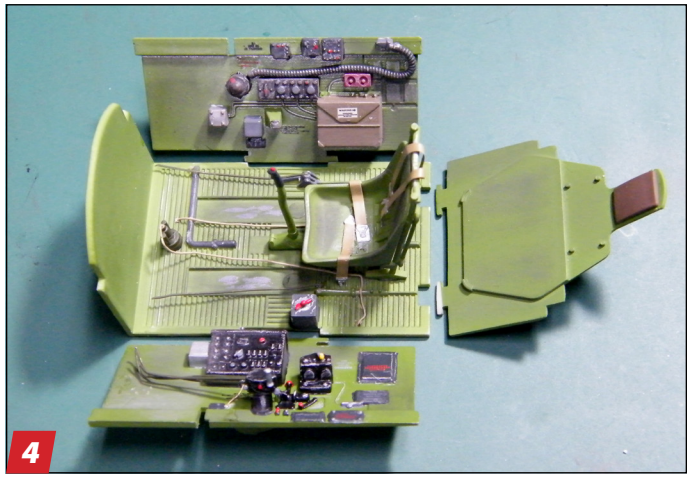
The instrument panel builds from film with printed instruments sandwiched between a gray rear section and clear front. I applied Micro-Mark Mask-it Easy Liquid Masking Film (No. 80923) to the clear instrument faces with a toothpick and allowed it to dry.



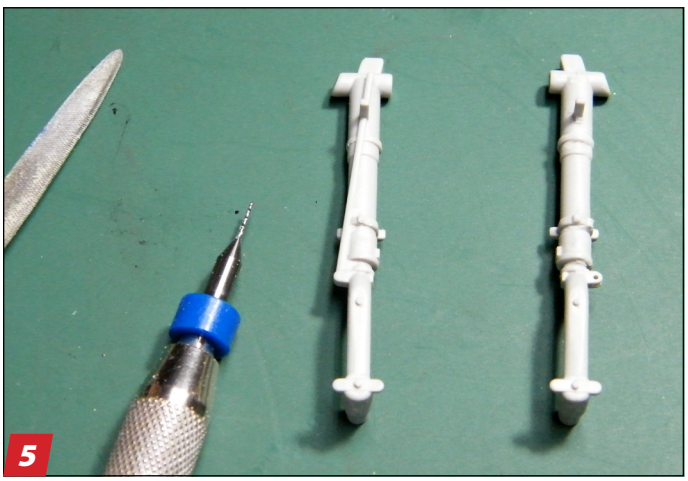
After painting the clear part black, I picked out switches by hand and ran a silver pencil over raised detail. Then I carefully removed the liquid masking film with a toothpick. Bare-Metal Foil Chrome (No. 001) on the rear plate will enhance the film's gauge detail.



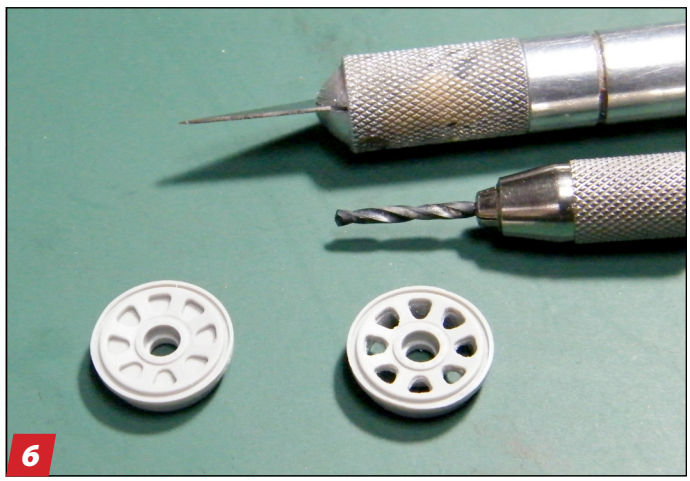
I carefully glued the plates and film together with a small amount of superglue and added the pedals and gunsight for a convincing panel.



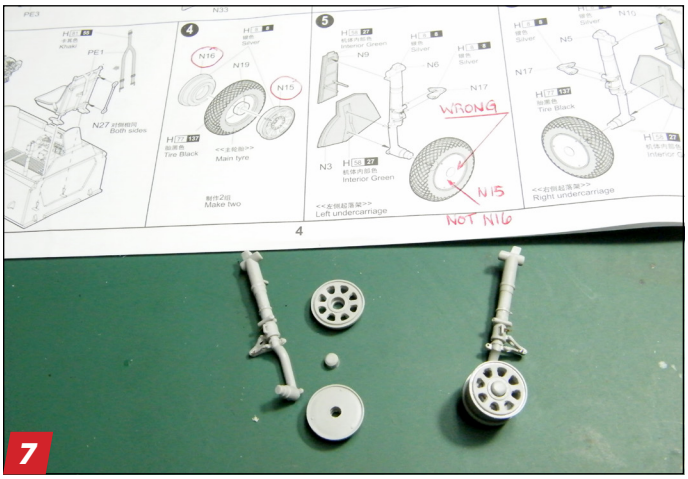
I airbrushed the cockpit walls, floor, and bulkhead with acrylic interior green and picked out details, including the photo-etched (PE) metal seat harness, by hand. To add electrical wiring, I glued .012- and .015-inch wire between various boxes and equipment on the floor and sides.



The actuators molded on the landing gear struts looked clunky. So, I removed them using a flat needle file to make room for a more accurate arm made using .025-inch music wire. I opened the eyelet with a .015-inch bit chucked in a pin vise.

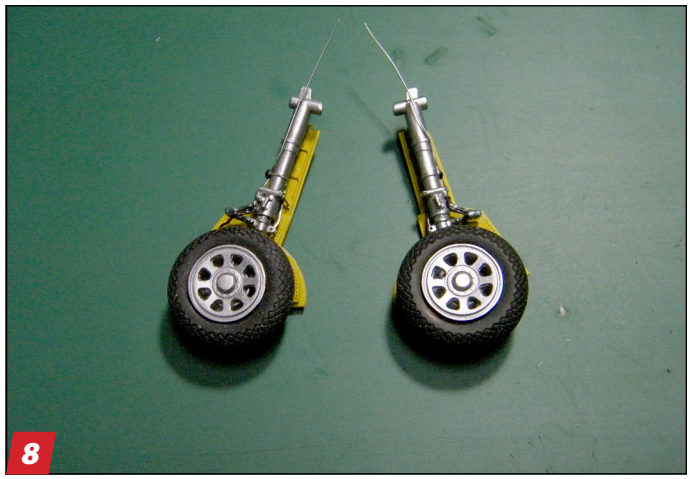


To improve the kit wheels, I opened the hub lightening holes, drilling them out with a .077-inch bit in a pin vise. Then I used the tip of a No. 11 blade to carefully scrape away any remaining plastic.



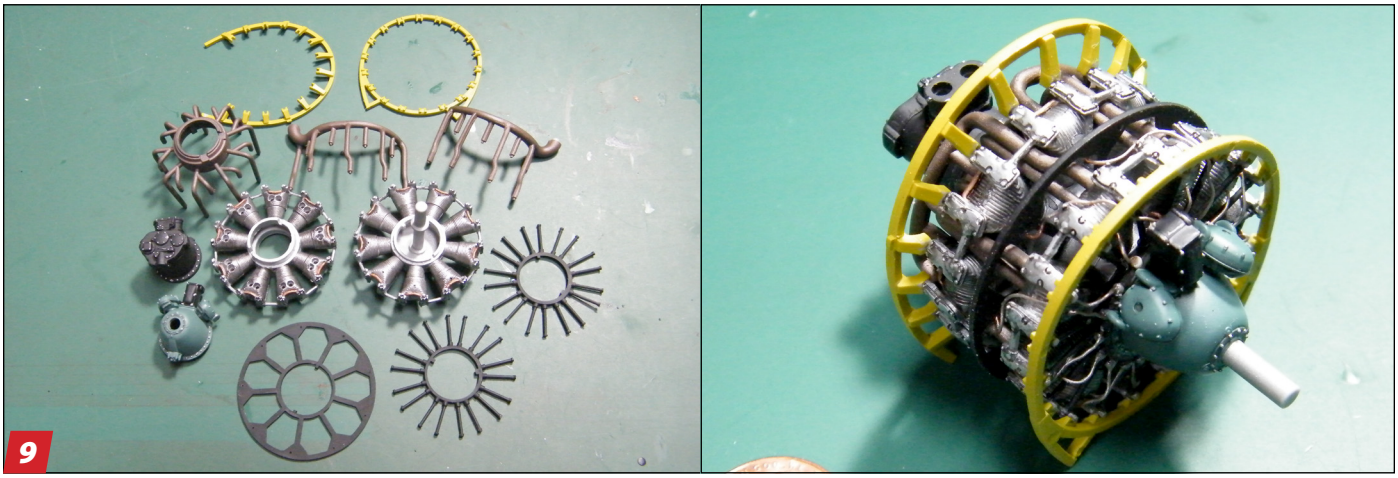
7

The kit has the inner face of the main wheels spoked, but it should be relatively smooth. I flipped the parts, drilling a hole in the smooth cap (Part N16) with a .120-inch bit to fit the axle. To fill the hole in the spoked hub, I rounded a .155- x .100-inch piece of sprue.



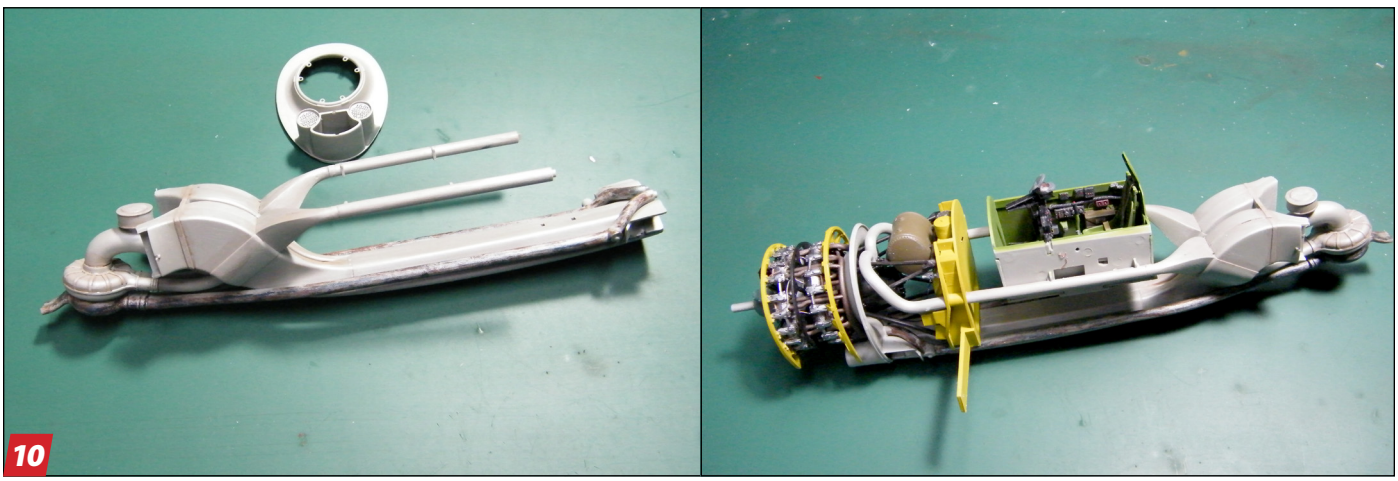
8

Before adding the vinyl tires, I airbrushed the struts and wheels with Alclad II Dark Aluminium (No. ALC103) and added brake lines using .014-inch wire. The inside of the gear doors was painted with Mr. Hobby Interior Green (No. H58).



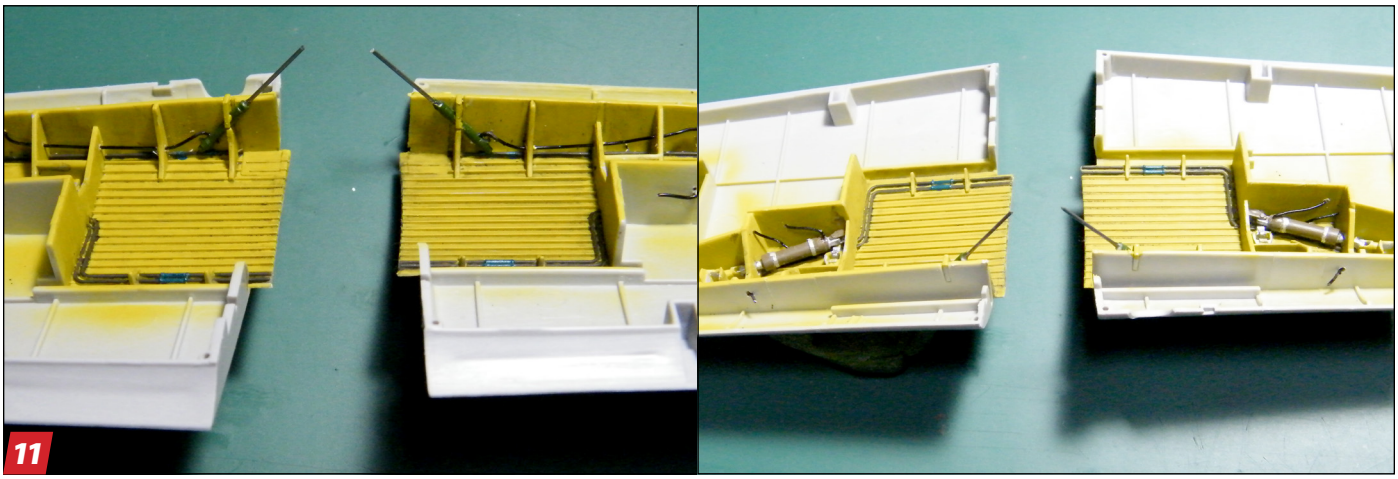
9

I painted the engine mounting bracket with Mr. Color Interior Green (No. C27), the cylinders Alclad II Dark Aluminium (No. ALC103), exhaust manifold with 1 part Tamiya Metallic Grey (No. XF-56) and 1 part Red Brown (No. XF-64), reduction gear housing 3 parts Tamiya Light Sea Grey (No. XF-25) and 1 part Medium Blue (No. XF-18), and the rear engine assembly Tamiya Flat Black (No. XF-1). Installing .015-inch copper wire to the engine cylinder heads for the ignition harness quickly added realism.

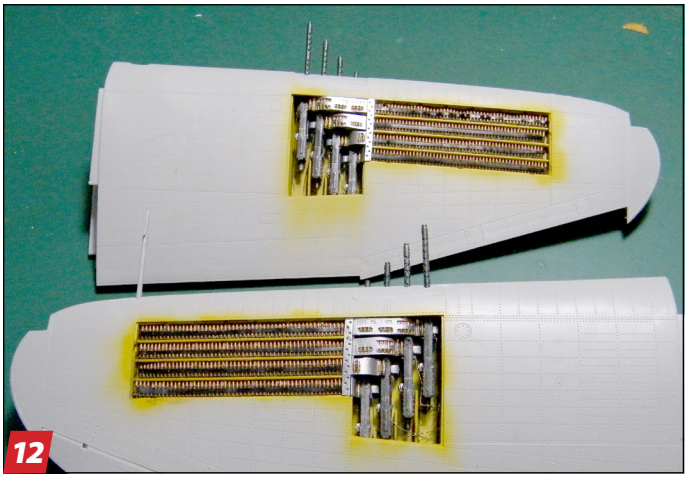


10

Despite the supercharger system being invisible on the finished model, I airbrushed it with a mix of 3 parts Tamiya Titanium Silver (No. X-32) and 1 part Deck Tan (No. XF-55). A dry-brushed mix of 1 part Dark Iron (No. XF-84) and 1 part NATO Brown (No. XF-68) followed by dry-brushed Vallejo Model Color Gunmetal Blue (No. 70.800) corroded the exhausts; a pinwash of thin Vallejo German Camouflage Black Brown (No. 70.822) finished the system before I attached the engine, firewall, and cockpit.



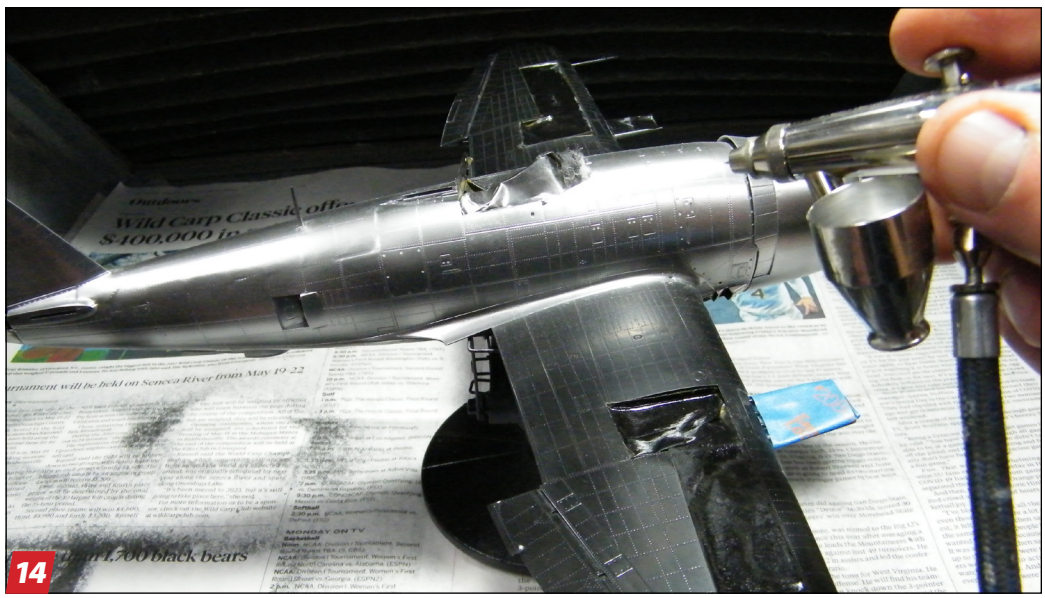
In the main gear bays, I added .019-inch black wire for hydraulic hoses and replaced the kit's plastic pushrods with .030-inch music wire on the gear door actuators.

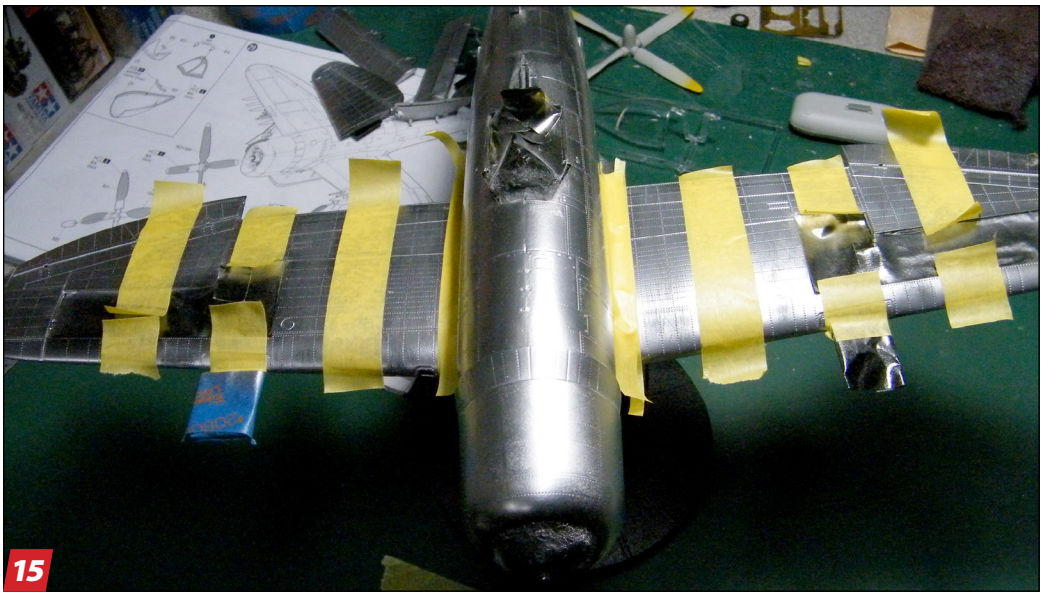


The kit includes plastic parts for .50-caliber ammunition in the open bays in the wings. To replicate the metal machine-gun cartridge belts, I cut narrow strips of black electrical tape and stuck them in place.

In preparation for a finish of Alclad II metallic lacquers, I primed the airframe with Rust-Oleum Acrylic Lacquer Gloss Black (No. 253365). I smoothed the paint by wet sanding with a 3000-grit foam sanding pad.

Satisfied that the surface was perfectly prepared, I airbrushed the model with Alclad II Polished Aluminium (No. ALC105).



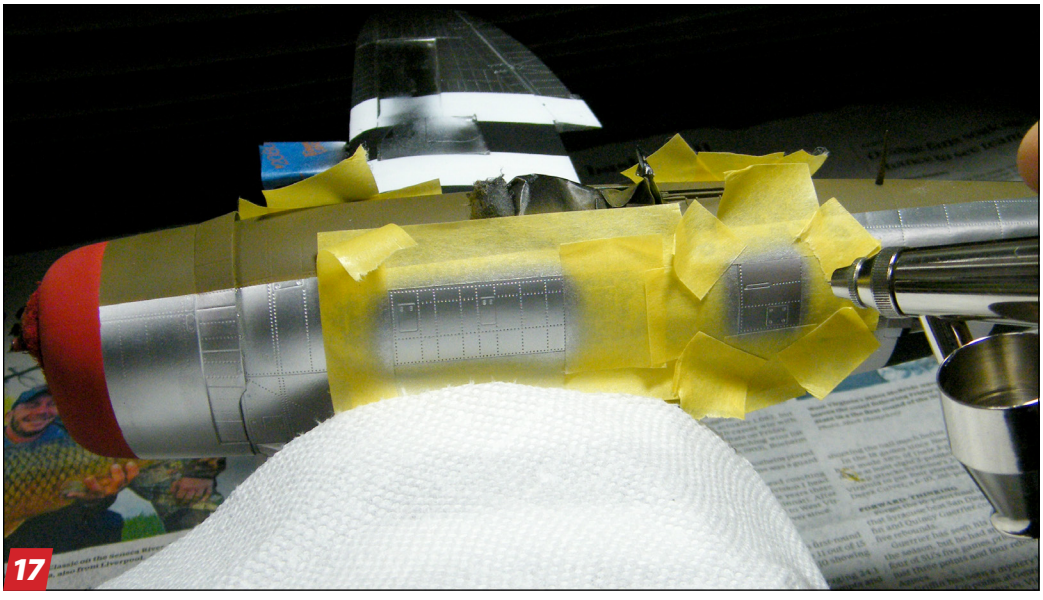


15

Using the painting and marking guide for scale, I cut Frog Tape to the proper width to mask the invasion stripes. I airbrushed Tamiya Flat White (No. XF-2) first followed by re-masking and Tamiya Flat Black (No. XF-1).

16

More masking followed as I painted the top of the fuselage with Mr. Color Olive Drab (No. C304), the forward cowling with Tamiya Flat Red (No. XF-7), and the rudder with Mr. Color Middle Stone (No. C21).



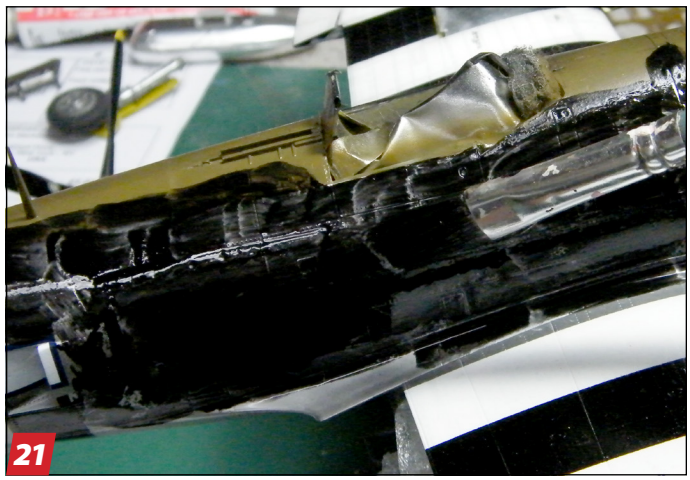
17

For color variation, I masked different panels on the airframe and airbrushed Alclad II Dark Aluminium.

I airbrushed the prop with acrylic chrome yellow (FS13538) for the tips, Tamiya Flat Black for the blades, and dark aluminum for the hub.

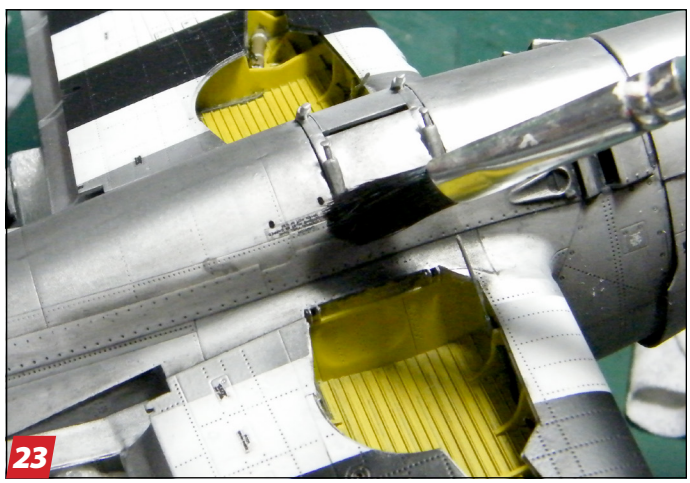
To make the drop tank look new in contrast with the airframe, I applied Bare-Metal Foil Matte Aluminum (No. 011) and burnished it over surface detail with cotton swabs. I added fuel-transfer lines with .023-inch vinyl coated wire.

After allowing several light coats of Pledge Floor Gloss (PFG) to dry for 24 hours, I applied the kit decals for Christensen's aircraft. Another layer of PFG sealed the markings and protected them against the weathering to come.

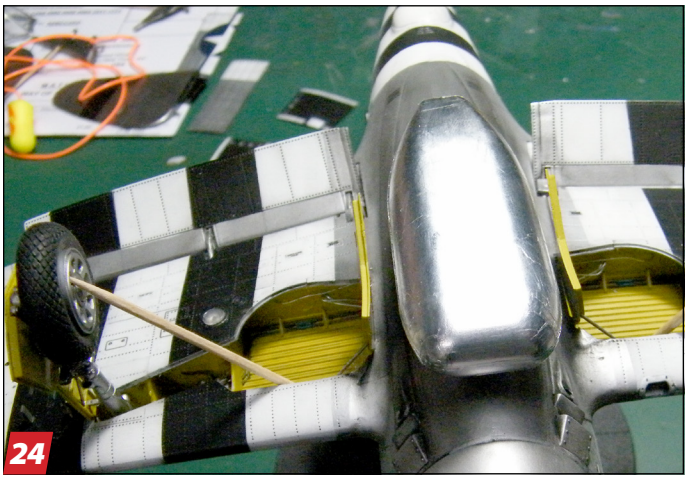


Working a section at a time, I brushed on a generous wash of Winsor & Newton black artist oil thinned with odorless mineral spirits. I wiped the excess away with a cottong cloth and cotton swabs damp with mineral spirits.

I left the wash to dry for 72 hours, then airbrushed the model with Testors Dullcote lacquer (No. 1160) mixed with Testors Lacquer Thinner (No. 1159).

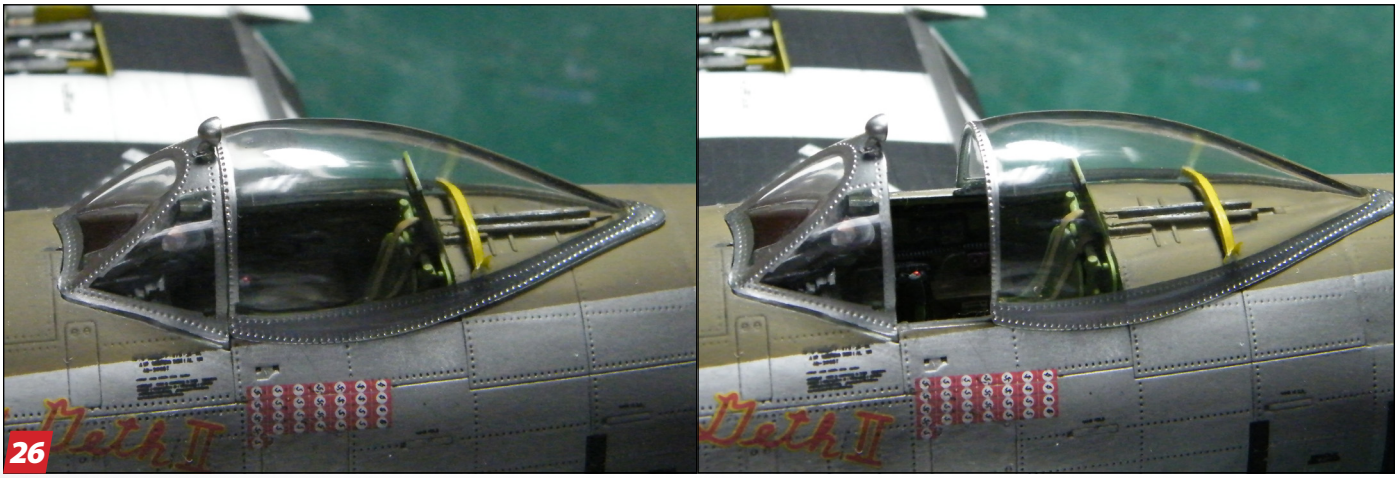


After grinding black pastel chalks into a powder against coarse sandpaper, I brushed them along the lower sides to represent soot stains aft of the exhausts.



I attached the drop tank, flaps, and gear bay doors. To keep the main gear legs stable under the large model, I used 5-minute epoxy instead of liquid cement; toothpicks assured alignment as the glue set.

I replaced the kit ordnance with a pair of Eduard Brassin U.S. 50-pound bombs (No. 632037). I painted the with Tamiya Olive Drab (No. XF-62) followed by PFG before applying the decals.



Finally, I installed the elevators, ammunition bay doors, windshield, and canopy. I did not glue the sliding section in place because a track on the turtle deck allows it to move.

FINAL THOUGHTS

WITH THE LAST PARTS in place, I called the project complete. It is a fitting — and large, more than 12 inches in span and length — tribute to one of America's WWII fighter pilots. It didn't take much more than basic modeling skills to finish. **FSM**

A little context

Techniques to make a base for your car or truck model

BY KOSTAS GEORGIOU

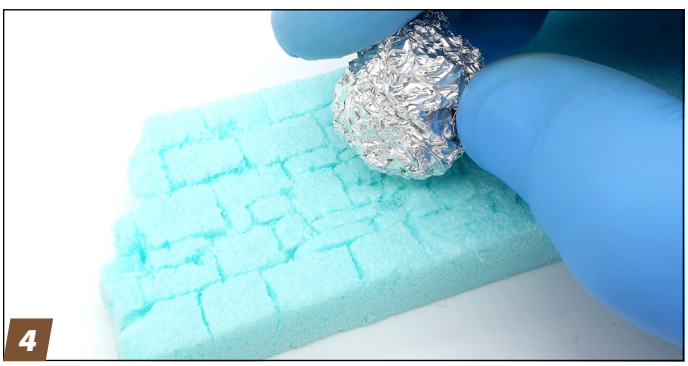
Flip open *FineScale Modeler* November/December 2022 (Page 44), and you'll find where I demonstrated how I built, painted, and weathered a 1972 Ford F-100 Sport Custom. My idea was to replicate a truck that saw a lot of work but was mostly maintained and operational. Happy with the results, the truck looked a little out of place just sitting on the shelf, alone.

The best way to give the F-100 context was to make a base for it, but nothing too complicated. In my mind, the pickup's surroundings would show some age, with a wall that was in disrepair and some cracked pavement. It would also need some weeds and scrub plants. With an idea in mind, I started modeling.

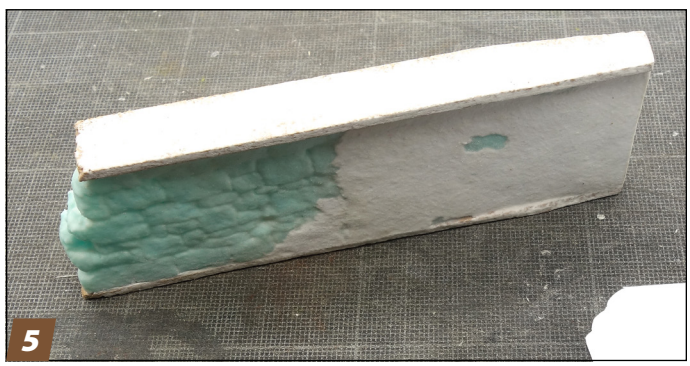
The base came together quickly with pressboard for the sides and cork sheet to make the upper surface. The wall would run across the back of the base, and there would be bare ground in the front corner. The rest of the cork would form the base layer for concrete pavement.

I cut ½-inch foam insulation with a utility knife into the rough shape of the wall. I compared it to the pickup to make sure it was the correct height and width and refined the shape with a sanding stick.

To make the wall's brick interior, first I cut the mortar joins with a utility knife and then widened them with a scribing tool.

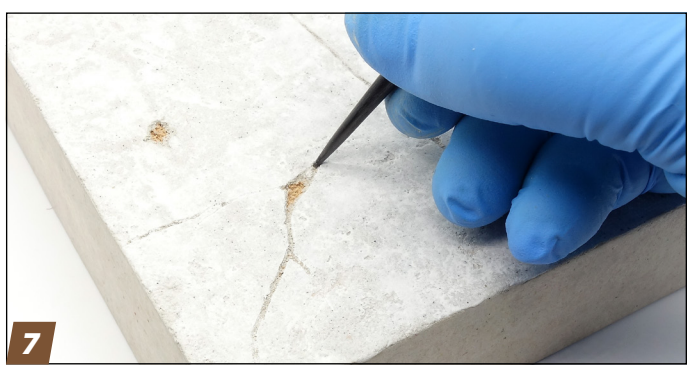


Gently pressing a ball of aluminum foil into the brick façade created a natural-looking dried-clay or stone texture that would be enhanced with paint and further finishing.

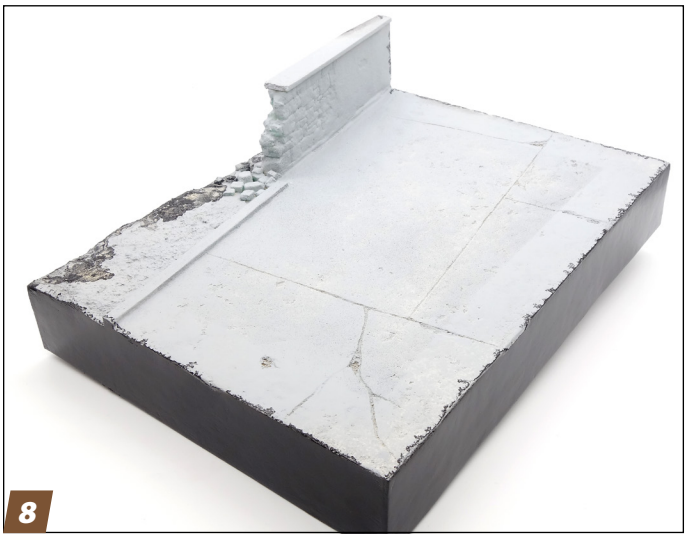


I glued paper over the untextured portion of the wall to mimic plaster, and capped the wall with cork. White wood putty, diluted and stippled over the cork and paper created just the right texture for both areas.

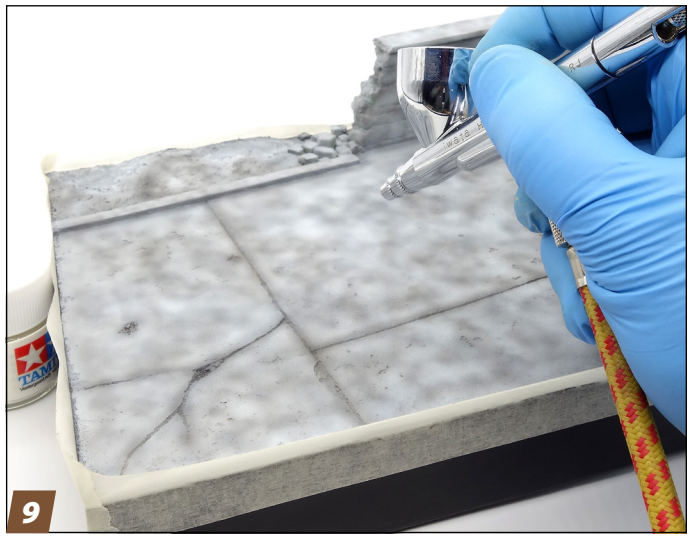
The area of bare ground was covered with AK Interactive (AK) Terrains Light Earth (No. AK8021) acrylic paste. Similarly, I brushed the "paved" portion of the base with AK Terrains Concrete (No. AK8014).



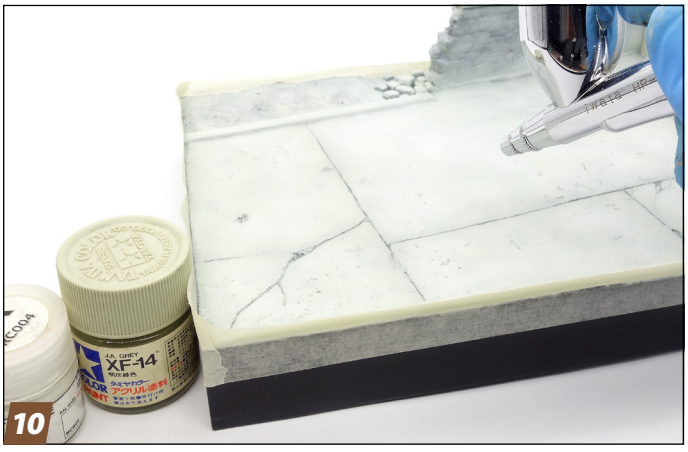
After the concrete acrylic paste had dried, I sanded it smooth and then used a scribing tool to create expansion gaps, cracks, holes, divots, and damage you'd typically see in such areas from age and wear.



The wall was glued in place, along with a few loose bricks I'd carved from the insulation and worn using the process shown in Step 4. Then I painted the base sides black and the pavement, wall, and bare ground areas gray.

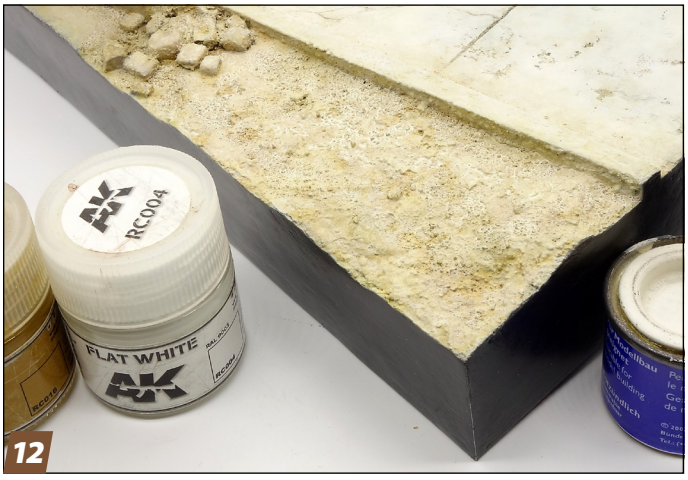


I airbrushed a mottled pattern on the ground work and wall with heavily thinned black and white acrylic paints.



A 1:1 mix of Tamiya JA Grey (No. XF-14) and AK Real Colors White (No. RC004) went over everything in a couple of thin layers. The point wasn't to obscure the mottled paint underneath, but to allow it to create visual interest.

I dry-brushed titanium white and raw umber artists oils on the concrete to create a realistic effect. There is no correct way to do it except to leap, work, and trust your eyes. The pavement cracks were enhanced with a wash of Humbrol Matt Ochre (No. 83).



For the bare ground, I airbrushed the area ochre and white acrylic and let them dry. I made two enamel washes of the same colors and applied them over the acrylics using the wet-on-wet method used with watercolors to allow the colors to blend naturally.

I painted the plaster on the wall Vallejo Bright Orange (No. 70.851) and the stones with various brown and gray colors. A filter of Humbrol Khaki Drill (No. 72) reduced contrast on the stones. AK Streaking Grime and a Winsor & Newton Raw Umber oil paint wash made rain marks on the plaster. Moss between the stones is Winsor & Newton Sap Green.

14

I placed small bushes and grass from Model Scene, Heki, Joefix, and Woodland Scenics on the bare dirt, in pavement cracks, and along the wall base. Thin green artist oils dabbed on some locations added a hint of dried moisture on the concrete and along the wall's base and top.


15

Dabs of AK Streaking Grime (No. AK012) on the top of the wall added more interest and variety. I made the tubular steel parking barriers from Evergreen styrene rod shaped with the help of a flame and then weathered them with the same techniques I used for the pickup. The final touch was some fallen leaves.

FINAL THOUGHTS

ALL THAT WAS LEFT was to place the Ford F-100 pickup and the scene was finished! Creating a base doesn't have to be an extravagant affair. With a plan and some easy-to-apply techniques, you can create a setting that adds context for a model, ultimately making its overall appearance better. I'm happy with how this scene turned out and encourage you to try a similar treatment for your next model. **FSM**

FineScale Modeler

SNAPSHOT

PAINT AND WEATHER A PICKUP TRUCK ENGINE

EVEN WHEN PROTECTED BY THE HOOD, an old pickup truck's engine will start to show the effects of dirt, moisture, and age. Here's how to achieve a well-weathered but functional appearance for your next work-truck scale model.

By Kostas Georgiou

Prime the engine and transmission and mist a coat of hull red over the engine only. Follow up with washes of Tamiya Red Brown and burnt sienna oil paint.

Moisten the surface of the engine with water and sprinkle salt over the part. Let the salt crystals dry in place, then airbrush chipping fluid over the engine.

Paints you'll need

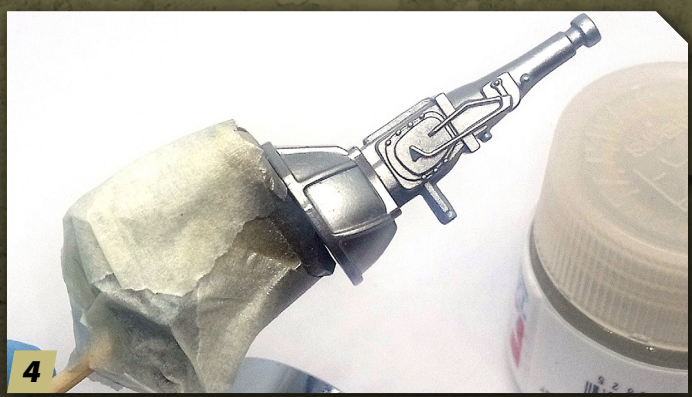
Black primer (such as Ammo of Mig Jimenez Titans Hobby; No. TTH100)

Tamiya Hull Red (No. XF-9), Red Brown (No. XF-64), Semigloss Clear (No. X-35)

AK Interactive Xtreme Metal Dark Aluminium (No. AK480); Worn Effects chipping fluid (No. AK088)

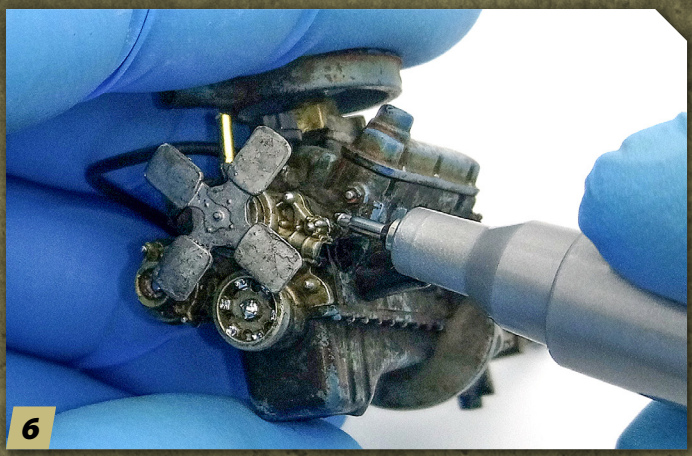
Black, burnt sienna, raw umber, and cadmium yellow artist oils

Let the fluid dry for 10 minutes and paint the engine an appropriately colored acrylic. In this case, a custom-mixed blue. After the paint dries, use water and a toothbrush to scrape away the salt and activate the chipping fluid for naturally worn-looking paint.



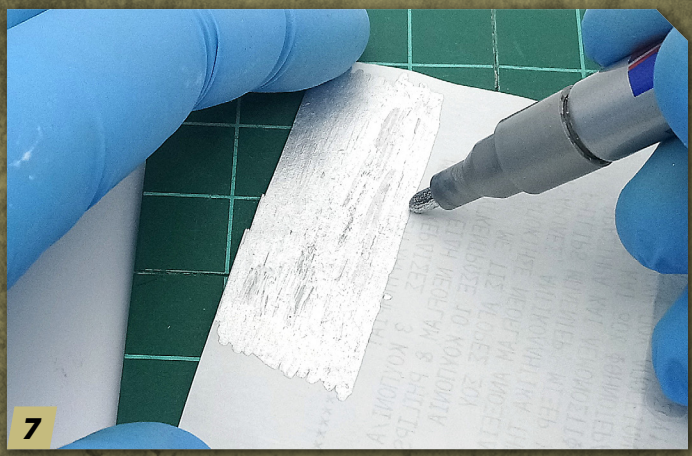
Mask the engine and airbrush the transmission an accurate color for the topic you are modeling — dark aluminium, in this case. Remove the masking and coat the assembly with semigloss clear to protect it from the washes to come.

Adding black and burnt sienna artist-oil washes on the engine simulates oil, grime, and further rusting. An orangish mix of cadmium yellow and burnt sienna imitates light rust that accumulates in recesses on top of the engine. Raw umber artist oils make bare-metal parts, like the pulleys and transmission, appear dirty and oily.



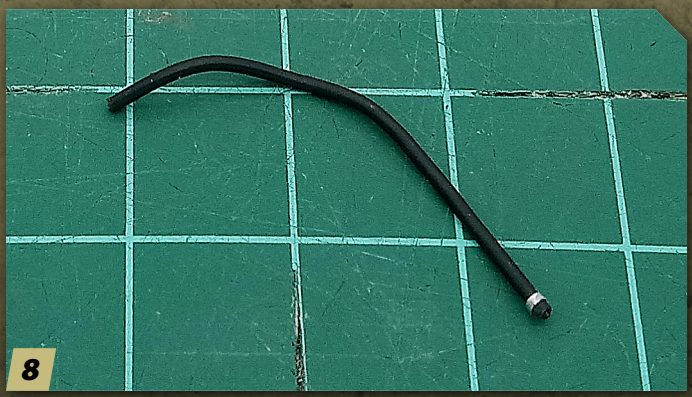
6

Not everything on the engine would be rusty, and you'll want to create some visual interest. Highlight bolts, linkages, and other parts that you want to stand out with a silver marker or paint.



7

Hose clamps can be easily made by coloring paper with either a silver marker or paint and cutting it into strips.

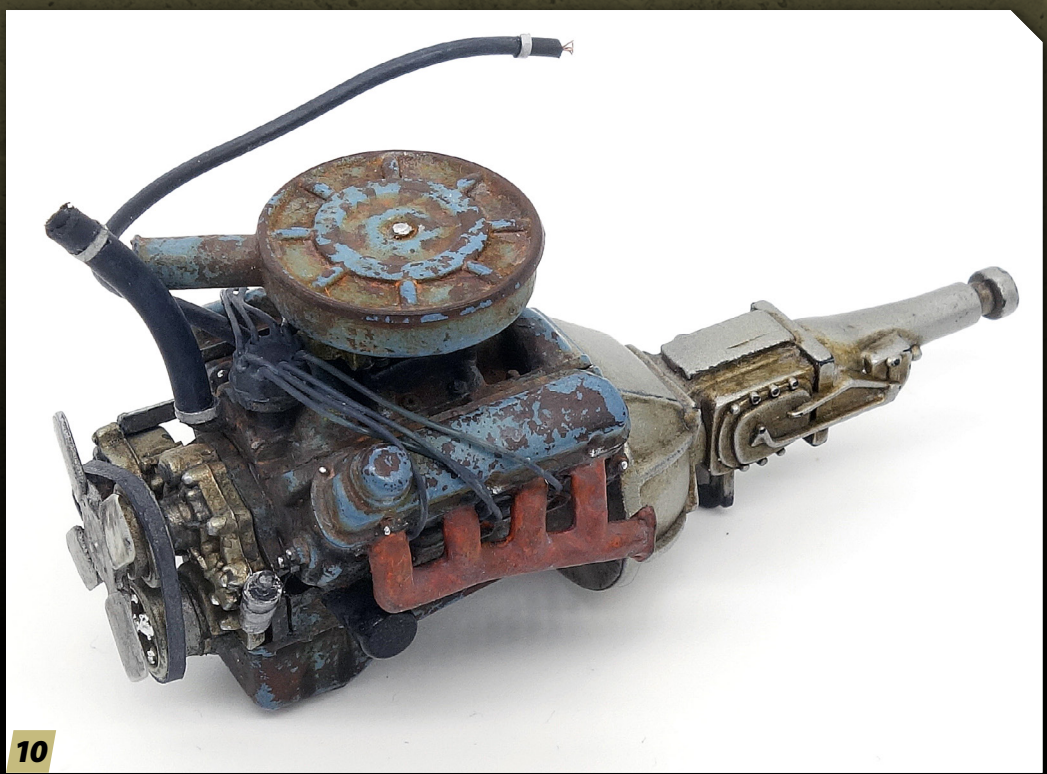


8

You can buy aftermarket hoses or make your own from wire of suitable scale diameter. Use white glue to attach the paper clamp to the ends before gluing the hose in place on your engine.

9

Like making clamps, you paint paper with dark gray or black acrylic paint and slice a strip off to use as a fan belt.



10

Lace the paper fan belt through the pulleys and affix it with white glue. Again, you can purchase aftermarket ignition cables, use wire of the proper scale diameter for your engine, or even make your own from stretched sprue, as shown here. Your completed engine is now ready to install in your model pickup truck. **FSM**

READ MORE SNAPSHOTS HERE!

https://finescale.com/tags/snapshot

Light a Giants

Detailing Doll & Hobby's 1/64 scale *Spindrift*

BY JIM JAMES

In 1968, after Irwin Allen launched the TV show *Land of the Giants*, Aurora quickly produced a kit of the show's primary spacecraft, the *Spindrift*. Re-released just once by Aurora in 1976, the kit became a collector's item. That was until Polar Lights re-popped it in 2002. Now, Doll & Hobby has re-issued the Polar Lights version of the kit with improved decals and a cool diorama display backdrop. It's a great kit but there's still room for improvement.

The *Spindrift* is rarely seen in flight, instead spending almost the entire show on the ground. For some reason, the engines were left running and a pulsing red light can be seen through the engine grilles. Hmm, did it occur to anyone that the 'giants' might spot a bright orange spaceship with pulsing red lights?

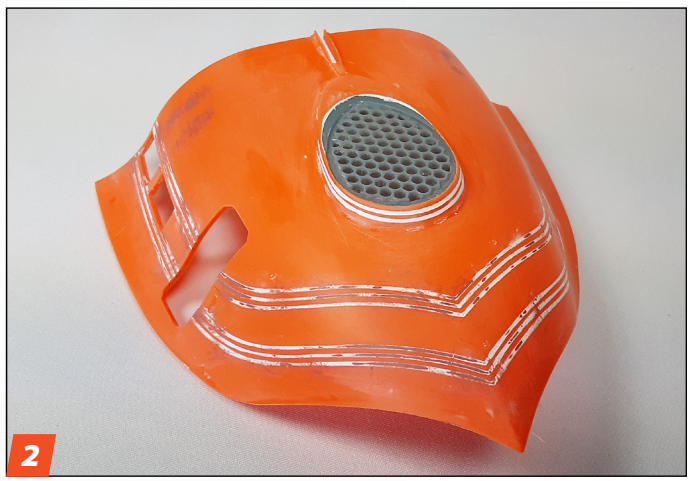
A section of the hull can be left movable, but I decided to seal the ship and light the interior. I used a TenaControls light kit (No. SPNDRFT-B) to replicate the pulsing engines and LEDs to light the cabins. My plan was to create a diorama of the *Spindrift* on the ground.

ParaGrafix offers three detail sets for the *Spindrift*. One corrects the cockpit interior (No. PGX237), another details the passenger cabin (No. PGX241), and the third replaces the inaccurate dorsal dome (NO. PGX240). I used all three in my build. The ParaGrafix instructions are very clear, and I've tried to not duplicate them here.

ship in miniature

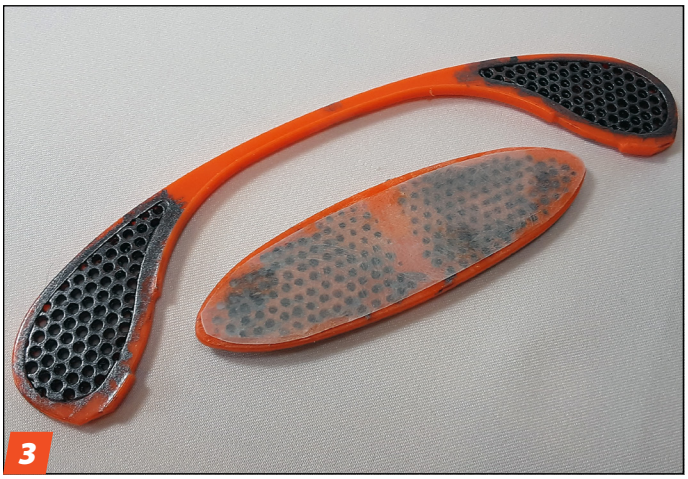
1

Using the template provided by ParaGrafix, I enlarged the hole for the dome in the top hull part and carefully sanded its rim until the resin dome support fit snuggly. I locked it in place with superglue and filled gaps with putty.

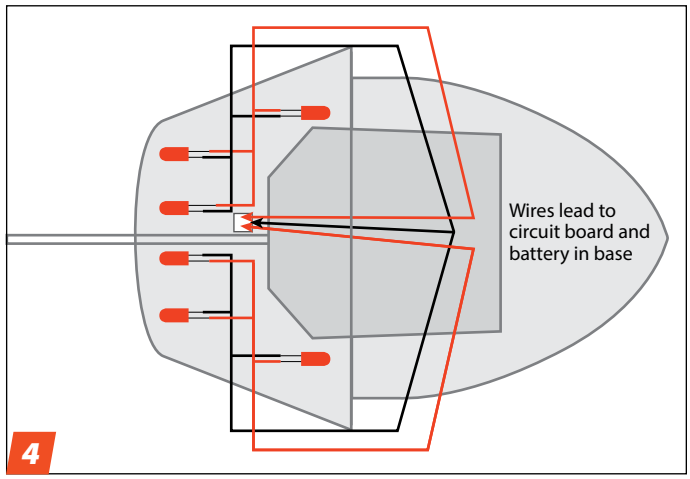


2

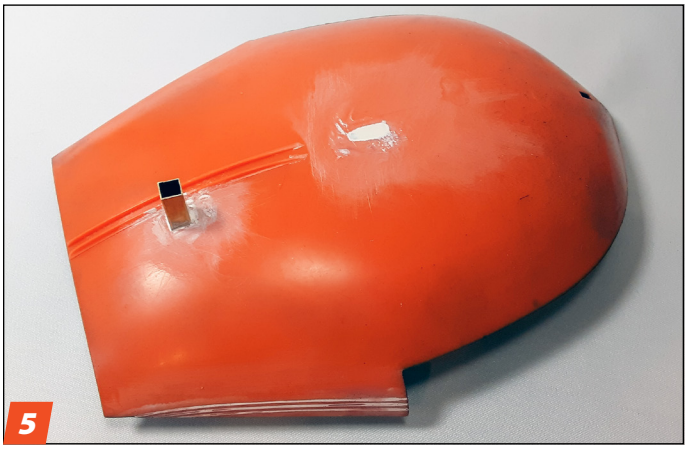
Like the original, the Doll & Hobby kit has engraved stripes, but, thanks to the improved decals, these stripes are redundant. I filled them on the hull, fin, and passenger door with white Tamiya Putty (No. 87095) followed by the finer grained Bondo Glazing & Spot Putty. I also sanded off the embossed and incorrect Continent Space Lines logos.



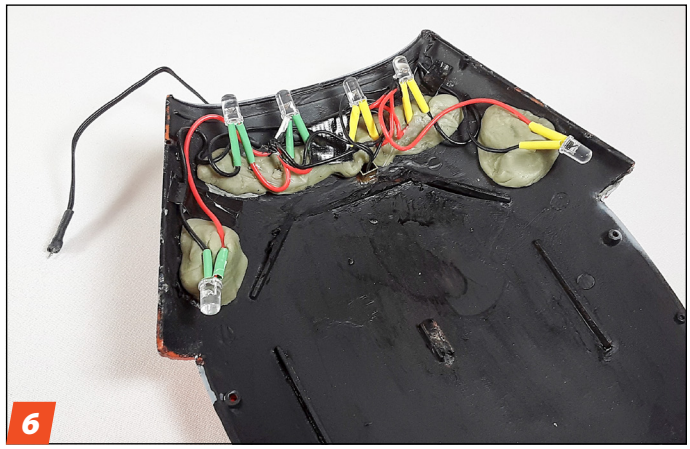
In preparation for lighting, I opened the holes molded in the engine grilles (parts 27 and 28) with a 1/16-inch drill bit. The outside of the grilles was painted with Tamiya Light Gunmetal lacquer (No. LP-20). To diffuse the lighting, I cut three pieces of clear styrene, glued them to the backs the grilles, and frosted them with medium grade sandpaper.



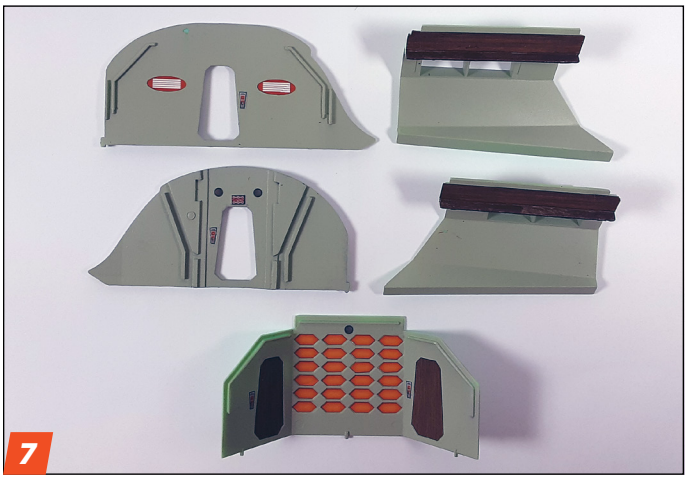
The TenaControls kit includes six red LEDs, which need to be wired in two groups of three — one LED behind the forward grille and two behind the aft and repeated for the other side. I used 28 AWG stranded wire for connections; it's flexible and works well in confined spaces.



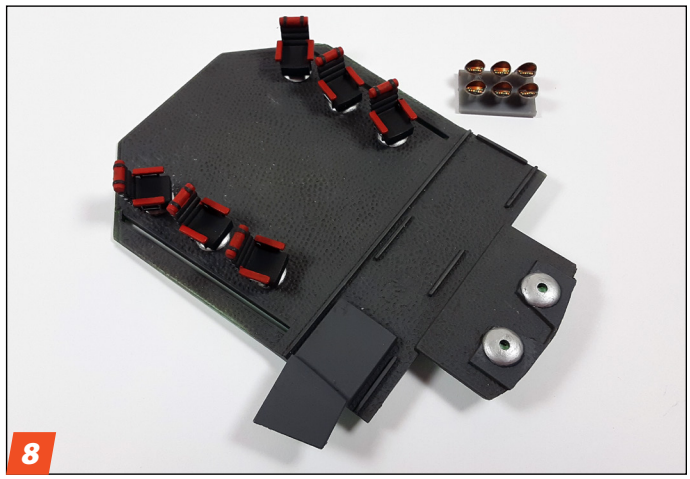
Using the cabin floor as a guide, I drilled a hole behind the cabin to one side of the fin groove. I glued a 1-inch section of ¼-inch square brass stock into the hole to carry wires from the LEDs to the switches and batteries in the base. I painted the inside of the hull flat black to block light bleeding through the plastic.



I soldered the LEDs to the three wires needed and tested the circuit. Then I placed a strip of Aves Apoxie Sculpt two-part epoxy putty along the back and two lumps on either side. I stuck the LEDs in the putty and finalized their positions using the hull top as a guide before the putty cured. It isn't pretty but it won't be seen!



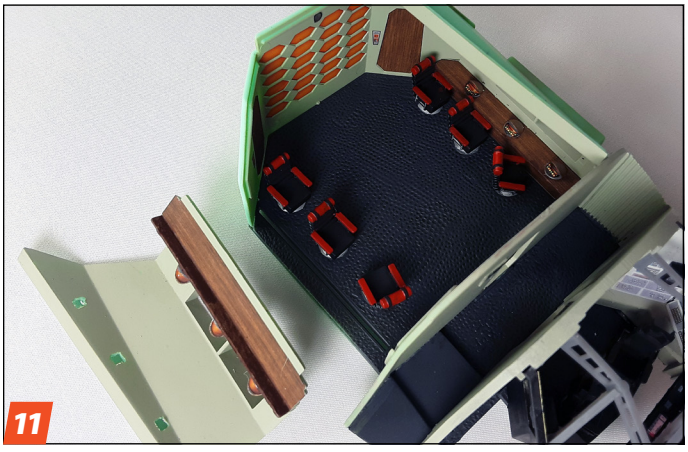
Before assembling the cabin, I trimmed the floor per the ParaGrafix instructions and sanded off unnecessary wall detail. I painted the floor with Tamiya German Grey acrylic (No. XF-63), the walls with Tamiya IJN Gray Green lacquer (No. LP-33) and applied the decals.



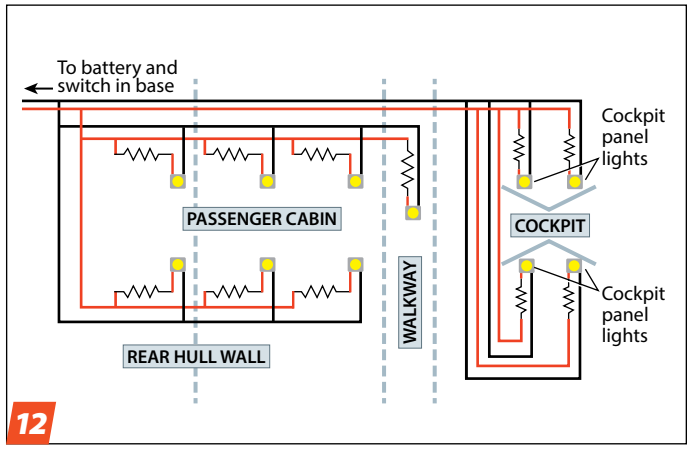
The ParaGrafix set includes six passenger seats in place of the kit's four, two extra seat mounts, and six computer consoles. I painted the seats black with red headrests and arms and applied silver for details. The kit includes decals to simulate the computer consoles that I cut in half to detail the ParaGrafix resin consoles.

I painted the ParaGrafix's photo-etched metal (PE) cockpit side consoles light gray and the associated monitor cases black. After painting the main instrument panel flat black, I added its monitor, throttles, and control yokes. The seats are dark gray-green with black upholstery.

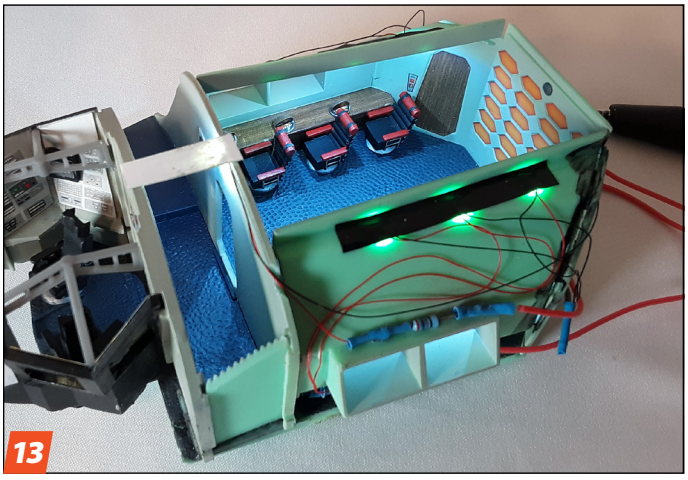
I applied the instrument panel decals before spraying all the components with clear flat. When dry, I glued the main divider walls in place and assembled the cockpit frame and panels.



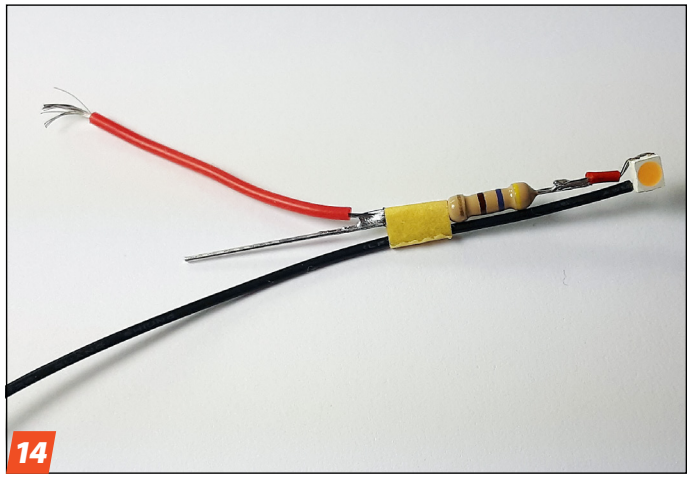
To complete the passenger cabin, I cut holes in the ceiling to accommodate surface mount LEDs (SMD) and glued the computer consoles to the counters. I added the port and rear walls, seats, and lastly, the starboard wall.



I designed the cockpit lighting so that the four control panels would be backlit with SMDs while the passenger cabin would be lit with seven overhead SMDs. Each SMD uses a resistor — 470 ohm for the cockpit and 267 ohm for the passenger cabin lights and the passageway.

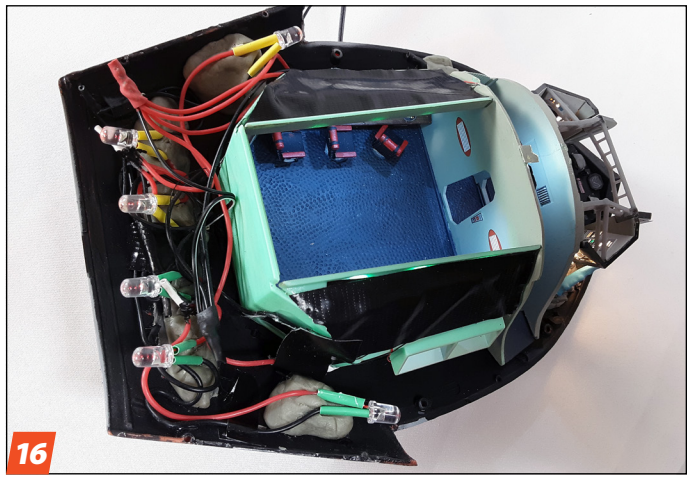


Starting with the passenger cabin, I taped 1mm SMDs into the ceiling holes and glued a single 1mm SMD above the passageway. After the connections were soldered, the wires and resistors were secured with Clear Gorilla Glue. I bundled the red positive and black negative wires on each side and tested the lights.



The SMDs behind the four instrument panels needed to be mounted about ¼-inch behind each panel. So I used each 470-ohm resistor as a support. I made four of these assemblies covering each with heat-shrink tubing before installation.

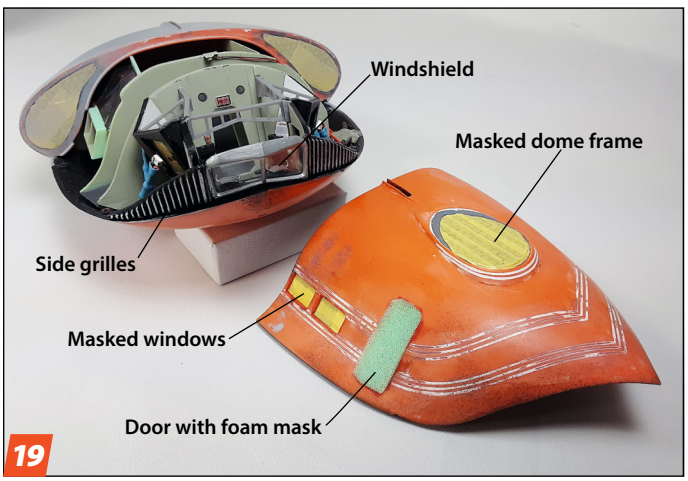
I placed a lump of Aves Apoxie Sculpt on the right side of the cockpit and positioned two of the SMD assemblies in it to light those instrument panels. The wires from the SMDs were threaded under the cockpit floor to connect with left side SMD wires. I repeated the process to place lighting for the left panels.



I bundled the red positive and black negative wires together with the wires leading to the base, soldered the ends and wrapped them with shrink tubing. After testing the lights, I stowed the wire bundles and any excess wire behind the rear cabin wall.

Making sure the front and rear were aligned, I glued the rear upper hull in place filling and sanding where needed. To check the seam, I sprayed a coat of Mr. Surfacer 1000.

I replaced the kit windows with pieces of clear styrene sheet attached with Clear Gorilla Glue and the painted and decaled door, open in its frame, was glued in place. I painted a piece of clear styrene with Tamiya Clear Red (No. X-27) and glued it under the dome support so the cabin lighting will make the dome glow red.



In preparation for final hull assembly, I masked the door opening with foam and taped over the dome support and windows. I glued the windscreen and front grilles (parts 25 and 26) in place. These did not fit well, so I masked gaps with Tulip Slick Dimensional Fabric Paint Black (No. 41401) to eliminate light bleeding.

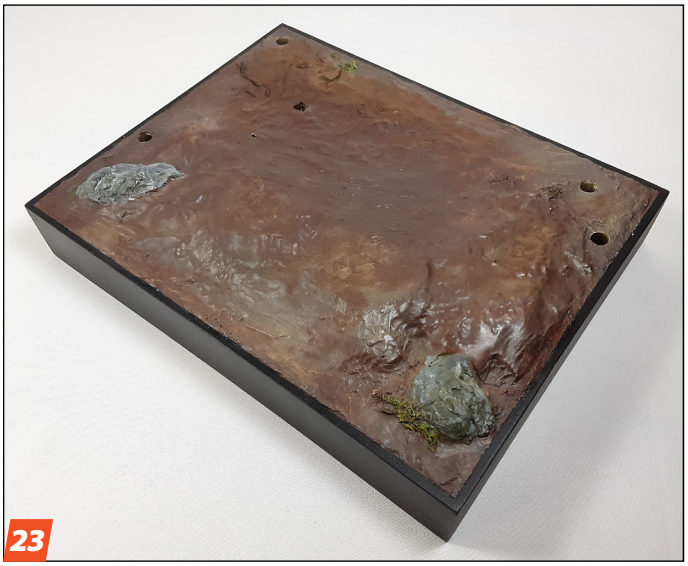
I filled gaps between the upper and lower hulls with a bead of Aves Apoxie Sculpt. After a lighting check, I masked the front grilles and windshield, and added the fin. I sprayed a coat of Mr. Surfacer 1000 to check for flaws and sanded as needed. This was followed with a coat of Tamiya White Surface Primer (No. 87044).

21

As a base color, references suggest Testors International Orange but AK Interactive 3rd Gen Acrylic Medium Orange (No. 11078) is a good substitute. I sealed it with Revell Spray Color Clear Gloss (No. 34101) for decals. When the hull stripe and logos were dry, I trimmed the stripes around the windows and doors with a sharp, new blade.

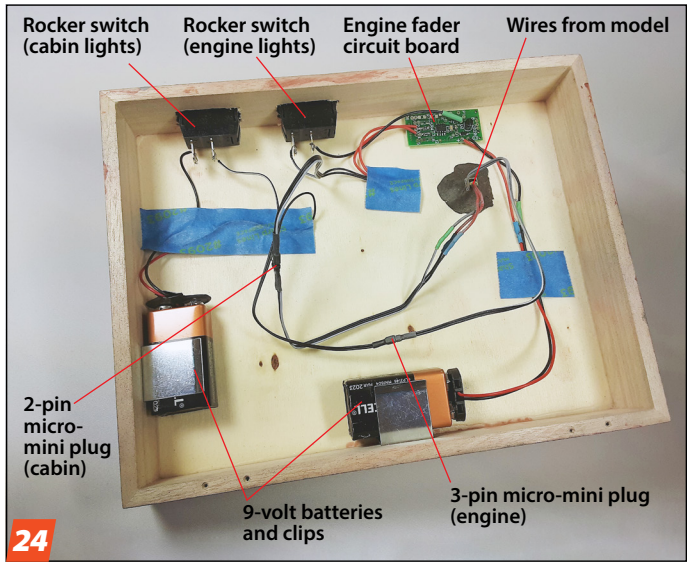
22

A layer of Mr. Super Clear UV Cut Flat (No. B523) was followed by a dusting of Mr. Hobby RLM 79 Sandy Brown (No. H66) since TV images showed that the *Spindrift* did not stay clean. When that was dry, I removed the masks and touched up paint as needed.



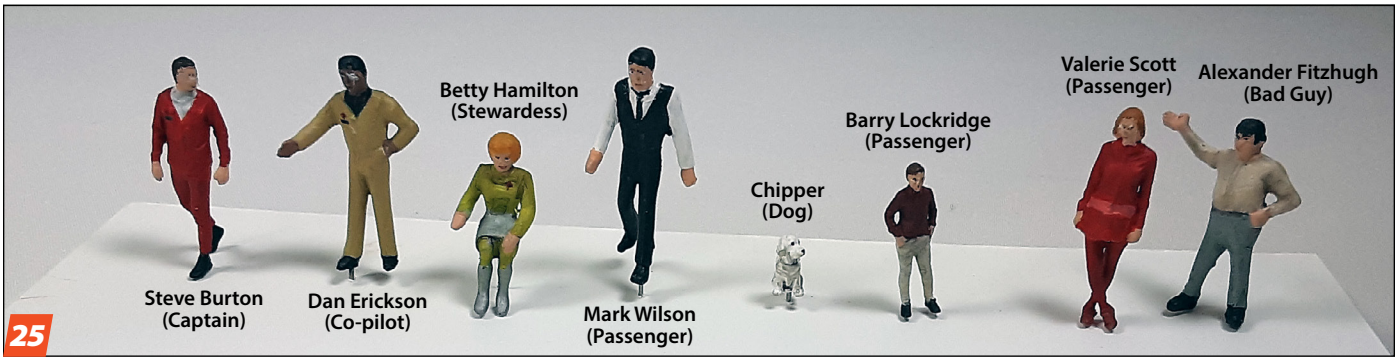
23

For the base, I painted a wooden box and installed a ½-inch piece of square brass tubing as a mounting point. The top surface is uneven plaster of paris with rocks made using epoxy putty. The four round brass tubes are for "planting" bunches of artificial ferns.



24

Experience has taught me that special and regular LED lighting don't always play well together. To keep the engine lighting and cabin lighting separate, I mounted two 9-volt battery clips, two rocker switches, and the TenaControls lighting board inside the box under the base.



25

The *Spindrift* had seven human passengers and crew and one dog. I used the kit figures, a figure from my spares box, and 1/64 scale printed figures I found online to complete the manifest. The scruffy dog was $10 from China. I used online references as a paint guide and printed decals with facial features and uniform logos for extra detail.

I planted the artificial ferns and used craft store moss to inhabit random spaces. The steps from the passenger cabin PE set were too low, so I raised the ground by the door with more plaster. Then the figures were placed randomly in groups.

The final touches were the ParaGrafix dome and the antenna. Use care adding the upper antenna and the nose probe. Both are delicate and should be added last.

FINAL THOUGHTS

I threaded the two power cords from the ship through the brass mounting tube, connected the Micro Mini Plugs, and turned on the power. The *Spindrift* has landed. Welcome to the *Land of the Giants*. **FSM**

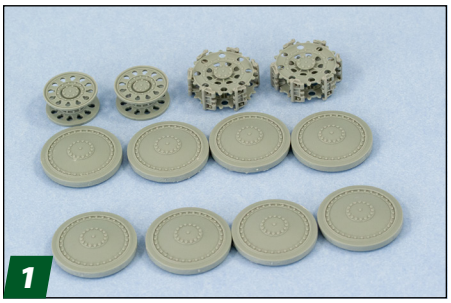
Fire up a GRILLE

Build a Dragon 1/35 scale self-propelled gun out of the box

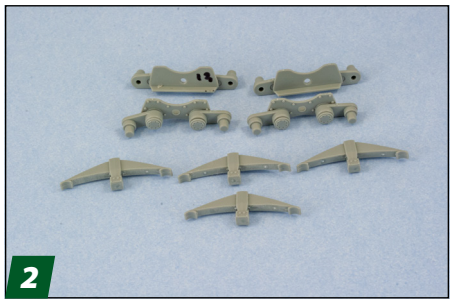
BY BILL PLUNK

The versatile Pzkpfw 38(t) chassis was the basis for many German fighting vehicles during World War II. One type mounted a 15cm sIG 33 infantry gun to provide mobile artillery support in the field. Known to modelers as the Grille H, the official designation was much more of a mouthful — 15cm sIG 33 (Sfl) auf PzKpfw 38t Ausf H or simply SdKfz 138/1. Produced from February to June 1943, the Grille H saw service on all fronts until the end of the war.

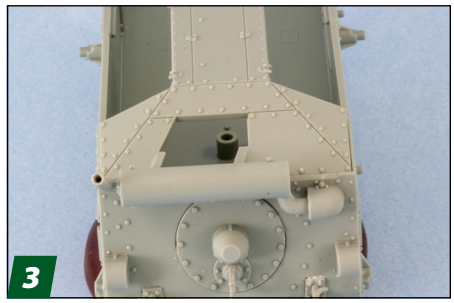
I replicated one that was at Kursk in summer 1943 by building Dragon's 1/35 scale kit (No. 6470). This out-of-the-box project shows how basic skills are all you need to build a great model. I used out-of-production Testors Model Master enamels for most of the painting, but there are similar colors available from current manufacturers.



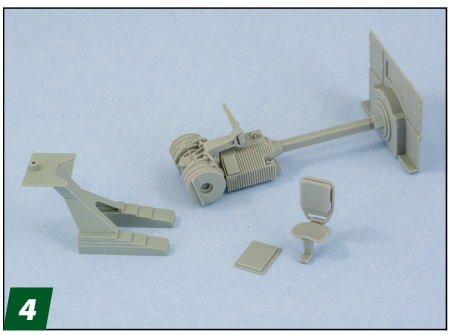
I removed mold seams on the road wheels and return rollers with a sanding stick and assembled the sprockets and idlers. To ensure the sprockets teeth lined up, I placed six of the individual track links around the sprockets while they dried.



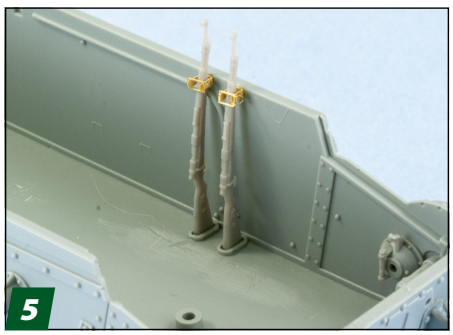
Mold seams on the leaf springs were eliminated with scraping and sanding, and I left the swing arms free on the suspension bogies so I could level the road wheels later. The mounts are handed, so I wrote the part numbers on them to avoid mix-ups; I left them off for the moment but attached the return-roller mounts and final drive housings.



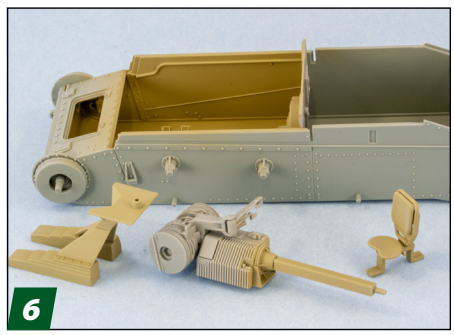
To set the spacing for the interior, I first installed the rear hull plate and tacked the engine deck in place. Details such as tow hooks and exhaust were added, and a small amount of putty was needed to fill small gaps around the tow hook mounts. I trimmed the tabs on the hooks slightly to fit the slots. The same thing was done for the front hull plate.



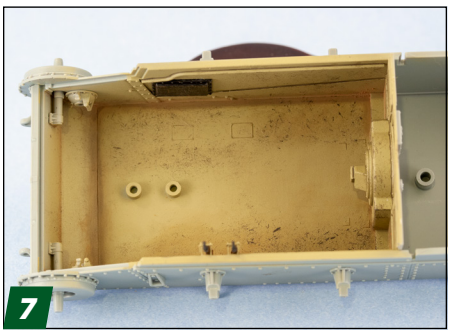
When building the brakes, transmission, and driveshaft, I test-fitted it in the lower hull with the firewall to keep everything aligned. I also assembled the driver's seat and the pyramid-like pedestal mount for the main gun.



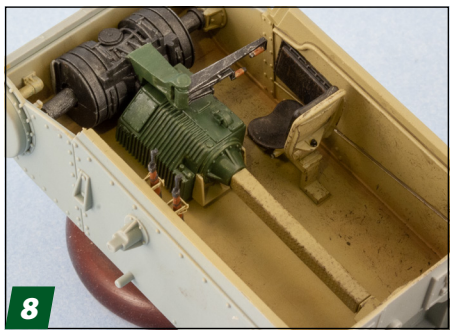
On the left wall, I added the kit's combination styrene and photo-etched metal (PE) clips for a pair of Kar98 rifles. The kit didn't supply the weapons, so I scrounged two from my spares. With careful gymnastics, they can be slid in and out of the clips for painting.



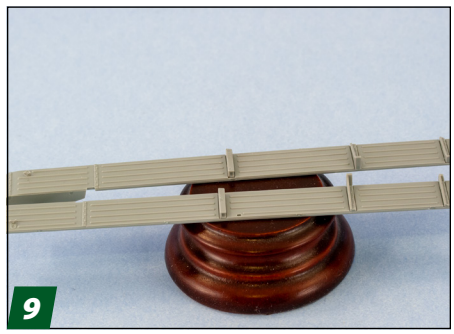
The lower hull and modules were airbrushed with mix of 4 parts dunkelgelb and 1 part light gray. I slipped the glacis into place to mask its joining surfaces.



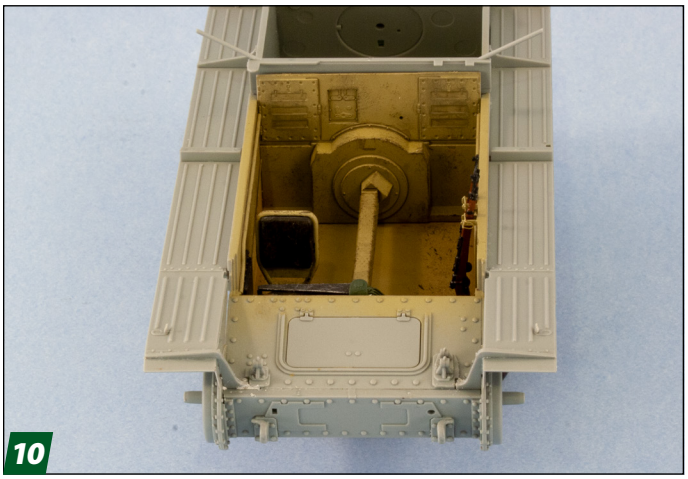
To weather inside the lower hull, I stippled on burnt umber to simulate scratches and scuffs and flowed a pinwash of thin raw umber around raised detail. A little Mig Productions Europe Dust (No. P028) pigment brushed into corners and on the floor around the gun mount added a layer of dirt.



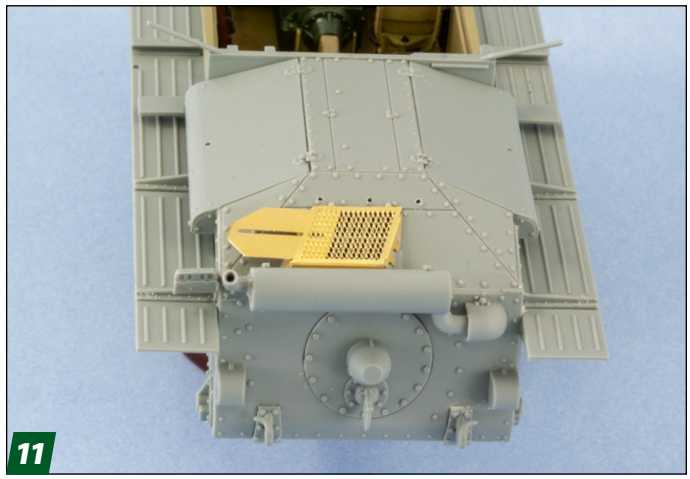
After detailing and painting the driver's kneepad, I installed it, the seat, and the drivetrain to finish the lower hull interior.



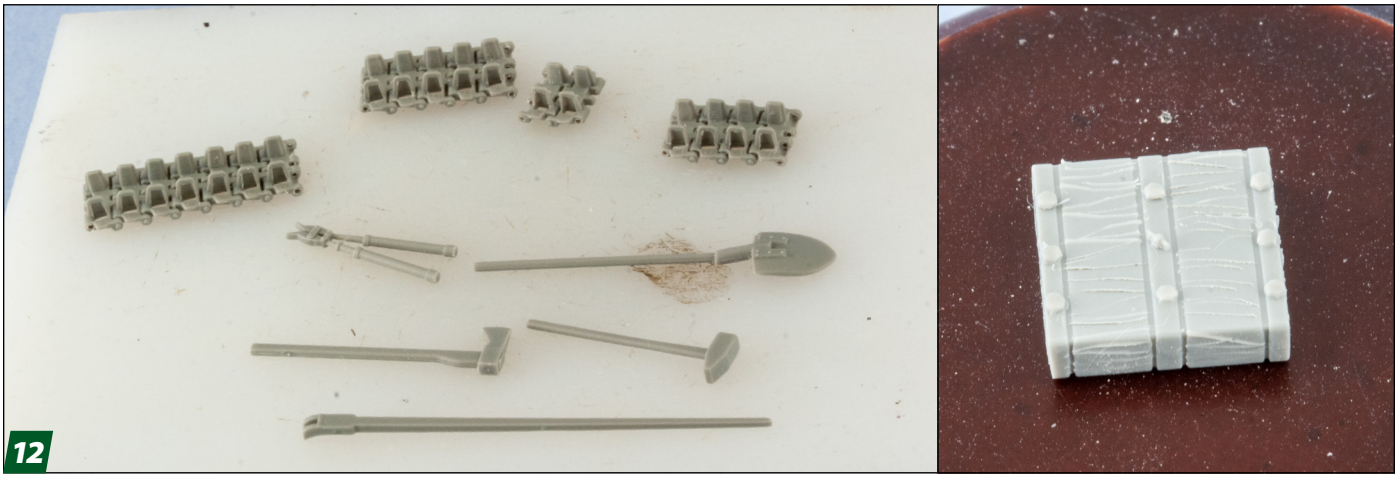
The fenders support the fighting compartment extensions, so I held off attaching the pioneer tools until the compartment was ready to avoid clearance or fit issues.



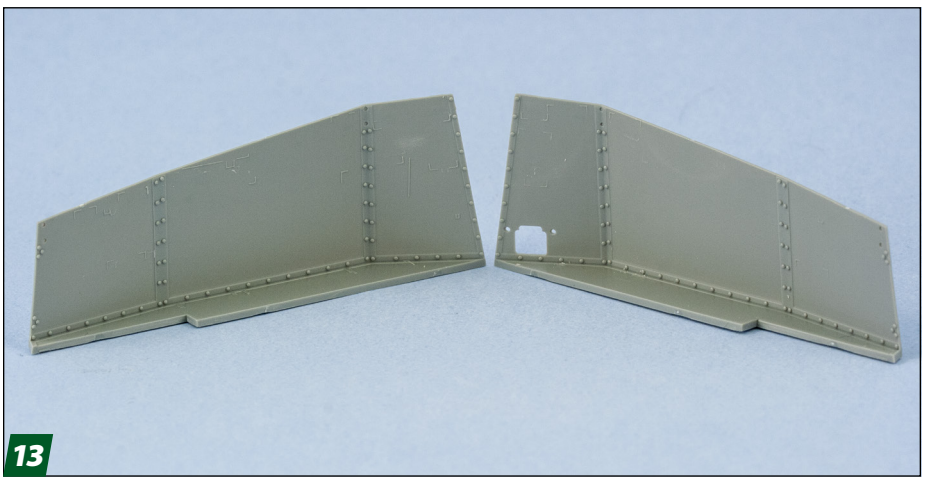
After adding the braces and supports for the fenders, I glued the fenders in place. The front right brace required some putty work because it was designed for the Panzer 38(t) Ausf G kit and had a small cutout that wasn't on the Grille H glacis.



The engine would be largely invisible on the finished model, so I omitted it and installed the engine deck with its hatches in the closed position. I fitted the PE intake screen, then carefully shaved bolts molded on Parts Tree K and attached them with liquid glue.

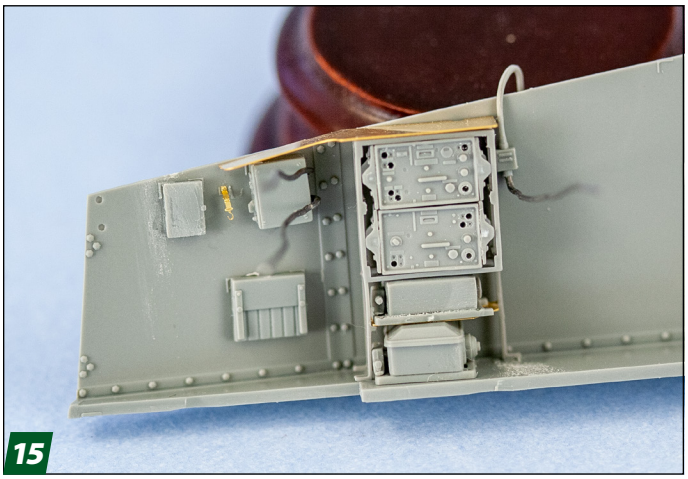


I removed the pioneer tools and other fender gear for cleanup. The jack block lacked detail, so I scribed wood grain into it with the tip of a No. 11 blade using a magnifier to see what I was doing. I used more bolts from Tree K to detail the block's metal bands. Using the kit's Magic Track individual links, I made four runs of spare tracks — seven links for the hull front, five for the left front fender, four for the rear compartment plate, and two for the left rear fender. I removed the molded pins from the end links on each run and opened holes with a No. 74 drill bit.

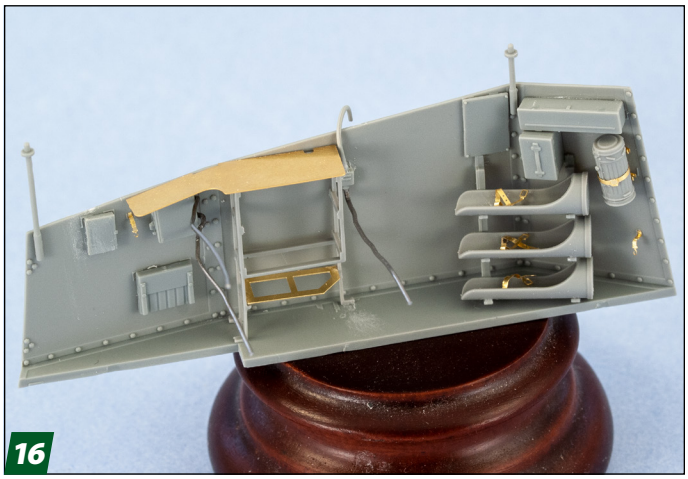


On the fighting compartment walls, I shaved off unneeded locators inside the plates with either a micro chisel or a No. 11 blade depending on how accessible the marks were.

On the left side, the most complex element was the radio/communication suite. I assembled the rack along with a PE insert for one of the transformers and prepped the gear for wiring by drilling holes to accept .5mm solder.

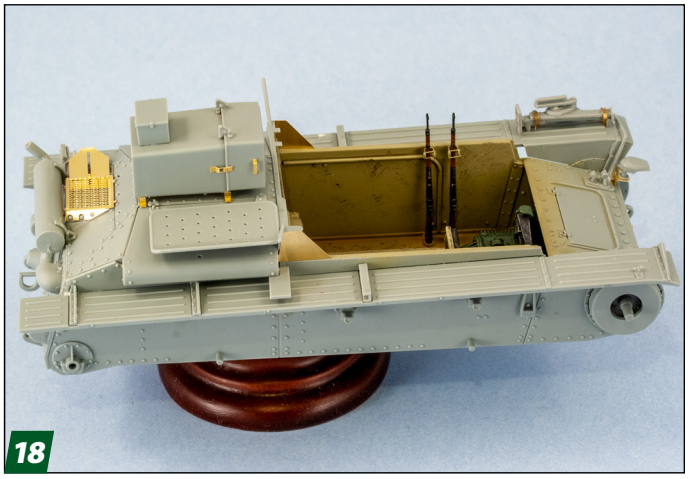


I attached the rack and test-fitted the gear to be sure it would fit — the smaller transformer had to be sanded down slightly to fit. The antenna junction box and intercom box were pre-wired, and I shaped the PE rain guard with pliers since no bend line was etched into it.



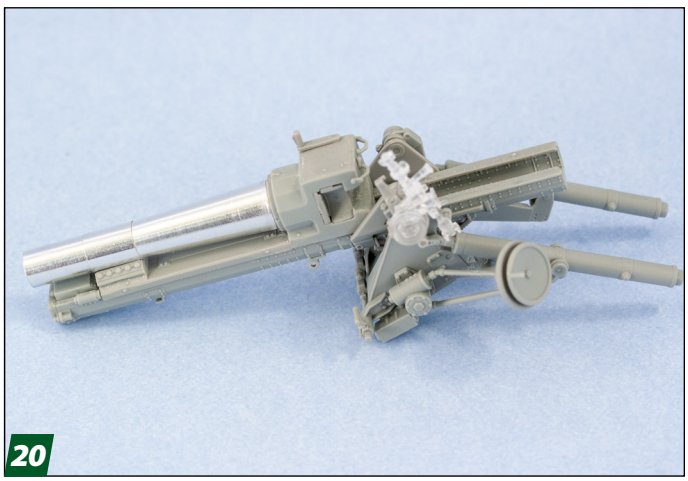
I opted to model the three ammunition holders empty. The PE straps were added using gel superglue, then carefully bent to shape. I installed the remaining equipment on this side except for the seat and MP40 that were left off for painting.

The right side included a PE armored glass block holder added with gel superglue and displayed empty for variety, two stacks of six charge-case boxes, and four ammunition racks. I attached the outer ones the placed the middle pair by checking the spacing for consistency.

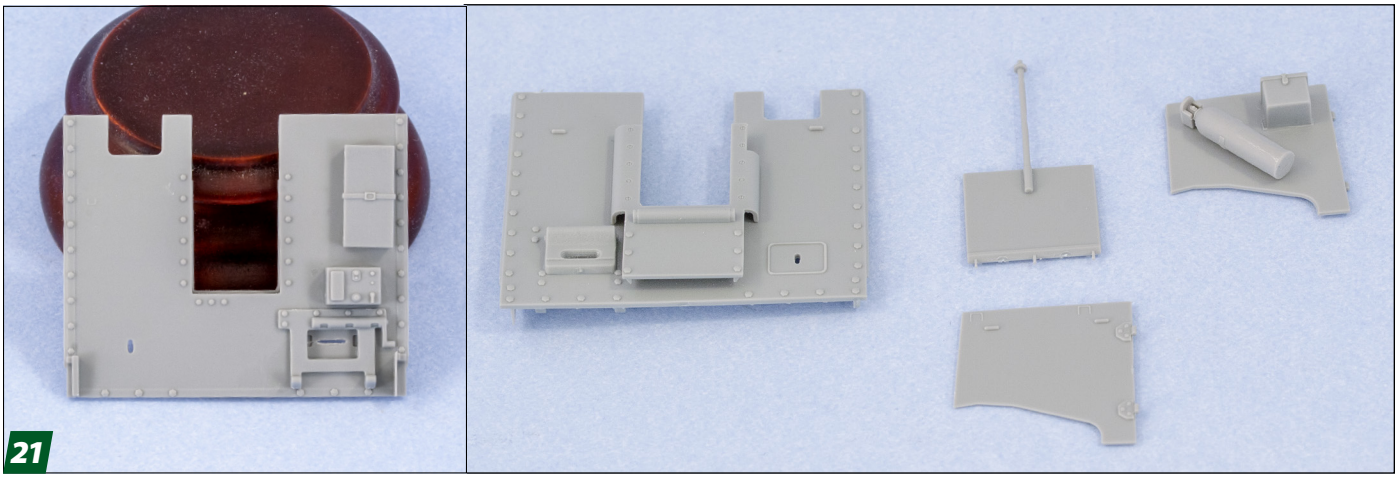


I assembled the six-round ammunition box for the engine deck. The instructions show it too far forward, so I carefully removed some rivets to position it properly based on photos. To complete this area, I added the loader's tray for combining rounds with charges alongside the box.

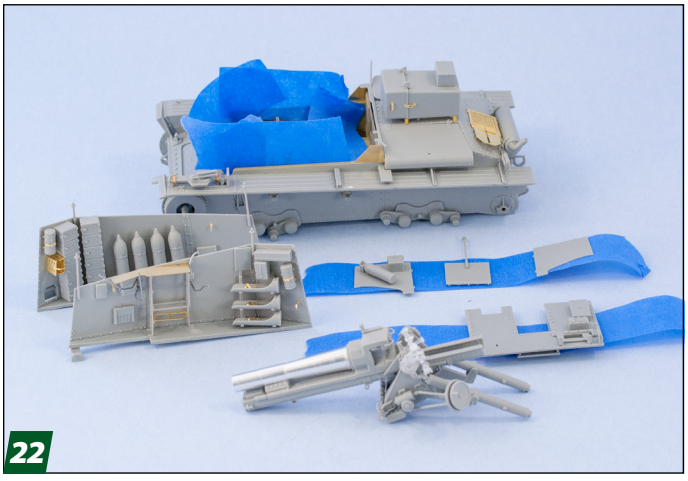
Turning to the sIG 33 gun, I built the multipart breech and recoil sled. The turned-aluminum barrel was attached to the breech and sled with gel superglue on the mount pin and the curved surfaces of the recoil sled to ensure a level fit. To facilitate painting, I left the breech block loose.



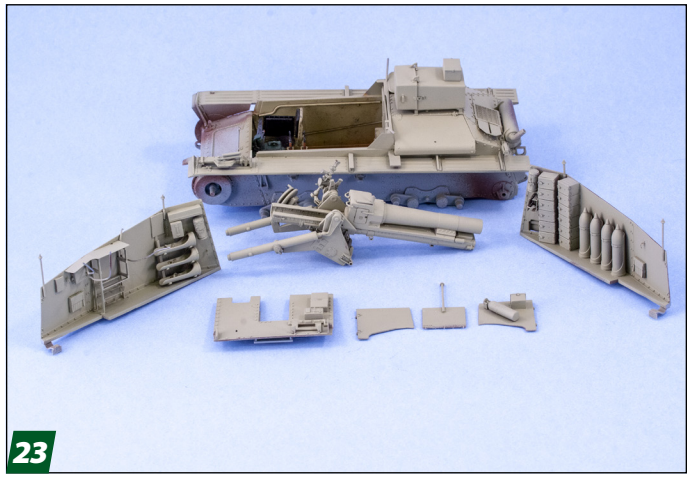
I put together the recoil tray next followed by the gun mount. The left half of the mount required careful assembly because of the elevation mechanism. The halves were joined at the base and the gun left movable by not gluing the trunnion pins so I could set the elevation when I placed it in the hull. The final step was the addition of the gunsight.



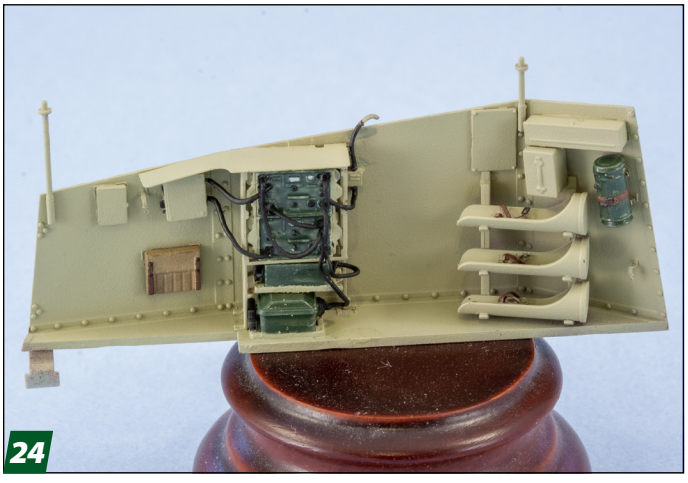
Inside the fighting compartment front plate, I added the driver's visor, first-aid kit, and intercom junction box. The exterior of the plate received the armored visor cover and the sliding protective armor for the gun. I added the foul weather cover support to the fixed central rear plate and prepped the crew access doors with a small storage box and fire extinguisher on the left.



With the modules assembled, I masked the lower hull interior with blue painter's tape. Strips of tape hold the smaller front and rear plate elements for ease of handling.

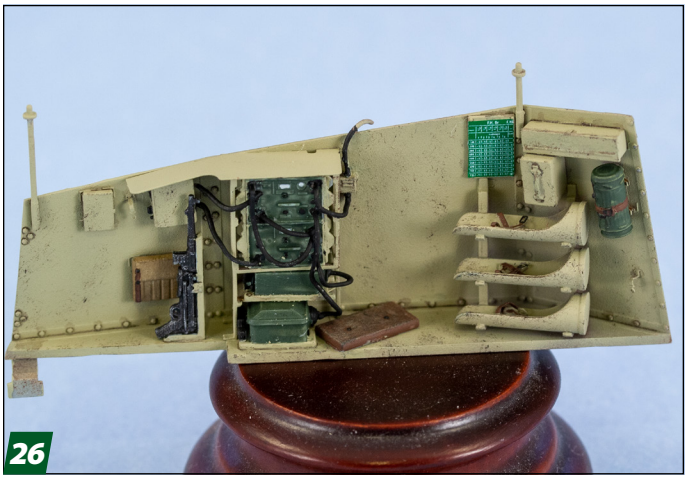


I primed the subassemblies with Italian dark brown followed by a base coat mix of equal parts dunkelgelb and light gray. I painted the engine deck and fenders because these would be difficult to reach with the fighting compartment in place.

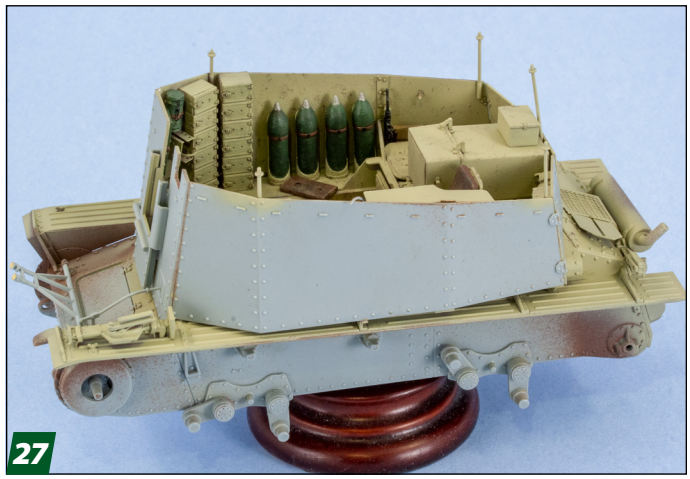


I painted the radio gear with a 1:1 mix of Russian armor green and schwarzgrau and picked out the displays with light gray and the knobs with aircraft interior black. After installing the units in the rack, I wired them with .5mm solder superglued into the previously drilled holes.

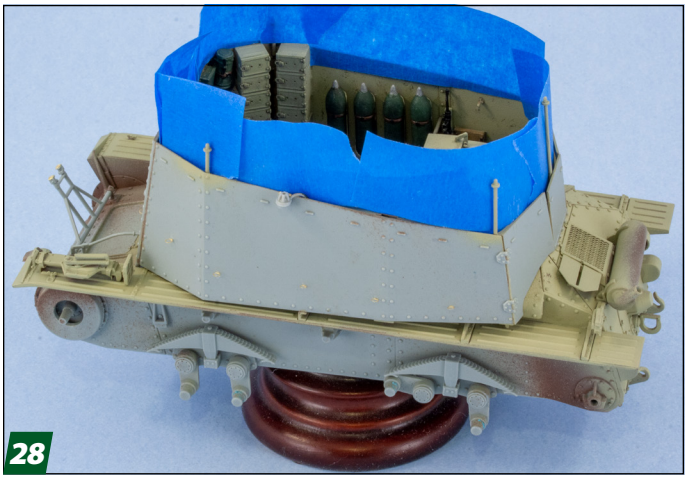
I hand-painted the 15cm rounds on the right side with the same mix as the radios, and the straps were painted Italian dark brown with gunmetal buckles. The fuse caps were finished with steel; I carefully dry-brushed steel on the rounds to simulate scratches from handling.



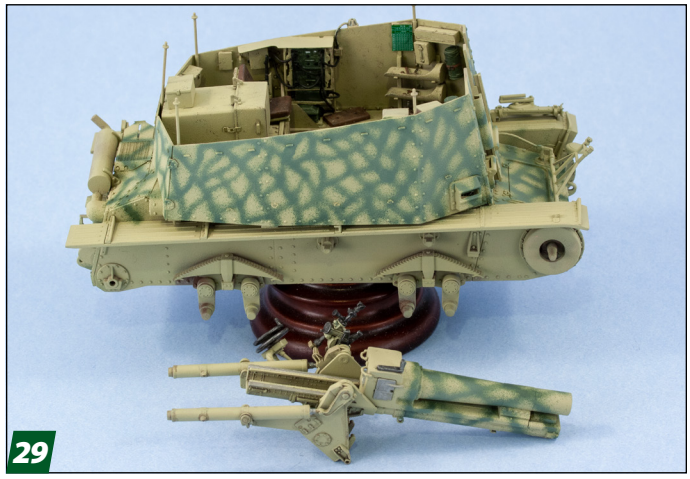
To weather the compartment, I stippled burnt umber followed by the base color to look like scuffs. A raw umber pinwash accentuated raised details before I attached the crew MP40s and seat cushions. The ranging board for the gunner was a spare decal from another kit.



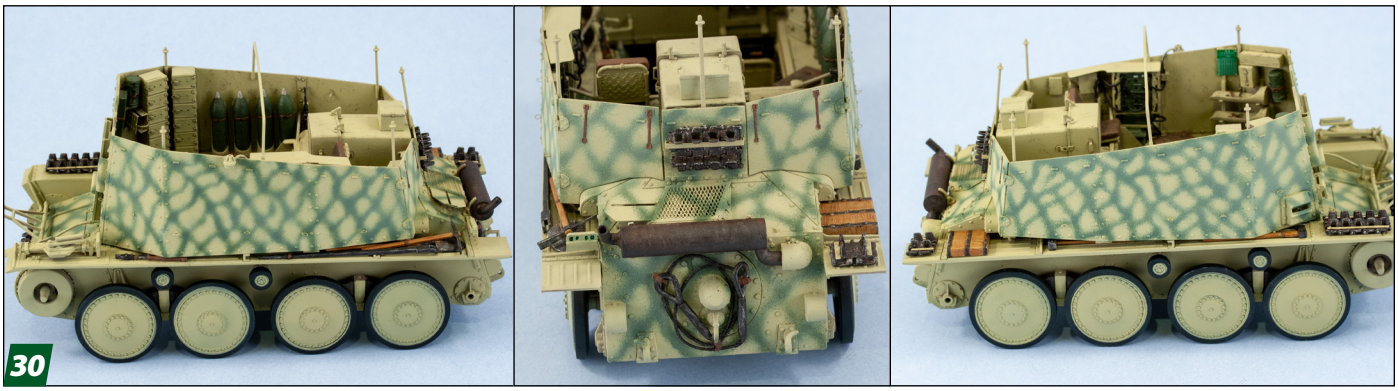
I installed the front casemate plate first, followed by the left and right sides, and finally the rear plate and doors. After all the panels were dry, I attached the gun travel lock in the unclasped position.



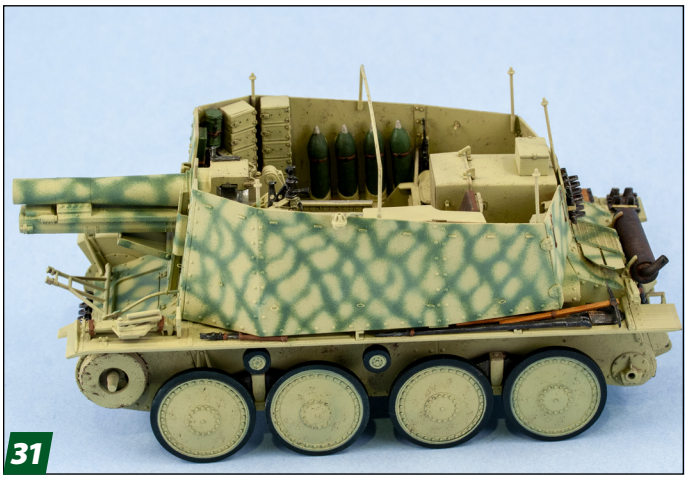
After carefully masking the fighting compartment, I primed the exterior with Italian dark brown. The final layer was a mix of equal parts of dunkelgelb and light gray airbrushed in thin layers to build up a good density.



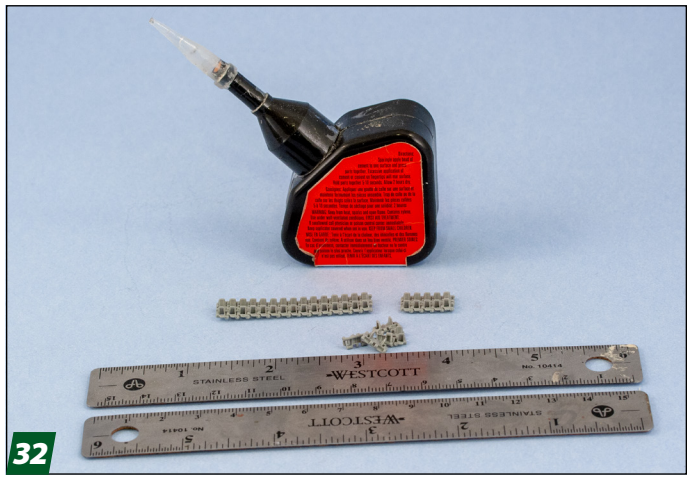
The Kursk Grille I was modeling had intersecting olivgrun lines apparently applied by the crew in the field. I airbrushed this freehand trying my best to follow the finishing guide and the box art. A thin mix of the base color was misted on to blend the camouflage.



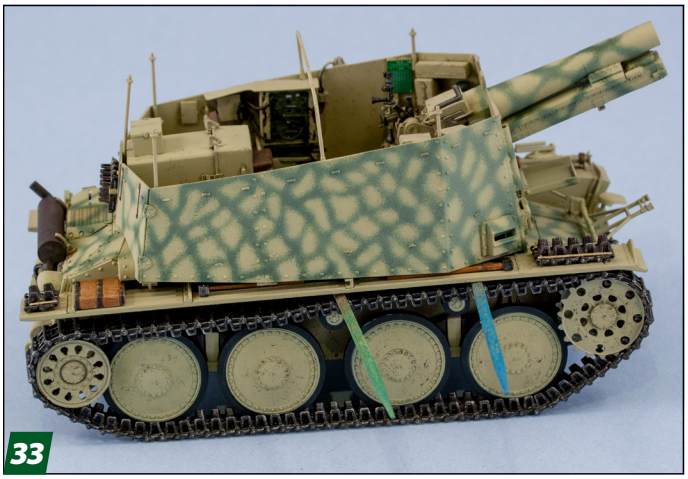
I painted the tires on the road wheels and return rollers and attached them to the suspension. Liquid cement was carefully applied to the movable swing arms to set their final position. I hand-painted the tool handles Afrika grunbraun followed by a wash of leather; metal parts were painted gunmetal then dry-brushed with steel. After painting the PE tool straps with Italian dark brown, I mounted the tools on the fenders. The spare track runs were painted with gunmetal, dry-brushed with steel, and given a light wash of burnt umber before they were attached to the vehicle. I painted the exhaust gunmetal before applying rust washes to give it the right corroded appearance. The rear Notek light lenses were picked out with Tamiya Clear Green (No. X-25). I superglued the kit tow cable ends to 10cm of fine crochet thread that I had dipped in Pledge Floor Gloss (PFG) to control fuzz and stiffen it slightly. I painted the cable gunmetal and dry-brushed it with silver.



The sIG 33 gun and its mount were glued into the hull. Then I attached the hinged elevation flap on the front open to set the angle of the gun before applying liquid cement to the trunnion points.



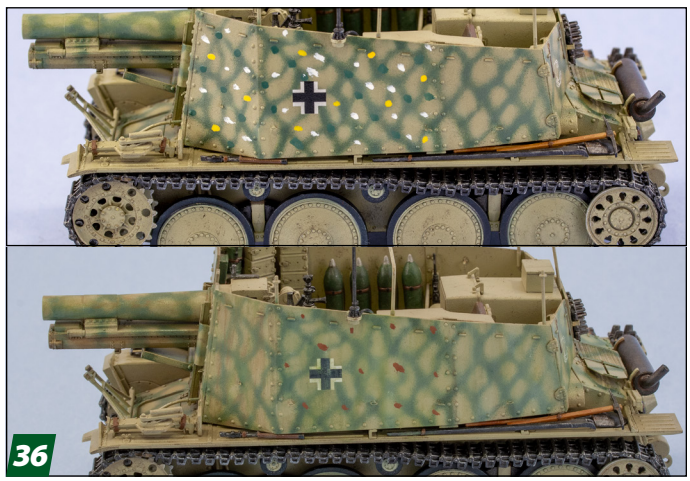
I cleaned up two sets of 93 track links per side and built groups of five links with slower setting solvent glue. These sets of were then joined together using a pair of metal rulers to keep the runs straight. I made two sets for each side — 23 links for the bottom and 70 for the top.



After painting, but while the runs were still flexible, I installed them along with the sprockets and idlers. Only 90 links were needed per side to produce the desired sag, so I removed three links from the top runs. Toothpicks held the links while the glue set.

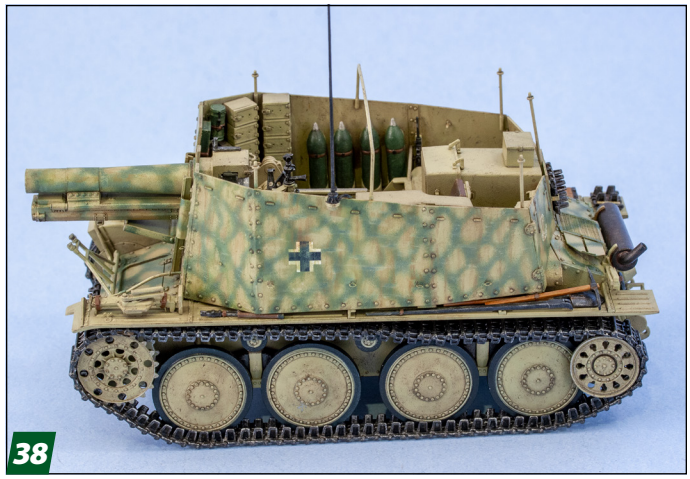
After sealing the model with a protective layer of PFG, I applied the kit decals. Solvaset ensured the markings settled without silvering. I sealed the decals with a second coat of PFG and left it to dry overnight.

The weathering process began with an overall wash of raw umber applied to the exterior with a round No. 1 sable brush. This added contrast to the surface and highlighted features.

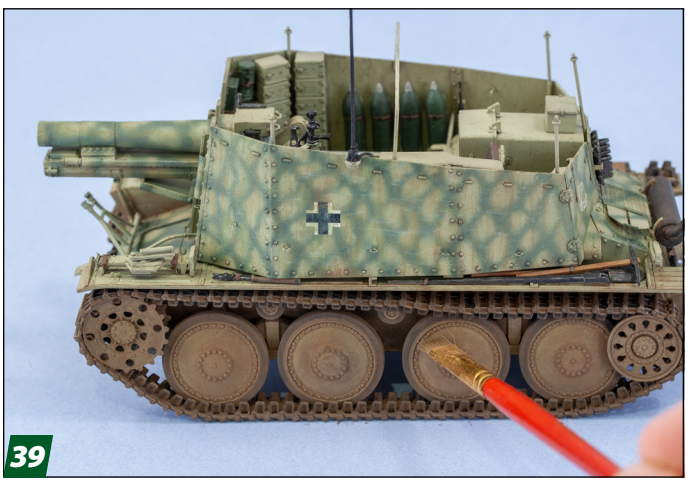


I applied two layers of dot filters. Working a section at a time, I dabbed on dots of flat white, deep yellow, and olivgrun enamels. I repeated this process with dots of military brown to create dirt accumulation and streaking due to the elements.

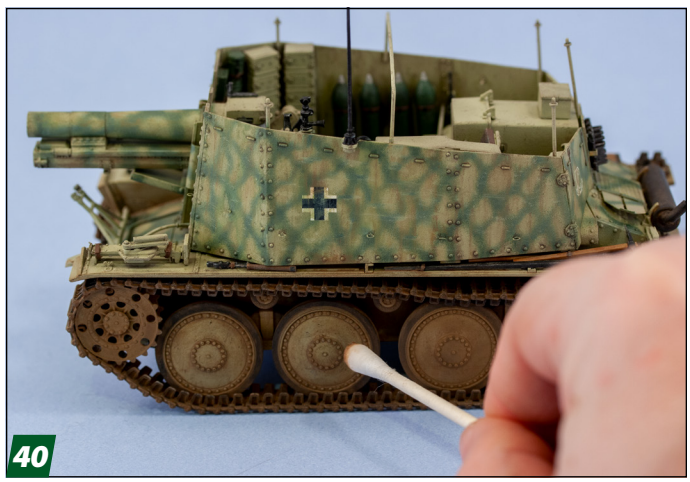
This was followed by a burnt umber pinwash flowed around raised details and into panel lines with a 10/0 brush. I removed excess wash and blooming — darker lines left where the wash flowed across the surface and dried — using the same brush and clean thinner.



I added fine horizontal scratches to the side plates with an 18/0 pointed script brush and the original base-coat color. The scratches were carefully blended with a flat brush slightly damp with thinner.



I sealed all the work with clear flat. An hour later, I added dirt to the tracks and running gear with a mix of equal parts Mig Productions Dark Mud (No. P033) and Europe Dust (No. P028) pigments. I mixed this with water, daubed it on, and left it to dry.



Wearing a dust mask for safety, I removed excess pigment with a dry stiff-bristled square brush. To refine and adjust the deposits, I dipped a cotton swab in water and rubbed it over the surfaces.

FINAL THOUGHTS

THE FINAL STEP was to make sure the Grille looked like it was in service by lightly dry-brushing contact points on the tracks and guide horns as well as the teeth on the drive sprockets and outer edge of the idlers with steel. With that, I laid down my tools and admired the model I cooked up. **FSM**

PAINT CHASSIS DETAILS

Tips to spruce up the underside of cars and light trucks

BY TIM BOYD

Detail painting is one of the easiest and most enjoyable ways to add visual detail and realism to the underside of car and light truck models.

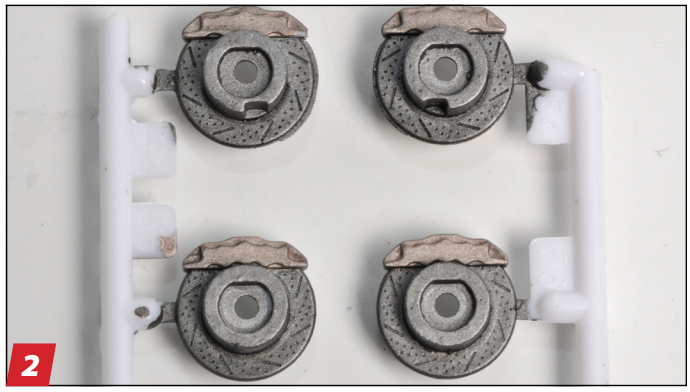
Kit makers often design full-detail chassis and suspensions to simplify manufacturing and expedite assembly so you can get on to more fun like the body and engine. The result is that what are distinct parts on a real car or truck chassis are typically molded together as a single piece.

For example, a kit's one-piece frame might include a portion of the real car's front suspension. Other parts of the front suspension might show up on a molded crossmember or subframe. Painting these parts just as they come from the box does not accurately replicate the 1/1 scale appearance of a vehicle.

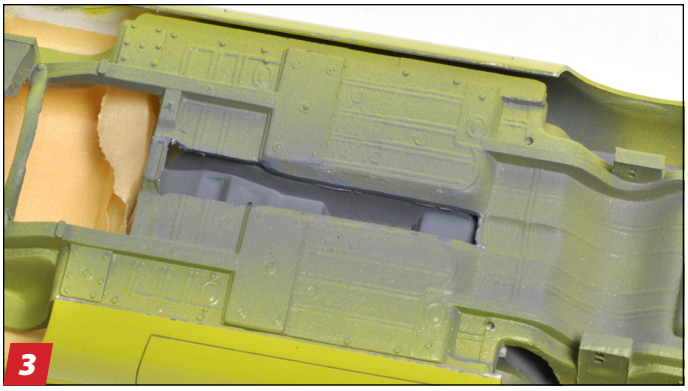
Fortunately, careful painting of the molded parts can overcome this issue. There are also ways to add further realism to an underbody, whether it's on a classic muscle car, a modern sports car, or a street-machine pickup chassis. These techniques will surely elicit a "Wow!" rather than a "ho-hum" when someone looks under your model.

1

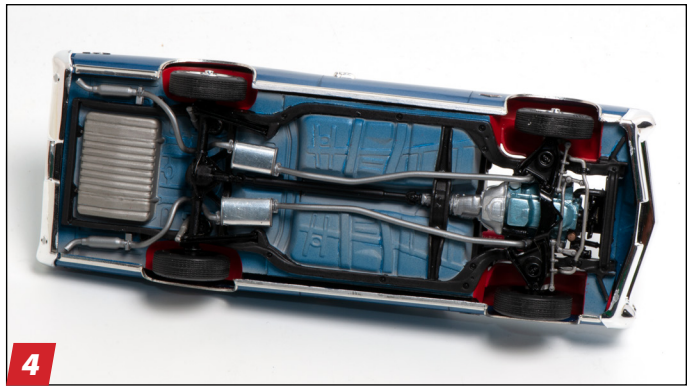
To detail chassis, I use Tamiya acrylics. Silver (No. X-11) and Metallic Grey (No. X-56) are useful, but I mix custom shades like the golden bronze in the center. Washes like Vallejo Dark Gray (No. 76.517) will emphasize details and lend parts a realistic, lightly used appearance.


2

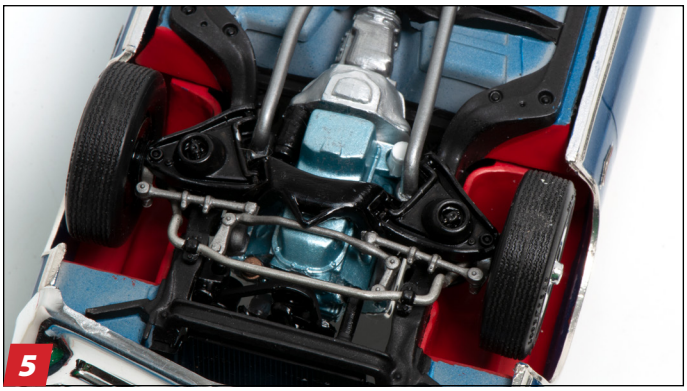
To finish brake rotors, I brush on metallic gray followed by dark gray wash. The calipers, separate parts on real cars but often molded with the rotors for models, were painted a gold/bronze color. Alternatively, they can be glossy yellow or red shades, or the body colors.


3

Many 1960s and 1970s unit-bodied cars — primarily Chrysler and smaller Fords — have remnants of the body paint color overspray underneath. After applying a light gray or rust colored primer, carefully add the overspray; less overspray is more accurate than more.


4

For body-on-frame cars of the same era, like this 1966 GTO, the underbody areas showed the same overspray, as they were typically painted before the frames (usually painted semigloss black) were added. Underbody gas tanks should be a flat metallic color.

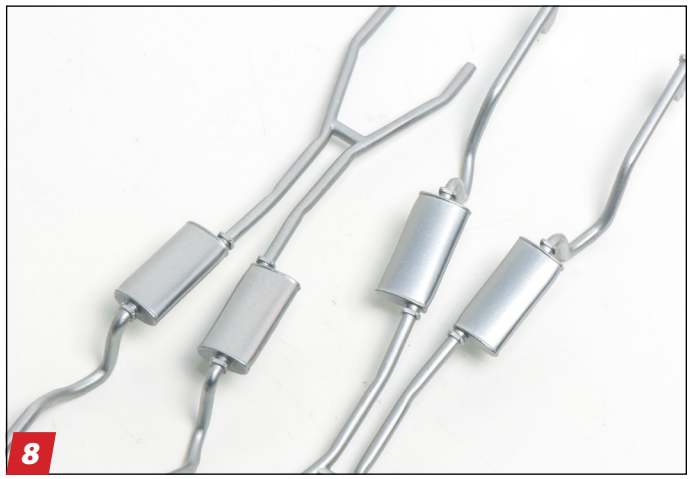

5

GM cars from the same era usually had black suspension parts, but the sheen varied between components. Stabilizer bars and tie rods wore metallic finishes. Note the red fender liners, seen on certain later '60s cars like the GTO and Barracuda and the early 1970s Olds 442.

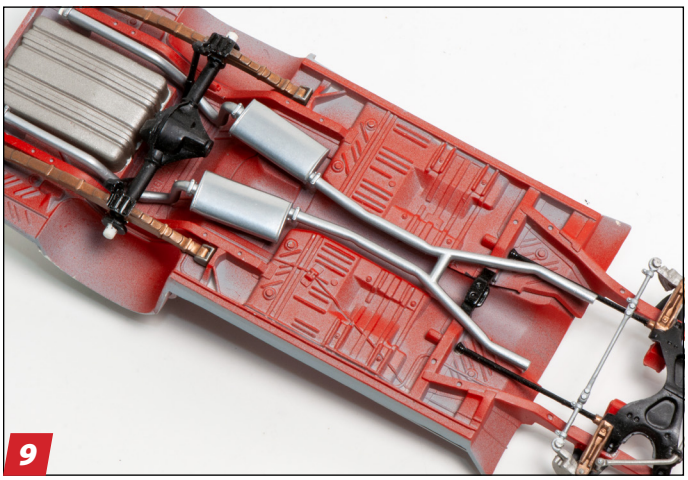

6

Mid-century Chryslers came with a variety of underbody colors and finishes. Front-end K-frames were semigloss black and the bare-metal lower A-arms wore a golden Cosmoline coating. Torsion bars were gloss black and tie rods, anti-roll bars, and spindles were untreated metal.

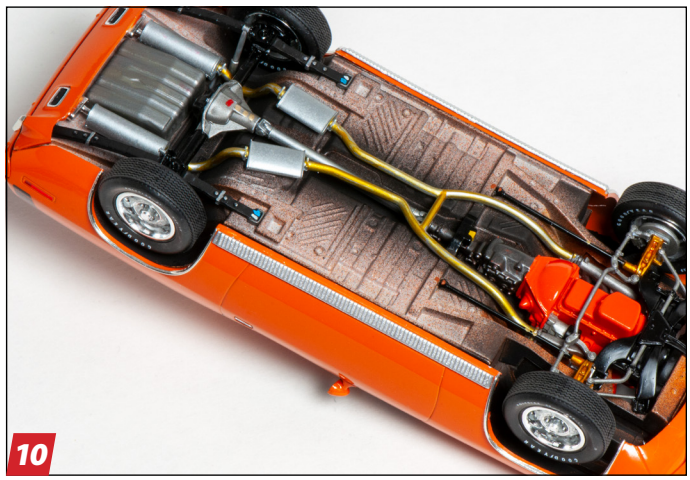
Chrysler's mid-century cars used leaf springs and solid rear axles. Restorers debate whether leaf springs should show metallic gray, Cosmoline coating, or black. Axles were usually gloss or semigloss black, and differentials were either black or metallic gray.



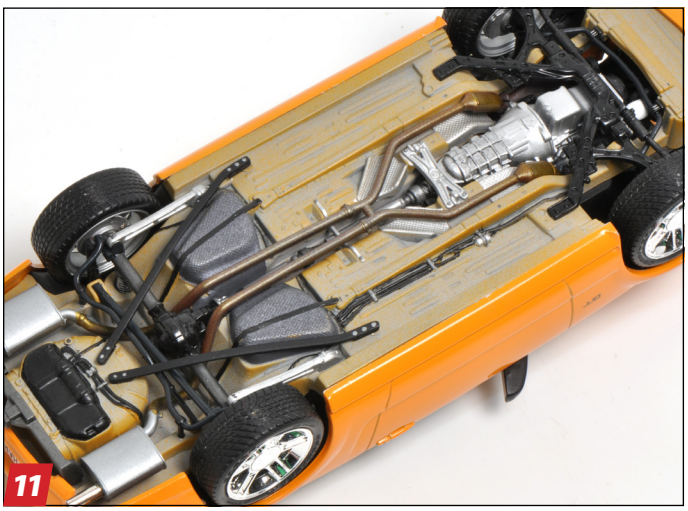
Exhaust systems can be finished with metallic grays or silvers. Some builders add a light overspray of rust-colored primer. Mufflers should be painted a slightly different shade, or you can add Matte Aluminum Bare-Metal Foil (No. 011) to them as seen on the right.



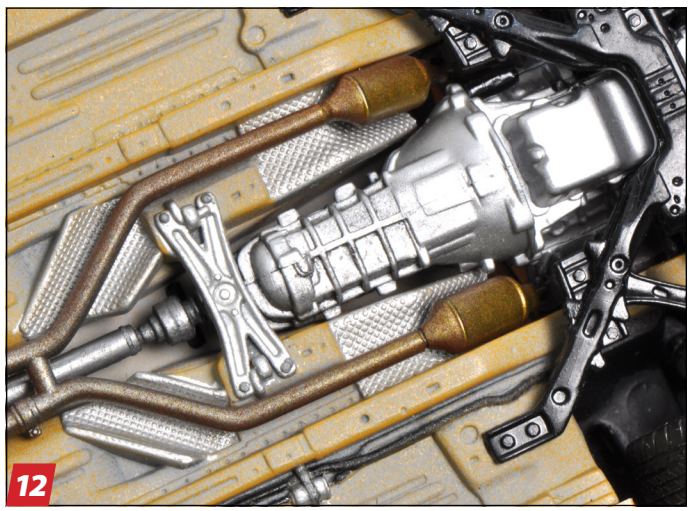
The finished chassis assembly of this 1968 Dodge Charger R/T kit shows how careful detail painting creates a realistic underbody appearance. Rather than this clean showroom appearance, you can add light or heavy weathering as a last step to make your model look used.



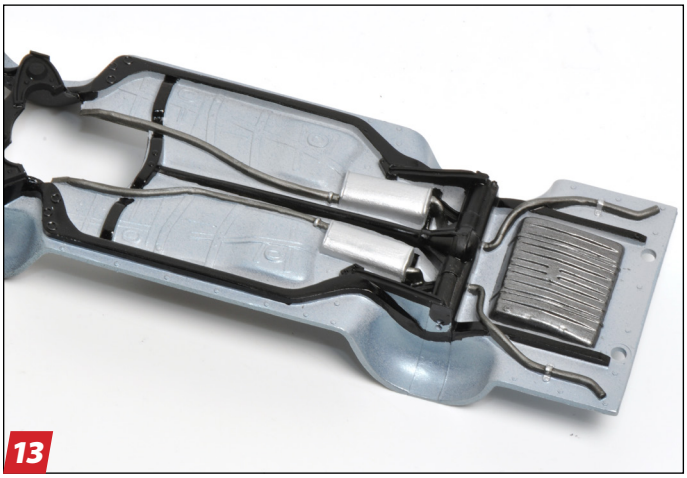
Here, the optional factory undercoating — a dull black — has been airbrushed along the transmission tunnel and rear axle well. Note the discoloration of the exhaust and the addition of factory assembly paint splotches on the torsion bar ends, leaf spring ends, and differential.



Contemporary subjects like this S197 generation Mustang GT also benefit from careful chassis painting and modelers of 21st-century cars have a plethora of online images to research correct colors. The builder added the wishbone underbody brace using .030-inch styrene sheet.

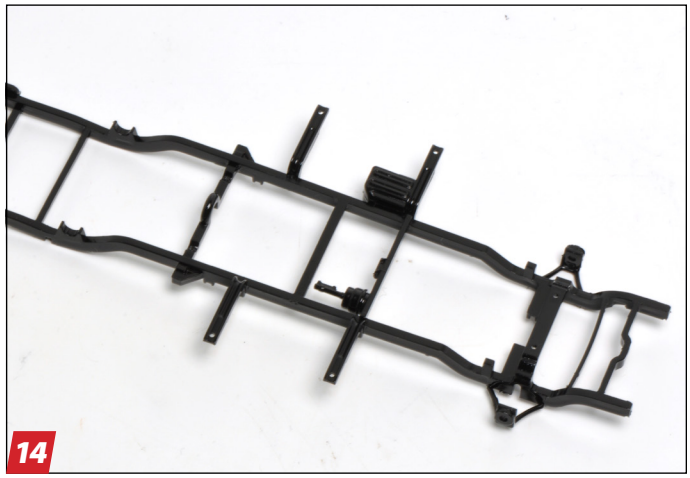


Catalytic convertors on modern cars and trucks give off considerable heat, so reflective heat insulation is often fitted to the floorboards above them. Use silver paint, as seen here, or satin foil to replicate this. Note the discolored exhaust painted with Tamiya Clear Orange (No. X-26).



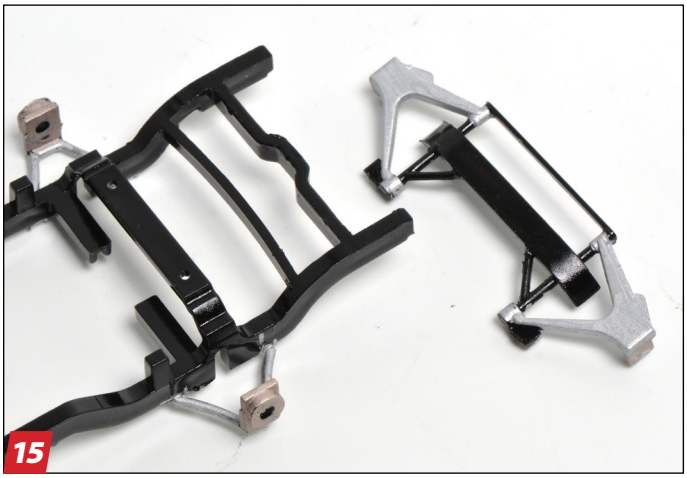
13

Even the simplified one-piece chassis found in most kits tooled in the 1960s and early '70s benefit from selective component painting. Here I've applied some of the techniques to an AMT 1964 Olds Cutlass 442 kit. Read more here.



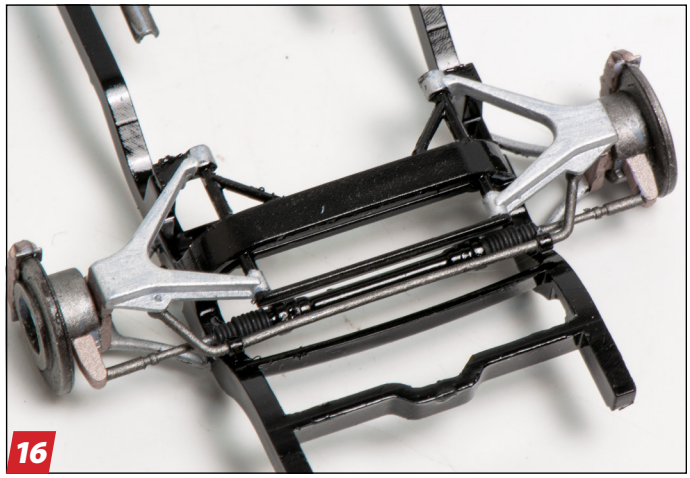
14

Mostly comprising the frame and crossmembers, this street-machine pickup chassis also includes portions of the front suspension and the power brake booster components. Start the paint detailing process with several coats of gloss black from a spray can.



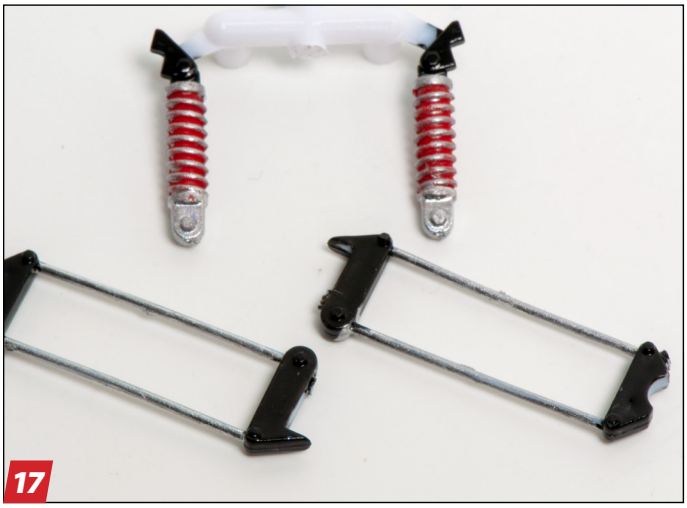
15

In the street-machine kit, the front suspension upper A-arms are molded with the frame, so I brushed them silver to visually delineate these parts. On the separately molded front crossmember, the lower A-arms are also painted silver following the molded demarcations.



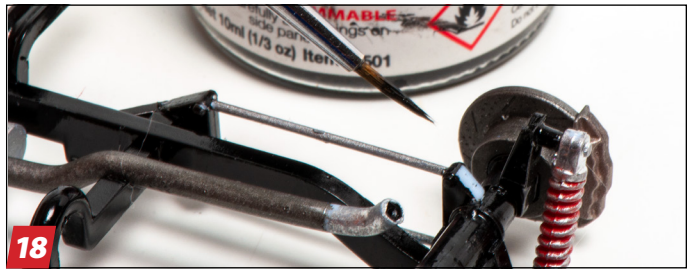
16

The rack and pinion steering is molded as one part, but in it comprises a frame mount, rubber-like boot seals, and tie-rod ends. Each portion should be painted separately: gloss black for the mount, flat black for seals, and metallic gray for the tie-rod ends.



17

On hot rod and street-machine kits, suspension parts like these radius rods are molded together with their mounting brackets. Paint the brackets the frame color; the radius rods should be different. A dry-brushed contrasting color brings out the coil spring detail.



18

Carefully inspect your project for any unfinished surfaces like this rear axle radius rod bracket and touch up these areas as needed. Most projects will have a few places that will require last-minute refinements and a fine paintbrush will be invaluable.

FINAL THOUGHTS

ADDING PAINT DETAILING as shown here is not only fun and relaxing but will add immensely to the authenticity of your soon-to-be-completed next modeling project. **FSM**

Build a plane IN A DAY

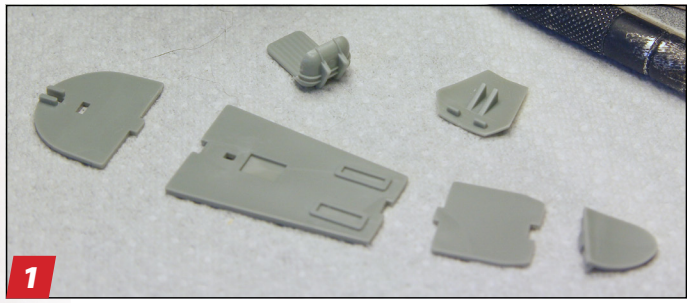
Revisiting the quick builds of childhood with improved skills

BY KEITH LINDSEY

Way back in the 1960s, my weekly allowance (dependent on whether I did *all* my chores *correctly*) was fifty cents. This went further than you'd think, with a bottle of Dr. Pepper at ten cents, a comic book at twelve cents, and those Revell and Aurora airplane kits with the clear plastic "globe" stands hovering around twenty cents each. However, inspired by my older brother and his hot rod car kits, my first model was a 1930s Chevrolet of indeterminate scale molded in bright green plastic. As soon as my mom's Rambler got us home from the TG&Y variety store, I settled at the kitchen table and slammed that kit together with the help of an orange and white tube of stringy Testors styrene cement. A whole fifteen minutes later, I proudly displayed my new glue-smeared creation to Mom. Who needed paint, putty, and hobby knives at seven years old?

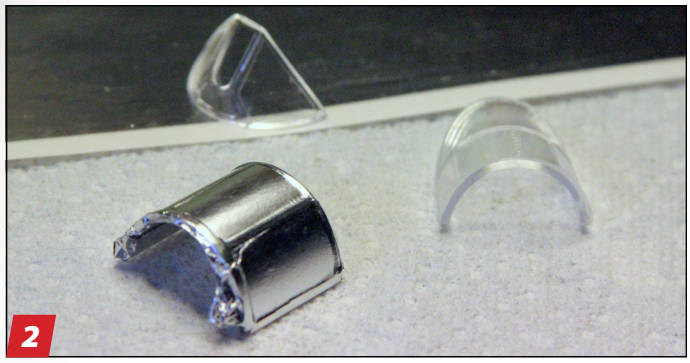
I've come a long way since then (it feels long, anyway). My upstairs modeling chamber is plump with stacks of kits, racks of paints, and other scale modeling detritus. How am I ever going to get all this stuff built before I shuffle off this mortal coil? Advanced modeling syndrome has made me too discerning to build a kit in fifteen minutes anymore without all the flourishes, or has it? I shall throw down the gauntlet, then take it up, and thus suffer a self-inflicted challenge. I *will* build a 1/48 scale plane in a day, if not in 15 minutes, from wakeup to beddy-bye.

The subject for this plane-in-a-day experiment is Academy's Lavochkin La-7 (No. 1649), a kit of what is considered by some to be the best Soviet piston-engine fighter of World War II. I picked this kit up at a half-price sale at a hobby shop a few years ago. My parameters for this build will be that it is out-of-the-box and to my usual standards; no corner-cutting. In hindsight, I probably should have chosen a kit from Tamiya or Hasegawa. The challenge would have been, well, less challenging.



1

And so we begin. On August 6, I was ensconced at my modeling desk precisely at **7:28 AM**, snipping off the cockpit parts needed for the first subassembly to kick off the build. Here's the day's timeline, minus bathroom breaks.

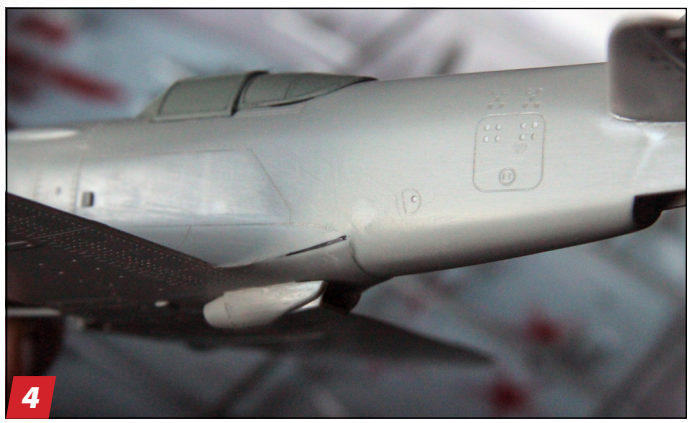


2

10:15 AM First, a trip to the garage and my aged spray booth, laying down the cockpit color using Model Masters RAF Interior Green and spraying the landing gear silver. By then, I'd also finished assembling the wings and detail-painting the instrument panel. A big time-consumer centered on masking the three canopy components so the inside of the frames will show the same color as the interior. I generally use Bare-Metal Foil as a masking medium; one sheet can do dozens of planes, but it can be a bit tedious, burnishing it down and then trimming with a hobby knife. On larger, multi-windowed planes, I always buy a pre-cut masking set. And I drank my first Dr. Pepper of the day.

3

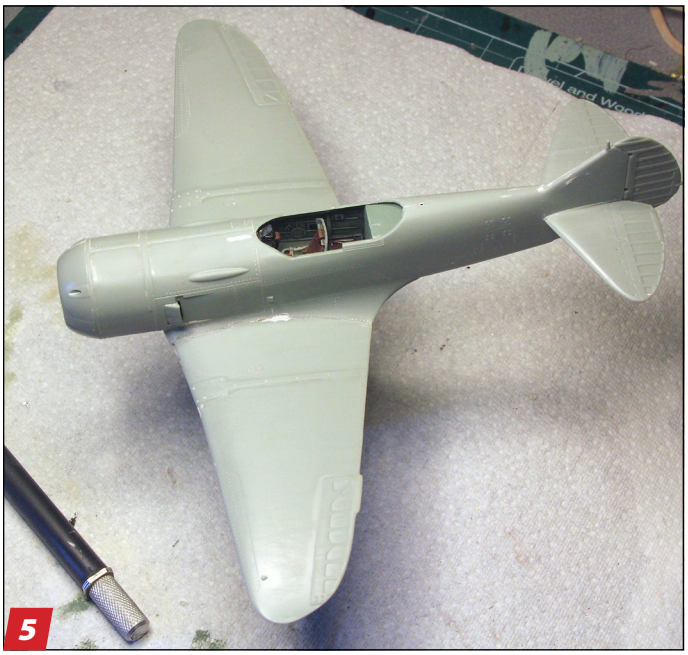
11:32 AM I finished and installed the interior, deviating slightly from my out-of-the-box manifesto by scrounging a set of Eduard seatbelts leftover from a previous build and applying them to the decent, kit-supplied seat. The cockpit detail is weak, but a wash of Tamiya Flat Black mixed with a squirt from a tube of acrylic raw umber, followed by a light gray dry-brushing, brought out what detail existed. I gave each instrument a dab of clear gloss lacquer to create the illusion of lenses.



4

2:42 PM The main components of the plane were now together. There were some major fit issues where the wing roots meet the fuselage and where the rear of the wing assembly joins the underside of the fuselage. A Tamiya or Hasegawa kit most likely would not have presented such challenges. I filled these with Zap-a-Gap, which hardened quickly with the help of a bottle of accelerator that I've been using since 1997. One drop is all it takes, folks. I added Tamiya Surfacer to minor seam gaps. All this was aided by my second Dr. Pepper of the day.

2:45 PM- 3:50 PM- Excuse me, I had to eat and rest my brain. The glue and filler had to dry, too.



4:22 PM With the sanding and cleanup complete, I headed back to the garage and spray booth to coat the underside of the plane with light gray. I now know that this is most likely the wrong color. In my defense, the instructions referred to an FS number I didn't take (or have) the time to decipher, so I went with the illustrations in Osprey's *Soviet Aces of World War II*; they sure looked gray there and on the kit box top illustration. More defensive posturing: the following day, a Google search turned up several pictures of restored La-7s and paintings, some with these same markings. To add to the confusion, some undersides were painted light blue and some were painted light gray. So it goes.

5:34 PM I thin my enamel paints about 60/40 with lacquer thinner, which helps the paint dry pretty darn quickly. So, after masking the underside, it was back to the airbrush to cover the topside with neutral gray (that was an FS number I *could* figure out). I decided not to leave the canopy open and thus glued it in place before spraying. While all this dried, I worked on the tires, propeller, and a few remaining fiddly bits. My third Dr. Pepper (diet!) kept me going.

6:52 PM The contrasting camouflage pattern for the topside was masked off and ready for its coat of RAF medium sea gray. Using blue painters' tape, I trimmed out the pattern with my hobby knife on the desk pad before applying the tape. I then masked and sprayed the white flash on the tail and the red cowl. After all this airbrushing, I cheated a bit and used a hairdryer on low heat to hasten the drying process. I removed all the masking tape and gave the plane a coat of clear gloss from a spray can.

7:18 PM After using Bare-Metal Foil for the shiny metal bands around the engine covers, it was time for a round of decalmania! There weren't that many decals to apply, but they were universally thick and non-conforming (like my cousin Earl!), even after multiple applications of decal softener. I used the hairdryer to hasten the drying process again and sprayed the near-finished aircraft with a coat of clear flat. Silvering persisted on several of the larger decals. I've since watched a very nice build of this kit online, and that gentleman suffered the same dilemma, even with a more generous time allotment. I suggest you seek aftermarket decals when tackling this kit. The partial consumption of a bag of Chips-Ahoy cookies and ice-cold milk fueled me up for the rest of the evening and didn't get too in the way of the task at hand.

9

9:42 PM Now commenced the weathering and attachment of landing gear, antenna, propeller, and that mainstay of midcentury aircraft, the pitot tube. Weathering is the biggest time-eater here; I apply my wash mixture to the various panel lines and rivets, then when it dries, I wet-sand the plane with a 3200 grit Micromesh polishing sheet. Someday, I will learn to use those oil washes I've been reading about for decades. At this point, I remembered to paint the metallic exhaust panels on each side of the plane. I use a 50/50 mixture of Testors Model Master chrome silver and flat black for almost anything metallic. This works well for gun barrels and other weapons, and it dries quickly, too. For a final touch, I used a Tamiya Weathering Master kit (TAM87088) to apply oily stains around the engine and exhaust outlets. All this took me to…

10

11:18 PM …and a completed Lavochkin La-7 in 1/48 scale sitting on my desk. I was too jittery, from both Dr. Pepper and excitement, to get a restful night's sleep.

FINAL THOUGHTS

MY CONCLUSION IS THIS: "Man is a giddy thing." No, really, you can build a plane in a day to a reasonable standard. You could probably build it in less than a day if you started with a kit with better wing fit and decals. Regrets? I have some. The red of the decals didn't match the insignia red used for the engine cowl; I would have liked to do more extensive weathering; and the silvering of the decals slightly spoils the overall presentation of the model. Otherwise, I'm satisfied. But maybe I'll just add an antenna wire tomorrow. And I could always mix up some red and respray the cowl. Nope, there are too many kits out there and too little time. I think it's time to tackle that Jagdpanther that's been calling to me from my stack of Tamiya kits.

PROS: Watched (mostly listened to) three movies and binged a couple of TV shows; didn't waste water taking a shower; the joy of model completion; eliminated one more kit from the teetering stacks in my stash.

CONS: Questionable hygiene; missed lunch; sore backside; blurred vision; caffeine jitters; paint-stained hands; messy model-building desk. **FSM**