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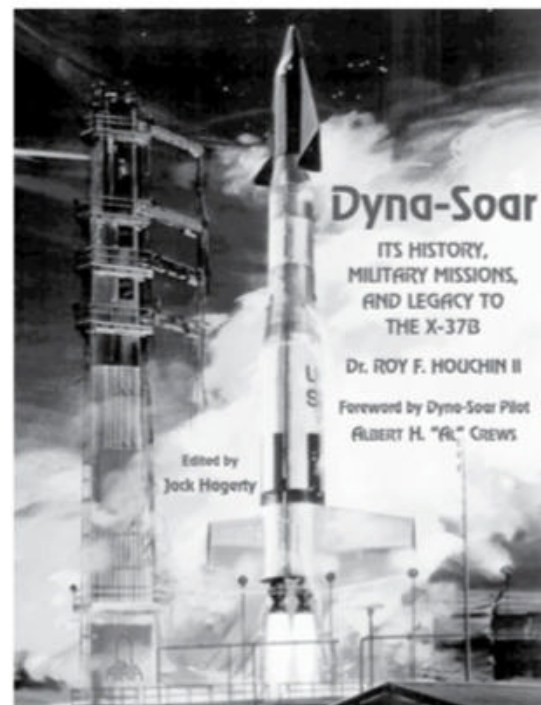


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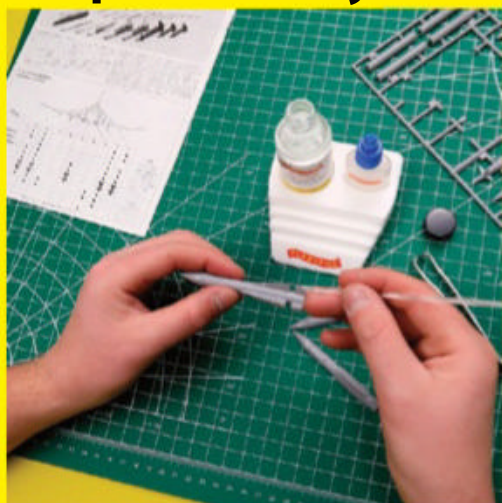
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By Aaron Skinner

BAMM moving forward

The inaugural Build a Model Month (BAMM) is in the books. The virtual model contest garnered 3,811 photos with some coming in the last seconds before entries closed at 11:59 p.m. on Nov. 30.

In all, 209 modelers contributed more than 750 models. They came from all over the world, including Serbia, England, and the Philippines, and the quality of the work on display was outstanding. Fellow *FSM* editor Tim Kidwell and I looked at every model in the competition, and I can tell you that the pair of us, along with our fellow category judges, had a tough time narrowing the winners down to a single model in each genre. You can see the top entries on the website, and the grand prize winner will be featured in the May/June 2023 *FSM*.

But the real focus of the event was building a model or models with a person or persons who had not built a model before and share the fun. We heard from a bunch of you who were doing just that, and you should visit and read some of those stories at [FineScale.com](https://www.finescale.com). Many clubs organized build sessions to bring in new blood and even a couple modeling podcasts got in on the action hosting group builds. Our hope is that once these events take off, they can keep

going outside of November.

The *FSM* staff want to thank everyone who took time to enter the contest and vote for People's Choice. Also, a big thank you to the people who took time out of their schedules to help judge the categories. They are in no particular order — Rick Lawler, George Seletas, Annya Shetinina, Jim Kampmann, Toni Levine, Spencer Pollard, and Kendra Bell.

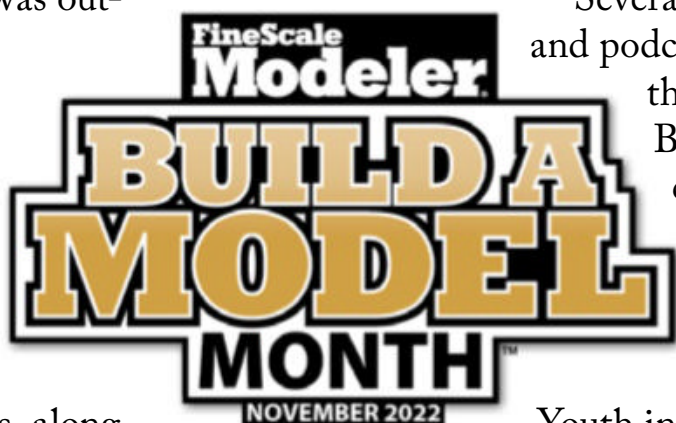
Several modeling clubs and podcasts helped spread the word for both BAMM and the contest, including IPMS/USA, IPMS Toronto, Lakes Region Scale Modelers,

Youth in Model Railroading, Model Geek's Podcast, and Scale Model Podcast. In addition, Airfix, AK Interactive, Atlantis Models, Arma Hobby, ICM, Revell, and Tamiya all donated products for the associated BAMM Sweepstakes.

At the beginning of this note, I referred to the 2022 event as the inaugural BAMM. We are already planning for November 2023 and hope to make it bigger and better. Watch the pages of the magazine and [FineScale.com](https://www.finescale.com) for announcements. In the meantime, keep building and spread the joy!



editor@finescale.com



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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

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EDITORIAL

262-796-8776

ADVERTISING DEPARTMENT

888-558-1544

Advertising Sales Representative

Michael Wieloch, Ext. 625

mwieloch@kalmbach.com

Ad Production

adservices@kalmbach.com

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The voice of the future

Hello! I loved your article about the future of scale modeling in the January/February 2023 *FSM*. As a 17-year-old modeler, it's interesting to hear about how our hobby is doing. I guess, a few years ago, I was one of those kids they were talking about. Four years later and I'm as invested in the hobby as I was when I started, if not more so. I'm a host of the The Micro Machines Podcast and am very active in the modeling community; I even table captained during a regional show! All in all, modeling was an amazing decision, and I'm so grateful for all the people who have helped me.

— Ezra Talavera

Truth Or Consequences, N.M.

Ed.: Thanks, Ezra. Your enthusiasm reinforces our confidence in the future of modeling!

Don't fret the hobby's future

I really enjoyed the January/February 2023 *FSM*. I think a lot of us have been concerned that our hobby was headed in the wrong direction. Yet, anyone who builds models today knows that this is a great time for builders, with an unlimited choice of kits, really great paints and weathering supplies, and tools that we only dreamed of a few years ago. I think what I and others sense is the shift in the hobby. The best models now come from Europe or China, paint is imported, and we notice brick-and-mortar stores closing. Go to shows and you see nothing but a lot of old guys bringing their models to the contest. I felt that eventually all the current modelers would pass away and there would be no one to replace them. Then I met a college student who builds Gundams. I thought these were guys snapping Transformers together, but he was building kits far more complex than mine using skills that far surpassed mine. That's when I realized that our hobby wasn't going away, it was shifting into areas that I had never imagined. Your article pointed out all of this and more. It was exactly the right info at the right time.

Also, thanks for the articles on 3D printing, something that is cropping up more and more in things I do and see, yet it remains mysterious and unapproachable to many of us. More and more of the parts we buy for our models are 3D printed, and the uses of 3D printing are limited only by our imagination. But I am also at an age where I worry about the steep learning curve required. The articles do a good job of pointing out the uses of 3D printing as well

as the equipment needed and why. I'm an old guy, and I may never jump into 3D printing, but I think there are a lot of people who might be ready to make the leap. Your articles provided the basic information to make this new tool a little less intimidating; more would be appreciated.

— George Blair

Georgetown, Texas

Ed.: We agree, George. 3D printing is here to stay and you can expect more articles about it in the magazine and at FineScale.com.

Relax and enjoy the plastic

I loved the article about the future of the hobby (January/February 2023). The reason I subscribe to *FSM* is that it covers the entire spectrum of scale modeling. I am an aircraft modeler and also subscribe to aircraft-specific magazines, but I enjoy all aspects of the hobby. The Gundam guys seem to have natural-metal finishes down to an art form. Not me! My nephew is a *Warhammer* fan and a gifted figure painter; he is a scale modeler, like it or not.

I'm a former Marine, and I feel one reason that interest in military subjects is declining is because so has military service and experience. In recent years, less than 1% of Americans have served in the military. The World War II, Korea, and Vietnam generations are disappearing. In addition, there aren't TV shows like *Combat*, *Rat Patrol*, or *Baa Baa Black Sheep*, so young people's exposure to the source material is minimal.

Despite that, I feel the future is bright for the hobby based on for the sheer volume of subjects available in every genre. So relax, enjoy the plastic, and happy modeling!

— Steve Berkold

Covina, Calif.

Ed.: Thanks, Steve. That's an interesting take on the decline of interest in military models.

The good, the bad, and the future

In regard to "The Future of Scale Modeling" in the January/February 2023 *FineScale Modeler*, I'd like to say that the future will be dependent on modelers and the industry. Both of them have an equal stake in the hobby, so both have much to gain and much to lose.

The internet has given modelers the advantage of finding and buying pretty much anything they need in kits, accessories, and modeling supplies. At the same

time, the local hobby shop has one thing that the internet doesn't — the personal touch. The hobby shop has always been a place a modeler can get valuable information, tips, and advice from other modelers. Even with the internet, that first-hand knowledge is invaluable.

In regard to the models themselves, Gundam models are a branch of the hobby that has taken off. Kids who scoffed at model building now find it a good way to get introduced to the hobby, which could lead them to go beyond the Gundam series to other subjects. If that happens, it gives older modelers the chance to share their knowledge of what they do, and how to do it. It might also give older modelers the opportunity to try something that doesn't require research to get things right, giving them an opportunity to use their imagination and build something creative.

To sum up, the future of scale modeling is looking pretty good.

— Daniel Burkett

Keansburg, N.J.

Ed.: Thanks for your thoughts, Daniel. I don't disagree that there is plenty of room for new modelers to learn from those who have been doing it awhile. But I think that exchange can go both ways, and I don't think it is predicated on Gundam modelers building planes and tanks. Exposure to well-built and finished models, whether the subject is historical or fantastical, drives creativity and advances the hobby.

From a clear-eyed reader

The January/February 2023 *FSM* was outstanding, especially the articles on 3D printing, which remain a mystery to those of us unfamiliar with the how-to details. However, I don't know if it was an author or magazine proofreading error in the article, "A Clear Challenge," on simulating transparent lenses with pain, but the French phrase for 'optical illusion' (or 'fool the eye') is "trompe l'oeil" rather than "trempe l'oeil", as it was spelled in the story. Trompe l'oeil is a well known artist's term for oil paintings that look like photographs. Interestingly, if you type the term "trempe l'oeil" into the Google Translator you get *quench the eye*, which is not what the author meant! — Ron Wells

Abingdon, Va.

Ed.: Right you are, Ron! I have made note of the term and enrolled the entire staff in art classes at the local college.

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ABANDONED



Kitbash a 1/72 scale Iraqi BMP-1

BY ANDERS ISAKSSON

For a long time, I have wanted to try my hand at building a vehicle with heavy wear. After seeing photos of weathered Iraqi armored personnel carriers during the Gulf War, I had my subject — a BMP-1. But a kit suitable for my plans was not in my stash. A bit of a search later and two kits would become one.

As a base for my Iraqi BMP-1, I chose S-model's excellent offering that includes photo-etched metal parts. Primarily intended for wargaming, it is well detailed, but the wheels and tracks are molded together. I replaced those with individual wheels and tracks from an Ace Model BMP-1.

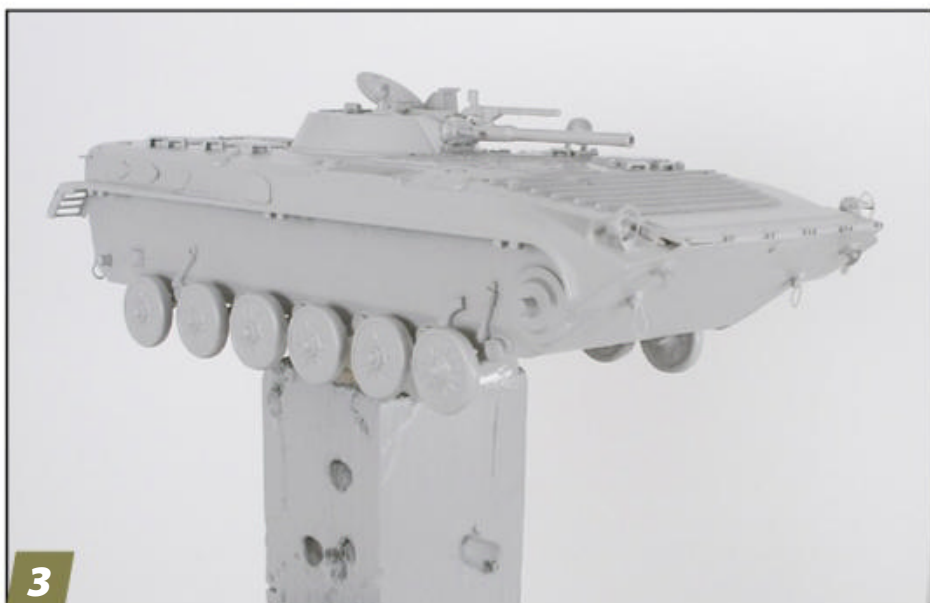
Building it as abandoned was a natural choice, since there are relatively few suitable crew figures in this scale. I imagined the crew leaving the vehicle on the side of the road because it had run out of fuel or suffered a mechanical problem.



1 Thanks to its size and relatively few parts, construction went quickly. The green plastic comes from the S-Model kit and the gray from Ace. I drilled out the hubs on the Ace wheels to fit over the S-Model axles.



2 The swim vanes at the rear were molded solid on the S-Model hull. To improve the overall fidelity of the model, I carefully filed them off and replaced them with individual vanes made from thin styrene strip.



3 After applying a layer of Tamiya gray primer directly from the spray can, I let the model dry thoroughly and examined the surfaces for errors such as glue stains or other defects.



4 I wanted to imitate a vehicle delivered in Soviet green camouflage and then sprayed with sand yellow for desert use after reaching the Iraqi army. Photos showed this upper layer worn to reveal the underlying green. I sprayed the model with Tamiya J.A. Green (No. XF-13), but the exact shade isn't critical because it will be mostly covered. The fenders, made from thin aluminum on the full-size BMP, were painted with Tamiya Bare-Metal Silver (No. AS-12) before the green.



5 To start the wear and tear, I carefully dabbed Humbrol Maskol, a liquid masking solution, onto edges, protruding details, and various surfaces with a chunk of foam rubber. The workflow may seem cumbersome, but it mimics the process of different layers of color being worn to different degrees, sometimes only to the green and sometimes further exposing pure aluminum on the fenders.



6 I mixed a desert sand color using Tamiya Dark Yellow (No. XF-60), Yellow Green (No. XF-4), and Flat White (No. XF-2) and airbrushed it in several thin layers so the green showed through in places. I left a few of the wheels green to look like spare wheels mounted at some point without being painted in sand camouflage.



7
As soon as the paint dried, I gently rubbed my finger over the model to remove the Maskol and expose areas of green. The layers of masking and paint revealed sections of green and aluminum on the fender skirts. On some surfaces, the Maskol proved more difficult to remove, but an old brush took care of that.



8
At this point, the damage looked rough with sharp edges to the chips. To blend those areas and add another subtle layer of wear, I masked some individual panels and airbrushed the green base color along the edges.



9
I used a piece of sponge to dab on green paint and create a finer pattern of the exposed base color.



10
AK Interactive Dark Streaking Grime (No. AK024) and a wash of 502 Abteilung Dark Mud (No. ABT130) oil paint thinned with White Spirit (No. AK011) deepened recesses and shadows to add contrast to surfaces.



11
A thin layer of Mig Productions Gulf War Sand (No. P037) pigment applied with a dry brush added a layer of dust to the vehicle.



12
The Ace kit's vinyl tracks didn't take paint easily. I base-coated the runs with brown acrylic and let that dry thoroughly. Then I applied Vallejo Model Color German Camouflage Black Brown (No. 70.826), Flat Earth (No. 70.983), and Tan Yellow (No. 70.912) with a sponge to avoid damaging the base paint.



13

A model this small benefits from a base to provide context. I cut blue insulation foam to fit a small wooden base, then brushed part of it with solvent thinner that melted the foam to produce a lower area. The unaffected half would serve as the paved road; I added minor cracks in the asphalt by lightly pulling a knife across the surface.



14

To avoid further damaging the foam, I hand-painted it with Vallejo Model Color acrylics. I used Luftwaffe Uniform WWII (No. 70.816) and Black (No. 70.950) for the pavement; the sand is Buff (No. 70.976) and Tan Yellow (No. 70.912).



15

After masking, I airbrushed a stripe along the edge of the road with a dirty white mixed by adding a drop of Tamiya Desert Yellow (No. XF-59) to Flat White.

FINAL STEPS

TO FINISH THE BASE, I added dry, shrubby vegetation from my spares box and small stones. An oil barrel of unknown origin was brush painted, weathered, and placed next to the vehicle for a splash of color. As a final detail, I installed a road sign from a Duplicata Productions set (No. 99A-72) printed on thick paper. After cutting the sign from the sheet, I painted the edges to match the front surface and mounted it on posts made from thin styrene tubes. With all the details in place, I glued the BMP-1 to the base, and my vignette was complete. **FSM**





Kitbash a **LINEBACKER** **PHANTOM**

Combine vintage 1/72 scale ESCI and Monogram kits to create a Navy F-4J bomber

BY GREG KOLASA

Nowadays, my eyes pretty much demand that I work in 1/48 scale and larger. But they're open — pun unintentional — to an occasional 1/72 scale build, so they agreed to an F-4J Phantom II as one of the last additions to my 1/72 scale carrier air wing collection. I had planned a basic out-of-the-box project with a unique ordnance load using an ESCI kit that has been around for nearly 40 years. It still builds into a nice Rhino with recessed panel lines, good fits, and sharp trailing edges.

While the F-4 is more often thought of as a MiG-killing dogfighter, during the Vietnam War, especially Operation Linebacker in late 1972, it established itself as one of America's premier bomb haulers. The specific Phantom I modeled is an F-4J, BuNo. 155882, from the VF-213 "Black Lions" operating off USS *Kitty Hawk*.

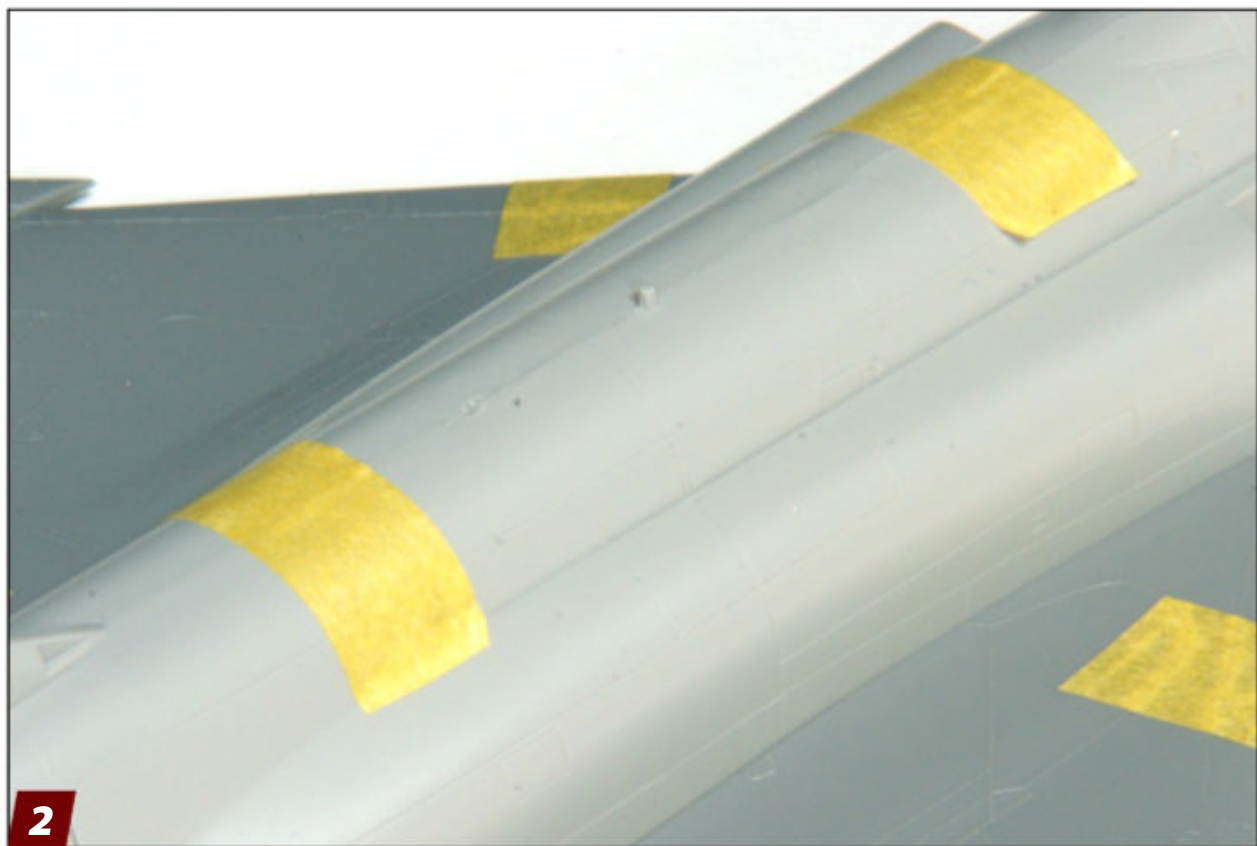
The kit I built is a 2016 reboxing by Italeri with decals for four MiG killers. Be warned, not all Italeri Phantoms are the sweet ESCI kit; the newer F-4S is a somewhat crude retool.



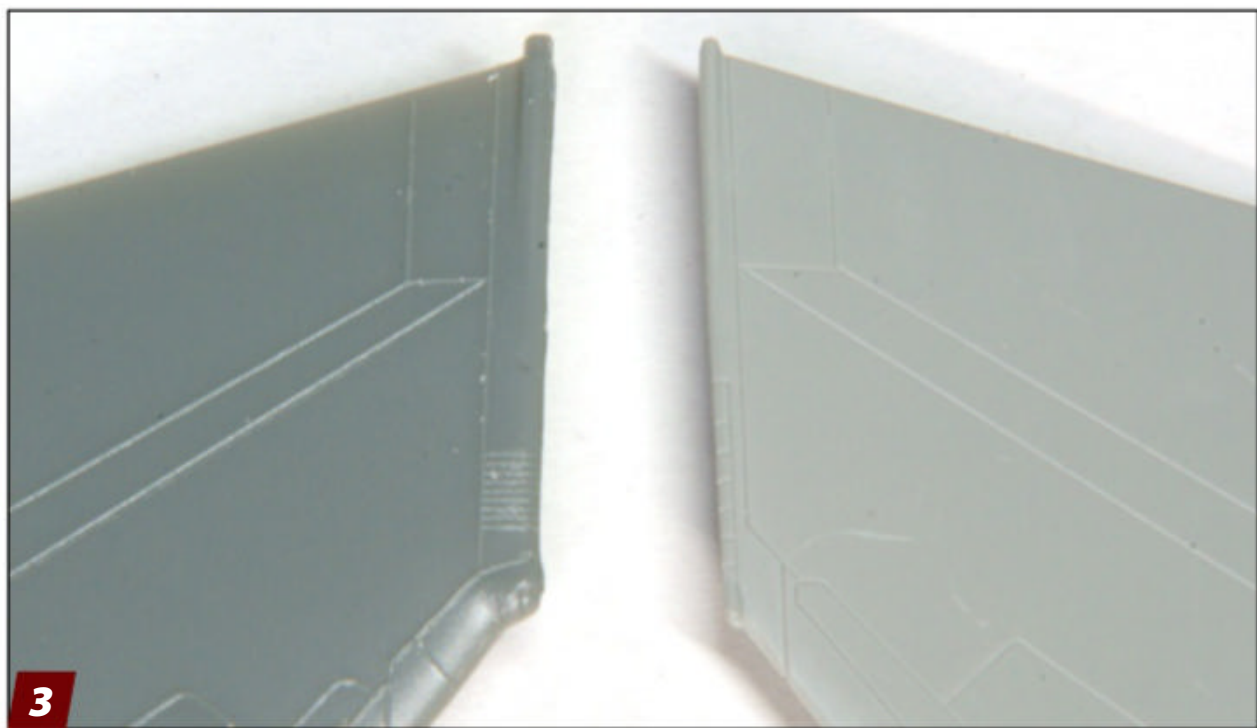
One of the quirks of the ESCI kit is the lack of the 600-gallon centerline fuel tank commonly carried by Phantoms. So I grabbed a partial Accurate Miniatures 1/72 scale Phantom — no box, instructions, clear parts, or decals — from eBay to get a fuel tank. This kit is itself a rebox of the Monogram F-4, which debuted in the mid-1980s with one of the nicest injection-molded cockpits available and still holds up well today. I figured plopping the Monogram cockpit into the ESCI fuselage would involve little effort for a high payoff. But a closer look at the Monogram kit showed that, despite some heavy raised panel details, awkward construction method around the intakes, and large sinks along the fuselage spine, the kit had posable ailerons, speed brakes, and auxiliary air inlets, and better landing gear. In addition, Monogram offered nice stores, including Triple Ejector Racks (TER) that I was going to have to scratchbuild for the ESCI kit. The build just got more complex as I contemplated merging the two kits.



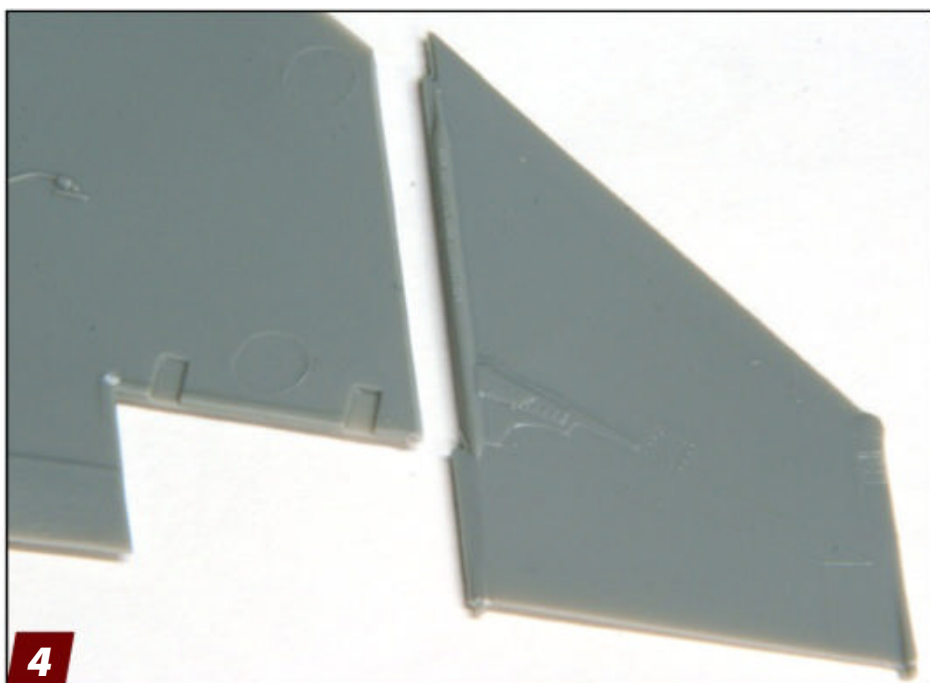
Test-fitting showed that the Monogram wing and integral lower fuselage don't quite match ESCI's fuselage. That means a bit of work to make the replacement seamless.



A potential deal breaker didn't materialize because the ESCI wing is a superb match for the Monogram fuselage and only light scraping was required for a perfect fit at the roots. Removal of the upper-to-lower wing locating pins produced an even better fit

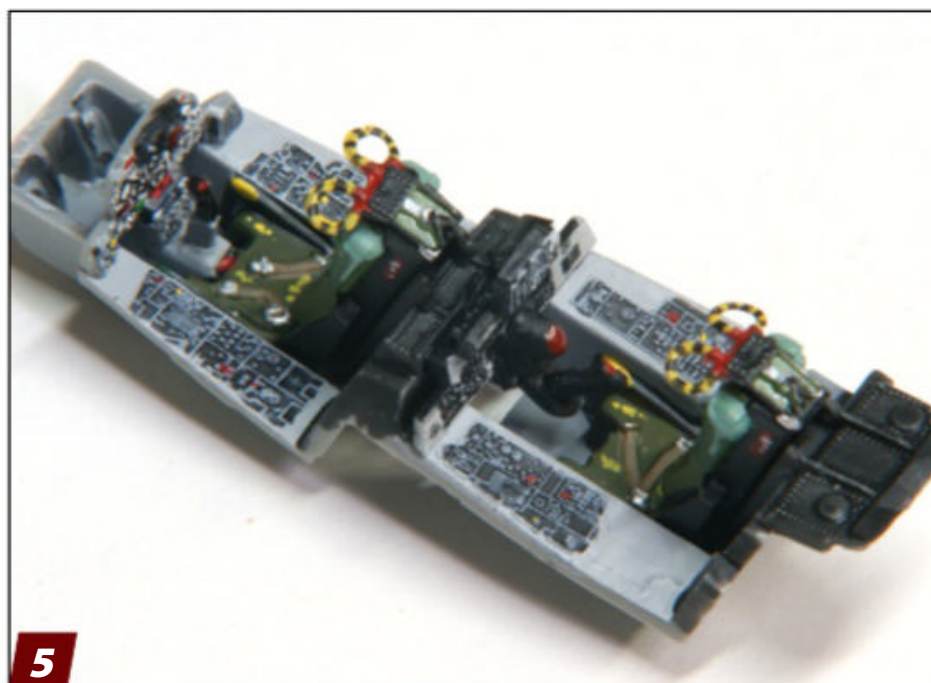


But the solution of one problem begat another. The Monogram wingtips (left) feature molded-in AN/ALR-46 RHAW antennas, incorrect for a Navy Vietnam-era bird. They are correct in the ESCI kit (right), but, since I wanted to fold the wings, I will fit CMK resin wingtips (No. Q72214) that mirror the ESCI parts.



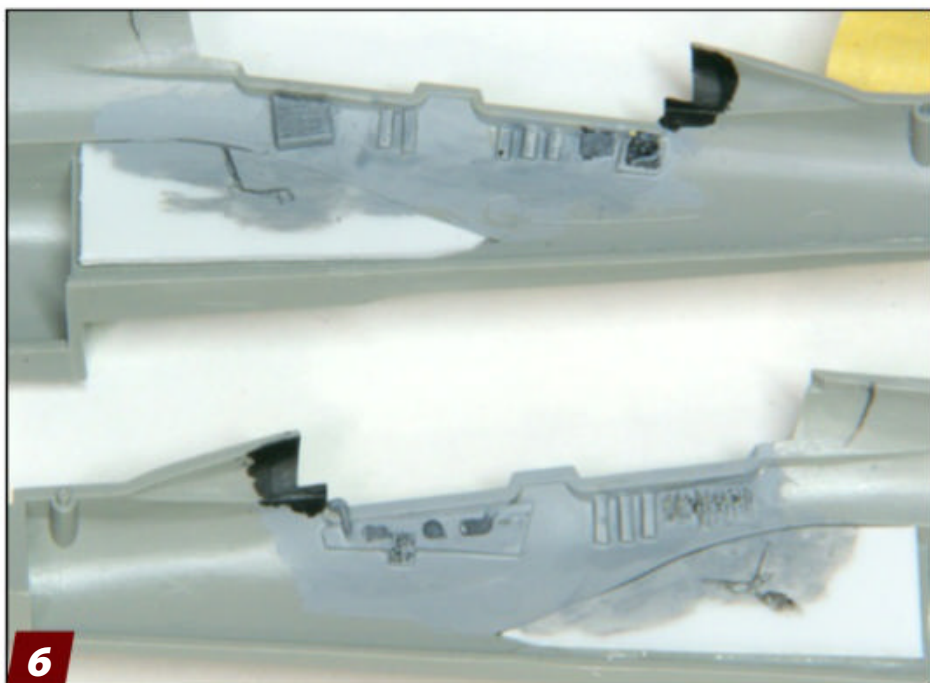
4

A rough cut at the hinge line removes the tips from the rest of the Monogram wing. Final trimming will be performed later when CMK's extremely detailed (and fragile) hinges are installed.



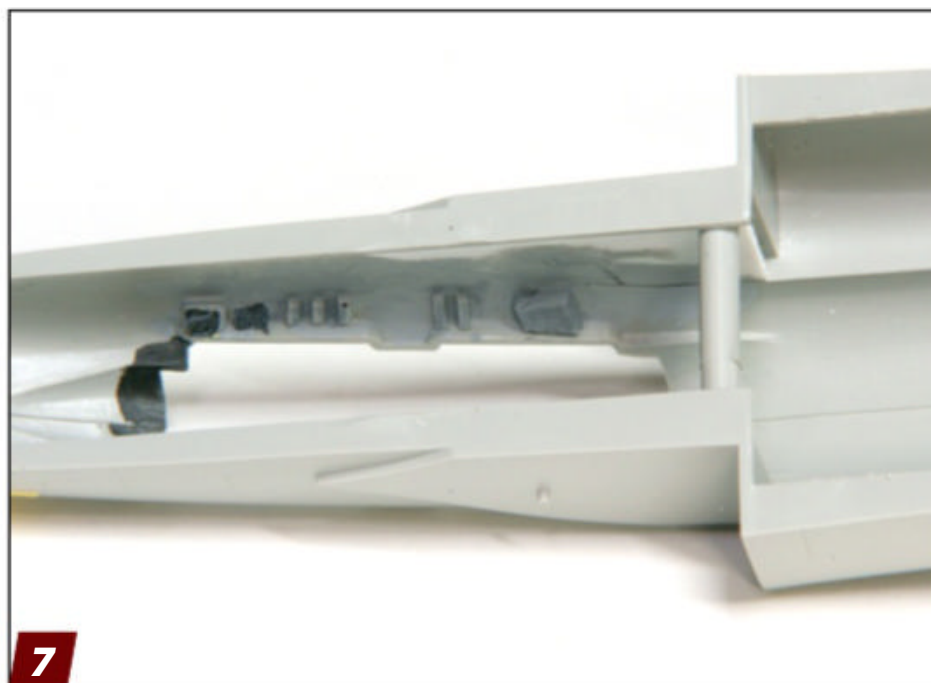
5

Microscale decals for the instruments and a rear cockpit radar joystick are the only additions to Monogram's otherwise nice cockpit. Everything else was detailed with careful painting.



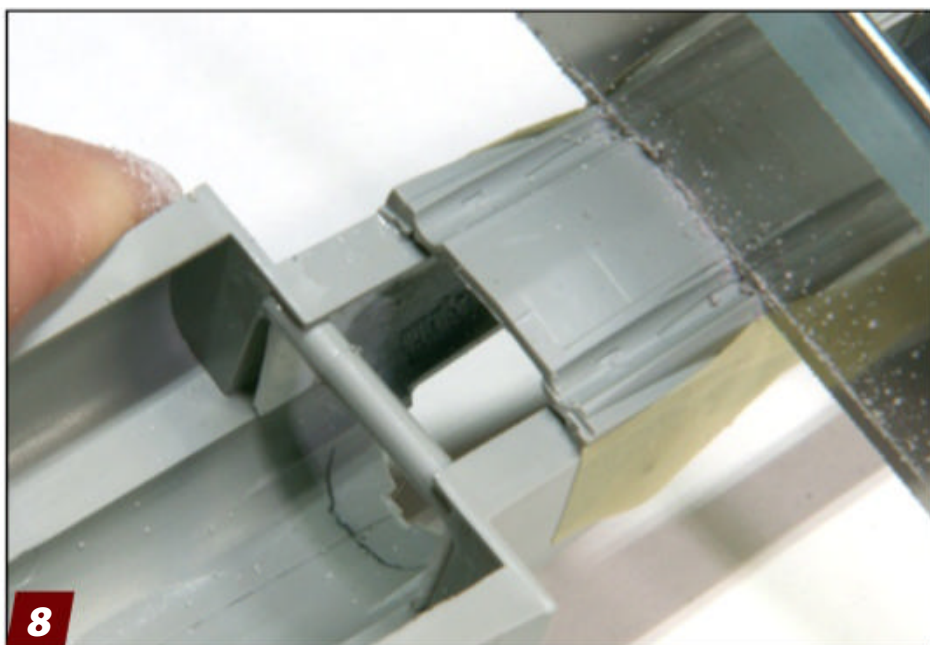
6

I rectified the ESCI kit's lack of details with sidewall parts from the Monogram kit enhanced with thin styrene strip and spare photo-etched metal (PE) control boxes to mimic detail molded inside the Monogram fuselage.



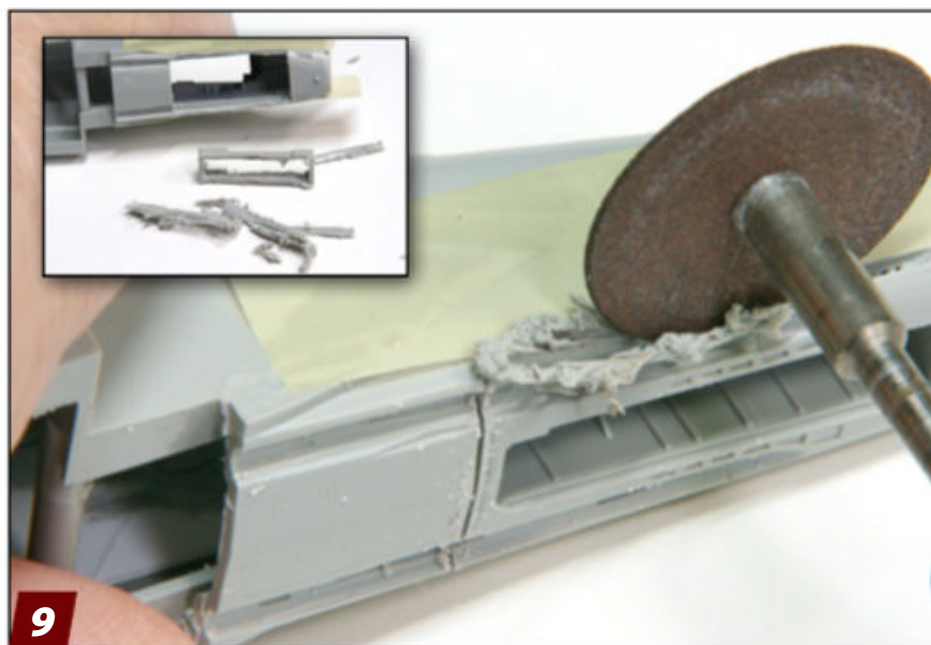
7

To prevent the ESCI fuselage halves flexing inward when I joined them, I fitted a brace cut from one of the parts trees. Then I attached the lower forward fuselage using plenty of glue, because only a thin wedge of the lower fuselage will remain.



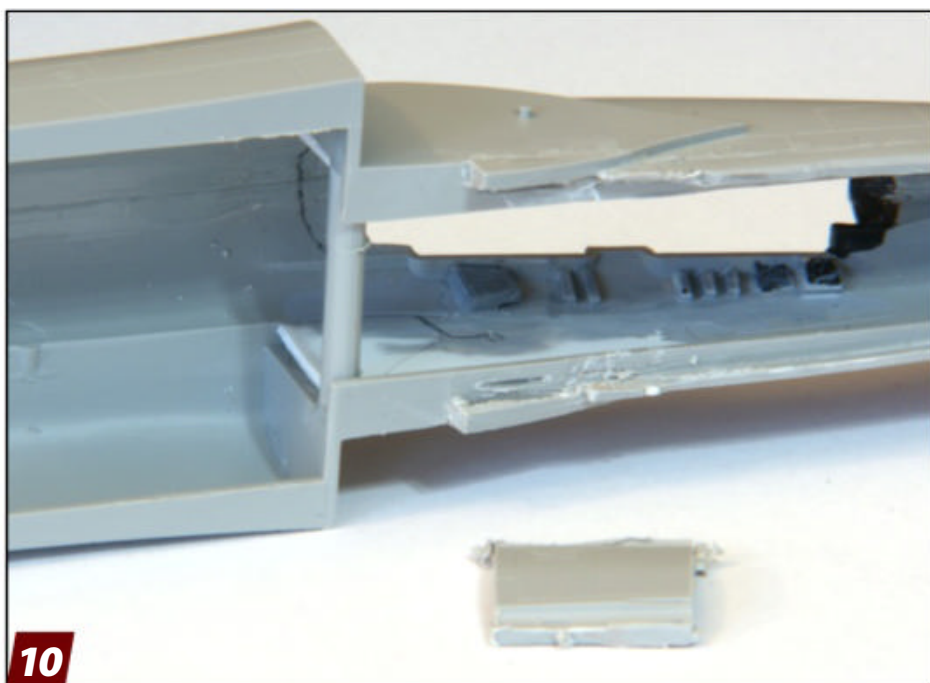
8

I waited until the cement was completely set before making the cuts necessary to adapt the ESCI fuselage to the Monogram wing. First, using a razor saw guided by tape, I cut fore and aft of the nose-gear bay.



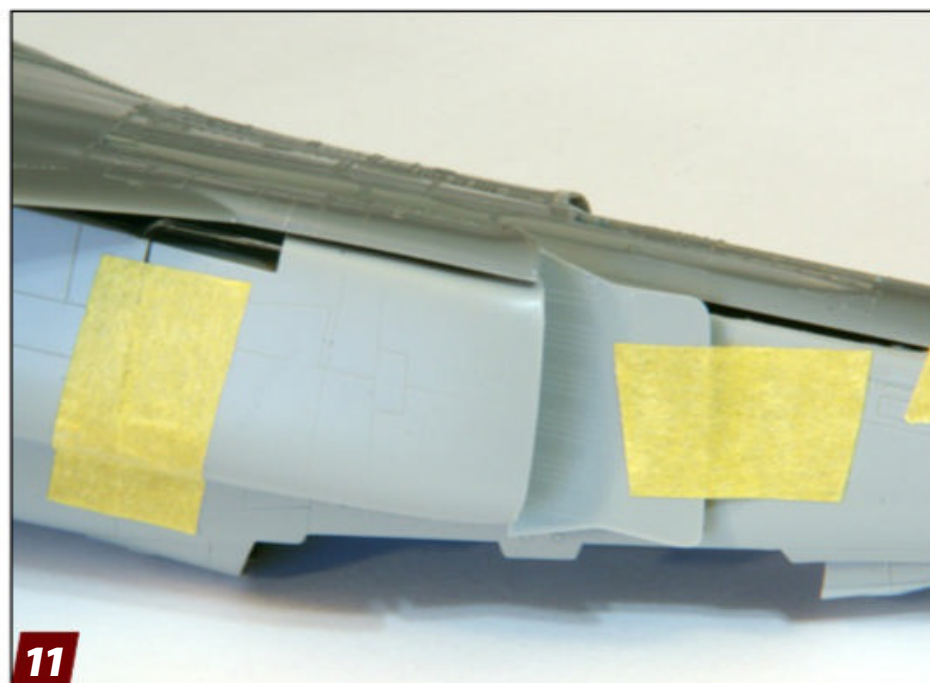
9

I connected those slices with a cutting wheel in a rotary tool and separated the nose-gear bay from the ESCI fuselage. Periodic checks indicated how much of the fuselage needed to be removed.



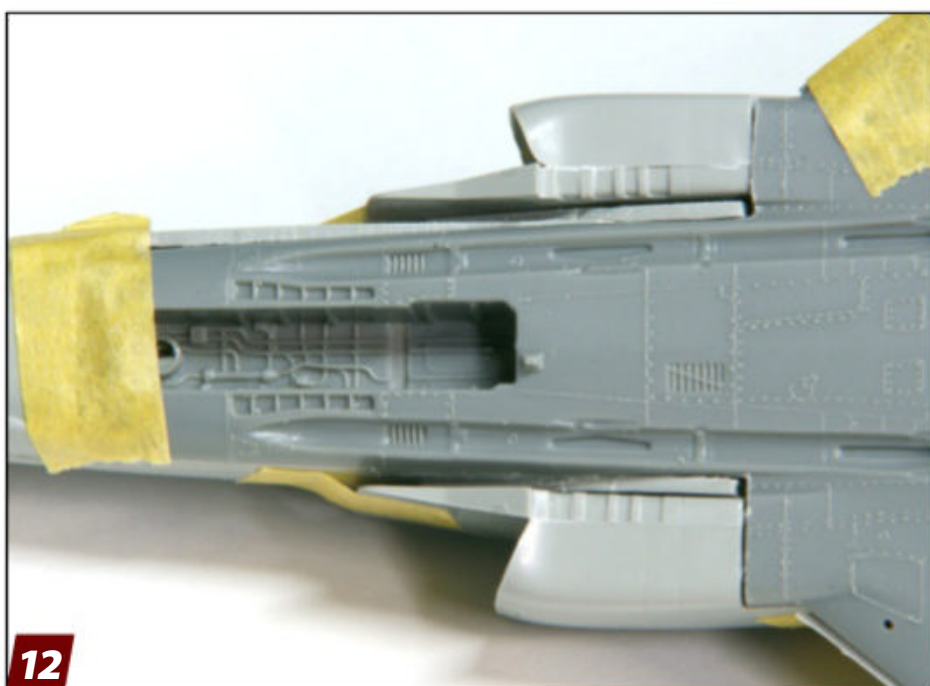
10

The remainder of ESCI lower fuselage was carefully removed, leaving the molded-in standoffs for the intake splitters untouched.



11

I taped the ESCI intakes in place to show where the Monogram intake undersides, molded with the wing, need to be cut to properly mate the kits.



12

At this point, taping the Monogram wing to ESCI fuselage shows the fit is quite good with just a little refinement necessary.



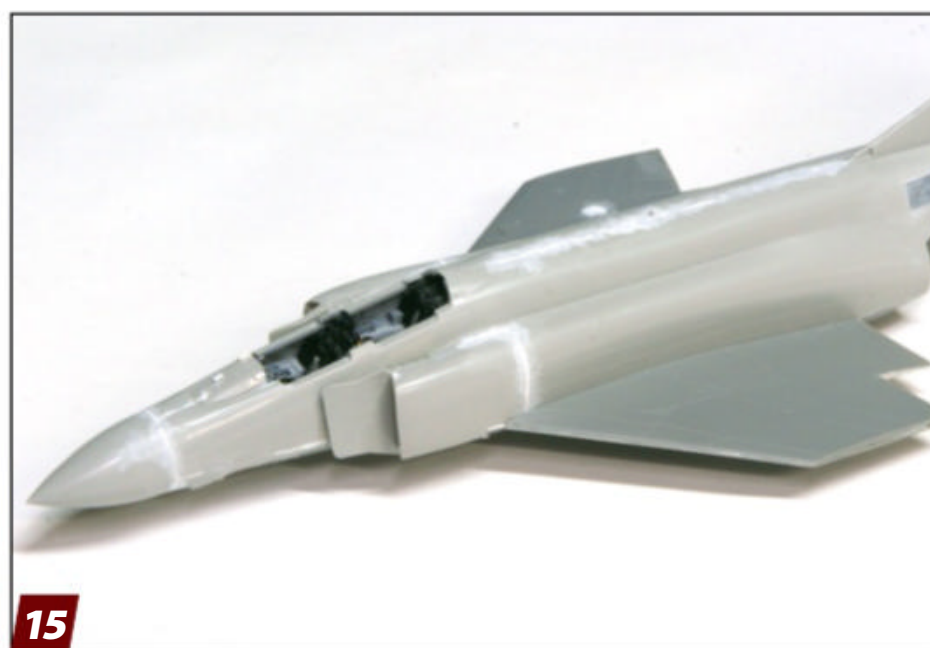
13

To compensate for slightly different lower fuselage lengths and fill a gap forward of the nose gear bay, I extended the Monogram fuselage with laminated styrene.



14

The Monogram wing lacks the carrier catapult hooks. I applied gel superglue inside the wing at the hook location to protect against me drilling through plastic with a rotary tool. The ESCI wing provided the size and shape. I made the hooks with brass wire ground to a point.



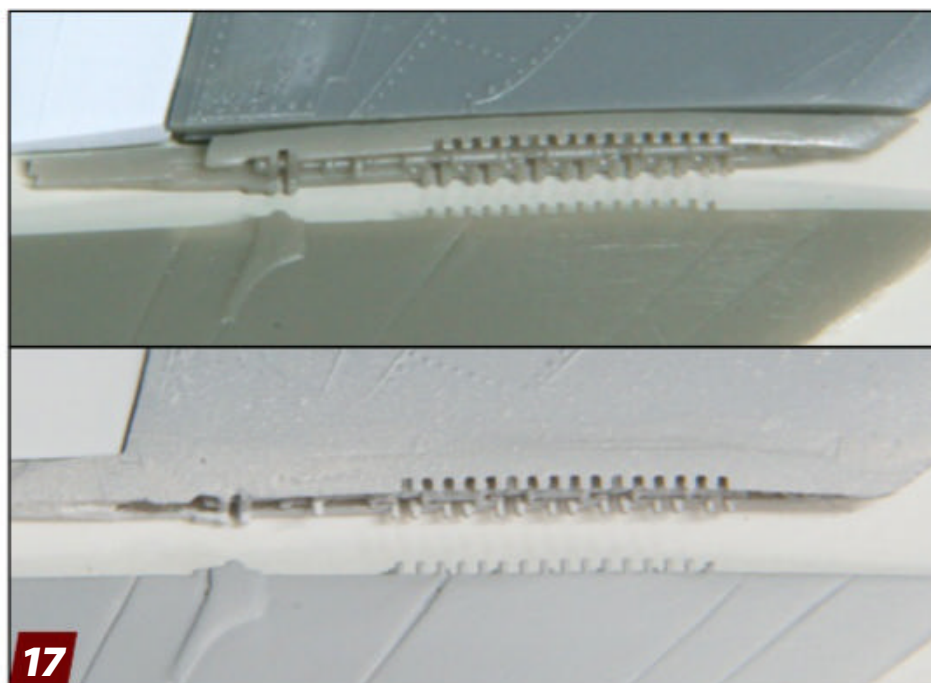
15

Rather than risk obscuring ESCI's fine panel lines with primer, I lightly dry-brushed flat white paint over filled seams to check my work before painting.



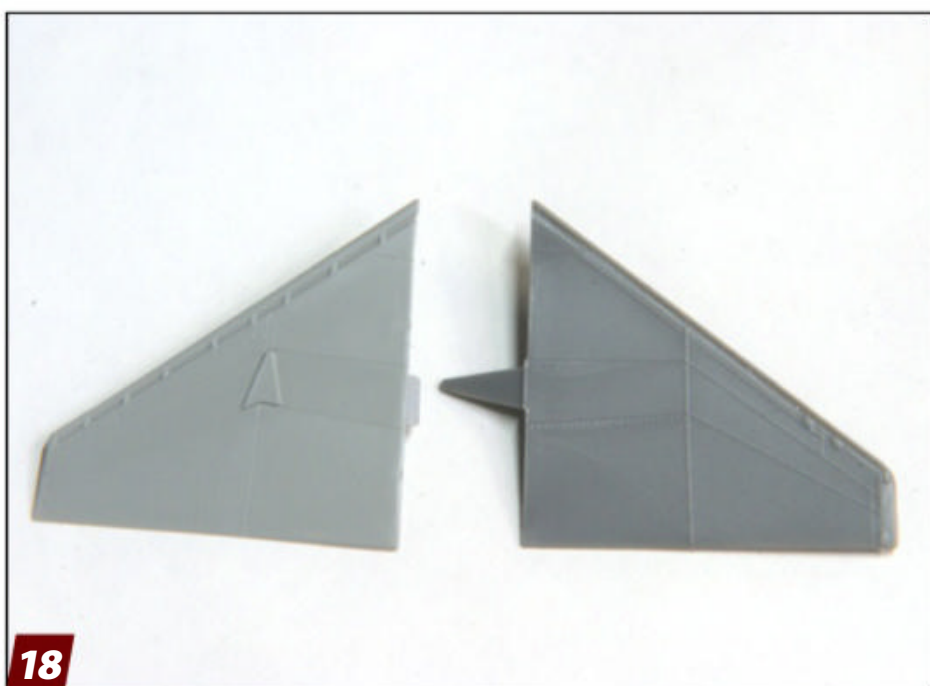
16

Just forward of the catapult hooks, I added the AN/ALQ-126 ECM antennas. After carving the shapes into the end of a styrene strip, I cut them to length and glued them in place.



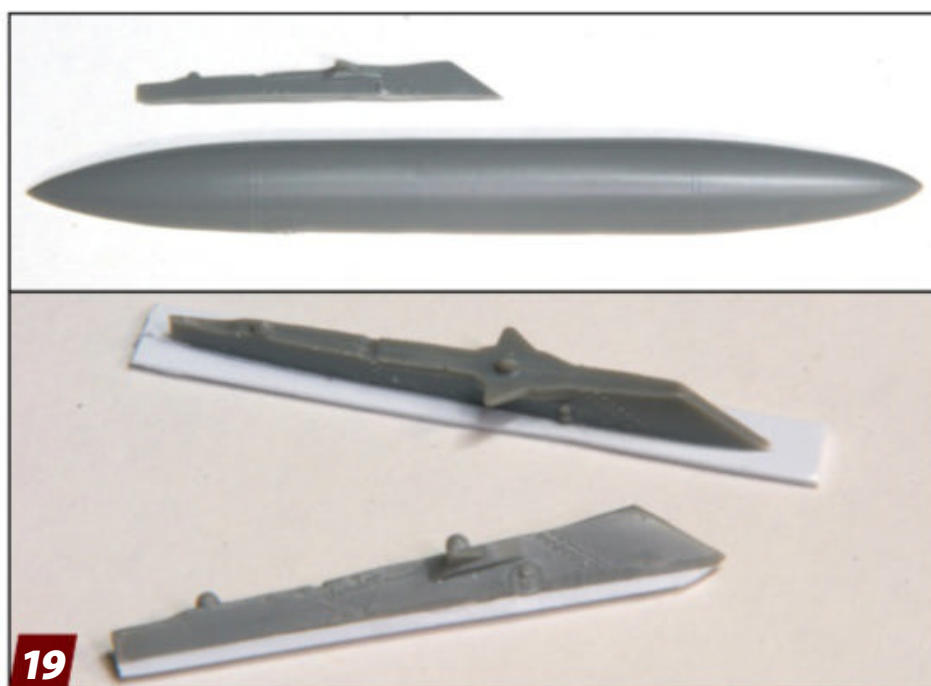
17

Designed for Hasegawa Phantoms, the CMK hinges are too short (top). So I sliced the fuel dumps from the Monogram wingtips, attached them to the CMK hinges, and blended the parts with thin Tamiya putty.



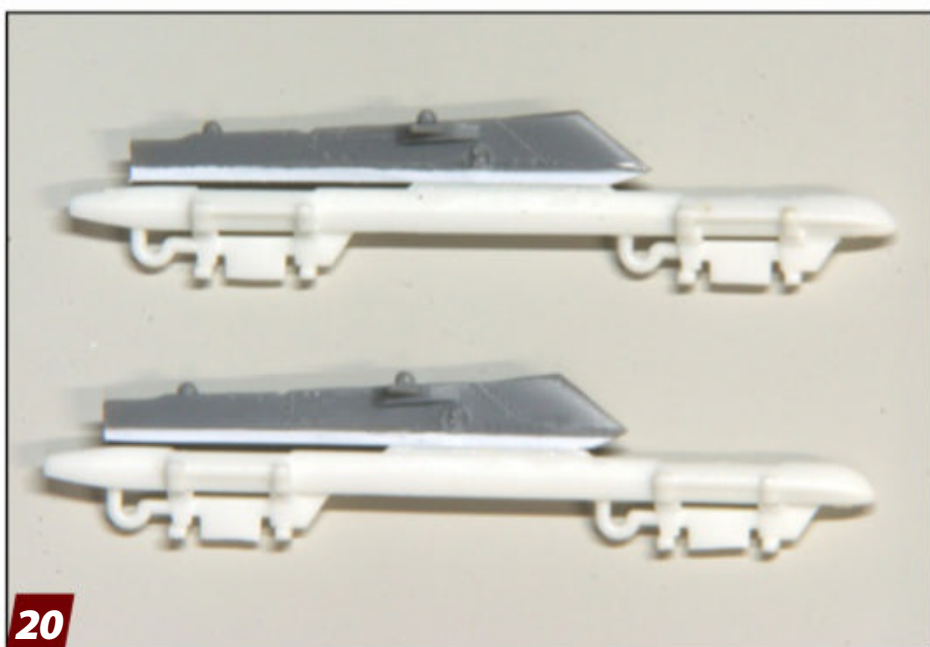
18

The ESCI stabilizers feature the raised "V" reinforcements unique to Air Force Phantoms (left), while the Monogram parts are correct for the Navy bird I'm building. Monogram's raised detail is a little heavier, but the attachment method is far superior.



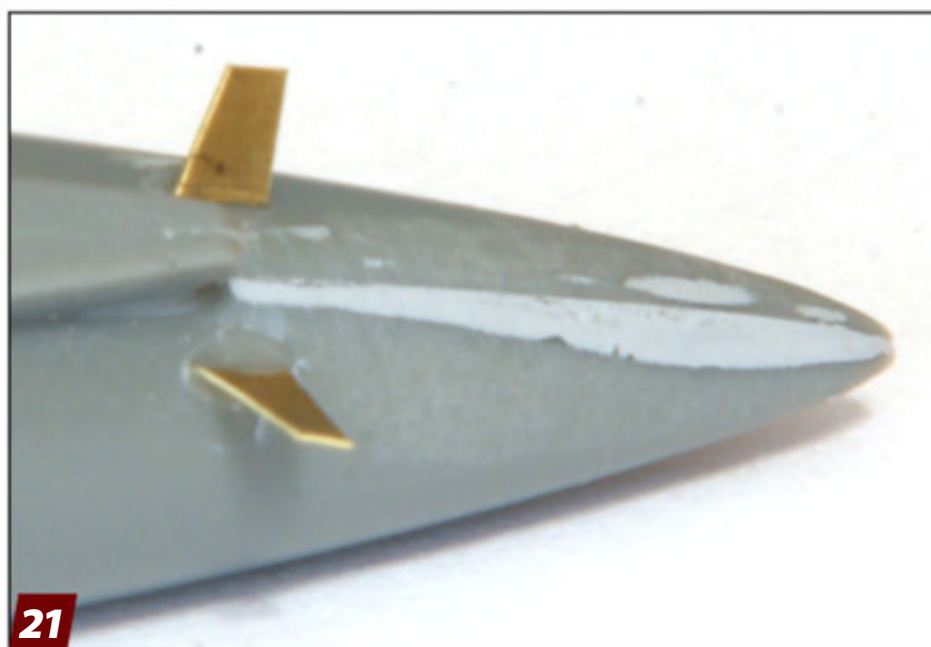
19

I used Monogram pylons all the way around, with the inboard ones and their TERs used out of the box with a single Sidewinder fitted. I cut the outboard pylons from the fuel tanks, squared off the lower edge, and glued on and shaped styrene sheet for an attachment point.



20

I found a pair of Multiple Ejector Racks (MER) left over from an A-7 Corsair II project and glued them to the pylons.



21

Often overlooked, small fins at the top rear of the centerline tank were cut from thin brass and attached in specific locations.



22

A load of eighteen 500-pound Mk.82 Low Drag, General Purpose bombs were added to the ejector racks. With the pylons decaled and the centerline fuel tank appropriately dirty and scuffed up, the stores were flat coated. See how I detailed the Phantom's bombs in the July/August 2022 *FSM*.



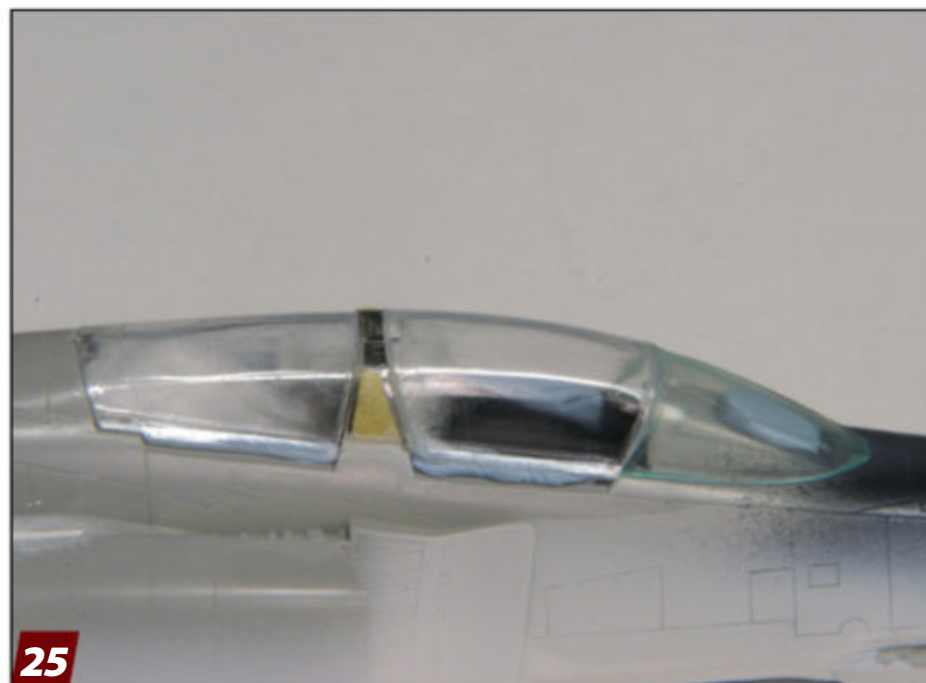
23

While applying the darker paint colors over lighter ones is preferred, the radome's conical shape and the air-conditioning intakes make for challenging masking. Instead, I painted it black with a few drops of white added and masked it off.



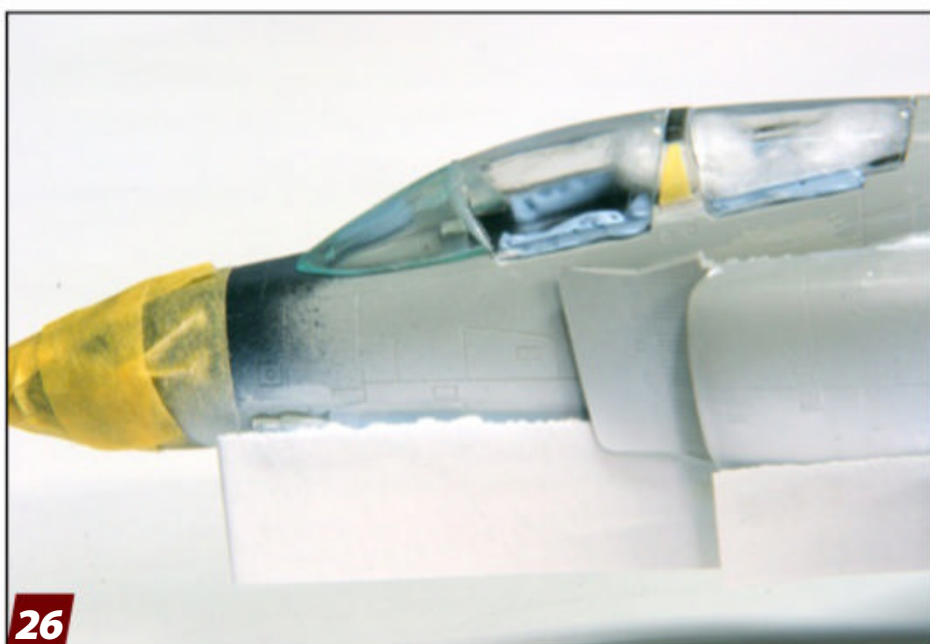
24

Cutting through tape over painted surfaces sometimes causes paint to chip when the tape is removed. To prevent this, I precut masks for the rudder balance tab over bare plastic and set them aside for later.



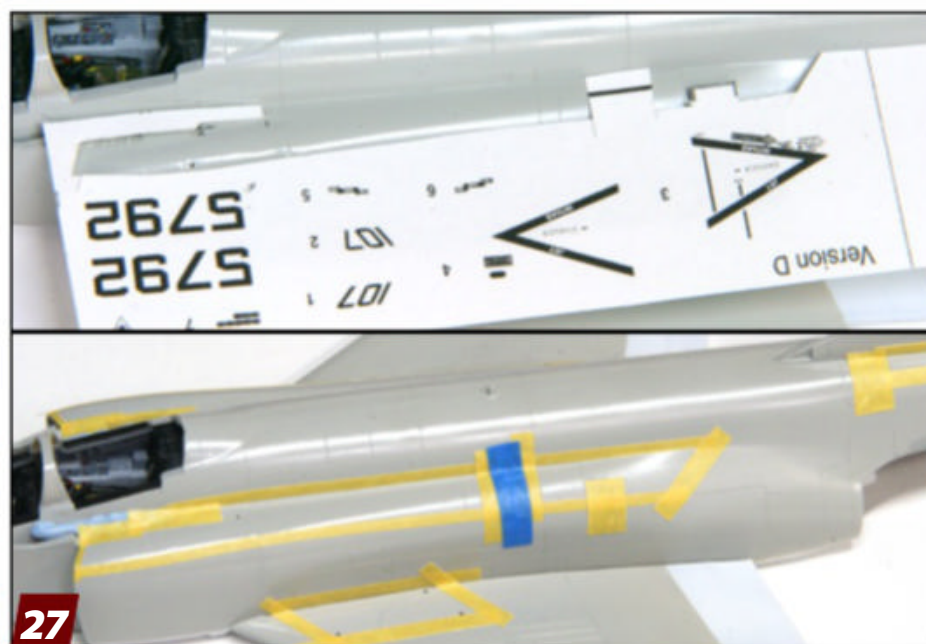
25

A spare, scratched, ESCI canopy, was tacked in place with poster putty for painting. Cotton balls underneath ensured no spray entered at the canopy seams. I airbrushed the undersides and control surfaces gloss white using a narrow pattern to keep the paint slightly uneven.



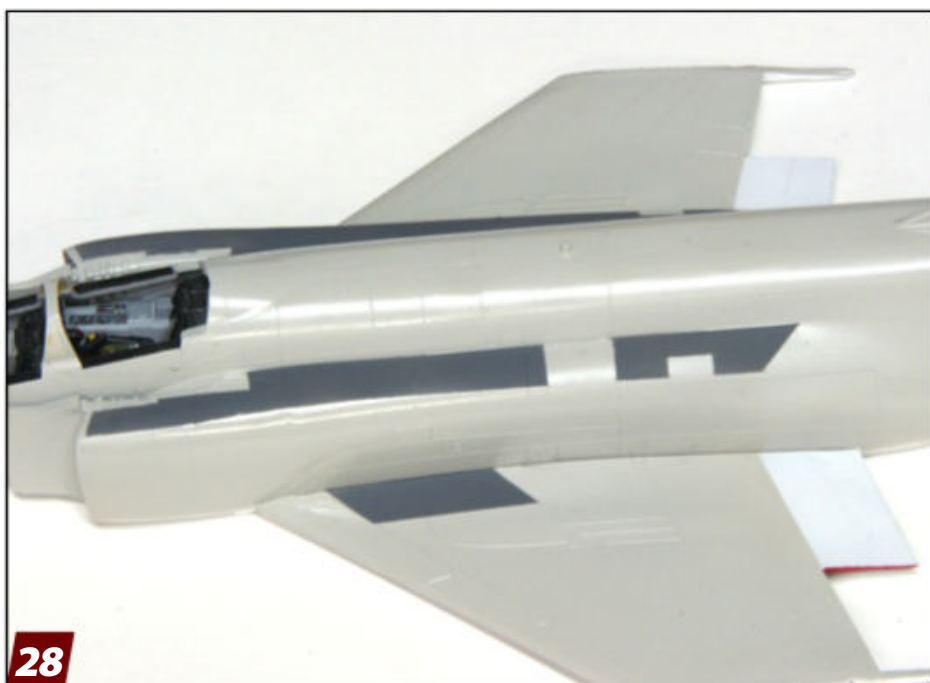
26

I used paper masks with worn edges held above the surface with poster putty worms to produce a slightly soft demarcation and airbrushed gloss light gull gray.



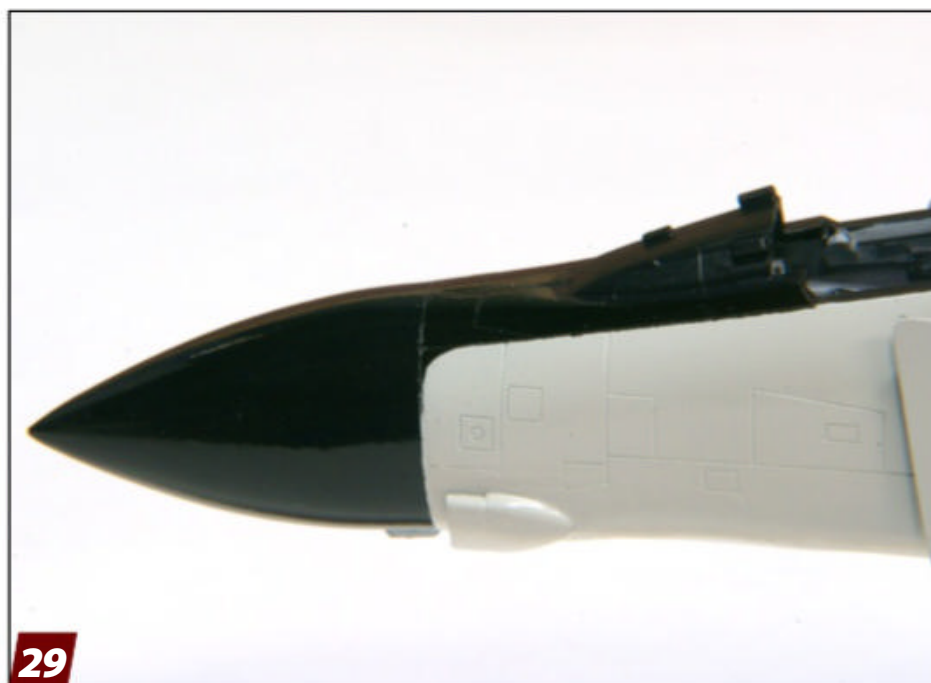
27

After photocopying the kit decals onto stiff paper, I cut out the walkways and marked the areas for masking. Some features had to be shifted slightly to match engraved panel lines.



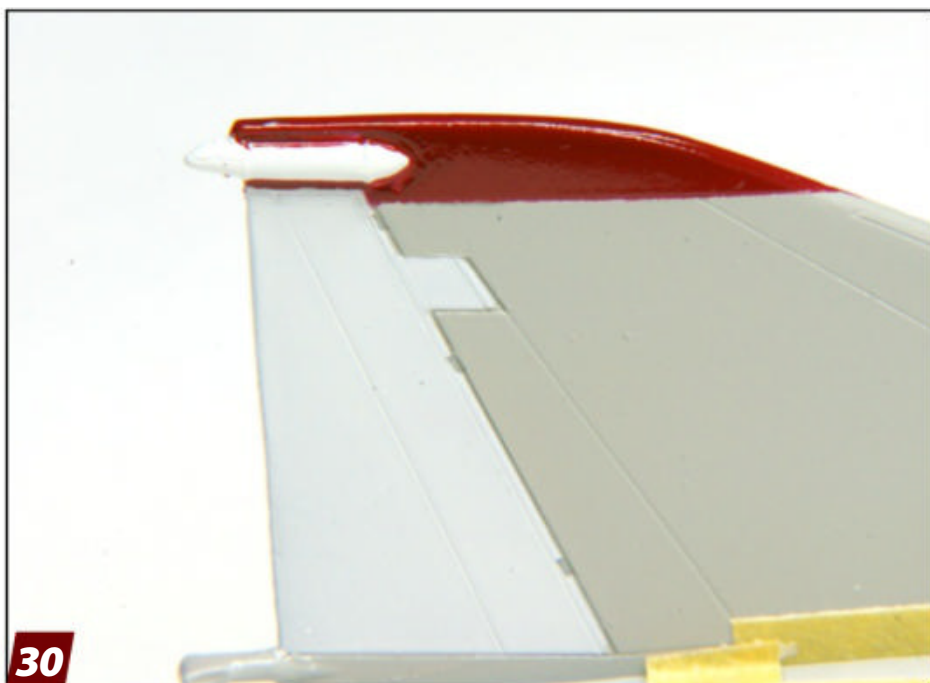
28

A slightly uneven application of gunship gray simulated walkways worn by the boots of personnel servicing the aircraft. Notches are the ram-air turbine and auxiliary air inlet doors, which are “no step” areas.



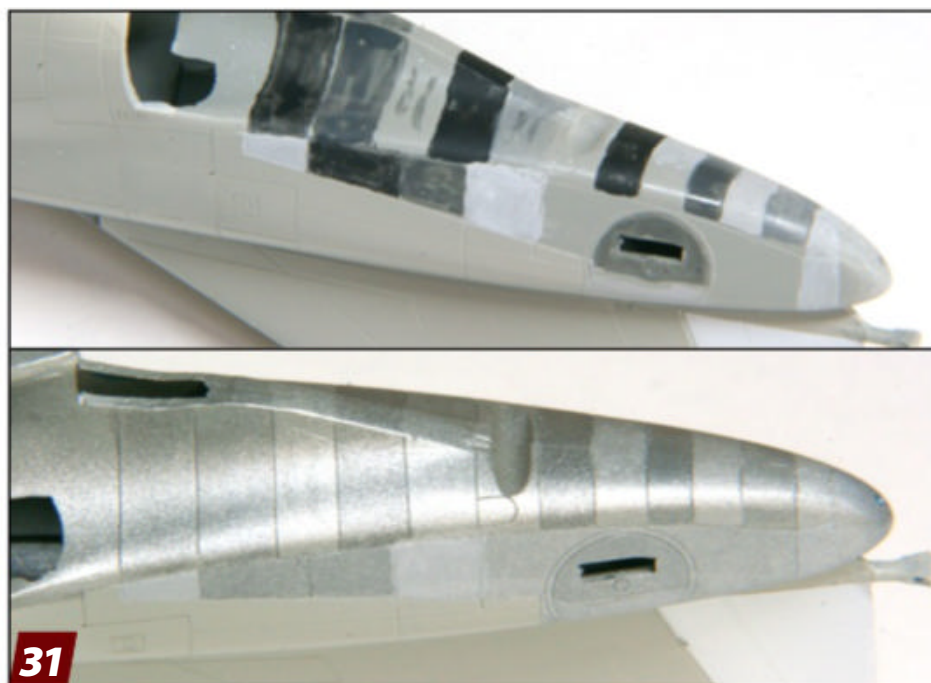
29

To contrast the dulled radome, I painted the antiglare panel with pure black. It looks freshly painted just as on the real aircraft I modeled.



30

Although SuperScale provides a decal for the fin tip, trimming around the football antenna would have been challenging. Testors Dark Red (No. 1104TT) matches other decal trim and painting yielded the often-overlooked slight step at the bottom edge of the cap.



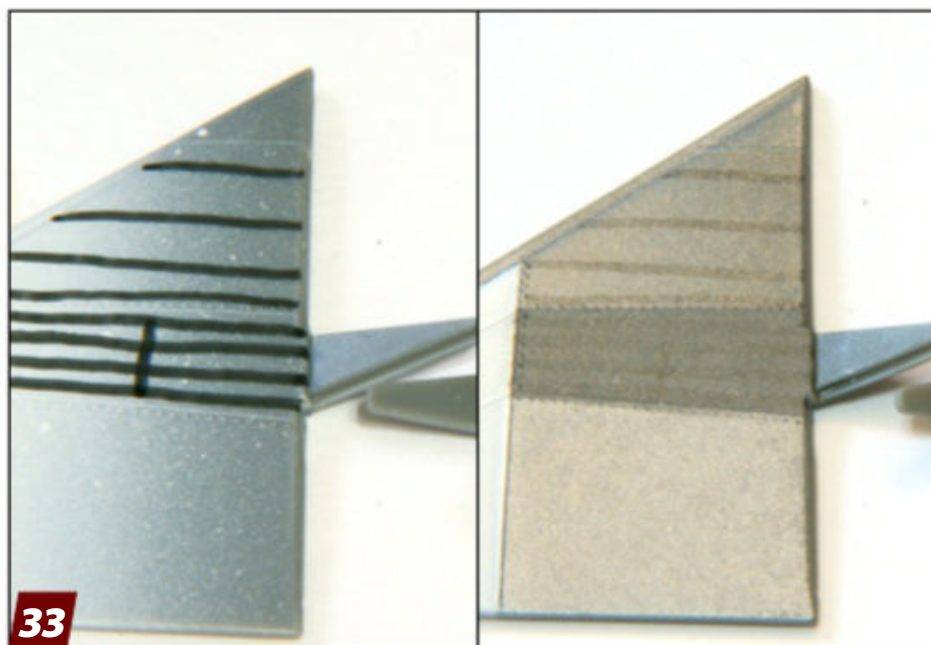
31

Trying a different technique for the steel and titanium panels around the exhausts, I hand-painted pre-shading on the panels. A thin coat of airbrushed aluminum on the upper section and dark steel on the lower area yielded a realistic contrast.



32

A black wash emphasizes what should appear as prominent seams between the heavy steel and titanium panels and gives a realistic sheen to the entire area.



33

Over black permanent marker pre-shading for the stabilator ribs, I masked and painted the metal surfaces with five shades of steel and aluminum.



FINAL THOUGHTS

BEFORE APPLYING SuperScale decals for VF-213, I dry-brushed flat rubber to highlight raised panel lines and flowed in a dark wash for recessed details. Various washes replicate grease, grime, and dirty water streaks underneath. On top, fine sandpaper and a dirty wash added tracks left during servicing. The twin pitot tubes on the leading edge of the fin were replaced with fine wire for the lower and fine wire slid into a hypodermic needle for the upper. G.E. silicone glue dries clear, doesn't fog plastic, and has a strong, flexible bond, which is great for attaching canopies. Except for the ESCI nose gear strut modified to fit the Monogram well, all undercarriage parts are from Monogram. The only addition was the nose gear door actuation strut, mostly to reinforce the delicate door. The final touches were to hang all the ordnance and attach the CMK folded wingtips. Although other F-4 squadrons had more flamboyant markings, VF-213's fits the powerful lines of the big Phantom bomber. **FSM**

Replicate a heavy metallic-flake paint job
BY MARK JONES

GLITTER *bomb*



Round 2 recently reissued the AMT 1/25 scale Meyers Manx dune buggy kit (No. AMT651-200). Fun and relatively easy to assemble, I've built it many times going all the way back to when it was first released. This time around, I wanted to build one that captured the look of the Manx buggies I remember seeing while growing up in SoCal in the '70s, and that means re-creating the glittery, metal-flake paint job. In the past, I've used the old Testors Ed "Big Daddy" Roth metal-flake colors, but they didn't have the heavy, old-school, dune-buggy look I was craving.

Instead, I went with a combination of Tamiya and old Pactra R/C paint (still available if you look for it). Keep in mind that heavier coats of clear are required to smooth out the coarse texture of the metallic flake. Even though heavy clear coats can bury details, don't expect either the flake or the clear to hide shortcuts in clean model making.



1 Painting over the badge would have made it unrecognizable, and I wanted to keep the detail. I pressed modeling clay over the buggy's front end, making a mold, and then poured superglue into the recess to make a new badge I could glue on later.



2 Tamiya Gold Leaf decanted and airbrushed onto the bare plastic body and the hood provided a base coat. I was good with the dry finish of the gold because it could add more sparkle to the end result.



3 Envisioning a candy orange-metallic finish, I painted Tamiya Clear Orange over the base coat. I was also hedging my bets, because I wasn't sure how well the gold flake to follow would cover. As it turned out, I needn't have worried, but the step didn't hurt.



4 Using a Paasche VL airbrush with a No. 5 needle, I sprayed Pactra Metal Flake Gold over the base coat and clear orange. It takes careful thinning not to have it spider-web. You can use other metal-flake paints, but make sure to use the recommended thinner.



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5

After the metal-flake paint dried — and it did so pretty quickly — I topped it with Tamiya Gloss Clear (No. TS-13) sprayed straight from the can. I let the clear dry for five minutes and then added a second coat. The surface was far from smooth, but I wasn't done yet.



6

Three more coats of clear orange. The smoother the finish is now, the less clear will be needed for a good gloss coat. When first applied, it looked nice and wet, but within 30 minutes, the paint began to lose its glassy appearance as the clear orange tightened down.



7

I let the clear orange dry 24 hours and then top-coated with 2K gloss clear. Prepared to sand and polish, I was pleasantly surprised when the clear dried as smooth as it did. I attribute this partly to less reducer in the mix and the simplicity of the body shape allowing heavier coats.

When paint blushes

SOMETIMES, the clear carrier in metal-flake paint can blush and turn a milky white. This happens with under thinning or too heavy a coat. If it's the former, just add more thinner and spray a wet pass or two. It will become clear again in a few minutes — even seconds. If it's due to a heavy coat, also let it dry for a bit. A hairdryer can speed up the blush clearing, but, when it begins to clear, let it finish clearing on its own.



Big-flake body

For instance, the badge on the nose of the Manx. Painting over it would turn it into a poorly defined bump. To keep the detail, I made a simple mold from modeling clay, filled the recess with superglue, and let it cure for an hour. When it was hard, I removed it and covered the new badge with Bare-Metal Foil before shaving the molded badge off the body, **1**.

After standard cleanup and prep, I airbrushed Tamiya Gold Leaf (No. TS-21) straight on the plastic as a base coat, **2**. (Tamiya Mica Silver (No. TS-76) would make a good base for silver flake.) I've seen body-colored dashboards on Manx buggies, but I wanted

something less distracting, so only the body and hood are getting the glitter treatment.

For a candy-orange metal-flake finish, Tamiya Clear Orange (No. TS-73) went over the gold base. Truthfully, I wasn't sure how well the gold metal-flake would cover, and I figured this could help the orange tone. If you want just a gold (or silver) finish, do not apply any tinted color at this point, **3**.

There are many brands of metal-flake paints, but I had Pactra Metal Flake Gold (No. RC70; OOP) for polycarbonate bodies on hand (there is a silver version, too). Overall, the process works the same. The metal-flake paint can spider-web when under-thinned



8

The underbody received a thorough coat of Tamiya Flat Black. I sealed the topside with a coat of car wax to protect from overspray. Masking is an option, but this was the quicker route.



9

After the underbody was dry, I wet a soft paper towel with window cleaner and wiped away any flat black overspray off the gloss coat. If it reduces the shine, don't worry. One more coat of wax and a good polishing will bring all the luster back.

or sprayed at too high a pressure. I started at 100% thinning with lacquer thinner, bumping it up to 150% after initial tests, and sprayed with a Paasche VL at 20 psi, **4**.

When you're pleased with the level of flake, seal it under a topcoat like Tamiya Gloss Clear (No. TS-13), **5**. This ensures none of the flake comes off and gets anywhere it is not wanted. I put on two coats of clear about five minutes apart directly from the can.

At this point, you can move onto the final application of clear, or, as I'm doing, a tint coat can be applied. Tamiya Clear Red (No. TS-74) and Clear Orange lacquers are good choices to go over gold flake. They can also be used over the silver flake, though Clear

Blue (No. TS-72) makes a good option, too. The Tamiya acrylic line has compatible transparent colors, but do not overcoat them with lacquer; urethane works fine over them. Of course, you can opt for other candy colors and brands. Do what suits you. I went with another three moderate coats of clear orange from the can, **6**.

For a top-notch clear coat, I opted for a two-part urethane. Sure, I could have built it up with Tamiya Gloss Clear or Testors Wet-Look, but, for me, the urethane approach was faster. I chose Valspar Clearcoat (No. AC2100), but other 2K systems will work. For a little heavier coat, I used 50% of the recommended reducer in the mix. Two coats of the urethane went over the clear orange 15



10

The kit's chrome-plated, offset Cragar SS wheels were molded well enough, but the sprue gates marred the outer ring. Time for an upgrade. I chucked the wheels in my lathe and parted the ring from the rest of wheel (bottom).



11

Top: unassembled rear wheel with outer rim removed (center); inner rim shortened by 1/10-inch with core hogged out (right); and the back of the two parts assembled (left). Front: turned-aluminum rim. Note the inner wheel still has its mounting boss; it's removed later.



12

Tires from my spares wrapped up the rear wheels and their new offset; the fronts kept their stock offset and used the kit tires. Then I noticed the small but noticeable wrinkles in the chrome plating. Popped them out of the tires, stripped, and painted gunmetal gray.

minutes apart and were allowed to fully dry, **7**.

Rather than mask before painting the underbody, I polished the body with Mothers California Gold Carnauba Wax (No. 05750). This protected against the overspray of the Tamiya Flat Black (No. XF-1) airbrushed on the underbody, **8**.

An hour later, after the flat black had dried, I sprayed Windex on a soft paper towel and removed the overspray to create a sharp line between the orange and black. It takes a few dampenings and wipe downs to remove the unwanted black, and a slight residue or haze is normal, but it should be easily removed with a second wax application and buffing, **9**. If the Windex or the wax is not doing



13

The engine needed a little help, so I provided ignition wires, aluminum pulleys, and a vinyl fan belt. I stripped the chrome parts and painted them because the chrome plating had a lot of flash and large flaws due to the sprue gates. Besides those modifications, it was built box stock.

the job, Novus No. 2 or Tamiya Fine Polish work very well to remove stubborn paint.

Upgraded wheels

To do my Manx justice, the wheels had to have an upgrade to match the paint. The Cragar SS mags in the kit were all the same diameter and offset. They looked nice enough, but the sprue gates detracted from the outer rims. I parted the rims on a lathe leaving just the spoked sections, **10**.

I milled new outer rims for all four wheels from 6061 aluminum rod on a lathe and made the rears 1-scale-inch larger in diameter

FINAL THOUGHTS

AT THIS POINT, putting the Manx together was only a matter of following the instructions. Because the chrome was marred by flash and sprue gates, I refinished most of the plated parts with Tamiya Semigloss Black (No. X-18), Light Gunmetal Grey, and Sparkling Silver (No. LP-48). Machined, two-part assemblies replaced the rearview mirror and gas cap, and a custom decal detailed the Manx hood ornament after installation. I also made decals for the license plate and gauges. Why not? It's what I do!



than the fronts. To change the offset, the rear wheels had 1/10-inch removed from the kit's inner rims and the core hogged out, **11**. I cut off the rear wheel mounting bosses and shortened the metal axle 1/8 inch to retain the rear track with a deeper look.

A set of Revell-Monogram tires from my spares box fit the rear wheels' new offset. I printed a set of BF Goodrich Radial T/A decals to go with the tread pattern and help hide the sidewall cracks. Unfortunately, the chrome on the wheel centers was wrinkly and magnified by the aluminum parts, **12**.

Rolling with the challenges, I took off the tires, stripped the chrome and painted the inner wheels and spokes Tamiya Light

Gunmetal Grey (No. TS-42). To further hide possible surface imperfections, I mixed a little bit of talc powder into the paint for a light texture.

A little engine work

While I was at it, I stripped the chrome engine parts with oven cleaner and built the powerplant out of the box except for the ignition wires and pulley set. I turned the pulleys from aluminum and made the fan belt from a strip of black vinyl (electrical tape would work, too), **13**. When the buggy was almost done, I added an aluminum stinger exhaust tip. **FSM**



▲ PATRICIO GONZALEZ AREQUIPA, PERÚ

Patricio built the hospital ship USS *Repose* from a 1950s Revell kit he inherited from his grandfather. He cut dozens of tiny, blue cardboard squares to make windows, shaded the rails and details with watercolor, and used styrene and fine thread for the rigging. Patricio adds that after 60 years, the plastic was brittle and fragile, but the decals performed well.



▲ SCOTT GLATSTEIN MINNETONKA, MINNESOTA

The OcCre 1/24 scale San Francisco cable car builds up from $\frac{3}{32}$ -inch plywood, wood strips, cast metal, and brass rod. Scott based it on car No. 60, which dates back to the earliest days of the cable car system in 1907 and has been rebuilt twice. His model represents the current car in service including added safety items, like nonskid mats, leather hand holds, and step-ups textured with 600-grit sandpaper. Scott spent a whopping 350 hours building and 10 hours cleaning up sawdust!



▼ MIKE WODKA

ANN ARBOR, MICHIGAN

Mike built an old IMC kit to replicate the Chaparral 2E raced in the L.A. Times GP. He fully detailed the engine, added seat belts, and posed the driver's door open. Mike enhanced the body detail with screens on body openings.



▲ JOSEPH SHAW

CORPUS CHRISTI, TEXAS

Joseph said he was inspired by a '67 Mustang he had years ago to make this near-replica of the car. He based the build on an AMT 1/25 scale 1967 Mustang GT Fastback (though the car he drove wasn't a fastback) and added aftermarket details like photo-etched metal parts, a license plate, and fuel and brake lines from a variety of sources. Joseph finished the model in MCW Acapulco Blue and Testors clear lacquer.



◀ STEPHEN LUCY

CALIFORNIA CITY, CALIFORNIA

Stephen detailed his Tamiya P-38G with a Quinta Studio 3D cockpit and ResKit block tread wheels. He finished it with Mr. Hobby, Hataka, and Model Master paints, and decals from Kagero and Eduard.

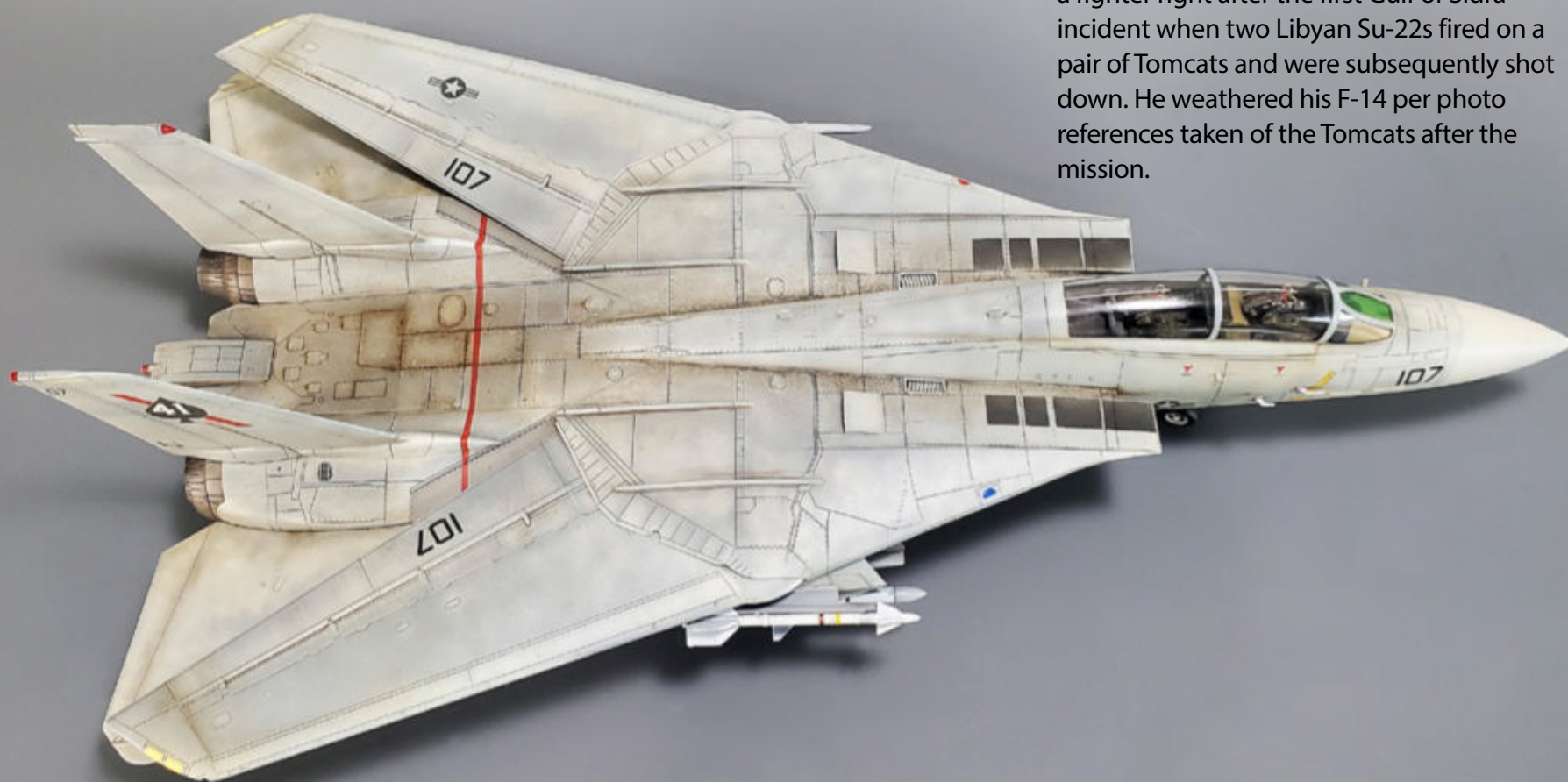
MICHAEL EPSTEIN PRAIRIE VILLAGE, KANSAS

Michael's 1/35 scale diorama used a Squadron base, Cyber-hobby Bego Type 82 Kübelwagen, Tamiya Type 166 Schwimmwagen with figures, and Tamiya Panzerkampfwagen V with Panzer Division Recon Team. The finished scene includes snow from Woodland Scenics and well-researched patterns on the uniforms. The Kübelwagen sports Panzer Art wheels with snow chains, perfect for the weather conditions.



DEREK JORDAN TULLAHOMA, TENNESSEE

Derek built his Academy 1/72 F-14A to depict a fighter right after the first Gulf of Sidra incident when two Libyan Su-22s fired on a pair of Tomcats and were subsequently shot down. He weathered his F-14 per photo references taken of the Tomcats after the mission.



F.A.Q.2

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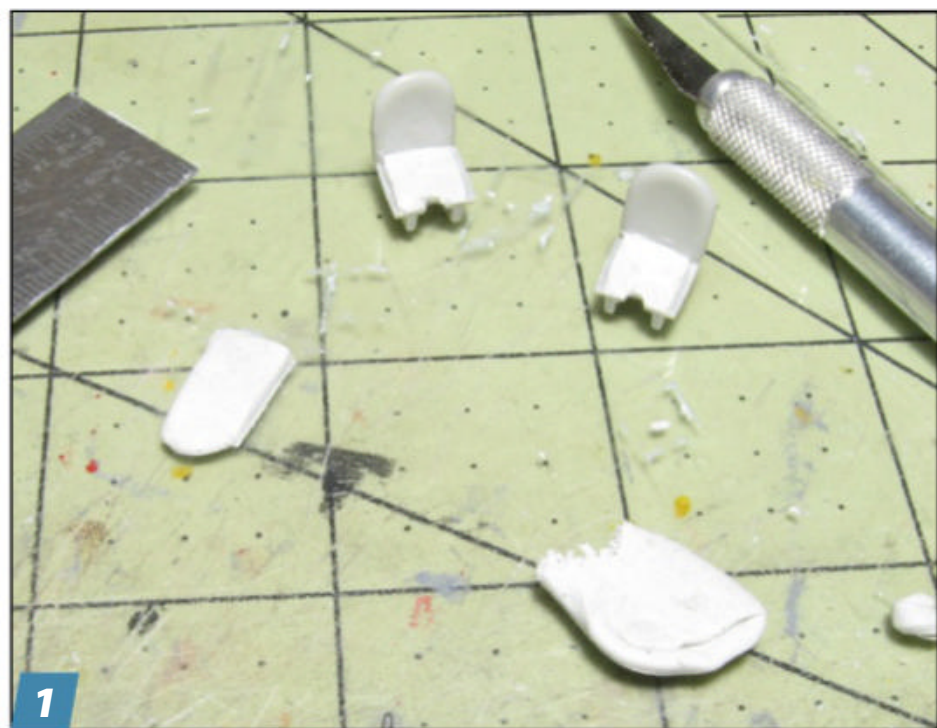
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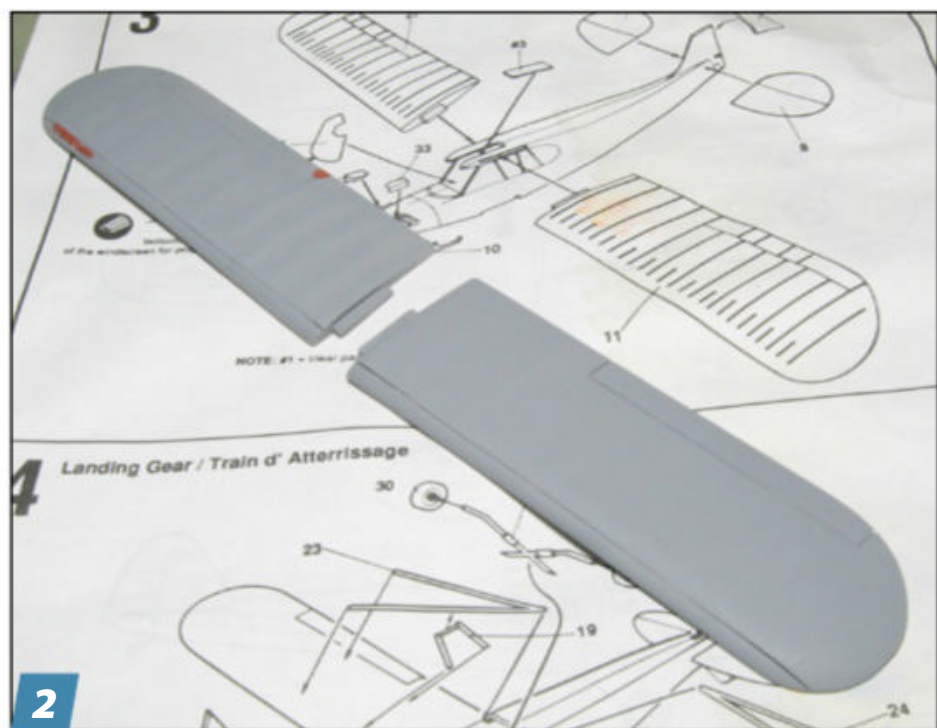
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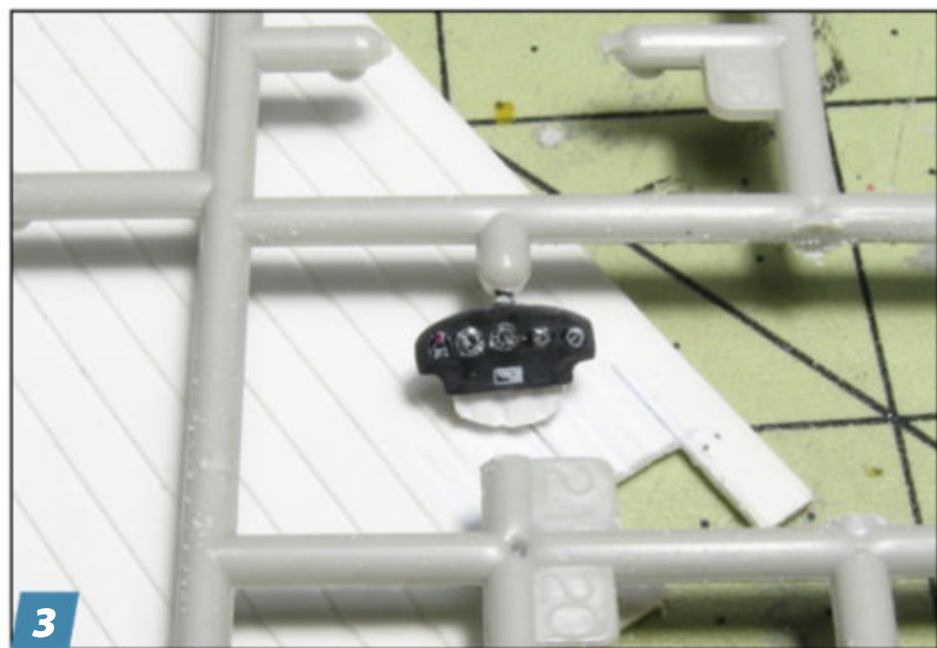
Detail **HOBBYCRAFT'S GRASSHOPPER**



I dressed up the kit's spartan seats with cushions made by pressing Apoxie Sculpt two-part putty in the bottom and trimming it to shape.



The wing upper surfaces had raised strips not on the full-size Cub; I eliminated them. To show depressions in the upper wing, I sanded between the ribs to give the impression of taut fabric. The leading edges should be solid, and I scribed a line to separate them.



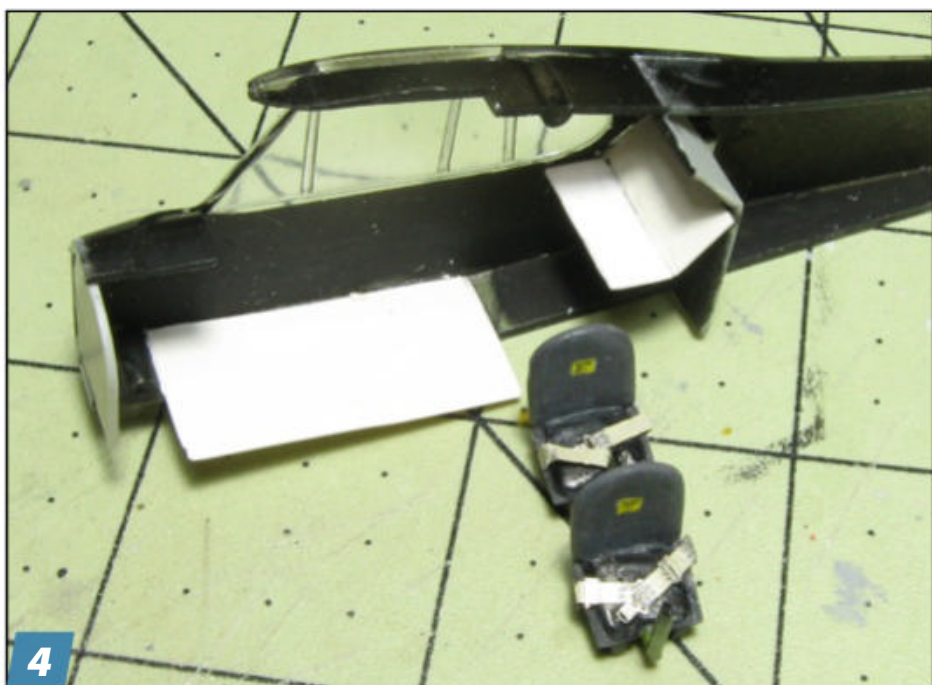
After painting the instrument panel, I attached a small piece of corrugated styrene sheet for the fuel tank behind and just below the panel.

Build a U.S. Navy NE-1 in 1/48 scale

BY FRANK CUDEN

Visiting a small grass-strip airport in the 1950s, you were apt to see a yellow Piper J-3 Cub or two. I lived across the highway from such a field that had three Cubs used for flight training that were stored in a metal Quonset hut. To save space when they weren't in use, the airplanes were tipped onto their noses.

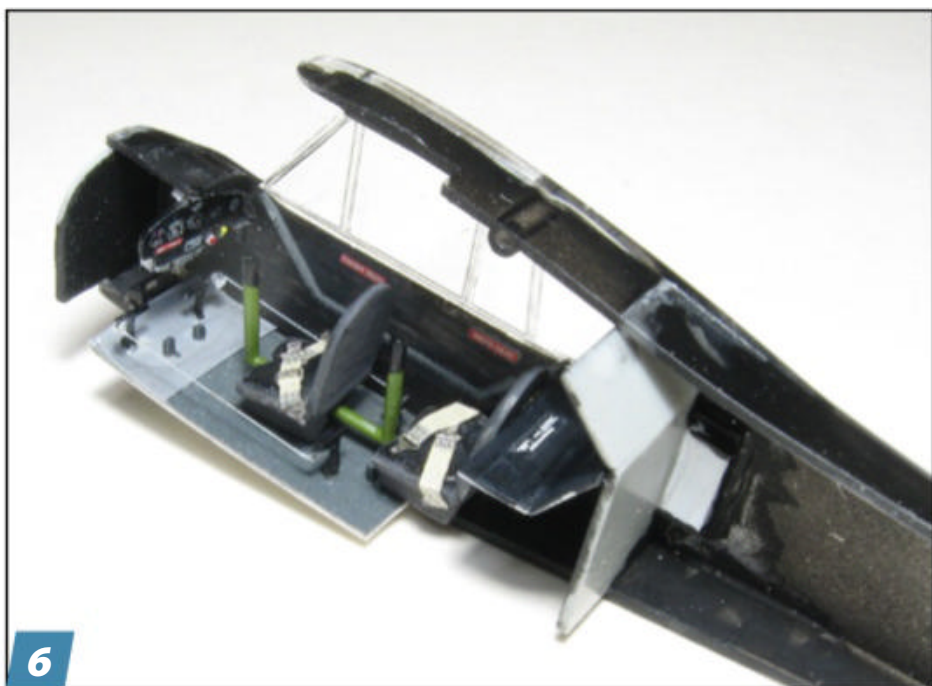
In the early 1990s, Hobbycraft released a series of 1/48 scale J-3s, including one marked as the L-4 Grasshopper (No. HC1580), the Cub's U.S. Army Air Forces designation. I picked up a Propagteam decal sheet that included markings for an aircraft attached to the U.S. Navy's Airship Squadron 32; the Navy designation for the Cub was NE-1. Questions abound as to the aircraft's camouflage, with some references suggesting dark sea blue, intermediate blue, and white. I chose to follow Propagteam's color callouts of light gull gray and Navy blue gray.



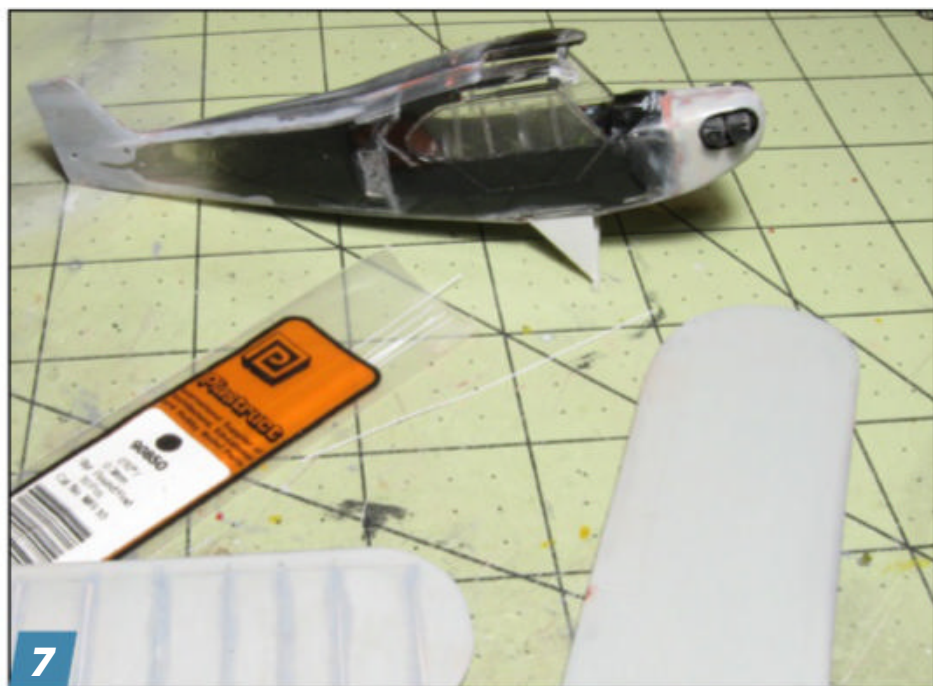
4 The clear fuselage halves required me to mask both sides when I painted the interior with engine black, a very dark gray. Referring to photos, I added a styrene-sheet floor and rear bulkhead to the cockpit. Spare Eduard photo-etched metal (PE) seat belts provided lap belts.



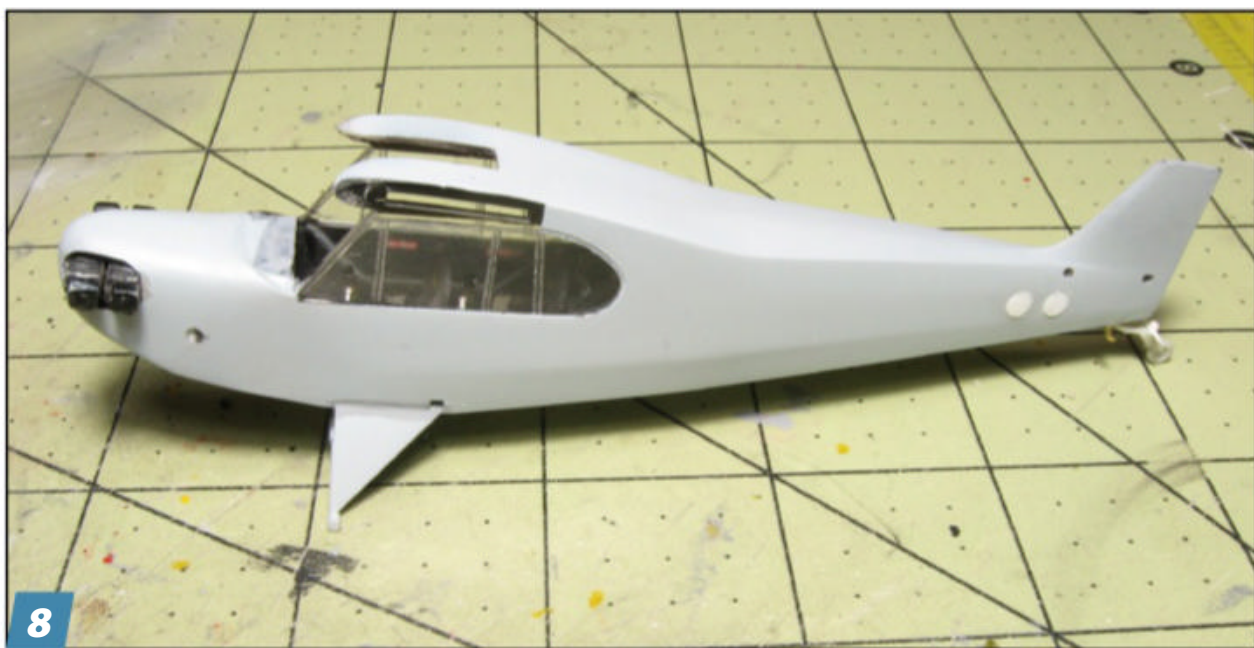
5 For contrast, I painted the seat backs with an ancient bottle of Pactra Hot Rod Primer, another dark gray, and the cushions semigloss black. I scratchbuilt throttle quadrants, tandem rudder pedals, and heel brakes, and added gray decal striping to show the door outline in the cockpit.



6 The floor of the Cub had a section covered with nonskid texture that I simulated with 400-grit sandpaper glued in place before I attached the control sticks and seats.



7 To replicate the ribs on the underside of the wings, I glued strips of .020-inch styrene rod and sanded to blend them into the surfaces. I also added the four-cylinder engine and buttoned up the fuselage.



8 After masking the windows and spraying the fuselage with Alclad II Grey Primer & Microfiller (No. ALC302), I punched out discs of .005-inch styrene and glued them to the rear fuselage to represent inspection panels.

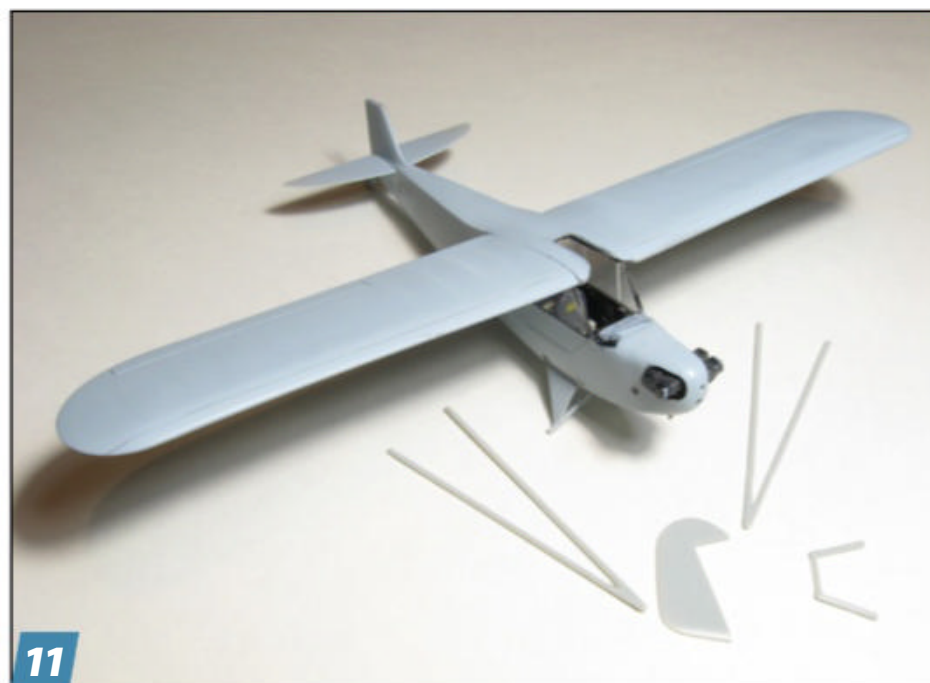


9 I constructed the short exhaust that protrudes from the underside of the nose by combining styrene and Minimeca stainless-steel tubing.



10

Using the same technique I used for the rear of the fuselage, I added circular inspection panels under the wings.



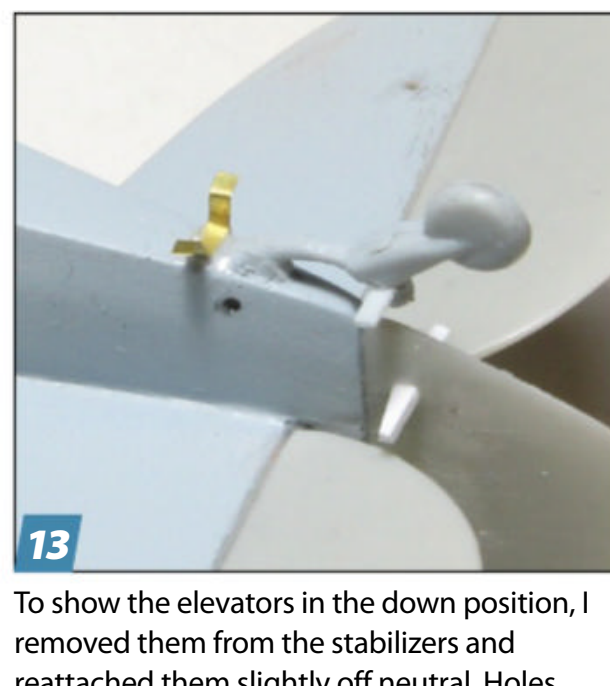
11

When the inspection panels were in place, I glued the wings to the fuselage. The wing struts, strut braces, and rudder are ready to be attached.



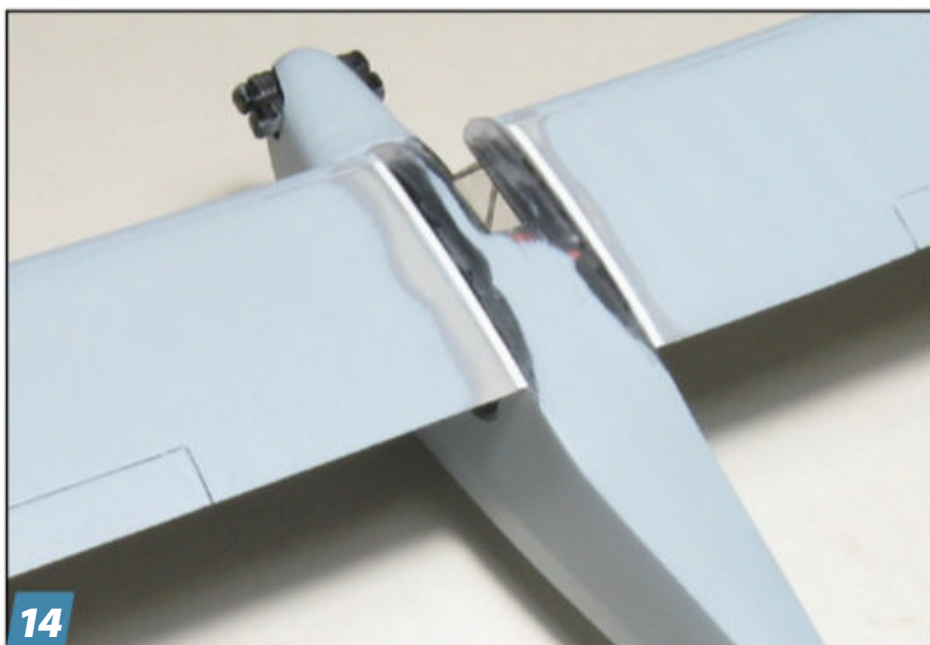
12

Looking at the underside after priming, you can see all the wing inspection panels well as traces of the wing ribs.



13

To show the elevators in the down position, I removed them from the stabilizers and reattached them slightly off neutral. Holes drilled into the stabilizers and fin are set for bracing wires to be fitted. I bent and attached a strip of thin brass to attach tailwheel springs.



14

I glued thin strips of .005-inch styrene along the wing roots for the fairing fitted where the wing joined the fuselage.



15

The aircraft had a narrow, rectangular skylight extending back from the windshield, which the kit provides as a separate part. I attached the windshield and skylight off the model to use as a master to vacuum-form a single clear part to be attached after painting.



16

L-4s also had aileron control cables under the wings, and I attached styrene rod control horns to accept them. The small, white, styrene square forward of the control horn represents a piece of leather fitted to prevent the cables from wearing a groove in the wing fabric.



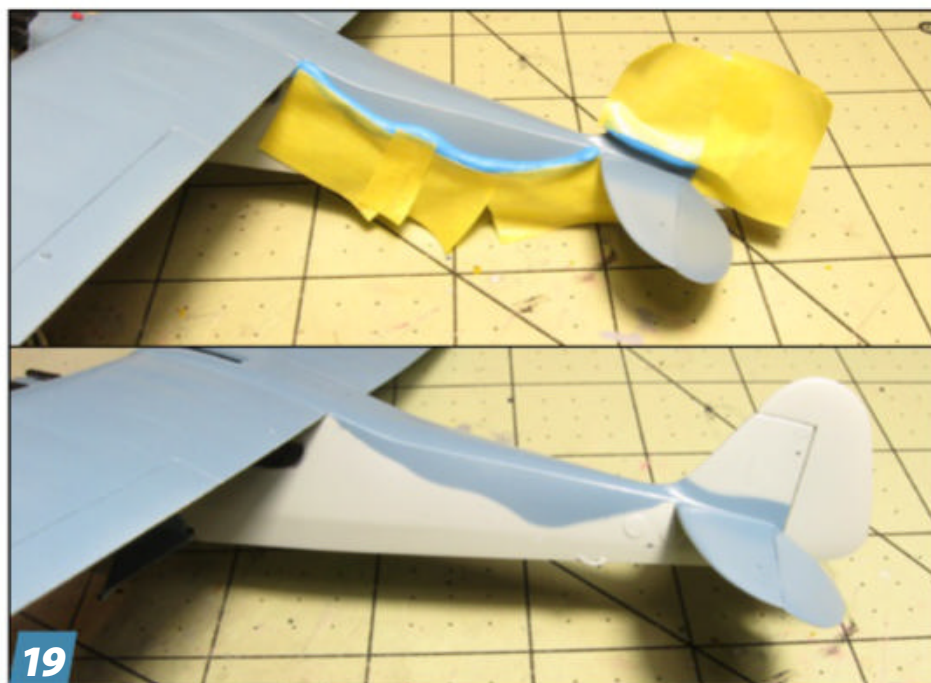
17

Before painting, I fitted a boarding step on the starboard side just aft of the landing gear fairing and lift handles on the lower rear fuselage made from thin wire. To mask the curved side windows, I punched circles of masking tape.



18

After airbrushing the model with gloss light gull gray (FS16440), I used thin worms of poster putty to produce slightly soft demarcation lines. Be sure the worms are completely sealed to avoid paint bleeding.



19

Adding masking tape to the poster putty worms protects surrounding areas from overspray (top). The result is a clean, slightly soft line between the colors that looks like it could have been applied with a spray gun on the full-size aircraft.



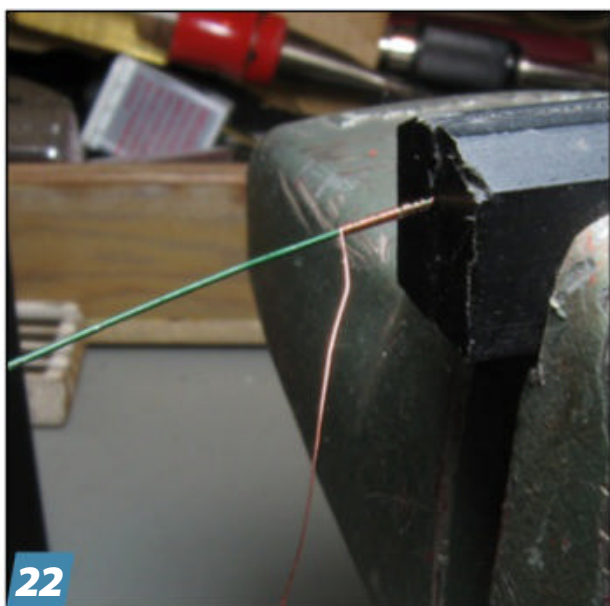
20

After applying the decals, I accented the ailerons, door outlines, and the leading-edge panels by drawing a soft lead pencil along them.



21

I sealed the decals and pencil with a coat of semigloss clear and added the kit exhausts that had been painted with Vallejo Panzer Aces Dark Rust (No. 70.302)



22

To make springs for the tail wheel, I wrapped fine copper wire around thin florist wire held securely in a vise. Once I had enough for two springs, I slipped the coil off the florist wire.



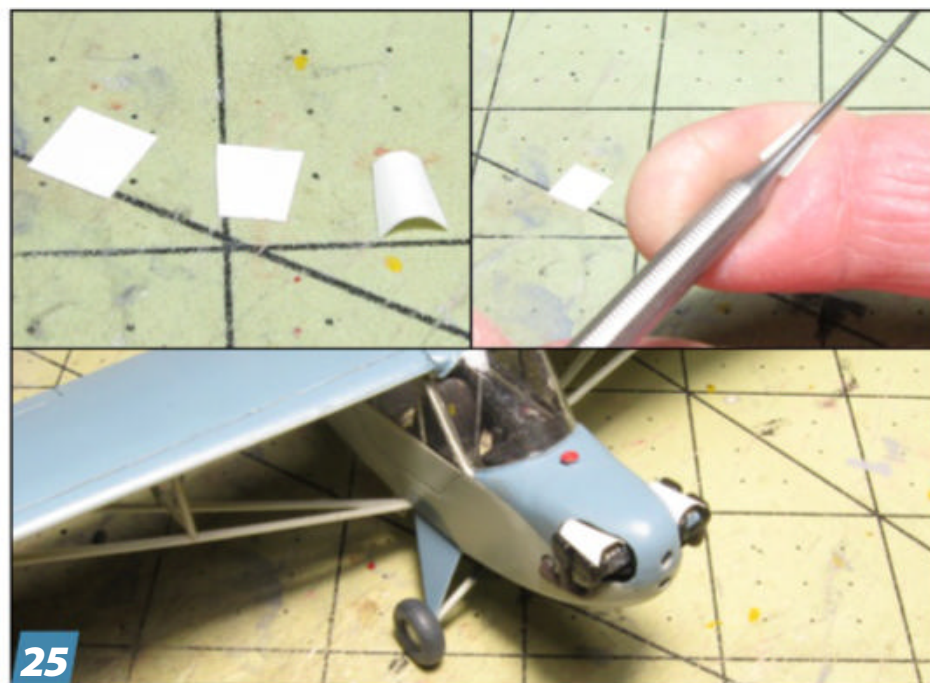
23

I cut the springs to fit between the brass bracket and the tail-wheel strut, glued them in place and painted them to match the underside. After that, I glued the tail rigging and rudder control cables into the holes in the fuselage.



24

I had looked at the kit's engine-cylinder cooling shrouds repeatedly and finally decided they needed to be replaced because they were incorrect (left). I cut them from the cowl and then filled and sanded the area smooth before touching up the paint.



25

To replace the cooling shrouds, I cut tapered shapes from .010-inch styrene sheet and then carefully bent them by pressing each into my finger with the narrow shaft of a dental tool. After gluing them to the cylinders, I painted them gloss back.



26

The propeller was painted tan with wood-colored paint streaked along it for grain. Then I brushed the tips with zinc chromate and added brass along the cutting edges. Using Elmer's Clear Glue, I installed the vacuum-formed windshield and skylight.

FINAL THOUGHTS

AFTER ATTACHING THE PROP AND CANOPY, I added the last of the control lines to the top of the wings. The Navy installed navigation lights to the Airship Squadron NE-1s, so I made small bullet shapes from styrene rod and glued them to the wingtips. Dots of white glue provided lenses, which I painted with Tamiya Red Clear (No. X-27) and Green Clear (No. X-25) followed by Clear (No. X-22) to make them shine. I stretched clear sprue and glued a piece to the gas cap forward of the windshield to represent the fuel level indicator. It was fun adding extra detail to the Hobbcraft kit, and, now, a Cub of a different color resides in my showcase. **FSM**

MASTERFUL

Careful construction and paint perfect Atlantis' movie monster

BY JEFF POLLIZZOTTO



Background: ©Ben Schonewille/
Dreamstime.com

MUTANT

The 1955 movie *This Island Earth* is an American sci-fi classic. Directed by Joseph M. Newman and starring Jeff Morrow, Faith Domergue, and Rex Reason, it tells the story of a race of aliens from the planet Metaluna who travel to Earth seeking help, because they are losing a war with people called the Zahgons. They look to Earth's best scientists to build a defense shield around Metaluna to protect them from the Zahgons' relentless attacks on their planet.

The mutant creatures, bred by the Metalunan

people as a worker class, were one of the highlights of the film.

Atlantis Models recently released a 27-piece Limited Edition 1/12 scale kit of the so-called Metaluna Mutant based on tooling from an original unreleased Aurora kit.

Limited to a run of only 4000, the kit is packaged in a classic 8¼-inch square Aurora-style box.

The finished figure stands 7 inches tall when completed. A rectangular base with a movie clapper slate name plate is included.



1 With just 27 parts, the mutant goes together quickly and easily. The head, torso, and legs build from halves, with an additional plate for the back.



2 The arm assemblies consist of eight parts for the main arms and the shoulder parts. Although the design leaves them movable, I chose to fix them in place.



3 To get a tight seal on the head assembly, I clamped it after cementing the halves together. This made cleaning up the seam easier, requiring minimal use of putty.



4 I taped many of the larger parts to a piece of cardboard for painting. Once I had base-coated them with Tamiya Fine Surface Primer, I assembled the parts and filled gaps with putty.





5

Clamping the arms and shoulders minimized filling. I didn't like the gaps in the elbows, part of the movability engineering, because they would be visible in the finished model. So, I filled them in with styrene strip and putty. I also cut open the ring on the link connecting the upper and lower arms so I could join them after cleaning up the seams.



6

The connection between the legs and the upper torso seemed weak, so I added 1/8-inch styrene strips to the waist joint. This creates a more solid gluing area when assembling the figure after painting.



7

The claws had shallow sink marks that would be visible after assembly, so I added a little putty to the areas. When dry, I sanded the claws and mounted them on toothpicks for priming.



8

I also noticed slight gaps at the bottom seam of the upper torso on both sides, which I filled with thin styrene strips and sanded them flush.



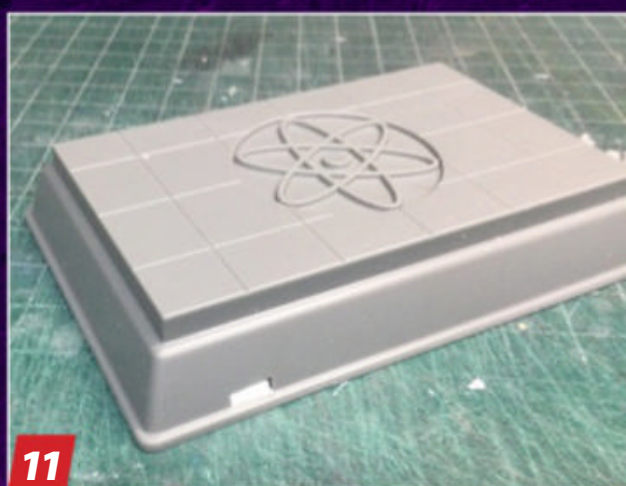
9

To make handling the parts easier for priming and painting, I mounted many of the larger body parts on sticks secured with masking tape.



10

I didn't plan to use the nameplate that came with the kit, so I needed to modify the base slightly. First, the small rectangular mounting hole needed to be filled.



11

I accomplished this by first cementing a piece of .040-inch styrene behind the hole. Then, I filled the hole from the front with another piece of styrene and putty, and sanded everything smooth.





12 I cemented the clawed feet to the legs, clamping the assembly to the workbench to make sure the feet stayed flat when drying.



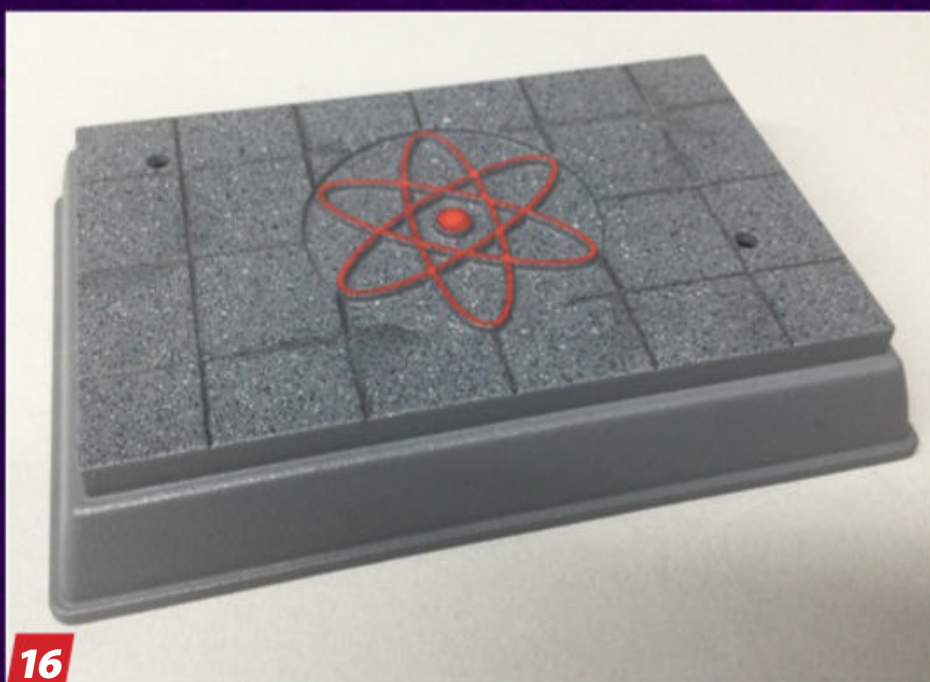
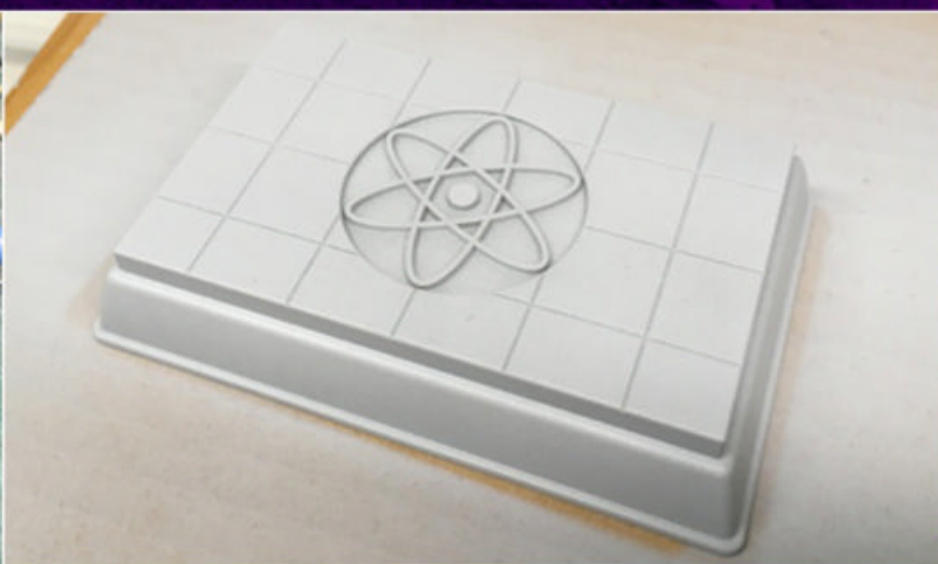
13 I wanted to mount the figure permanently to the base without glue. This gives the finished piece a better look and avoids messing up the base with wayward cement. I drilled small holes through each foot near the heel and I made matching holes in the base.



14 Here, the figure is temporarily mounted to the base with two No. 6 screws. I wanted to make sure everything lined up as I intended.



15 The underside of the base shows both screws mounted in place. You can also see the finished styrene patch that covers the hole in the base. Applying gray primer laid the groundwork for paint.



16 I covered the base with Ace Premium Machinery Grey (No. 17021). After masking the edges, I misted on flat black and flat white from spray cans to produce a textured appearance. A red paint marker colored the atomic symbol, and I flowed Tamiya Panel Line Accent wash to pop the lines between the blocks.

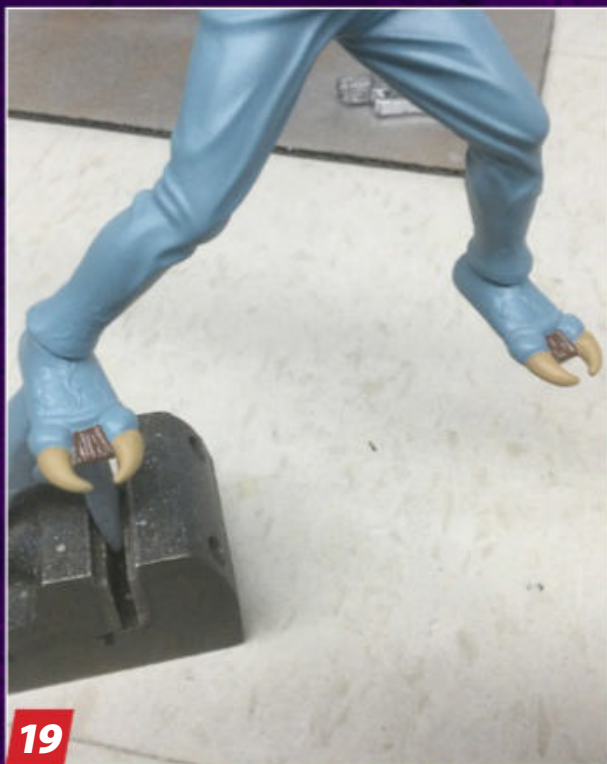


17 To base-coat the figure, I mixed Tamiya Medium Blue (No. XF-18) and Flat White (No. XF-2).



18

Each sub-assembly was attached to various clips and holders to make airbrushing the color coats easier and more consistent.



19

Once the assemblies were dry, I started hand-painting various details on the figure, such as the claws.



20

Photos of the mutant show clear lenses over the eyes, so I covered them with clear parts from a Wave Detail Parts set. I hand-painted red veins on the backs of the lenses and flowed a black wash over the kit parts.



21



To paint the belt area on the figure, I masked off the area with Green Frog brand tape and paper.



22

The most challenging part of this build was hand-painting the red veins all over the body. With a new artist brush and steady hands, I picked out the molded details. I used the same technique to paint the veins on the mutant's head.



23

Once the veins were painted on all of the parts, I started adding a black wash. Here you can see the result on the clawed feet.



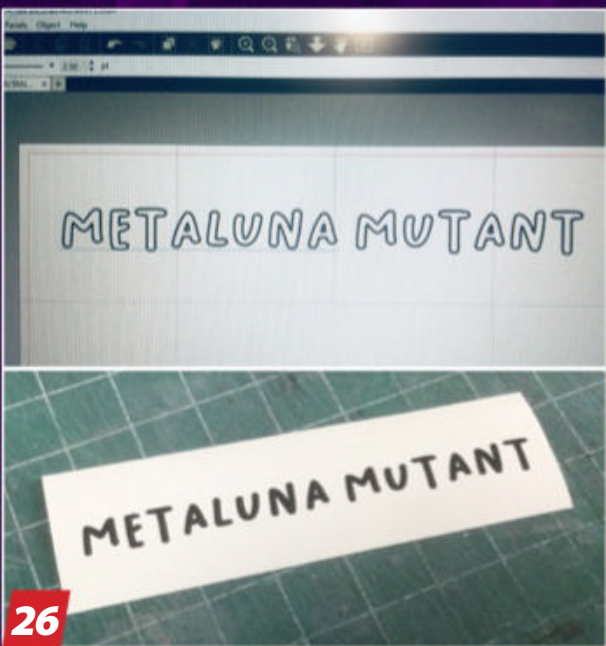
24

I attached the clear lenses over the eyes using Testors Clear Parts Cement.



25

The completed body parts are ready for final assembly after adding the black wash.



26

Using my vinyl cutter, I designed a new logo for the base. This is how it looked after cutting and removing the excess vinyl.



27

I peeled off the carrier sheet after burnishing the letters to the base, revealing the completed assembly. **FSM**



FIRE IT

Planning, tools, and creative thinking motorize a 1/32 scale Spitfire

BY JARED DEMES

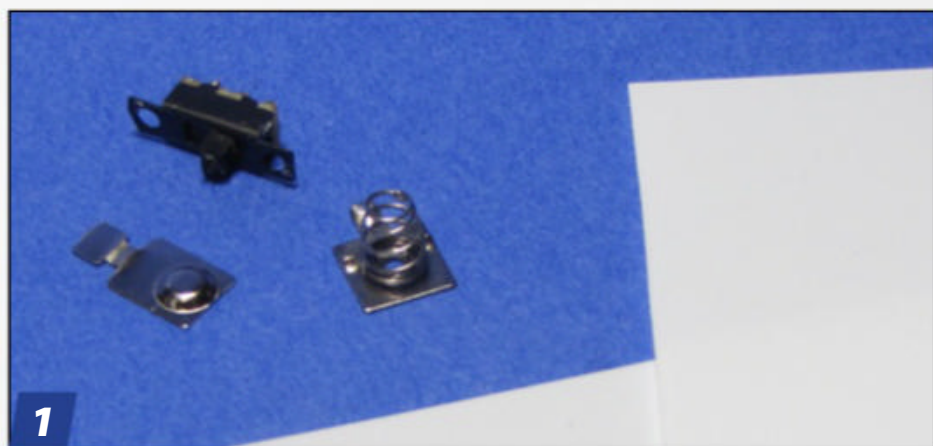
When I was a kid, my dad returned from a trip to Germany with gifts from Oma (my grandma). One I really liked was a small red plane with a small motor to spin the propeller. Motorizing a model isn't something new — many companies have been doing it for decades. However, they all seem to either house the electrics in a display stand or box with the model permanently mounted. The unfortunate side-effect

means we can't fly them around our hobby rooms — don't deny it, you know we all do it! I held onto the idea of a motorized model all these years, and made one for myself that kept everything contained inside, hidden from view.

For this build, I used a Revell Germany 1/32 scale Spitfire Mk. IIa (No. 03986) and kept the electronics simple; the wires and motors can be found at electronics stores or ordered online.



UP!



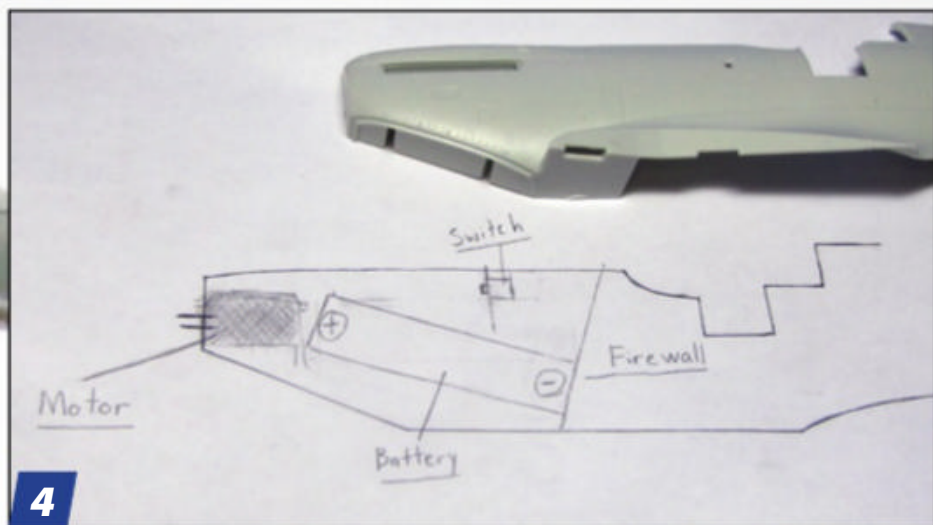
1 First, you'll need a simple two-way switch, battery connectors, and styrene sheets. Choose a switch that slides easily; a tough-moving switch may damage the model's structure with use.



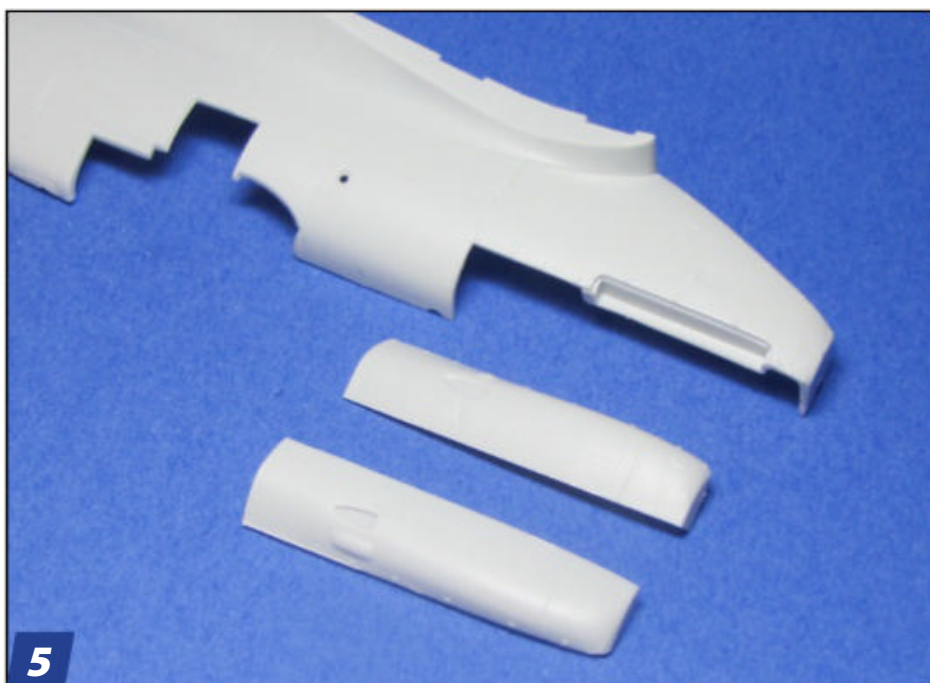
2 The motor may be the most difficult part for you to find. The Tamiya Mini Motor (No. 75026) and Airfix Electric Motor (No. AF1004) can be bought online or hobby stores. Both are small enough to fit in the model and still have power to spin the prop. I used the Tamiya motor.



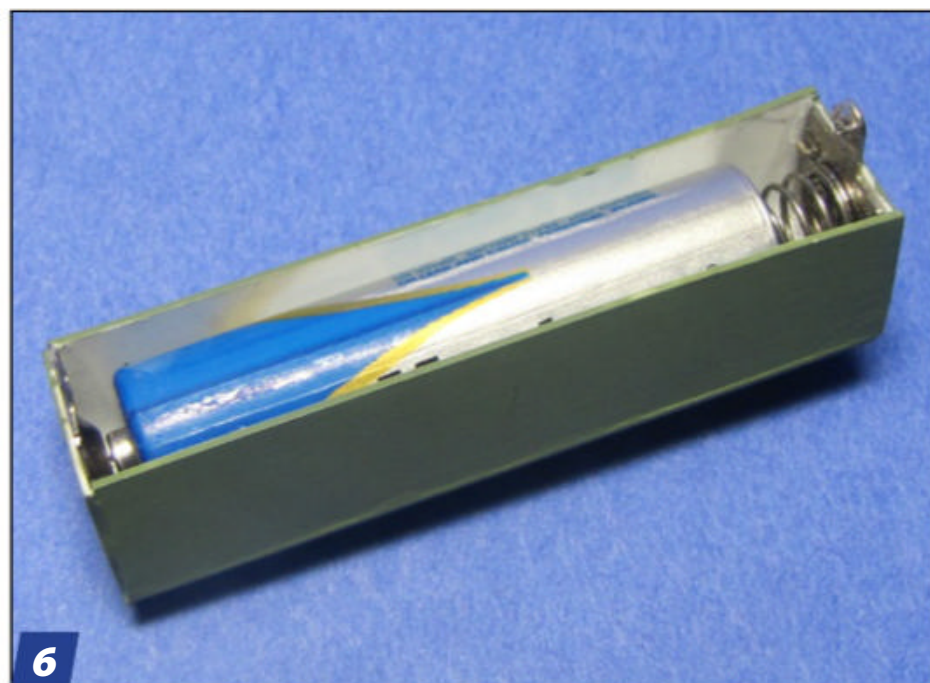
3 These tiny saw blades were essential to the whole operation, and I can't recommend them enough. The one on the left is a Tamiya Fine Craft Saw for Scribing (No. 74097). On the right is an Excel No. 13 Fine Saw Blade (No. 20013). Do yourself a favor and pick up a couple of each.



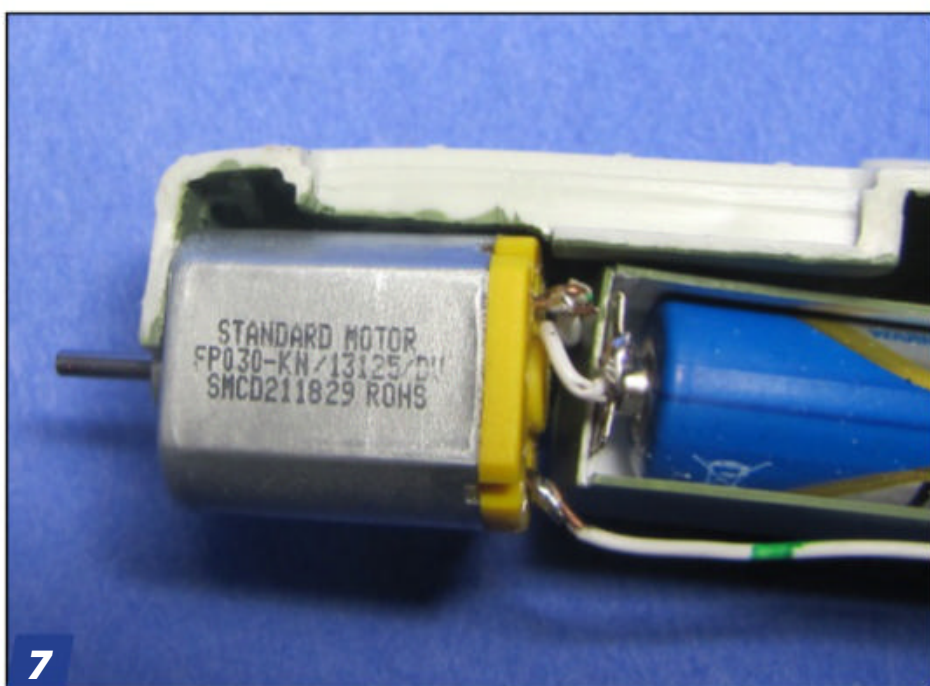
4 I traced the fuselage on a piece of paper and used it to measure all of my parts. I placed the motor and the switch on the template to determine how much room I had for the battery compartment. I angled the battery case for easier access and battery removal.



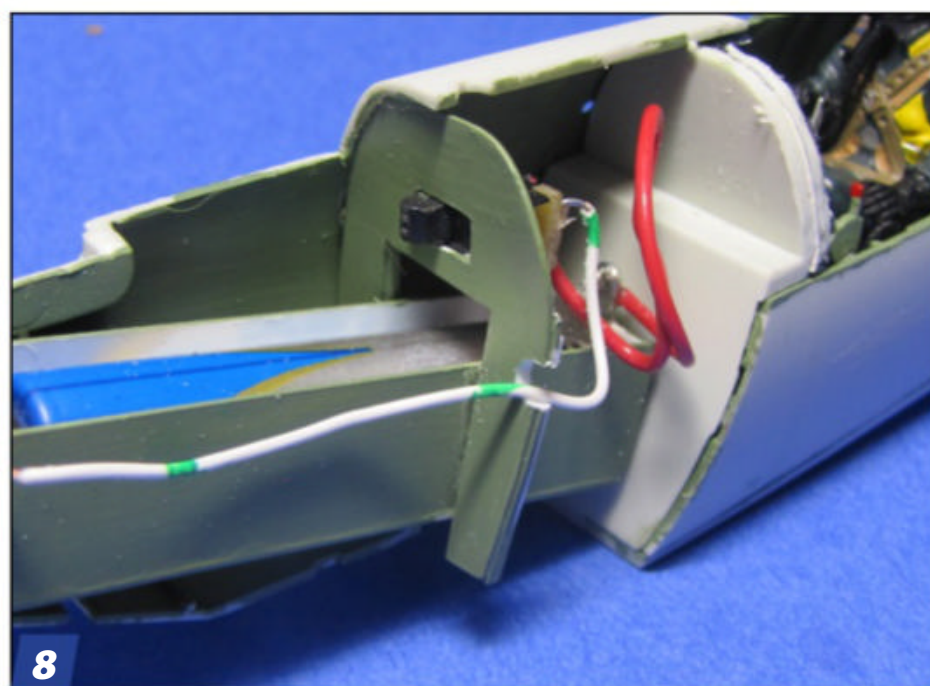
5 I cut off the top of the cowling, just like it would appear on a real Spitfire. The Excel saw made quick work of the task. Later these pieces will be glued together to create the battery cover.



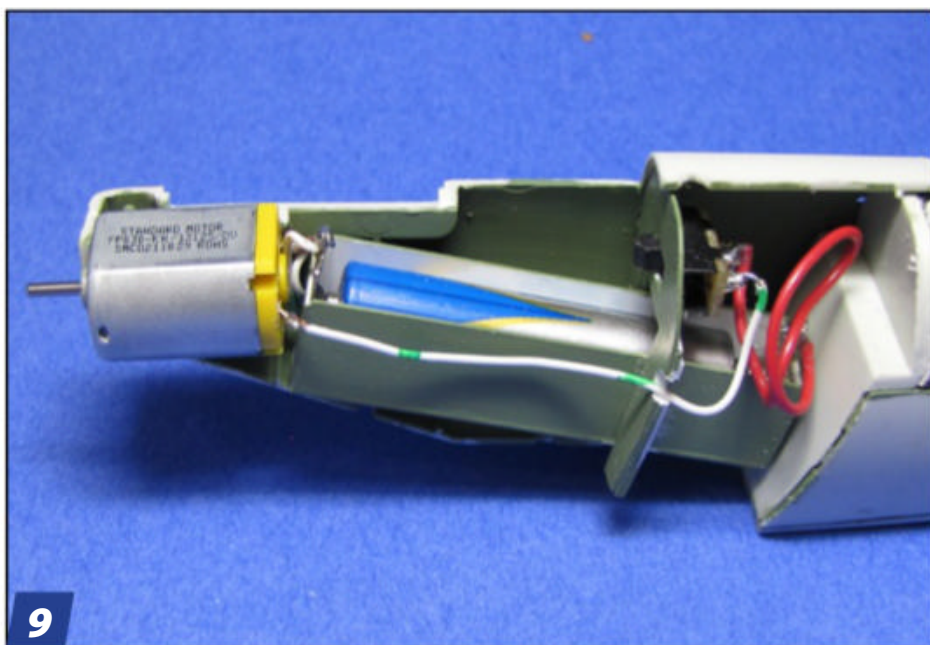
6 No battery box I could find fit the plane's nose. Instead, I made my own from styrene sheet and painted it Tamiya Cockpit Green (No. XF-71). It's a snug fit and holds a AAA battery. I made sure the spring was a bit tight to keep the battery from falling out during maneuvers.



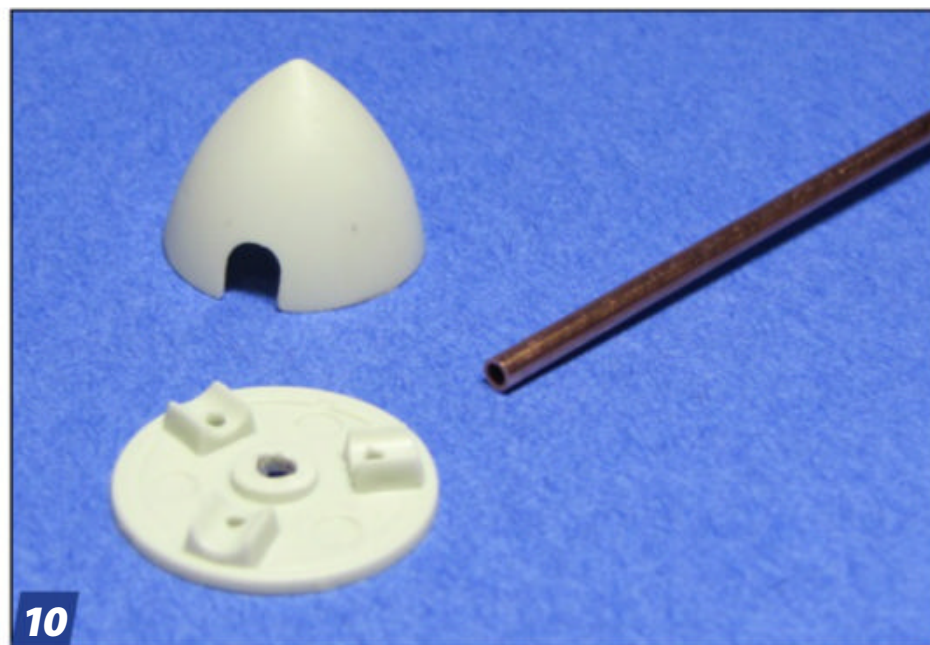
7 Slightly trimming the sidewall made enough room for the motor to fit. I mounted it in place with gel superglue. Make sure to keep the superglue away from the motor shaft so it doesn't gunk it up and possibly impede rotation.



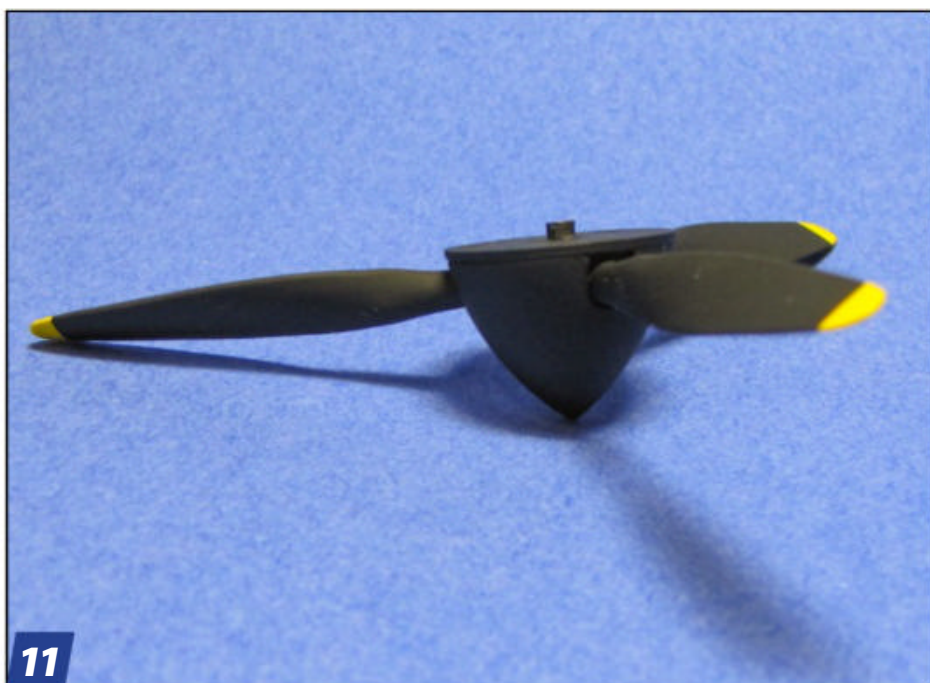
8 I fashioned a bulkhead from styrene sheet and mounted the switch to it. The bulkhead serves as a secondary mount for the battery box, which rests comfortably on the kit's firewall. I superglued all these parts; they need to be able to withstand use and jostling.



9 With the parts mounted, I connected and soldered the wires. Make sure you connect the wires correctly or your propeller will spin the wrong direction or not at all.



10 I removed the propeller shaft and replaced it with brass tubing. The inside diameter you will need depends on the motor shaft; pick something that fits securely. I cut a length of brass tube to fit inside the spinner and glued the propeller components together.



11

Leave a few millimeters of tubing extended out the back of the spinner. This will keep the propeller from grinding against the fuselage. If the gap is too wide, file down the tube until you're satisfied and the prop still spins without touching the fuselage.



12

A small dab of superglue on the end of the motor shaft is all you need to attach the propeller. As a precaution, turn the propeller about every 30 seconds for 5 minutes to prevent any glue that may have run down the shaft from gumming up the motor.



13

I embedded two rare-earth magnets I picked up from a gaming store into the exhausts. These will anchor the top of the cowling. You can paint over them without lessening their power. Be warned, these magnets are powerful, so don't let kids or pets get a hold of them.



14

After gluing the upper cowl pieces together, filling the seam, sanding, and painting, I added two thin metal strips — any scrap metal will do, so long as it's effected by magnets.



15

When the glue was dry, the top of the cowling simply snapped in place, the magnets holding the battery cover securely to the fuselage.

FINAL THOUGHTS

TESTORS MODEL MASTER RAF Green and Dark Earth enamels on top, and a mix of Tamiya acrylics underneath finished the paint. Markings from Fundekals.net decorated my Spitfire as the hero aircraft for the 1969 movie, *Battle of Britain*. I'd had the decals for a while, and this seemed the appropriate time to use them. Last up was the addition of a pilot figure. It would be weird to have a plane's prop running without a pilot inside, wouldn't it?

Motorizing a radial-engine model airplane might be harder to do than a inline engine like this, but don't let degree of difficulty deter you from building a motorized model. Take time to plan so everything fits inside the model and be creative. In the meantime, I'm off to take this Spit on another sortie! **FSM**



Try your hand at **SCRATCHBUILDING**

Simple techniques convert an inexpensive kit into a unique vehicle

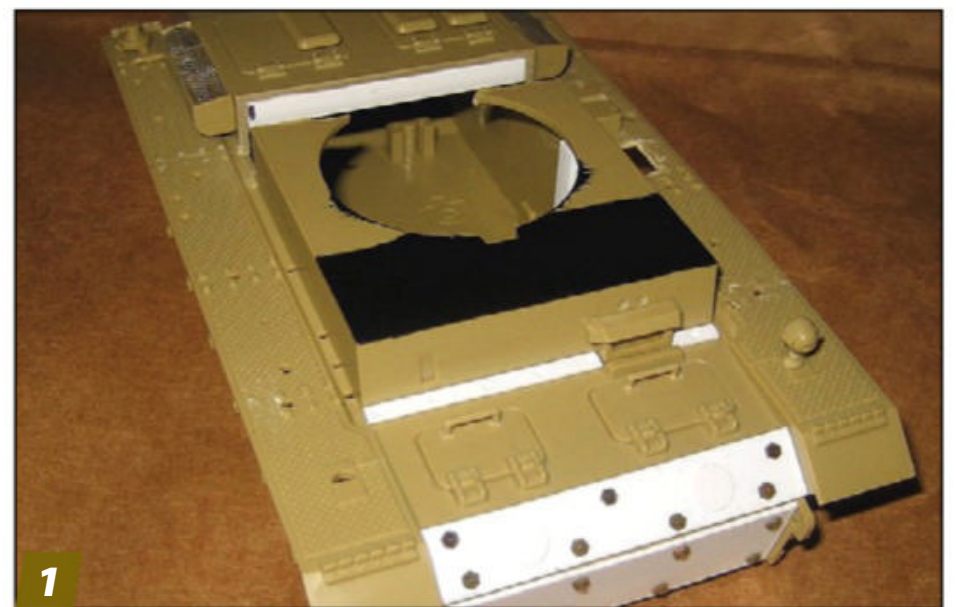
BY MIKE DIKOS



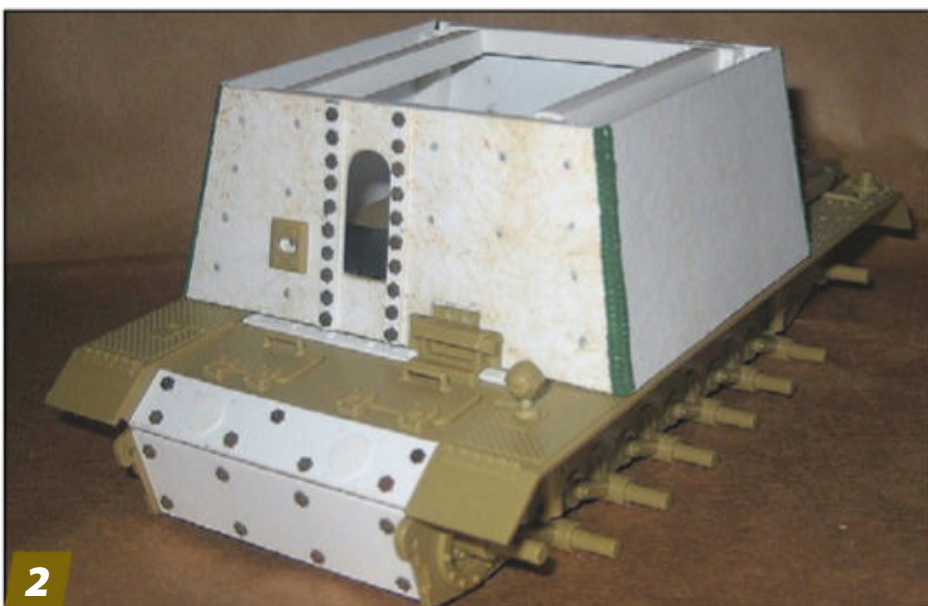
Despite derision from some fellow modelers, I bought Tamiya's older 1/35 scale Panzer III in the vendor room at an IPMS show. Dating from 1971, it's not the latest, greatest model, but for \$5, it was a bargain. Opening the box was like a trip back in time. I remembered, as a kid, coming home from the dime store and heading to my room with my new Monogram model, tearing off the shrink wrap, and looking inside. I went straight for Shep Paine's tips, hoping my model would turn out like his. As far as I'm concerned, Shep is the father of model detailing. Rather resin and photo-etched metal, he did everything with scraps of styrene, sprue, index card, and white glue.

To that end, I figured the Tamiya kit was the perfect candidate for conversion to a Sturmpanzer IV, a self-propelled assault infantry gun armed with a 15cm cannon in a fixed casemate. This fixture would be the main part of the conversion.

Unable to justify the cost of a trip to the Kubinka tank museum in Russia, home to the sole surviving StuIG 33B, I measured line drawings and photos to create 1/35 scale templates for the casemate and a prominent stowage box on the engine deck (Figure 1).



To accommodate the new casemate, I cut a gap in the upper hull at the forward edge of the engine deck that extended to the turret ring to fit the rear wall. Square styrene tubing glued into the opening under the engine deck gives more gluing surface, and I reinforced the deck with square tubes installed vertically. Applique armor cut from .030-inch styrene sheet to fit the kit parts was a detailed with bolt heads.

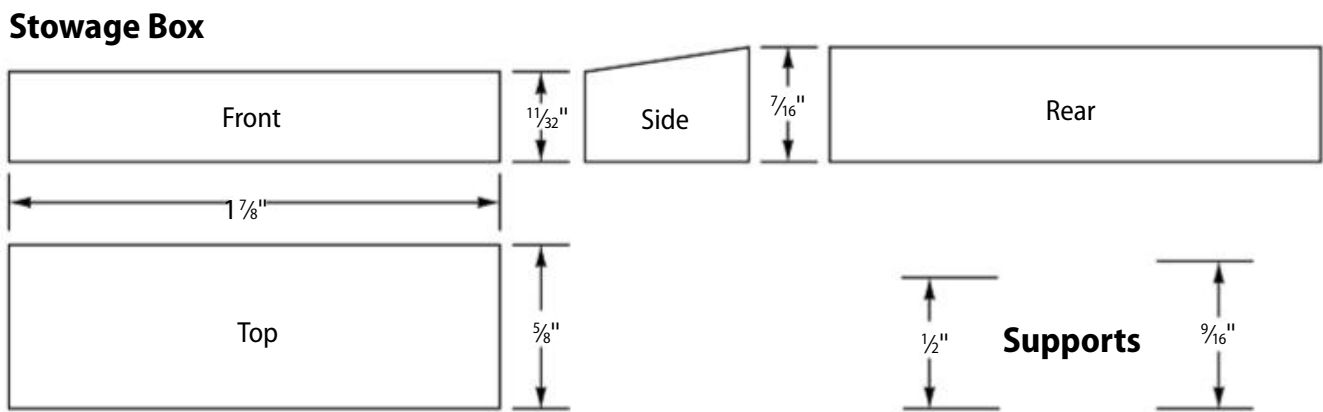
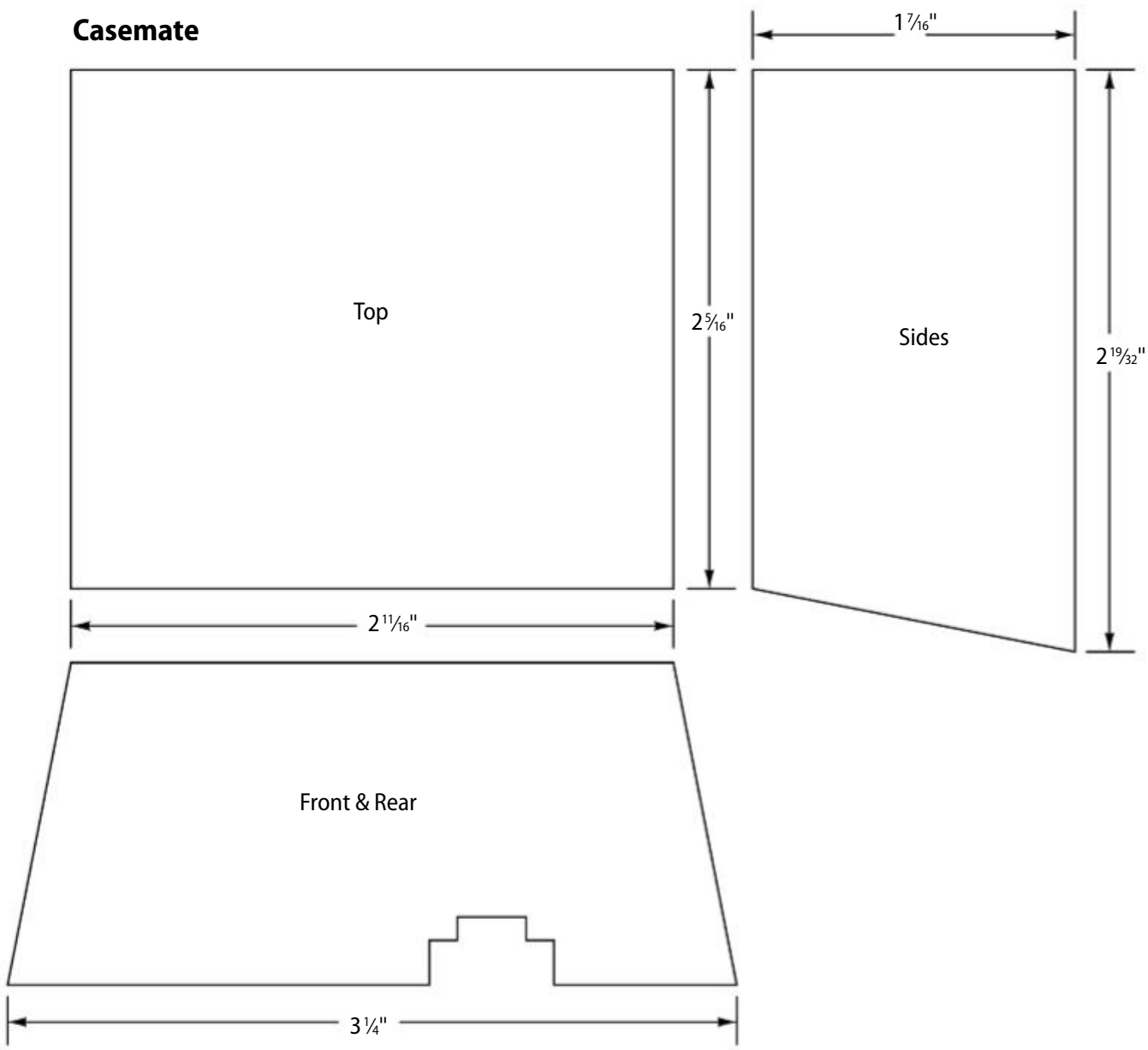


I made the casemate's walls using .030-inch styrene sheet. The front wall's vision port and opening for the gun were cut out and contoured. Working in 1-inch-square sections, I brushed liquid cement onto the armor plates and stippled the softened plastic with a stiff brush. When I assembled the box, I reinforced corner joins with square styrene tubes.

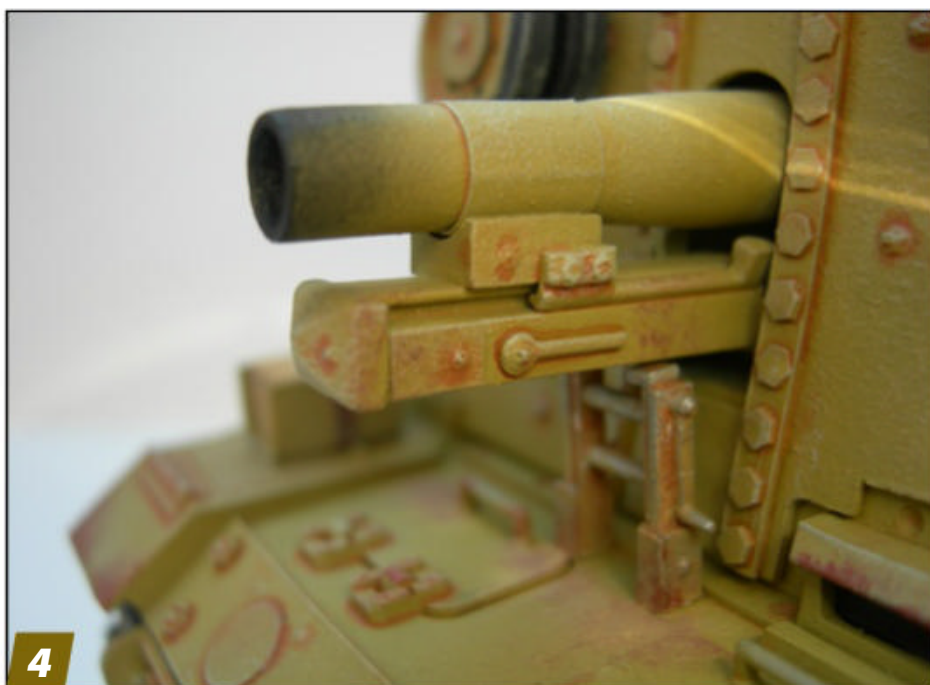


For weld seams between the plates, I applied traditional model putty to the casemate one corner at a time. When the putty was tacky, I rolled a 2-inch finely threaded bolt across the seam to texture the bead. I made hatches and the gunsight shield using styrene sheet detailed with wire handles and hinges made from styrene, fine wire, and white glue rivets.

Templates for 1/35 scale Sturminfanteriegeschutz 33B



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 1/72 — 48.6% 1/48 — 73% 1/32 — 109% 1/16 — 219%



4

Before adding the casemate roof, I installed the 15cm gun. The base came from a Testors 1/35 scale PaK 40 kit detailed using gizmology. For the barrel, I cut the body of a ballpoint pen that tapered gently in the same way the full-size cannon did. A short length of plastic tubing added to the end of the barrel finished the weapon.



5

I made the rear stowage box and its supports with .030-inch styrene sheet. Care must be exercised with the uprights to ensure the box sits level on the hull. I attached the box after painting it and the vehicle with Tamiya Dark Yellow (No. XF-60), but before weathering.

FINAL THOUGHTS

I KNOW THIS MODEL has some flaws and inaccuracies, but I am pleased with the outcome overall. This project proves that every kit has value. Just because it's not the latest tour de force in styrene doesn't mean it should be relegated to the scrap heap. Try a little scratchbuilding to make yesterday's news today's masterpiece. **FSM**



Airfix de Havilland Mosquito B.XVI

Originally, de Havilland designed its Mosquito as a high-speed bomber capable of outrunning opponents, and, as such, it carried no defensive armament. The last major Mosquito variant was the B.XVI, which incorporated a pressurized cabin for high altitudes and could carry a 4,000-pound bomb load. Entering service in 1944, a total of 402 were built.

The Mosquito has been covered well in the modeling world, with plenty of kits available over the years. Airfix continues to update its catalog, replacing some older kits with newly tooled versions. This new 1/72 scale de Havilland Mosquito B.XVI kit features fine, recessed engraving, a fully detailed bomb bay, and options for either ground or in-flight display (no stand included). It includes markings for two ver-

sions, both in the standard ocean gray and green camouflage on top with either gray or black underneath. Don't let the 112 steps of instructions intimidate you: They're broken down into clearly defined stages, with good paint callouts along the way.

The Airfix Mosquito's well-appointed cockpit starts with the floor, which also incorporates the roof of the bomb bay and wing supports. All the necessary bulkheads, radio gear, controls, and panels are included, along with some nicely molded details inside the fuselage. I used Tamiya Cockpit Green (No. XF-71) for the base color, with details picked out as instructed. A decal highlights the instrument panel, and there is also a pilot figure.

Mating the fuselage halves reveals a nearly perfect fit, with the cockpit assembly secured between. The mounting tabs for the tail planes overlap with each other, ensuring perfect alignment. With some minor work, the separate rudder can be posed off-center.

The only part of the build that was a little fiddly was the main landing gear. There are no locating pins on the cross braces, just simple butt joints. Using the lower wing section as a jig to hold things in place as instructed helps, but I would have preferred something a little more definite. As a plus, the wheel hubs are separate, so no masking is required.

Interestingly, the exhaust manifolds are molded in two parts, with alternating pipes on each part. It gives better definition to the pipes and certainly makes cleaning up any mold seams easier. Another nice feature is that the wingtips are molded as clear pieces, so there is no need to try to glue on tiny, clear navigation lights.

Assembling the engine nacelles went without issue. They consist of several pieces, but the fit was excellent, as was the fit of the completed unit to the wing. The detail in the main gear wells is also very good. Sliding the wing onto the support spars made for a sturdy connection to the fuselage, and the excellent fit showed no need for filler.

I used Model Master RAF Dark Green and Ocean Gray enamels (out of production) for the topside camouflage. For the underside, I used black Mr. Color Finishing Surfacer 1500. The decals worked perfectly, but most of the red stencil decals underneath are nearly impossible to see.

I recently built the Tamiya 1/72 scale Mosquito B Mk.IV, and I have to say that this new Airfix 1/72 scale de Havilland Mosquito B.XVI kit stacks up very favorably. The Tamiya Mosquito may have a very slight edge in surface detail, but construction-wise, I think the Airfix kit goes together better, and it has the full bomb bay. I don't think I could give it a much better recommendation than that!

— Mike Klessig



Kit: No. A04023 **Scale:** 1/72

Mfr.: Airfix, www.airfix.com (Sample courtesy of mfr.) **Price:** \$32.99

Comments: Injection-molded plastic (blue-gray, clear); 161 parts; decals

Pros: Excellent fit and engineering; good detail **Cons:** Lack of locator pins for main landing gear



ICM Unimog S 404

The Mercedes-Benz Unimog is one of the most durable and versatile vehicles on Earth. The Unimog started production in 1948 by Boehringer and continues today under Daimler Truck and fulfills dozens of roles. Daimler-Benz produced the Unimog 404 (also called the Unimog S or 404 S — the swapping of the letter and numbers on the kit box top is unconventional) from 1955 to 1980 and sold it under the Mercedes-Benz brand. ICM has faithfully reproduced this iconic 4x4 in amazing accuracy.

More familiar with the ICM 1/24 scale Mercedes G4 from a few years ago, I was anticipating a shrunken version. Not so. This truly fantastic kit, with terrific quality and detail, contains 250 parts, and you use



all but two because of different side mirror options.

Seven sprues bear parts with finely molded details — bolts go through the other side of the individual frame rails! The windscreens, headlight lenses, and turn indicators are crystal clear. The tires wear crisp tread patterns. The minor flash on some parts is easily cleared away.

There are 24 pages of instructions with 103 steps split into five sections: chassis, main cab, finish the cab, cargo area, and additional details. The hood and doors can be posed open. However, the kit doesn't



provide hood hinges. Closed, the doors and hood fit perfectly.

The frame builds up from separate crossmembers and siderails, onto which the shocks, springs, fuel-tank brackets, shock-towers, and exhaust brackets are placed. The excellent engine detail includes belts, pulleys, and an alternator.

Although it's a tight fit with the engine and radiator, the cab should fit OK. However, I had to remove the steering column completely to get the cab to sit properly on the frame. I wasn't able to snake the column through the floor without damaging the build, so I left it off.

A cabrio, the cab's canvas top is only provided as a covered option. The windscreen can be positioned folded down on top of the hood. The instructions show the cargo bed sides in the closed position, but you can attach them folded down.

The kit realistically represents side mirrors and other small parts, but the sprue attachment points are a bit large, so be careful during removal and cleanup. The spare tire rack located under the cab and cargo bed wouldn't fit with the wheel on; maybe my problem, but it is quite tight there.

A decal sheet offers sharp, clear markings for four different versions. I built the one shown on the box top with decals for the German air force, 74th Fighter

Squadron, based in Neuberg, 1970. They went down without difficulty, and even the gauge cluster for the dashboard settled beautifully over the part's contours.

ICM's 1/35 scale Unimog 404 kit is a busy little model, well detailed with just a couple of fit issues. Overall, it's a fantastic kit. Not

for beginners, builders with a few models under their belts will have no problems with this kit. ICM should be able to make more kits based on this versatile vehicle, and an early G-Wagen would certainly go well with it. Either way, this Unimog will look fantastic next to a Leopard 1A1.

— Caleb Horn



Kit: No. 35135 **Scale:** 1/35 **Mfr.:** ICM, www.icm.com.ua (Sample courtesy of mfr.) **Price:** \$72 **Comments:** Injection-molded plastic (gray, clear); 250 parts (5 vinyl tires), decals **Pros:** Excellent detail; good overall parts fit **Cons:** Steering column interfered with cab

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By Tim Boyd

Monogram Callaway Corvette Speedster

A steal, if you can find it

The lime green paint is outrageous. The wrap-around windshield looks like the strip of cellophane that you rip off the top of a candy bar. The interior, only slightly less outrageous than the paint, is electric blue pigskin accented by the Speedster script logo in mellow yellow. The Callaway Speedster is a wild car." So states the introductory paragraph of the 45-step instruction sheet for Monogram's Callaway Speedster kit.

When the 1/1 scale aftermarket tuner Callaway introduced a special, topless version of its twin-turbo Corvette conversion in 1991, it garnered considerable coverage in the "buff books" of the era. Painted a trendy lime/mint green pearl metallic, the prototype was eye-catching with its lowered windscreen that carried around into abbreviated racing-style side windows. The twin-turbo, small-block, Corvette engine carried a factory-ship-through code (RPO B2K) and generated 403 net horsepower that delivered performance similar to the high-dollar European exotics of the day.

By the early 1990s, kitmaker Monogram had largely erased its 1970s reputation for somewhat simplified and easily assembled kits that sometimes lacked accuracy in body proportions. One of the key steps along the transformation was the mid-1980's introduction of the company's C4 Corvette coupe (and later, convertible) 1/24 scale kits.

The Monogram product development team saw the Callaway Speedster as a logical addition to the C4 Corvette kit range, as well as a great opportunity to polish credentials as a state-of-the-art kit design and manufacturing organization. While sharing much of the content with Monogram's 1991 Corvette convertible kit (and to a smaller extent, its ZR-1), the kit also included many newly tooled parts and assemblies.

Model car journalist and historian Dennis Doty reviewed the new Monogram kit in his April 1993 issue of *Model Car Journal*. He noted numerous newly tooled engine and engine compartment components, a new frame and floor pan assembly, and, of course, the all-new Speedster body

MONOGRAM CALLAWAY CORVETTE SPEEDSTER

Kit No.: 2958

Introduced: 1992, never reissued

Current Value: \$16

featuring open lower side vents. Noting only the omission of Callaway decals for the wheels, Dennis concluded his review by stating, "I love this kit!"

Recalling the first time I broke the seal on a Callaway Speedster kit, I was impressed — indeed, almost overwhelmed — with the effort Monogram expended on this replica. Looking at the kit three decades later, I find my initial reaction still holds. Only the kit's dark green styrene and overly tinted gray

translucent parts trees (and possibly the tires) would be considered negatives from today's perspective.

Reportedly, no more than 10 of the real twin-turbo Callaway Speedsters were produced, making the 1/1 scale prototype a very rare piece even back then. I suspect the kit did not sell all that well, and the lack of reissues, along with the almost embarrassingly low price of the kit today, certainly reinforces that view.

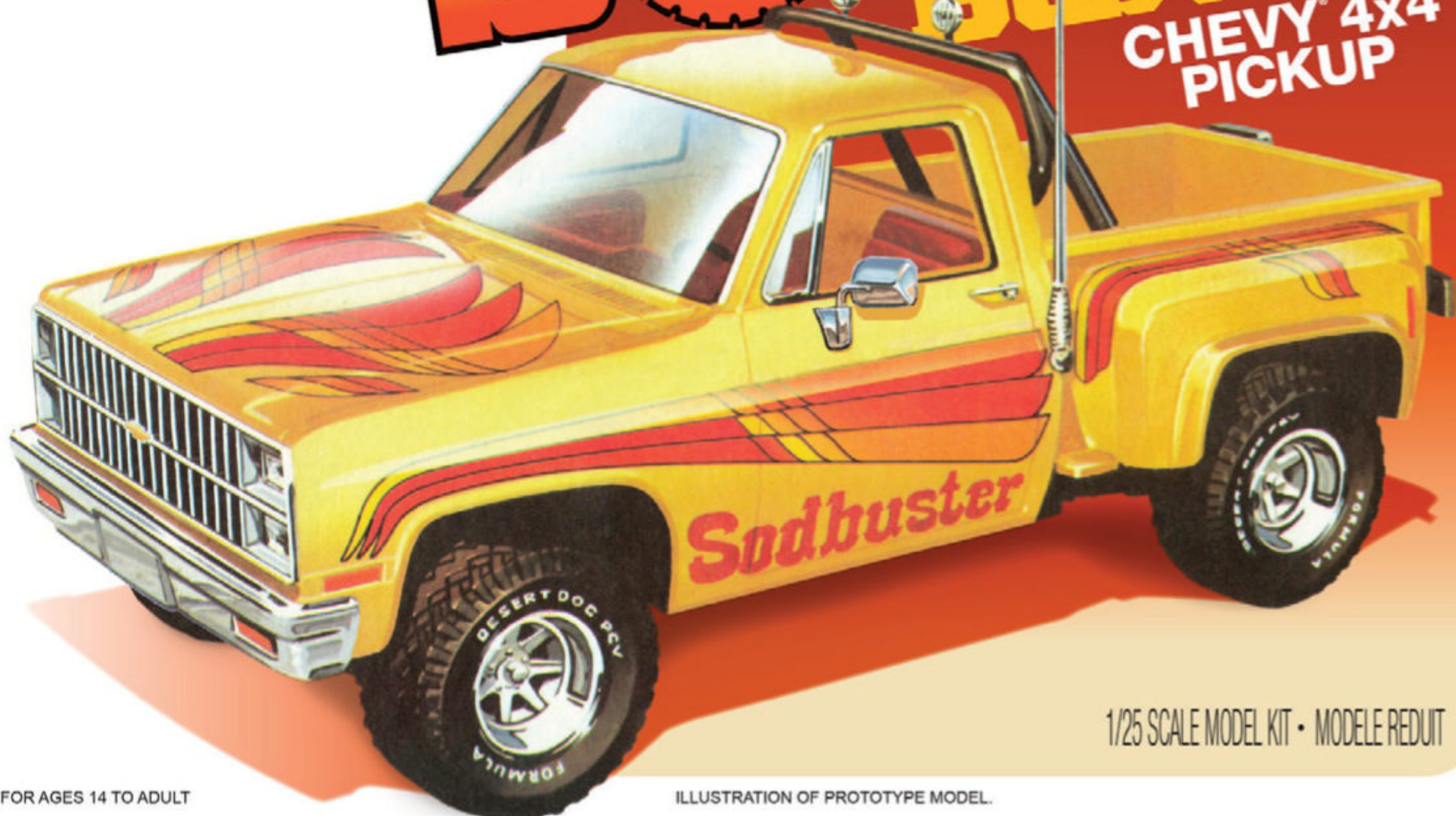
However, stated another way, this highly detailed and extraordinarily well-executed Monogram Callaway Speedster may now rank among the best all-time values in highly detailed, collectible Corvette kits. **FSM**





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#MPC972 (1:25 SCALE)



*prototype shown

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1966 FORD MUSTANG GT FASTBACK (NEW BODY TOOLING!)
#AMT1305 (1:25 SCALE)



'62 CHEVY IMPALA CONVERTIBLE
#AMT1355 (1:25 SCALE)



BATMOBILE BAD GUY GETAWAY EDITION
#POL998 (1:25 SCALE)



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BRITISH CRUISER TANK A34 COMET

Item No. 35380

1/35
SCALE

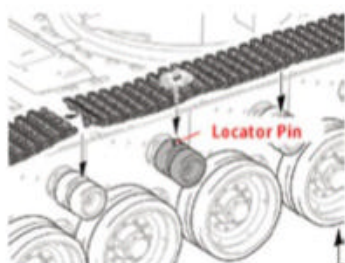


Cruising to Victory

While German forces had dangerous Tigers and Panthers prowling the battlefield, by the end of the conflict the British were fielding a capable answer: the Comet. With a hull based upon that of the Cromwell and a new, larger turret accommodating the Q.F. 77mm gun, it was a formidable proposition indeed. Comets took part in the March 1945 Allied crossing of the Rhine, providing vital infantry support fire; crews are said to have been happy with the balance of firepower, survivability and mobility it provided.

About the Model

★ This is a 1/35 scale plastic model assembly kit. Length: 219mm, width: 88mm. ★ Extensive study of full-size Comets underpins this accurate rendering of the boxy hull with larger turret and 77mm gun. ★ Cast metal armor surfaces on the hull and turret front are realistically depicted, as is the shape of the canvas gun shield cover. ★ Assembly type tracks employ one piece straight sections. ★ Choose between connected and separated "Normandy cowling" designs for the rear. ★ A clear part is used to recreate searchlight lens. ★ Comes with two crew torso figures in winter gear, with two vehicle marking options also included in the kit.



One of the return rollers features a locator pin that ensures your track will be in just the right spot.



Commander and loader torso figures can be installed to add even more life to your modeling masterpiece!



A depiction of the canvas gun shield cover masterfully depicts creases and folds in the fabric.



A busy front section features driver's visor, machine gun, headlight and a complex tow cable layout.



Assembly type tracks showcase marvellous molding detail, using one piece straight runs for convenience.



Take a look at the powerful Comet from the rear, the 77mm gun oozing menace in detailed 1/35 scale.



Smoke dischargers and tow hooks accent the rear, as does the duct dubbed a "Normandy cowling."



The two-part Normandy cowling allowed the gun to be locked at the rear of the Comet.



Plenty of accessories are included to add an extra accent: shovel, bar, helmets and more.



The chassis is built up into an accurate box-like structure, with bulkheads boosting durability.



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Tamiya America, Inc. 36 Discovery, Ste 200, Irvine, CA 92618

(800) 826-4922

www.tamiyausa.com