

FineScale

October 2018

Modeler

The essential tool for model builders



Detailing in 1/72 scale

Tips for working with short-run models

8 kits reviewed



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MODELING THE GREAT WAR

Great War Scale Modeling, a new special issue from *FineScale Modeler*, shows you how to build iconic tanks, ships, and biplanes from a long-neglected part of modeling history — WWI.

Stories include:

- Building a detailed WWI diorama with how-to techniques on weathering and creating and painting figures.
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FineScale Modeler 100TH ANNIVERSARY OF WWI'S END

Great War Scale Modeling

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- 3 Builder Basics
- and more!

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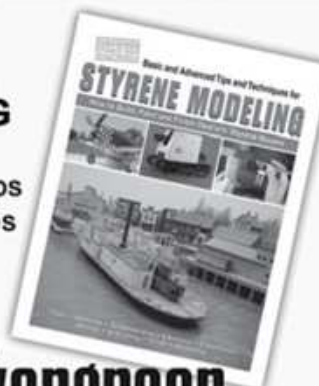
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By Mark Savage

Ahhhh, that great feel of paper

By the time you read this ... oh, baby, that sounds old-fashioned. We're all used to reading whatever we want, exactly when we want.

That goes for weather forecasts, books, magazines, newspapers, and Facebook posts about people feeding their furry kittens gourmet gluten-free low-cal wafers.

Truth is, we all read at our own pace when we want. It's great that we can now see websites 24/7 on our laptops, iPads, and cellphones.

We're part of all that, naturally.

You're used to seeing new-product videos on our website twice monthly, and taking part in our forums to get questions answered or just commiserate with fellow modelers as you work through a vexing project.

It's great that we can now see websites 24/7 on our laptops, iPads, and cellphones.

But it's my contention that as the world's electrons spin faster and flash all that information past our eyes like Times Square's neon signs hopped up on speed, a paper magazine is pretty good company.

I don't think of this as going retro, although some of my younger compatriots might. I think of this as reading sane. That can be due to the reading material itself or just the medium, in this case off-white (sorry) paper.

Reading a magazine is comfortable, and for how-to stories such as those in *FSM*, it makes a lot of sense. You can fold open the magazine to any page and follow along, step by step, to make sure you're making your model the best it can be.

So, sit back and enjoy another issue of *FSM*, share it with your friends, and then, when you're in the



right mood, hop on our website for some more sterling videos from Aaron and Elizabeth, or check out our Facebook page for some grins and inspiring photos.

One more thing

Watch for something special coming your way soon.

Just one word — *Damaged!*

editor@FineScale.com

Off the sprue: Who's your favorite author?

... as if any of us would want to read after spending all day with our eyes glued (see what I did there?) to our computer screens!



Editor
Mark Savage
msavage@Kalmbach.com

Don't read many novels anymore. Loved Twain as a kid, and Dave Barry's humor later (I'm not making this up!). Really enjoyed the ironically named Sarah Vowell's irreverent travelogue of sorts, *Assassination Vacation*.



Senior Editor
Aaron Skinner
askinner@FineScale.com

If I had to pick one — guess I do — it's Douglas Adams, mostly for his imaginative use of language. I re-read the five books in the *Hitchhiker's Guide to the Galaxy* trilogy every couple of years and always laugh out loud.



Associate Editor
Mark Hembree
mhembree@FineScale.com

Hard enough to name these few: Brautigan, Thurber, and Twain (short stories), Hiaasen (action/mayhem), Foote (history), C. Moore (goofy), Kosiński (not goofy), Mencken and D. Parker (cruel but fair).



Assistant Editor
Elizabeth Nash
enash@FineScale.com

Isabel Allende's got a way with words. Her work pulls you in right away with storylines that don't beat around the bush, and her enthralling characters and hints of magical realism hold you tight 'til the last page.



Editorial Associate
Monica Freitag
mfreitag@FineScale.com

Harry Potter came out when my son was just at the right age to become obsessed with anything *Harry Potter*. We started reading them together, and as time went on we read the series at our own pace. So, I'd say J.K. Rowling is magical.

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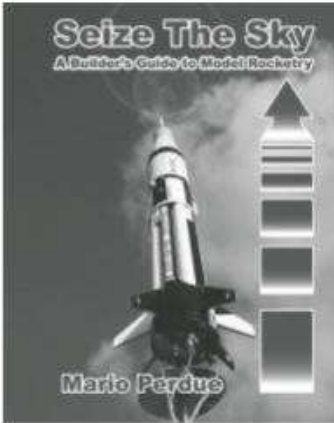
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Newer not always better

What I like about *FSM* is that you put the spotlight on older kits, showing what fine models someone made from them.

I love the latest kit from Tamiya as much as the next modeler, but there are a lot of molds out there from the last century that are still quite good. I made an Otaki P-40E last year (from way back in my stash) and enjoyed it immensely.

Too often one sees petty online carping from Keyboard Commandos armed with dubious and doubtful “expertise,” spouting off and trashing the latest kits, or worse, a kit from yesteryear with raised panel lines. OMG!

I finished a Monogram B-25J and I left the raised panel lines intact. It’s sitting 4 feet from me as I type, and I can’t tell.

Happy modeling!

– Matt Dyer
Gilbert, Ariz.

Thanks, Dad!



Trumpeter’s *USS Greenwood*, built by Rich with his father’s guidance.

My absolute favorite model I ever built was of the ship my dad served on in World War II, the *USS Greenwood* (DE-679).

Armand Anthony Zolla, MM1c (Machinist’s Mate 1st Class), enlisted in the Navy on December 14, 1942. His tour of duty included the Philippines, Iwo Jima, and Okinawa.

The *Greenwood* was a *Buckley*-class destroyer escort. If you’ve ever seen *The Enemy Below*, that was the class of ship featured in the movie. Watching it with him, he’d say, “That’s our engine room! Looks just like it.”

Building Trumpeter’s 1/350 scale *Buckley*-class destroyer escort with someone who served on it was (and is) an invaluable experience. He was thrilled when I completed it. (He wasn’t so thrilled when I showed him how small it was in comparison to the battleship *Missouri* — “I was in the Pacific in that little tin can?!”)

Show us your workbench!



The great outdoor workbench

Here are my two “workbench” photos. I’ve worked on an old drafting board since I was a kid and still like it.

I construct all of the subassemblies first, then put everything together, all on the same board. It’s also portable, so I can go out on the porch in summer and get a nice view, or watch a movie while working in the winter.

In one of the photos (right) you can see my view this last summer.

– Ron Poniatowski
Baraboo, Wis.

Modeling while recovering

As I prepared for open heart surgery a few months ago, I was heartened to receive my copy of the July issue. I realized that I do not have either the messiest or smallest workstation — what a relief!

I read Ulf Lundberg’s fascinating rendition of *Mirage*’s HMS *Zinnia* with excitement. While visiting Nova Scotia last summer, my wife and I got to tour another incredible *Flower*-class corvette at Canada’s Naval Memorial in Halifax. HMCS *Sackville* (K-181) was built in 1942 and served as an escort for North Atlantic convoys throughout World War II.

I was so impressed that I wanted to model it, but could not find a proper kit. As I turned to p. 46, there it was — my dream model!

I have already ordered the kit and look forward to spending my recovery building this truly wonderful tribute to the brave crews who went to sea on this little warship.

– Dick Nagle
Croton-on-Hudson, N.Y.



Scary when you think the thickest armor was around the engine room at ½ inch! Compare that to the 16-inch armor on the *Missouri*’s bridge.

My dad said that the scariest moment on board ship was when they took a dummy torpedo amidships during war games and the torpedo pushed in the armor forming it to the shape of the torpedo. Off to dry dock for repairs!

Here is a picture of the *Greenwood*. Behind is the flag from his service, along

with three of the spent shell casings from the honor guard’s three-volley salute.

He passed in October 2014 at the fine age of 93. I still miss him to this day. Toughest moment of my life was when they handed me his flag. I still don’t know how I kept it together.

I just kept thinking of the sacrifices he made for his family and country.

Thanks, Dad!

– Rich Zolla
Monson, Mass.

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Canadian Military Pattern vehicles

Go online to see a gallery of Steve Guthrie's CMPs and flip to p. 25 to read about how more than half a million of these vehicles were built during World War II.

Desktop wallpapers

Peruse dozens of computer backgrounds of favorite scale military and sci-fi subjects that you can download for free. Go ahead, treat your monitor to a makeover.

New Product Rundown

Want to know about a new kit on the market? Aaron Skinner and Elizabeth Nash host a twice-monthly video review of the newest models and show what's inside the boxes.

Keep the sci-fi coming!

I want to thank you and compliment you on the science fiction-oriented May 2018 issue. As someone who models sci-fi (as well as other subjects), this issue was right up my alley.

Unfortunately, I think science fiction is still denigrated by many modelers whose subjects of choice are more traditional.

For example, in my own local model club, I overheard one of our longtime members describe the people who build Gundam as "still living in their parents' basements."

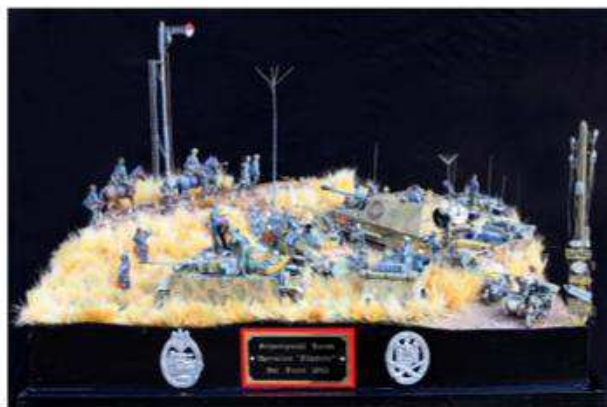
Now, aside from the fact that almost no one here in Southern California actually has a basement, this remark seemed to indicate an unhealthy and counterproductive attitude toward that subject matter and the people who enjoy it.

When I look at the ever-increasing numbers of science fiction entries in contests and the relative youth of the people submitting them in comparison with the general model-building population, I can't help but think two things: First, traditional model building could benefit from the enthusiasm and imagination of science fiction modelers. Second, science fiction modelers could benefit from the experience and techniques of more traditional modelers.

I hope to see more science fiction models in *FSM*, both to broaden its appeal to science fiction modelers and expose them to other forms of modeling, and also to build awareness of the subject among more traditional modelers.

— *Ethan Idenmill*
San Diego, Calif.

A call for dioramas



Todd Jackson's diorama "Operation Zitadelle" featured in the July 2018 issue is a thing of beauty!

Keep publishing dioramas, please!
— *Dean Monahan*
Reinholds, Pa.

Ed.: You heard the man! Send us photos of your diorama at editor@FineScale.com and maybe they'll be published.

Operation Citadel details

I was impressed by Todd Jackson's "Operation Zitadelle" diorama, but I have to point out some things:

1) During Operation Citadel, the Germans were supposed to use temporary divisional markings, but these were rarely implemented. A mixture of markings was used instead.

2) Most of the German helmets in the scene have *Wehrmacht Heer* insignia on them. By 1943, the German army had removed all insignia from its helmets.

Nevertheless, it is a great diorama.

— *Gary Watson*

Cramlington, Northumberland, England

Me 262 panel lines



The Me 262 airframe *Wrknr. 111711* with taped seams. Photo from the National Museum of the U.S. Air Force.

In the May 2018 issue, Mike Klessig reviewed the Airfix Me 262.

I wanted to let him and anyone building the kit know that the seams in the fuselage were taped and sanded to reduce drag and gain speed. So the "panel lines" in the fuselage should be filled and sanded smooth.

— *Vaughan Askue*
Stratford, Conn.

Never too old

I read with interest the letter from Bill Simpson (Scale Talk, March 2018) about getting back into modeling as a 69-year-old.

After having to quit my 35-year hobby of hand-sewing western saddles from scratch, due to arthritis and a bone chip in my cutting hand, I, too, am enjoying fine scale modeling.

Concentrating on 1/32 scale planes gives me the same satisfaction in the finished product as a 100-hour western saddle with a lot less hand ache.

It proves the old saying, "you're never too old" — I'm 76!

— *Gene Aleksa*
Whispering Pines, N.C.

Hurricane correction



Airfix's Hurricane with a square poison-gas warning yellow patch.

Had to let you know that I loved the feature build of Airfix's 1/48 scale Hawker Hurricane Mk.I by Anders Isakkson in the

March 2018 issue.

I want to chime in that the yellow square on the Hurricane's port wing is not a fuel-warning patch; it is a poison-gas warning patch.

These color-changing patches were applied to RAF planes during this period as it was feared poison-gas bombs would be dropped. The more you know!

— *Alf Small*

Broughty Ferry, Dundee, Scotland

P.S. I hope you will feature more of Olga Kropotova's exquisite work with such fine detail (Form & Figure, "Hand-painted details charge a war elephant"). Not that I am planning to replicate her work — I just loved seeing it!

Reader tips



Inexpensive bolts, washers, and wing nuts turn a wooden block into a useful jig.

Homemade rotating model jig

Here's a tool I initially thought would make scribing vacuum-formed fuselages and wings easier. But I have found it useful for all kinds of model work, including scribing, gluing, and scratchbuilding.

It's quite simple: a wood block (the one pictured is 50mm x 50mm x 200mm); two bolts screwed into the center of each end; and a washer and wing nut on each bolt. The lateral supports each have a vertical cleft to accept a bolt. So, you can rotate the block to where you want it to be, then tighten the wing nuts to firmly fix it in place.

I traced different grids on each face of the block. The size of the tool works well for 1/144 and 1/72 scale. I usually fix the work to the block with double-sided tape or adhesive putty.

The materials and tools you need to make this model jig are inexpensive and can easily be found in hardware stores and home-improvement centers.

— *Luciano Mina*
Turin, Italy

Good use of a bad habit

I was on the hunt for a chain to use on a 1/35 scale Panther. The photo-etch I came across was too fragile and flat.

Although I wouldn't call myself a smoker, once in a while I fire up a pipe and pretend I'm Sherlock Holmes. Therefore, I own many inexpensive pipe cleaners.

One day while playing with matches, I lit a cleaner on fire. As it burned away the fuzzy material, there appeared to my wondering eyes a

tightly twisted thin wire — it looked exactly like a small armor chain!

It's durable, three-dimensional, and can be bent to shape. Plus, burning the metal gives it a darkened, well-worn look.

Since smoking has been relegated to eternal damnation these days, pipe cleaners are not easy to find. Look for "craft sticks" in hobby stores like Michaels.

— *Eric Roth*
Algonquin Highlands, Ontario, Canada

1968 memories



The finished UH-1D Huey by Pat Najmulski.



2nd Lt. Phil Gioia (center), platoon leader, 82nd Airborne, at Hué during Tết, 1968.

The first time I saw your magazine was the February 2018 Vietnam War issue — Wow! Fabulous detail work on the models.

They brought back memories of my combat tours in '68 as an infantry platoon leader in the 82nd Airborne during the Tết offensive, and '69-'70 as infantry company commander in the 1st Air Cavalry Division.

A year ago I commissioned a Huey from Pat Najmulski in the same markings and equipment as one of the aircraft that lifted my rifle company in combat assaults we conducted in III Corps, in the Michelin rubber plantations and along the Cambodian border.

The 229th was known as the Stacked Deck Battalion; its four lift companies wore the insignia of playing cards. B Company had the spade, which was placed on the pilot's side door (see above). Its radio call sign was "Killer Spade."

I asked Pat to reflect the chipping on the panel edges and wear on the compartment decking; the Cav's helicopters were worked hard, and they showed it.

I think he did a terrific job.
— *Phil Gioia*
Corte Madera, Calif.

Spotlight

Tamiya's latest F-14 is a Super Tomcat

Two years after the release of its highly regarded 1/48 scale Tomcat, Tamiya follows up with the F-14D (No. 61118, \$124). The ultimate version of the Tomcat, the D model combined a new glass cockpit and better avionics for a potent strike aircraft.

Parts added to update Tamiya's terrific initial F-14A include: modern instrument panels, side consoles, ejection seats, HUD, and pilots with later suits and helmets; new internal and external engine components as well as the beaver tail between the nozzles; nose gear doors; a bigger

nose sensor pod; and, of course, weapons. In addition to the Phoenix, Sparrow, and Sidewinder air-to-air missiles from the F-14A kit there are GBU-12, GBU-16, and GBU-31 JDAM bombs along with a LANTIRN targeting pod. A TARPS recon pod fea-

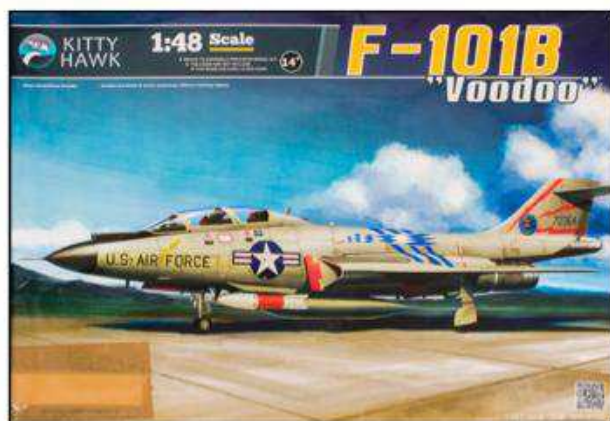
turing internal camera detail is also provided.

Decals supply markings for four F-14Ds, one each from U.S. Navy squadrons VF-213, VF-101, VF-2, and VF-11.



AIRCRAFT KITS

1/48 SCALE



F-101B Voodoo from Kitty Hawk, No. KH80114, \$79.99.



Messerschmitt Bf.109 A/B from Dora Wings, No. DW48009, \$49.99. Look for a detailed review in an upcoming issue of *FSM*.



Sukhoi Su-34 "Fullback" from Kitty Hawk, No. KH80141, \$109.99.

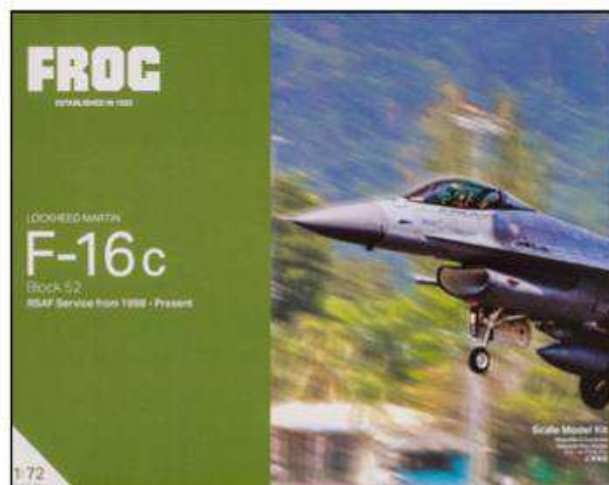
1/72 SCALE



Percival Vega Gull (civil service) from Dora Wings, No. DW72002, \$31.99.



P-63E Kingcobra from Dora Wings, No. DW72005, \$34.99.



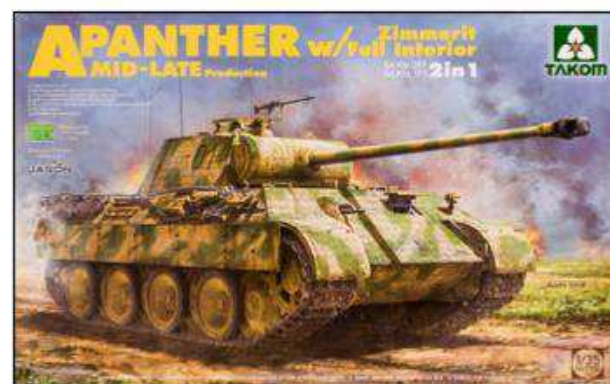
Lockheed Martin F-16C Block 52 (Singapore Air Force service) from Frog Model Kits, No. NF-2001, \$TBA.

ARMOR KITS

1/35 SCALE



Bandvagn Bv 206S armored personnel carrier from Takom, No. 2083, \$64.95. With interior. Look for a detailed review in an upcoming issue of *FSM*.



Panther Ausf A with Zimmerit and interior, mid-late production from Takom, No. 2100, \$84.95.



Bergepanther Ausf.D Umbau Seibert 1945 from Takom, No. 2102, \$79.95.



Bergepanther Ausf. A assembled by Demag — full interior kit from Takom, No. 2101, \$84.95. Look for a detailed review in an upcoming issue of *FSM*.



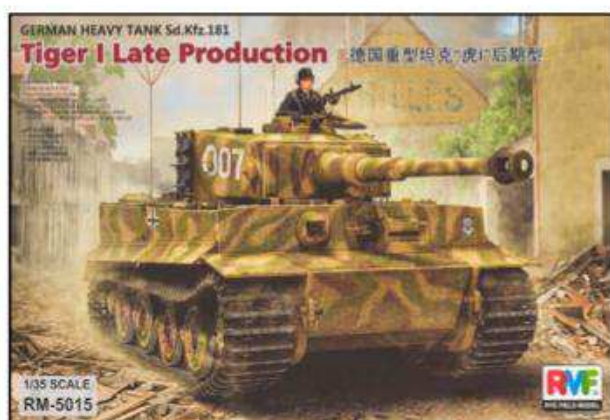
Polish TKS tankette from IBG Models, No. 35046, \$37.95.



T-IV E Panzer IV Ausf. E German medium from Zvezda, No. 3641, \$36.75.



T-90MC Russian main battle tank T-90MS from Zvezda, No. 3675, \$54.99



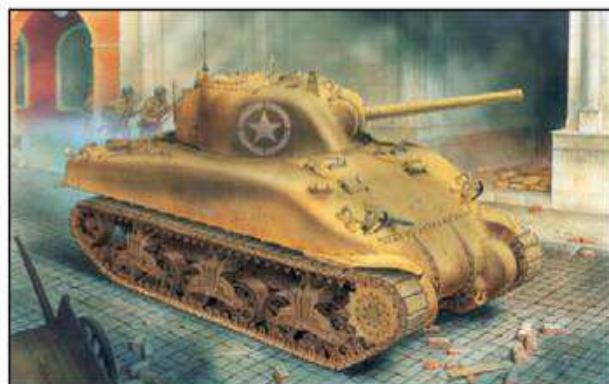
Tiger I late production from Rye Field Model, No. RM-5015, \$TBA.



M132 armored flamethrower from Dragon, No. 3621, \$59.99.



El Alamein Sherman from Dragon, No. 6617, \$67.99, with Magic Tracks.



US M4A1 DV from Dragon, No. 6618, \$64.99, with Magic Tracks.



7.5cm Pak 40/4 auf RSO from Dragon, No. 6640, \$54.99. Smart Kit. With bonus figure set.



TKS tankette z NKM wz. 38 FK-A 20mm from IBG Models, No. E3501, \$40. With quick build tracks and Hataka paints.



TKS tankette z NKM wz. 38 FK-A 20mm from IBG Models, No. E3503, \$40. With quick build tracks.



9K37M BUK-M1/SAM-11 Classical Scale Series, from Panda Models, No. PH35033, \$69.99.

1/72 SCALE



Type 1 Chi-He-Japanese medium tank from IBG Models, No. 72055, \$TBA.



Hungarian 40/43M Zrinyi II 105mm assault gun with skirts from IBG Models, No. 72052, \$TBA.

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www.greggschollvideo.com
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Spotlight

Get started airbrushing with Aaron Skinner's DVD

Want to use an airbrush on your models but afraid you'll blow it? Don't panic. Check out the latest instructional DVD from Kalmbach Media, *Airbrushing Techniques: Getting Started* (No. 15347).

In a friendly, matter-of-fact way, *FSM* Senior Editor

Aaron Skinner shows you everything you need to know to take the plunge and start airbrushing your scale creations today.

Subjects covered include selecting an airbrush and air supply, understanding pressure, care and maintenance, priming, pre- and post-shad-

ing, and different masking techniques. Along the way, Aaron offers hints about filling gaps and applying decals.

Produced in cooperation with *Model Railroader Video Plus*, the 75-minute video features tanks, aircraft, and railroad subjects, including a natural-metal finish on Airfix's

1/48 scale P-51D.

The video is playable on any DVD player or computer. Order your copy for \$12.99 www.kalmbachhobbystore.com.



PzKpfw IV Ausf. A from IBG Models, No. W-004, \$TBA. Includes booklet.



3rd FJ Division (German Paratroopers) figure set with King Tiger Henschel turret tank Battle of the Bulge, from Dragon, No. DRA7361, \$19.99.

SHIP KITS

1/72 SCALE



Patrol torpedo boat PT-109 from Revell, No. 05147, \$24.95. New-tool. Look for a detailed review in an upcoming issue of *FSM*.

1/350 SCALE



U-boat Type VII C/41 from Revell, No. 05154, \$TBA.

1/700 SCALE



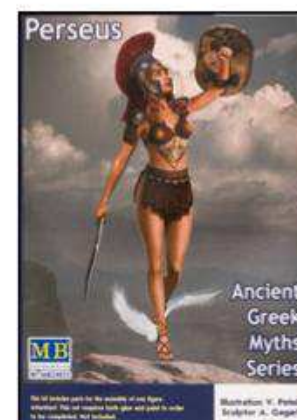
HMS Prince of Wales May 1941 — Battle of Denmark Strait from Flyhawk, No. FH1153S, \$TBA.

FIGURE KITS

1/24 SCALE



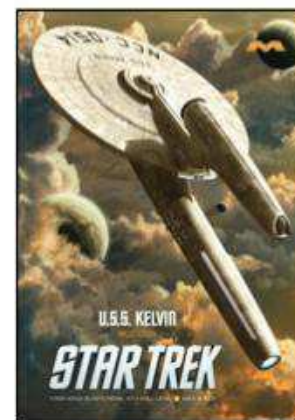
Joni "Lookout" Johnson and her dog Maxx from Master Box, No. MB24045, \$16.95. Truckers series. Kit. No. 5.



Perseus from Master Box, No. MB24032, \$16.95. Ancient Greek Myth Series.

SPACECRAFT KITS

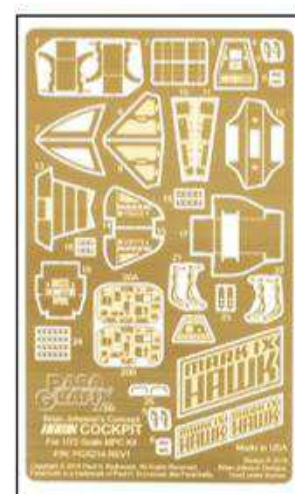
1/1000 SCALE



Star Trek USS Kelvin from Moeblus Models, No. 976, \$59.99

SPACECRAFT DETAILS

1/72 SCALE



Brian Johnson's Concept Hawk cockpit from ParaGrafix, No. MP881, \$28.95.

ARMOR DETAILS

1/35 SCALE



Sd.kfz.171 Panther Ausf.A/G workable track links from Rye Field Models, No. RM-5014, \$TBA.

SHIP DETAILS

1/700 SCALE



HMS Prince of Wales May 1941 wooden deck from Flyhawk, No. FH710051, \$TBA.

TOOLS AND PAINTS



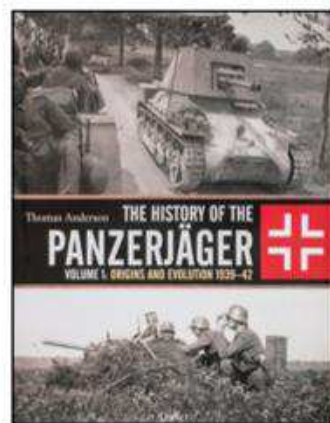
Multimedia module from HobbyZone, No. , \$23.95. Holds your iPad, tablet computer, smart phone, or even analog instructions, using the adjustable holders, hole in the back of the module to route a USB cable for external power of your device.

Featured Product

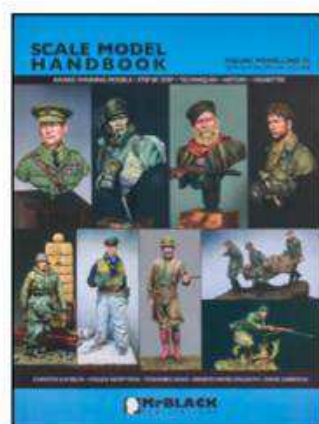
Flex-Set Complete Finishing Set (#85008, \$25.99). Each package includes 1 Flex-I-File frame, and 8 assorted tapes plus the complete grit range of Flex-Pads. For use wet or dry. From: Kalmbach HobbyStore.com



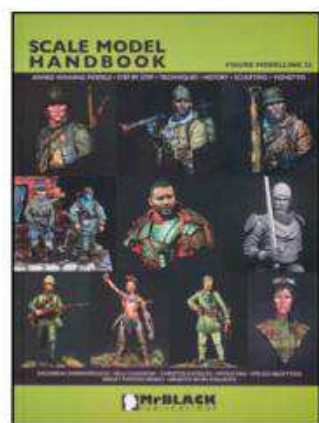
BOOKS & MEDIA



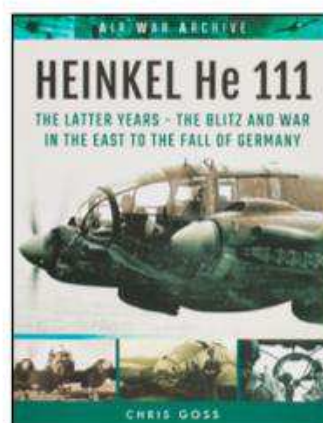
The History of the Panzerjäger Volume 1 - Origins and Evolution 1939-42 \$45, by Thomas Anderson, hard cover, 304 pages, all black-and-white photos, ISBN: 978-1-4728-158-7. From Osprey Publishing.



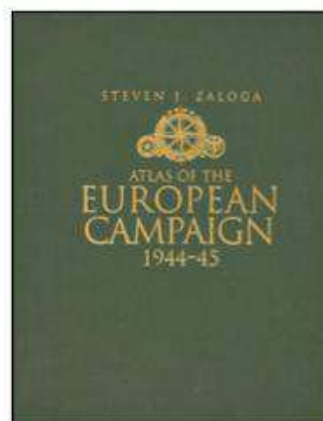
Scale Model Handbook Figure Modeling 21 - WWI & WWII Special Volume, \$29.95, soft cover, 50 pages, all color photos, ISSN: 2241-1054. From Mr. Black Publications.



Scale Model Handbook Figure Modeling 22, \$29.95, soft cover, 50 pages, all color photos, ISSN: 2241-1054. From Mr. Black Publications.



Heinkel He 111 - The latter years - The Blitz and War in the East to the fall of Germany, \$24.95, by Chris Goss, soft cover, 158 pages, all black-and-white photos, ISBN: 1-84832-445-6 Air War Archive. From Pen & Sword Books Limited.



Atlas of the European Campaign, \$60, by Steven J. Zaloga, hard cover, 280 pages, color maps, ISBN: 978-1-4728-2697-8. From Osprey Publishing.



The Dauntless from Greg Scholl Video Productions, \$24.95.



The Last B-29 from Greg Scholl Video Productions, \$24.95.



P-51 Mustangs from Greg Scholl Video Productions, \$24.95.



Soviet Cruise Missile Submarines of the Cold War \$18, by Edward Hampshire, soft cover, 48 pages, black-and-white photos, color illustrations, ISBN: 978-1-4728-2499-8. From Osprey Publishing.

P-39/P-400 Airacobra vs A6M2/3 Zero-Sen \$20, by Michael John Claringbould, soft cover, 80 pages, black-and-white photos, ISBN: 978-1-4728-2366-3. From Osprey Publishing.

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Painting a Japanese tank commander

Big-scale crewman
benefits from
careful blending

BY JOE HUDSON



Takom's 1/16 scale Japanese Type 94 tankette kits feature well-molded plastic figures that give a great sense of scale to the diminutive vehicle. I finished one of them for a friend who built the late-production version of the Type 94 (kit No. 1007). This kit includes a commander to fit in the turret hatch. Or, I should say, most of the commander, because his legs end just above the knees.

After assembling the tanker's 12 parts, I primed him with an airbrushed layer of Tamiya sky gray (XF-19).

*Thin
glazes
work
best —
think
of them
more
as tinted
water
than
paint.*



1 I completed the uniform and base-coated the helmet. This frames the face so I can see the effect of the surrounding colors on the skin tones.



2 For a foundation for flesh, I mixed beige red and saddle brown. For a soldier tanned from extended exposure to the Pacific sun, I used more brown than red.



3 Adding saddle brown to the base mix darkened it for the first shadows. Using progressively more saddle brown further deepened the medium-shadow tone.



4 I applied shadows under the eye bags, sides of the nose, and under the bottom lip, as well as the edges where flesh meets the helmet and collar.



5 For dark areas, I added African shadow to the previous mix. This was brushed above eyes, under eye bags, around nostrils, under the bottom lip, and along clothing edges.



6 To contrast and separate the lips, I applied pure African shadow to the upper one.



7 Moving to highlights, I added beige red to the base flesh tone. I applied this mix to the forehead, top of the eye bags, cheekbones, chin, nose, and nostril flares.



8 I brightened the highlights with smaller and smaller applications of pure beige red, a mix of beige red and sunny skin tone, and finally a little basic skin tone.



9 To blend the layers and soften brush strokes, I brushed on glazes of the base flesh shade thinned with water. This step can take several applications to get just right.



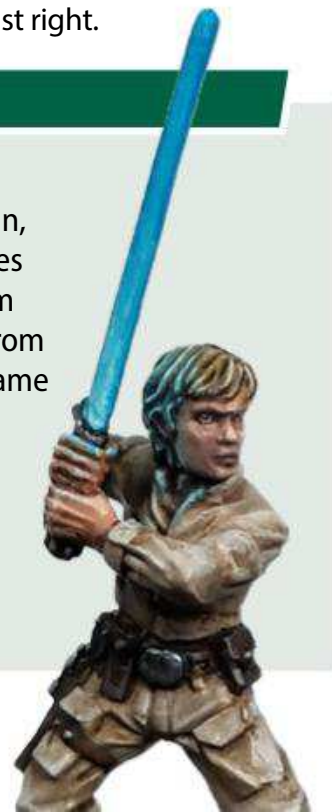
10 Finally, using a mix of beige red and Indian shadow, I added a thin glaze to the cheek hollows, temples, and the sides and tip of the nose. **FSM**

Colors used

Vallejo Model Color Beige Red (70.804)
Vallejo Model Color Basic Skin Tone (70.815)
Vallejo Model Color Sunny Skin Tone (70.845)
Vallejo Model Color Saddle Brown (70.904)
Scale 75 Indian Shadow (SC-23)
Scale 75 African Shadow (SC-24)

Next issue

Our new gaming miniatures column, Paint & Play, strikes back with a 35mm Luke Skywalker from the tactical wargame *Star Wars: Legion*. Rich Erickson shows you how to paint the young Jedi.



By Aaron Skinner

Old-school weathering on a tank in the news

Takom's easy-to-build T-55 puts the focus on painting, washing, and dry-brushing

Since 2011, footage of the Syrian Civil War has been featured on broadcast and cable networks and watched by millions of viewers online. Many of those images include Syrian army tanks rolling down city streets and rural roads.

Henry Milton replicated one of those with Takom's 1/35 scale T-55AMV (No. 2042). Building a kit he describes as "seriously sweet" out of the box, he focused on painting the multicolored camouflage.

"When I finished construction, I had six subassemblies: turret, hull, two fenders, and two sets of tracks and wheels," he says. After cleaning the sections with warm water, he laid down two light coats of Vallejo black surface primer (No. 74.602) mixed 7 parts paint to 1 part Vallejo thinner.

He used a Grex Tritium TG3 double-action pistol-trigger airbrush powered by a Grex AC-10A 1/8 horsepower compressor.

"I have no tried-and-true formulas and settings for my compressor, preferring to experiment with different paints, pressures, and techniques with each project," Henry says. "As a rule, I generally work between 15 and 30 psi."

To make color choice easy, Henry used Ammo by Mig Jimenez's Modern Syria set (A.MIG.7103). "These paints are airbrush-ready, but I add a drop or two of Vallejo thinner if I feel the particular color warrants it," he says.

First, he applied five layers of Russian green base. For the first pass, he added several drops of flat black and made sure to get into recesses and corners created by the explosive reactive armor (ERA) and other details. On the next three passes, he slowly built up thin layers of straight Russian green. His last pass was Russian green lightened with a bit of yellow.

Next, he applied the red-brown and yellow freehand. "I have tried masks, but prefer the more-creative approach," he says. "Key to this is a bit of practice before applying paint to model." Before attempting any camouflage pattern, he will spend 30 minutes or so with a practice model or an easel to get a good feel for what he wants to accomplish.

Then it's straight from the practice session to the model. "With my airbrush set to 12-15 psi, I get in close and work by eye, going back over the pattern until I like what I see," he says. "You have to trust your eye — and that can take some time to develop — but I find this a very satisfying way to stimulate the artistic side of the hobby."

After picking out tools, the tow cable, tracks, and other details, Henry sprayed Vallejo clear satin varnish in preparation for decals and a dark brown artist's oil wash.

Using Testors Model Master enamel, he dry-brushed highlights and subtly altered the colors, a technique he's used since getting back into the hobby. "It is a bit old-school, but it allows me to get color variation that I cannot achieve with an airbrush alone." **FSM**

Base: After staining and varnishing a pine plaque, Henry created simple terrain by combining artist's sand and pigments. He brushed on Ammo by Mig Jimenez sand and gravel glue (AMIG2012) and sprinkled on sand, allowing the excess to slide off into a bowl. "I repeated this as I built up the groundwork," he says. "Then, I added various shades of pigment, using pigment fixer along the way to achieve the varied shades of sand."



Meet Henry Milton

ERA blocks: To keep the camouflage consistent across the blocks of explosive reactive armor, Henry checked the coverage with a flashlight after each airbrush pass. "I went back numerous times to correct inconsistencies, blemishes, and errors," he says. A little dry-brushing refined the fixes.

Spurred by his interest in World War II, Henry started building models with his brother in the 1970s. He returned to the hobby in 1998 after he and his wife, Susan, bought their first house. "Today, I focus mostly on armor," he says. He attributes that

affinity to his having worked in U.S. naval aviation for 20 years on active duty. He was surrounded by jets and ships all day and did not feel like bringing his work home. A resident of Suffolk, Virginia, Henry is a member of the Tidewater chapters of AMPS and IPMS.



Pigments: Henry did much of the weathering with powdered pigments. "I like Ammo by Mig Jimenez pigments because they have bite and sit down better, even without fixer, than other options," he says. He applied several shades to the T-55 by dipping a flat brush in the pigment and blowing the powder from the bristles onto the model. Using a separate brush, he removes excess and pushes the pigments into nooks and crannies. "This is a messy and time-consuming approach, but I really like the results," he says.

Figure: Referring to photos to get the camouflage correct, Henry painted the uniform on a resin figure from Tank Models with green, yellow, brown, and black Vallejo acrylics. The face was finished with Testors Model Master enamels. "I have developed my own technique over the years, based on Shep Paine's style," he says. "While I have used other types of paint, I prefer enamels to oils or acrylics." He starts with skin tones and adds burnt sienna and dark yellow to subtly alter the shades. "I use a small hand-mirror while I am doing the face, looking at the reflection as I go to spot any blemishes," he says.



Warhawk *on a forgotten front*

Sword's 1/72 scale P-40K built to guard the outskirts of the Aleutians

BY VLADIMIR KAFKA



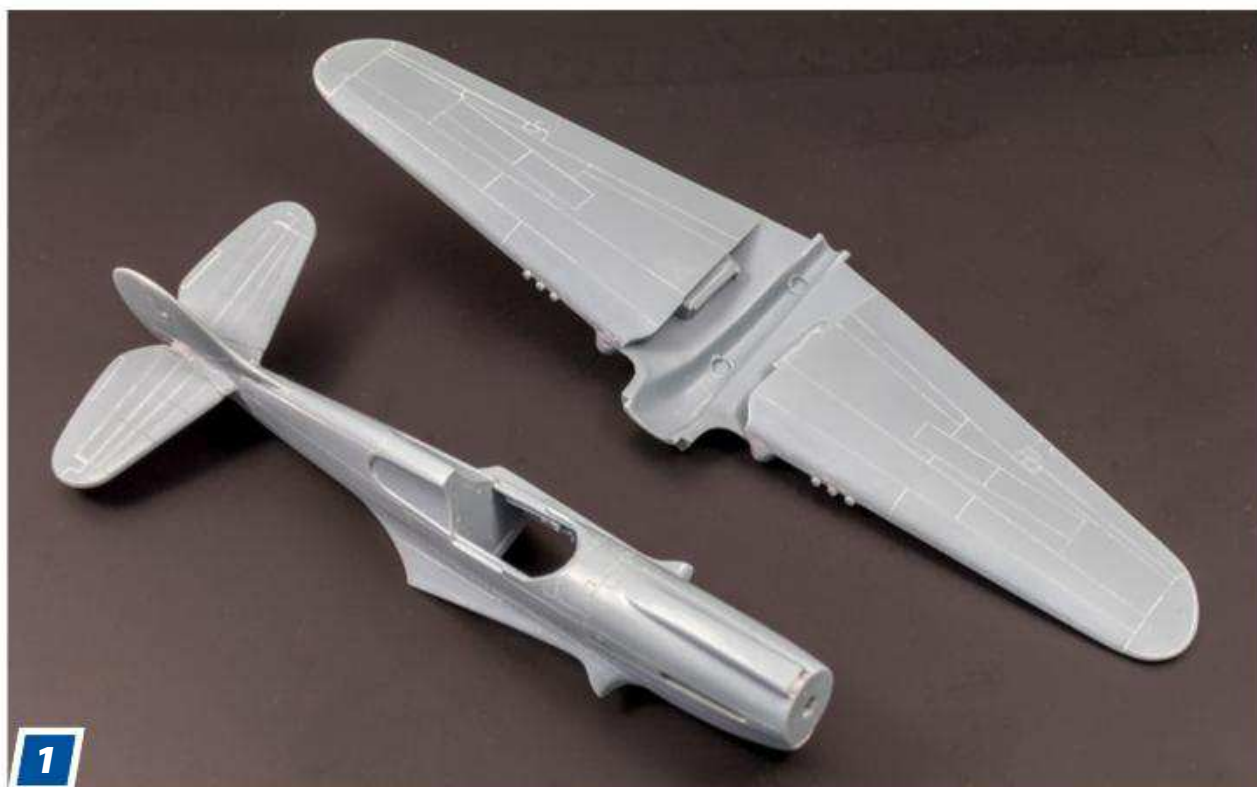
Patrolling the edge of nowhere, this P-40K makes a stand against the unrelenting elements after many of its parts were refitted.

Amchitka is remote even by Alaskan standards. At 1,350 miles east of Anchorage, this island in the Aleutians was home to a U.S. air base where Capt. George Hicks III of the 343rd Fighter Group flew an early P-40K in 1944. Hicks' tour of duty came six months after U.S. forces drove Japanese troops from the Aleutians. Their 14-month occupation of neighboring islands Attu and Kiska marked the first and last time Japanese troops landed on American soil during World War II.

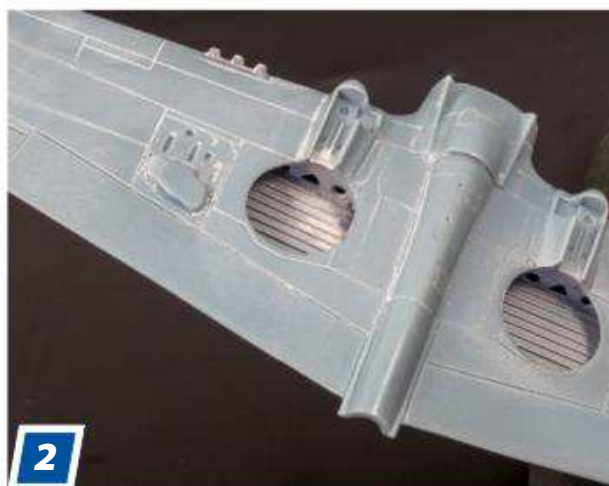
By the time Hicks was guarding the regained islands, there was only wildlife left to attack. This, however, does not mean it was easy. In constant cold and stormy weather, noncombat losses included not only accidents and frostbite but also a mental health condition known as the "Aleutian stare," brought on by the dismal conditions.

I have a soft spot for the more-obscure, half-forgotten theaters, so I fell in love with Sword's 1/72 scale P-40K, complete with red-outlined insignia, yellow spinner and wheel hubs, and the crude Pluto the Dog emblem.

The kit is accurate enough, but it does have some fit issues, and all of the parts needed cleaning, trimming, and adjusting.



1 To ease the sanding and filling process, I joined the fuselage halves before painting the cockpit and joined the wings before painting the wheel wells. This alone involved constructing 23 parts — quite a number for a single-seat plane in this scale. I could see that their fit would need help.



2 Old Sword kits are known for their high-gloss surface — nice for in-box reviews, but not practical. So, I dulled it with sanding. Note how crude the surface looks after rescribing the panel lines. The fiddly assembly of the wheel wells with their four-part walls looks great once completed. I filled and sanded the front bulkheads, but they shouldn't be flush with the wheel opening; the skin of the wing should overlap just a little.



3 The fit between the fuselage and propeller isn't great. So, using a few dabs of super glue, I temporarily attached the spinner, sanded it flush with fuselage, and then snapped it off. I thinned the dividers inside the radiator intake using a small piece of sandpaper held with tweezers.



4 Reaching the cockpit from below the assembled fuselage is a snap and it's easy to sand and fill the rear bulkhead — important if you want an open cockpit. In a futile attempt to improve the fit of the wing, I tried to stretch the fuselage by inserting a piece of sprue ...



5 ... but there was still a wide gap at the wing root to fill. Not feeling up to the challenge just yet, I turned my attention to the cockpit instead.



6

I obtained a Marabu photo-etch (PE) set. It is intended for the AZ Model/Legato P-40E, but, because it includes this fantastic canopy frame, I had to try it out.



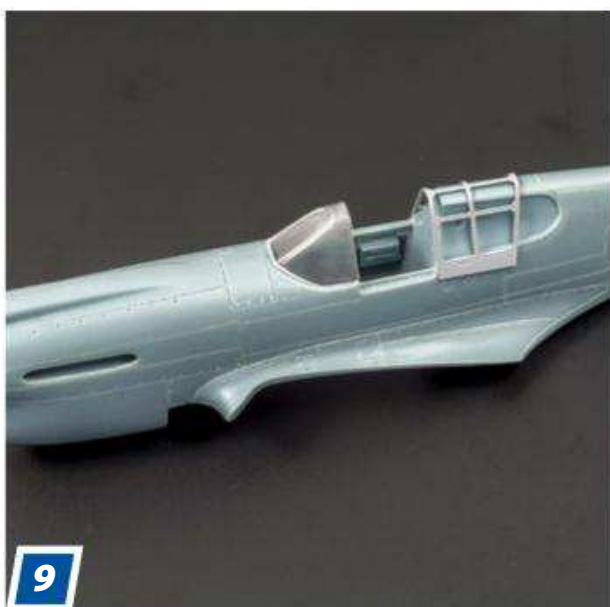
7

I also used the cockpit seat, instrument panel, and a few other bits from the PE set. The other kit-supplied parts, such as the cockpit walls and wheel wells, looked good out of the box, making extra PE unnecessary.



8

The windshield was cut away with a razor saw. One edge was noticeably thicker, so I shaved it with a scalpel until it matched the other side. I kept the kit's canopy frame as a jig to bend the PE replacement to shape.



9

I primed the PE canopy frame with a layer of Mr. Surfacer. Dry-fitting showed the windshield attached perfectly. To remove the scalpel marks made from thinning, I sanded the windshield with 600-grit sandpaper ...



10

... then applied Tamiya's three polishing compounds consecutively. A cotton swab fixed in a Proxxon motor tool is small enough to reach everywhere.



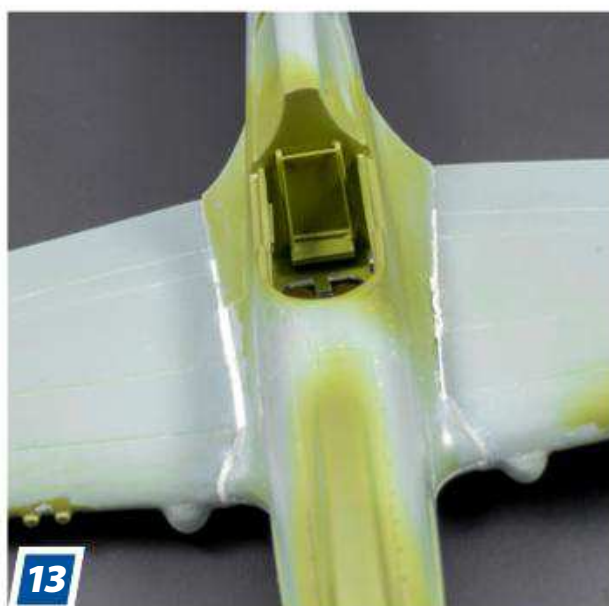
11

Polishing is the fun part! Just make sure you protect your eyes, clothes, and drink — sometimes the paste splatters. After a few minutes, the windshield looked better than ever!



12

The side windows did not fit well, so I replaced them with clear acetate. Side note: there is a missing panel line that should run from the windows to the tail and pass just above the radio/first-aid compartment. Strange glitch, as the line is present on the other half of the fuselage.



13

After painting the sidewalls with GSI Creos zinc chromate Type I and attaching the floor, I joined the subassemblies. The gaps were filled with thin super glue and plastic strips stuffed into the crannies with a toothpick. Note the tubular seat frame made of stretched sprue.



14

The PE instrument panel from the Marabu set was centered. Warhawks have a fabric hood over the panel; I made and installed one later in the build. The cockpit side detail is all out of the box — very nice for a short-run kit.



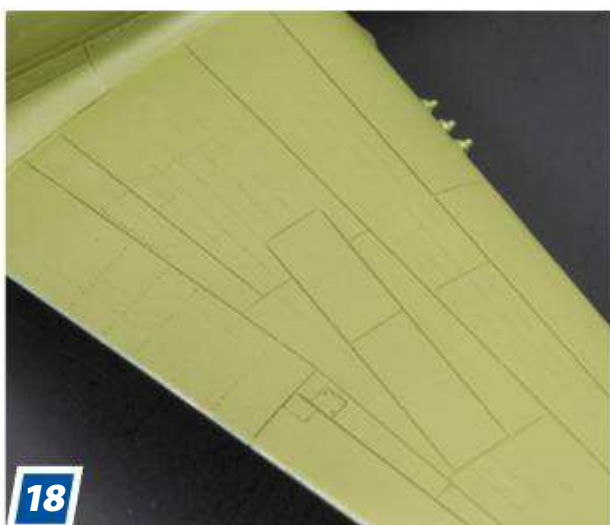
15 The wheel wells were painted with the same zinc chromate as the cockpit. The ill-fitting cowl flaps were replaced with scratchbuilt ones later.



16 I thinned trailing edges on wings, elevators, and the rudder with a sanding stick. The actuator fairing on the rudder had to be made anew then. I also lost all the fabric effect. This would be re-created by paint shading.



17 I liked the qualities of this zinc chromate paint, so I thought, why not use it as an overall primer? It provides a semigloss, durable coat, and shows imperfections a bit better than dull gray Mr. Surfacer.



18 Although the rivets are not evenly pronounced, I don't think they would be any more uniform on the real thing. I drew every second rivet line or so, using a small metal ruler and a drafting pencil.



19 New cowl flaps were made from thin plastic card. Where I live, mustard is sold in white styrene cups that are an excellent source of styrene. The cup walls even had the correct curvature. Also note the holes to place the "double-W" brace of the drop tank.



20 I replaced the kit's crude gunsight with a scratchbuilt, purposely clunky-looking thing typical for P-40s. The instrument panel cover is made of plastic strips covered with super glue, painted gray and brown. I sprayed the wing roots and leading edges near the fuselage with GSI Creos super fine silver.



21 I bought Eduard masks meant for Hasegawa's P-40, but they didn't fit Sword's canopy. Not sure which windshield is more accurate, but it's as if the masks are meant for a different plane. Still, with some trimming it took less time to use the masks than to start from scratch.



22 I sprayed the camouflage freehand using an Iwata HP-BH airbrush; I think softer lines look better on a model. GSI Creos brown and Tamiya green (XF-81) covered the top, and Tamiya gray (XF-19) got the undersides.



23 As for weathering: In several photos of Aleutian Warhawks, I noticed stripped paint on areas of the wing affected by airflow from the propeller. It appeared that constant rain, snow, and fine volcanic dust mixed with seawater did not chip but literally sanded paint off the airframe.



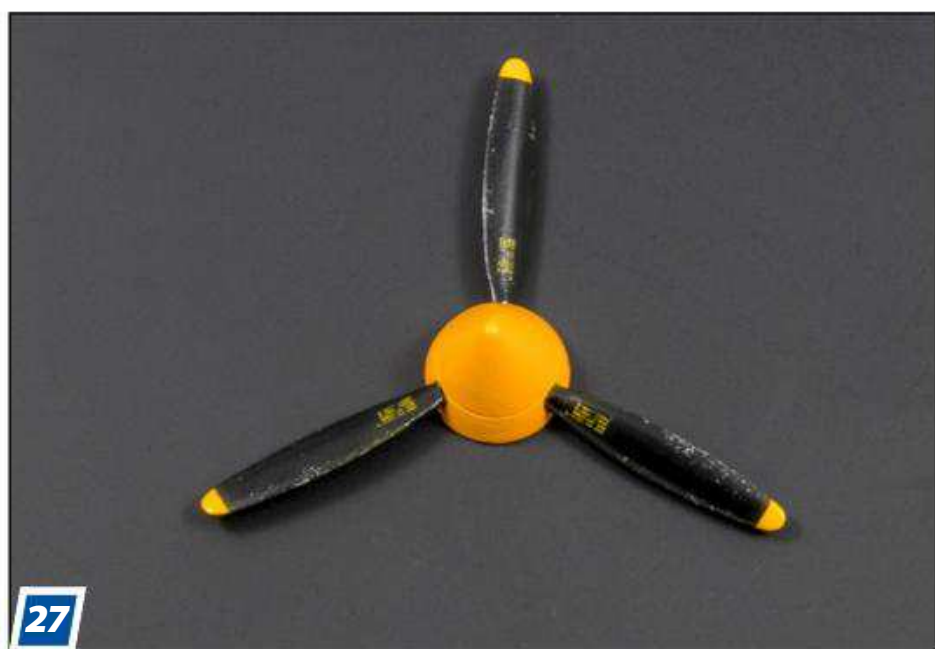
Wanting to simulate that near-bare-metal look between the rivet lines on the wing roots, I sprayed silver in a comb-like pattern. Diluted green and brown then outlined the silver.



More light chipping was produced by Agama metallic paste diluted with GSI Creos Mr. Leveling Thinner and gently dabbed on the surface using a tiny piece of foam sponge.



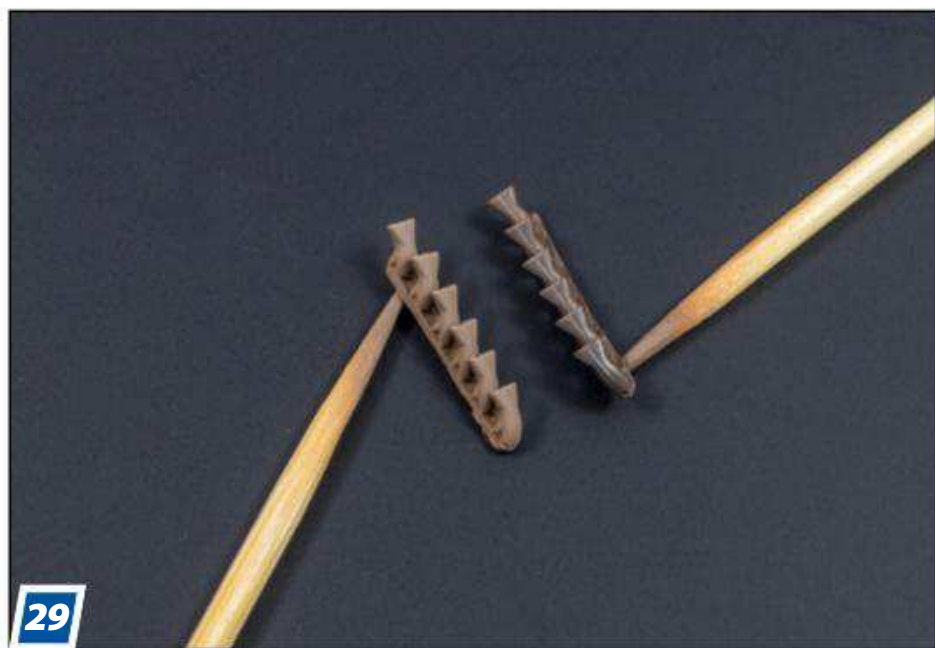
For exhaust stains, I used Tamiya smoke (X-19), either alone or mixed with wooden deck tan (XF-78), for a warm gray shade. I made several attempts, which I had to retouch with camouflage colors until I reached an appearance I liked.



After reattaching the spinner, I painted the propeller to match the DK decals using a mix of Tamiya yellow (XF-3) with a few drops of orange (X-6). Airflow flings most debris behind the propeller, so, using the wing surface mix, I simulated light chipping along the edges ...



... and stripped the back sides down to bare metal. Again, I used a foam sponge, but this time I dabbed Vallejo Model Color black gray (70.862) over pure aluminium (71.062).



I replaced the kit exhausts with Quickboost resin. The kit's parts aren't awful, but time removing flash would be better spent elsewhere. Here is a comparison of one exhaust with a basic flat brown coat next to one with graphite (pencil dust) rubbed in.



30

Back to the canopy: Inserting the clear film was fiddly indeed. Impatiently, I bent the frames before measuring the clear piece, so I had to proceed with trial and error (and the margin for error isn't big). In the end, it took five attempts before I glued it in correctly.



31

DK Decals have excellent register, even in the smallest details. Because of an error in the instructions, I accidentally applied the fuselage insignia, which are slightly bigger, to the bottom of the wing as well. This photo shows the correct decal in place, but with traces of hasty sanding and respraying still visible around it. *Doh!*



32

Over clear gloss, the decals conformed to panel lines with the aid of a sharpened drafting pencil. I sealed the markings with more clear gloss and lightly wet-sanded the finish. The white stripes on the rudder and below the windshield were airbrushed, even though the DK Decal sheet includes them.



33

My panel line wash is a mix of equal parts warm gray and black artist's oils. Attaching the landing-gear doors early wasn't a smart idea — every one of them broke off at least once during painting. Surprisingly, though, the drop tank with all those tiny braces made of stretched sprue held its ground.



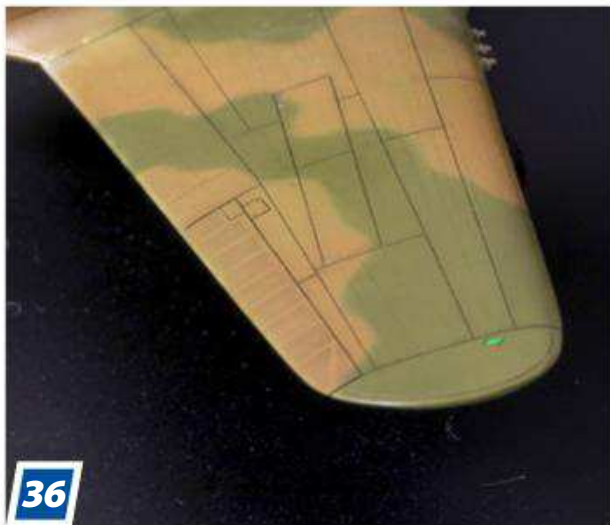
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I also attached the cross-hairs gunsight, rudder actuator, pitot tube, and antenna mast much too early. Don't be surprised to find a slightly different mast in the final photo, as this one broke and was swallowed by the mess on my bench. These are moments when the excitement of adding new things to the model overpowers common sense.

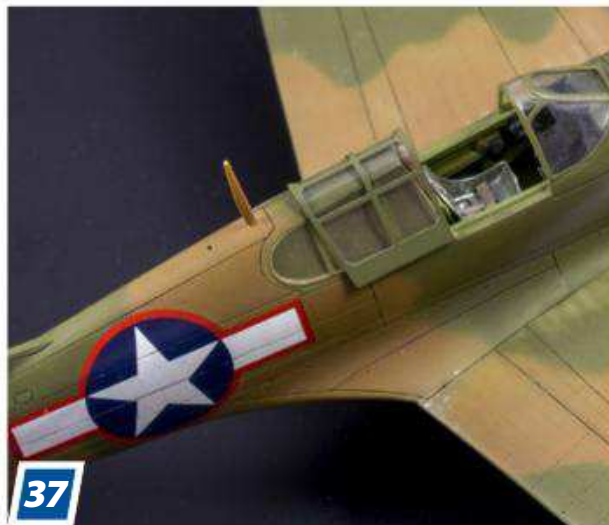


35

Aizu tape masked ribs to re-create the fabric-covered control surfaces. This was even more tedious and time-consuming than it looks — I spent about two hours just applying tape. Only background noise from history documentaries on YouTube made it bearable.



A thin mix of equal parts Tamiya red brown (XF-64) and black (X-1) shaded the control surfaces. The problem with this technique is that you see the result only after unmasking. So, you better make sure everything is nice and parallel and that you guess the right intensity without looking. Experience is key!



My acetate replacement windows seemed to fit well enough during dry-fitting on bare plastic. Only after I impetuously glued them did I realize the fit was somehow worse than I thought. A couple of days was spent head-scratching and waiting to see if I could come to terms with how it looked. I couldn't. Instead, I tore the windows out (complete with some paint), fixed the fit, and repaired the paint. Fortunately, most of the windows' outlines are covered by the sliding canopy.



A few last touches, including an antenna wire and light weathering with pastel chalk dust on tires and wheel wells. Then it was off to the display case.



By combining Sword's kit with a Marabu PE set, this little Curtiss P-40 Warhawk was ready to brave the Alaskan outlands and a few modeling contests. **FSM**

*"I believe that
in the future,
whoever holds Alaska
will hold the world."*

– William "Billy" Mitchell
to Congress, 1935



Images from Milifax Photo Archive

A Cab 12 Ford F60T 3-ton 6 x 4 fitted with a British-built wireless body: The first and second axle were powered; the third was unpowered but helped support the lengthened body. This chassis was replaced by the Chevrolet C60X 3-ton 6 x 6. England, 1941.

Canadian Military Pattern vehicles

In the Allied drive to victory, Canada built more than half a million /// BY STEVE GUTHRIE

Before World War II, Canada had produced few military vehicles of any sort. The domestic auto industry, based in Ontario in Windsor and Oshawa, produced a few transports for the tiny peacetime Canadian army — “off-the-shelf” cars, vans, and trucks, nearly civilian except for a coat of green paint.

But by the end of the war, Canadian factories had turned out more than 850,000 military vehicles, including 500,000 Canadian Military Pattern trucks.

Before the war, the Canadian army followed the British army in terms of organization, training, doctrine, and equipment.

More at FineScale.com

Visit us to see a few of Steve's own CMPs. If you're going to list and explain them, you might as well build them — and he did!

When the Canadian government began rearming, it turned to the British for help in designing its first military trucks.

The new trucks were to have four-wheel drive and large, single tires all around for cross-country mobility, a short wheelbase for maneuverability, and a semi cab-over-engine driver's position. This placed most of the engine in the cab between the front seats and over the driven front axle for greater traction as well as allowing more chassis length for loads.

General Motors and Ford were called upon to design and build a class of military vehicles for the Canadian army. Known as the Department of National Defence (DND) pattern, it was to utilize tested and proven engines, drivetrains, and chassis, yet embody British design features and standards in terms of load classifications and parts interchangeability between GM and

Ford. Except for engines and drivetrains, the vehicles were almost identical.

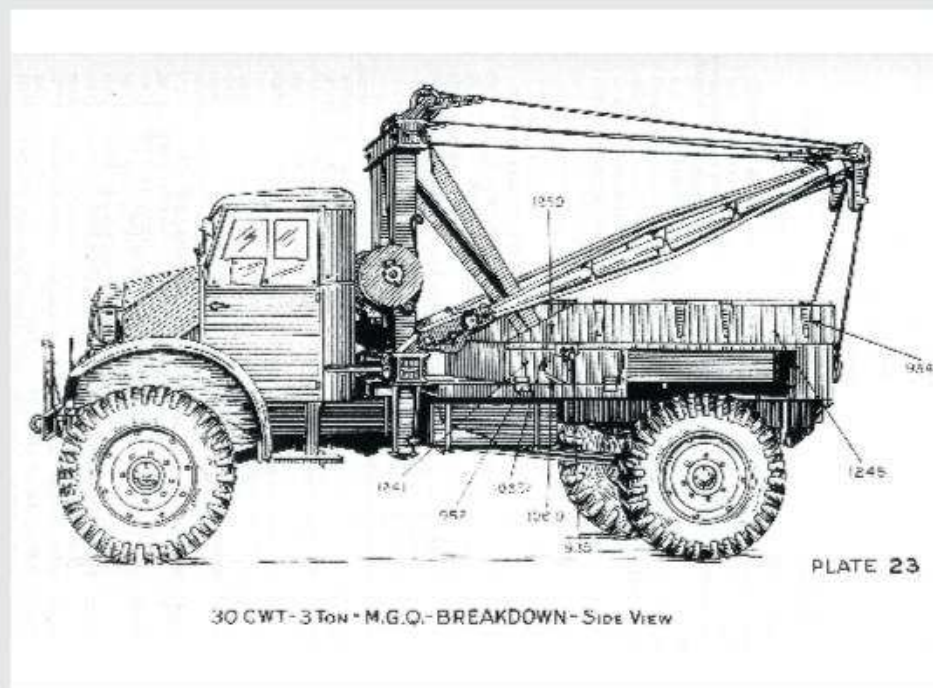
By the time war was declared in 1939, the final design of these vehicles was well in hand. There were five classes: 8-cwt (hundredweight, ½ ton), 15-cwt (¾ ton), 30-cwt (1½ ton), 60-cwt (3-ton), and the Field Artillery Tractor (FAT). All these trucks could be fitted with cargo bodies, but many carried specialized bodywork like break-down tractors (wreckers) or Bofors anti-aircraft gun tractors. Ford also built a 60-cwt 6 x 4 (F60H) vehicle to carry longer technical or workshop bodies. Because they were expected to be used in the UK, all these vehicles had right-hand drive.

Originally, there were no plans to export DND-pattern vehicles to other Allied nations. But the rapid expansion of the war around the world and the loss of thousands

continued on page 28



An 8-cwt wireless truck in service with 3rd Field Regiment, Royal Canadian Artillery, England, 1941. The canvas top could be removed and used as a shelter supported by folding legs.



A drawing from the body-parts manual of the Cab 12 30-cwt light breakdown tractor. Recovery equipment was supplied by the Ernest Holmes Co., of Chattanooga, Tennessee.



Cab 12 Chevrolet C30 30-cwt light anti-aircraft tractor towing a 40mm Bofors gun. Likely from the 2nd LAA Regiment; the unit has been in a beach landing exercise, as shown by the chalked LCT marking on the bumper and vehicle-dimension chart on the windshield. England, 1942.



Cab 13 Ford F60L 3-ton GS in a beach landing exercise, likely with the 48th Highlanders of Canada. Each infantry battalion had 3-ton GS trucks to move fuel, ammunition, and other supplies to the front line. England, 1943.

Canadian Military Pattern model kits

1/72 SCALE

BRITISH QUAD FORD GUN TRACTORS (NO CAB NUMBER MENTIONED)

ESCI et al

- ESCI (kit No. 8042)
- Hasegawa (MB-135)
- Revell Germany/ESCI (H-2342)
- Soldat (8042)
- Polistil (8042)
- Ertl (8321/8614)
- ESCI (8321)
- Italeri (7027)

CHEVROLET C15A, C15TA, C60S

IBG Models

- Cab 13 water tanker (72012)
- Cab 13 personnel (72013)
- Cab 13 general service (72014)
- Cab 13 Australian Pattern wireless/signals (72015)
- Cab 11 water tanker (72016)
- Cab 11 personnel (72017)
- Cab 11 general service (72018)
- Chevrolet C15TA (72053)
- Cabs 11/13, Chevrolet C60S with Holmes breakdown (72032)
- Chevrolet C30A general service (72054)

1/35 SCALE

CHEVROLET GUN TRACTORS

Best Value Models

- 15-cwt anti-aircraft with 20mm Polsten gun (35143)

Peerless Max et al

- Peerless Max (3508)
- Tomy (3503, 3504, or 4)
- Airfix (08367-4, 08368-7)
- Italeri (233, 240)
- Testors/Italeri (no number/240)
- Bilek (992)
- Italeri (6233)
- Testors (778)



15-cwt 200-gallon water tankers making a pickup. The second vehicle in line is from an infantry division headquarters. These trucks usually had a frame and canvas top over the bodywork to appear more ordinary to enemy observers.



Chevrolet C15A 15-cwt GS being used as a 6-pounder tractor by the Carleton and York Regiment antitank platoon. The pole across the top is the rammer staff for the gun. I don't know why the serial number on the service marking is so large and crude.



Cab 12 Chevrolet Field Artillery Tractors (FATs) from the Field Regiment RCA trying to cope with a muddy battlefield. This is the Chevrolet version of the Ford FAT, as modeled by Tamiya. Racks on the front fenders are for 2-gallon petrol/oil/water containers.



Cab 13 Chevrolet FAT of an unknown field regiment towing a 25-pounder gun/howitzer and limber through a streambed in Italy. Almost all the vehicles following are CMP trucks.

Mirror Models

- Field artillery tractor, 7B2 Body, Cab 13 (35122)

OTHER CHEVROLETS

IBG Models

- C60S petrol tanker (35036)
- C15A personnel lorry (34037)
- C30A general service (35038)
- C15TA personnel lorry (35020)

Italeri

- 15-cwt (6233, 233, 6505)

Mirror Models

- C15TA armored carrier (35100)
- C15A Cab 11, van/lorry (35101)
- C15A Cab 13, van/lorry (35102)
- C15A Cabs 11 & 12, water tanker (35104)
- C15TA armored ambulance (35106)
- C8A Cab 13 heavy utility (35121)
- C30 Cab 13 general service (35151)
- C60L Cab 13 3-ton general service (35161)
- C60L Cab 11 3-ton general service with winch (35162)
- C60L Cab 13 petrol tanker (35163)
- C60S Cab 13 Holmes breakdown wrecker, short chassis (35164)
- C60L Cab 13 water tanker (35165)

FORDS

Mirror Models

- F15 Cabs 11/12, 2A1 and 2B1 body options (35105)
- F15 Italian service with 20mm Breda (35107)
- F15A Cab 11 van/lorry (35108)
- F30A LRDG truck with 37mm Bofors gun (35133)
- F15 Cab 11 water tanker; 15-cwt 4 x 2 (35166)
- F-15A Cab 13 water tanker; 15-cwt 4 x 4 (35167)

Tamiya

- Ford Quad gun tractor (MM144, MM145, or 35045)



Chevrolet C60L with Lindsay mobile dental surgery bodywork. Developed by the Lindsay Co. of New York, the bodies had interchangeable panels for multipurpose use as ambulances, mobile workshops, and wireless vans.



Chevrolet C8A heavy utility fitted out as a mobile recording studio for Canadian Broadcasting Corp. war correspondents in Italy. Interviews and battle noise were recorded on discs that were sent out for radio newscasts.



Chevrolet C60L GS, an ammunition supply truck with the 3rd Canadian Troops Company, Royal Canadian Army Service Corps, is pressed into service as an infantry transport. Mirror Models' C60L kit depicts a vehicle of this type.



Canadian ingenuity: A Royal Canadian Engineers CMP 3-ton GS has been converted to a compressor truck to power road-breaking equipment (like jackhammers). Typically, these compressors were towed; mounting one inside the body makes it quicker to use.

of British army vehicles after the fall of France led to huge orders for all types of these simple, rugged trucks. They would come to be known as Canadian Military Pattern vehicles, so there would be no mistake as to their origin.

As the war went on, Australia imported CMP truck chassis and built its own series of army trucks with locally built cabs and bodywork based on the Canadian design.

The first CMP production vehicles were fitted with the No.11 cab. Because much of the engine was inside, the cab was cramped and hot, and the engine was accessible only through a small hatch on top of the hood.

The next cab type, No.12, had a windshield that swung open and doors that could be braced open for better ventilation. The hood was modified to open in "alligator" fashion.

Finally, in 1941, the No.13 cab was put

into production. The front end was wider and deeper, and the windshield, which again swung open, sloped forward to prevent reflection and ice and snow buildup. Engine access was still an issue.

As the war went on and vehicle needs lessened, certain chassis — such as the 8-cwt 4 x 2 and the 30-cwt 4 x 4 — were dropped from production to reduce the number of types in service. The U.S. jeep and the 15-cwt took over for the 8-cwt, and since the 30-cwt and 3-tonners were almost the same size, the army opted for the 3-tonner. However, other vehicle types were put into production to meet new needs, such as GM's C8A 4 x 4 heavy utility, Ford's SP Bofors carriage (F60B), and GM's C60X 60-cwt 6 x 6, which took over roles originally performed by the F60H.

At war's end, the Canadian army brought CMP trucks back to Canada but

also left thousands in Europe to be used by the Dutch, Belgian, and French armies as they rebuilt. Thousands more were given to the United Nations to rebuild European infrastructure or released to the civilian market in Europe and Canada.

There are a couple of ways to tell CMP Fords from CMP Chevrolets. Cab 12 Fords have square, louvered air intakes on either side of the grille, while Cab 12 Chevrolets have round, screened intakes. On Cab 13, Fords have grilles with square-pattern mesh, while Chevrolets have diagonal mesh. Ford's brush guards are mounted on the rear of the bumper, but Chevrolet's are split, attached to front and back. Cab 13 Chevrolets have a radiator overflow tank on the left corner of the hood. Fords have the horn mounted on the bumper to the left of the grille. There are others, but I find these distinctions most useful. **FSM**



IBG provides the chassis and drivetrain parts you need for a CMP C60S tanker, but there are certain changes — none difficult — that can make a big difference in accuracy for this Canadian service vehicle.

Top off a CMP petrol tanker

Easy details for IBG's 1/35 scale C60S /// BY STEVE GUTHRIE

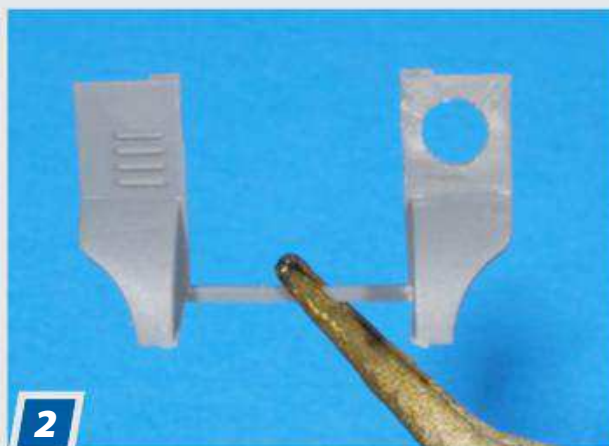
When it comes to Canadian Military Pattern (CMP) trucks, it seems there is no end of kits from which to choose — which is as it should be, considering Canada produced more than a half million of these vehicles in endless variations.

Having built Mirror Models' 1/35 scale C60L GS, I was interested in seeing how IBG Models treated a similar subject, a Chevrolet C60S petrol tanker (kit No. 35036). The Mirror kit had the Type 13 cab, so I built the IBG kit using the Type 12 cab (the kit provides both types).

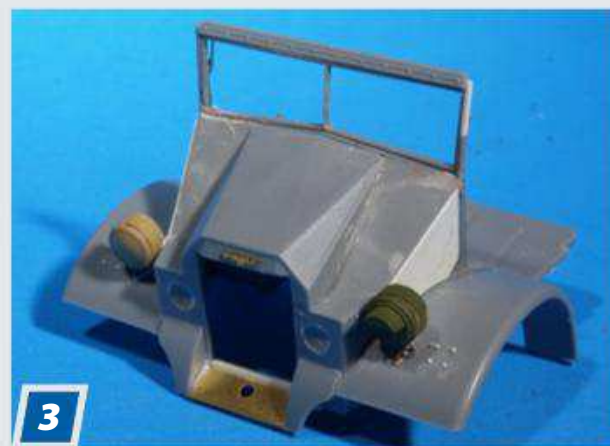
The shape of a Cab 12 is difficult to capture. I found it's vital to keep everything square — because I dropped the ball at some point and ended up with the windshield and rear edge of the cab floor out of whack. They should be parallel, but they weren't. If I had been more careful I could have avoided all that carving, clamping, fiddling, filing, and swearing.



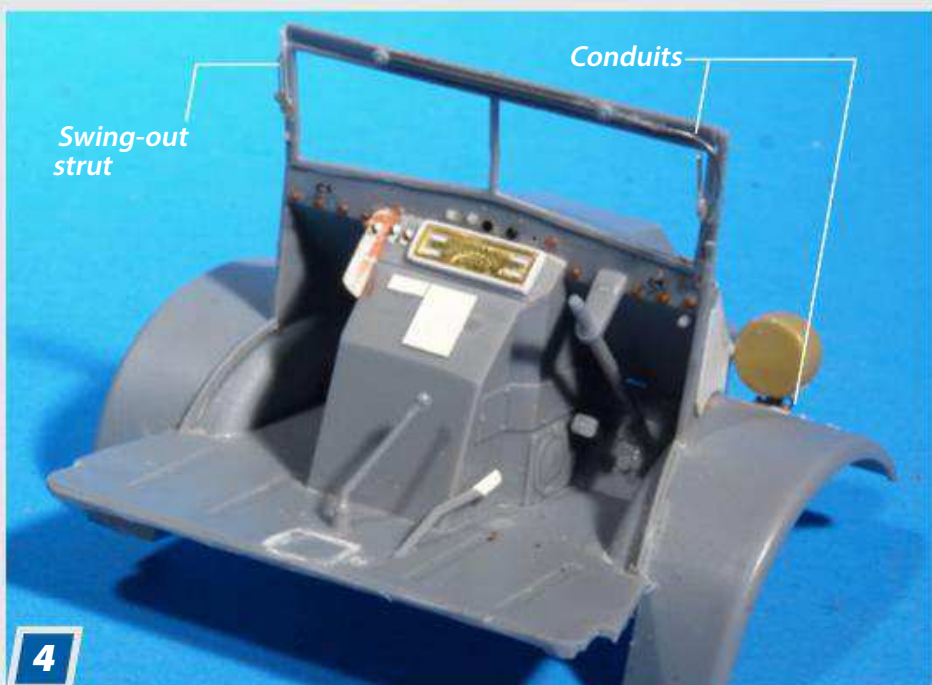
1 Kit wheel on left, resin Hussar (out of production) on right. The latter is more accurate in shape and detail, but must be modified to fit the IBG axles.



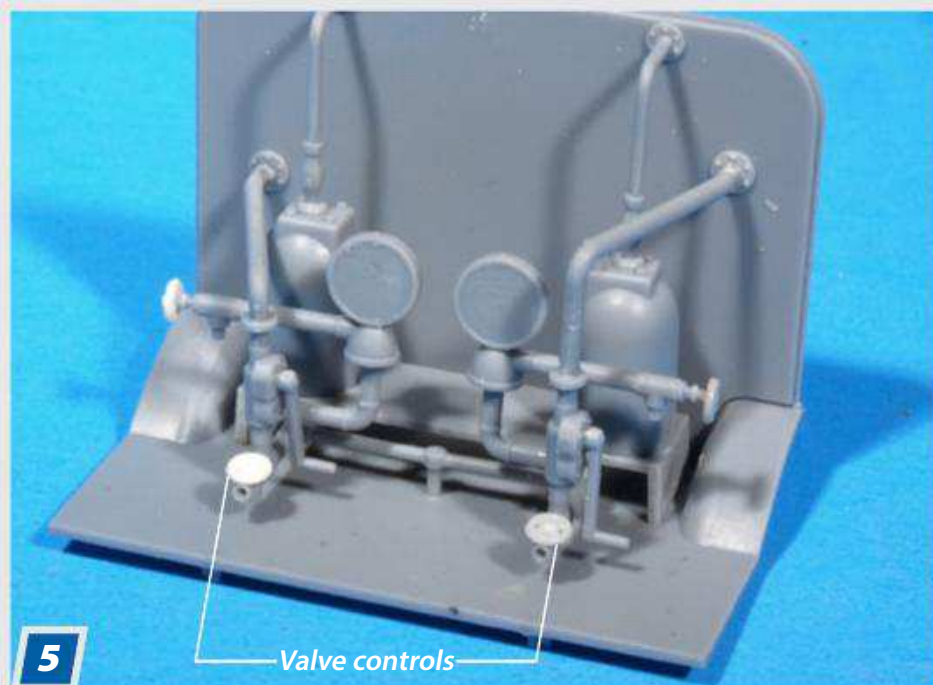
2 Chevrolet CMPs had round, screened air intakes on either side of the grille; the kit's are square and louvered, like the Fords. I filed the louvers flat, drilled 4mm holes, and backed them with fine mesh (sheer window-curtain material).



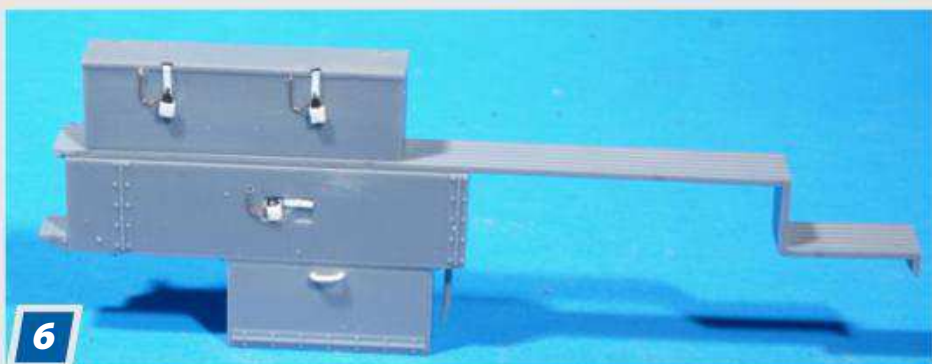
3 I replaced the smallish headlights with parts from the Tamiya Quad. The Chevy "bowtie" comes from a photo-etch (PE) set made for the Mirror C60L ...



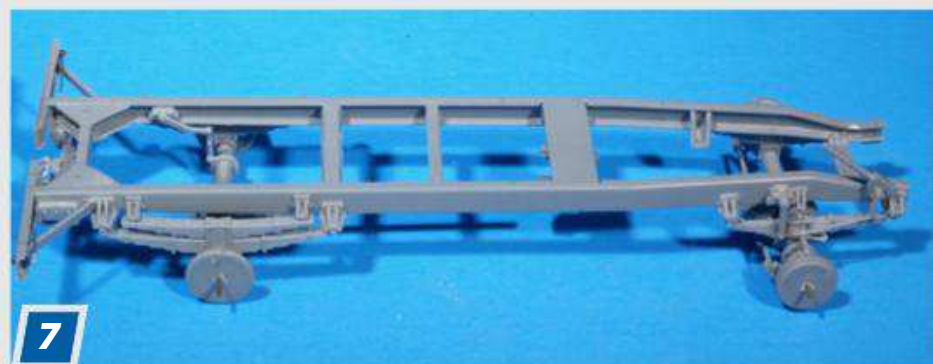
4 ... as does the civilian-style instrument panel. Lead wire provides conduits for the headlamps and windshield wipers. The windshield swing-out struts are from LZ Models.



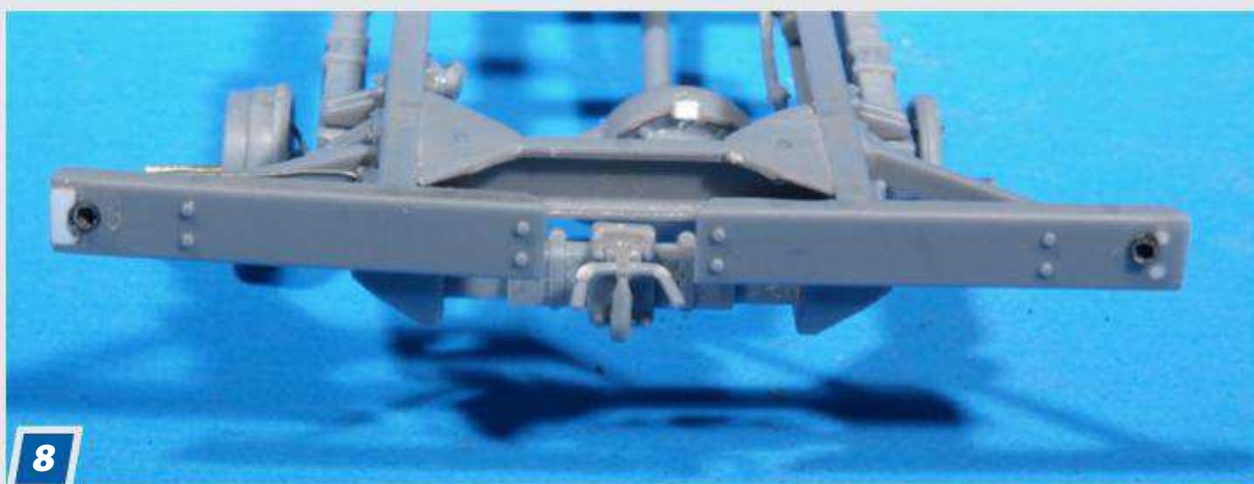
5 Pump gear with new valve control wheels from the spares box. HO scale model railroad brake wheels would work, too.



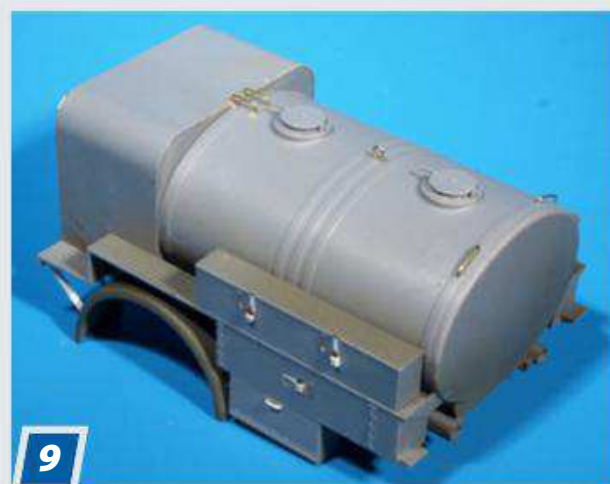
6 Side stowage bins with new hasps and padlocks (white styrene), and safety chains. Actually, the bottom bin should be recessed.



7 I mounted brass pins in the brake drums to adapt to the resin replacement wheels I used.



8 The rear bumper has two holes at either end for taillights. There should be only one; I filled the holes and drilled new ones, making new light receptacles with styrene tube.

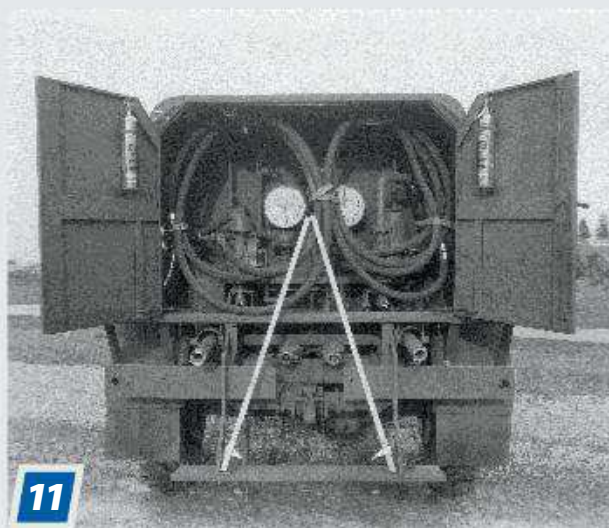


9 On the completed tank body, I replaced the kit's grab handles with brass wire.



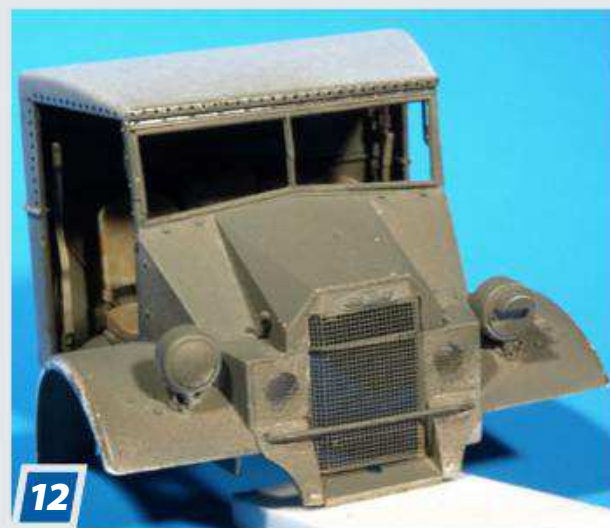
10

A friend made some decals for the pump's dial faces. I replaced the rear fender struts with thinner styrene strip and drilled out the tubes at the bottom of the pump compartment (these held hoses and dipsticks.)



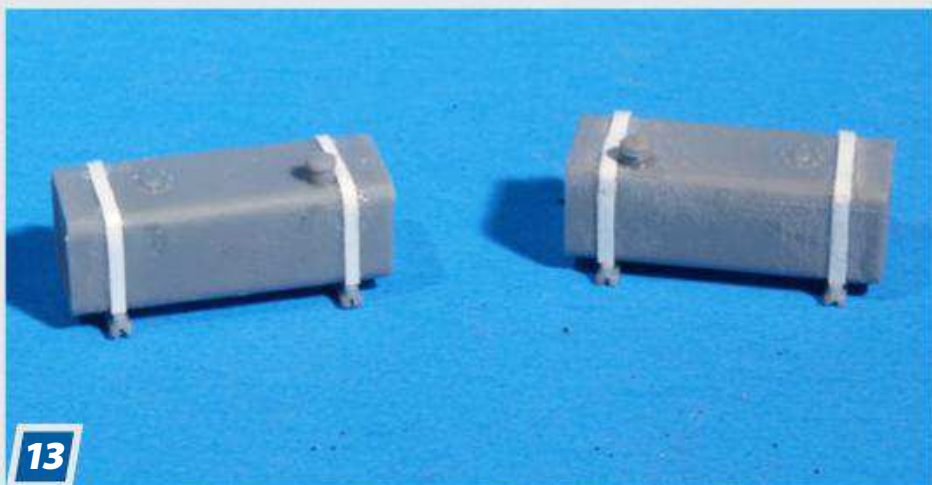
11

1/1: This photo was taken at General Motors in Oshawa, Ontario, Canada; the photographer has artfully arranged some of the tools and equipment. Photo courtesy of Clive M. Law, Service Publications.



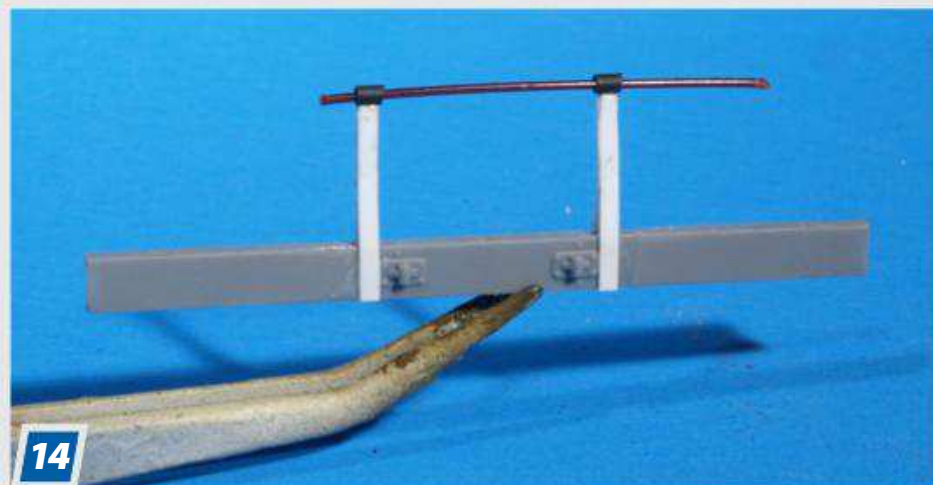
12

Little bits add up. Seen here: added rivets from Archer, bolt heads from Plastruct hex rod, and hood latches made from PE scraps.



13

Strips of styrene make better-looking straps for the fuel tanks.



14

I built up a brush guard for the front bumper from styrene strip and rod; I still needed to trim the crossbar and add some rivets.



15

Brush guard on a very early production C60S petrol tanker with Type 12 cab. Photo courtesy of Clive M. Law, Service Publications.



16

In 1941, Canadian vehicles were painted "khaki green No. 3" with a disruptive pattern of "dark tarmac." I used Tamiya acrylic paints: For the first color, I added dark yellow (XF-59) and NATO brown (XF-69) to olive drab (XF-74); the dark tarmac is Vallejo German camo extra dark green (70.896). The yellowish blob on the hood depicts paint that was supposed to change color to detect mustard gas. (It didn't work.) Among the markings are decals from Archer Fine Transfers, assigning this petrol tanker to No. 62 General Transport Company of the Royal Canadian Army Service Corps, stationed in England. Two coats of Italeri clear flat and a dusting of powdered pastels finished my one-in-a-half-million CMP vehicle. **FSM**

Tip

Styrene strip

Often an improvement over molded stowage straps

AMPS 2018

Dayton, Ohio, best known as the birthplace of aviation, hosted the largest military modeling contest and show in the U.S. when the Armor Modeling and Preservation Society International Convention rolled into town in May 2018. More than 700 model tanks, armored cars, and other vehicles crowded the tables in the contest room and set a record for the largest number of entries at the organization's annual show. *FSM* editors Mark Savage and Aaron Skinner photographed scores of models; here are some that caught their attention. Look for more in *Great War Scale Modeling*, available in November. You can pre-order it at www.FineScale.com.

Next year's show is scheduled for May 9-11, 2019, at the Adam's Mark Hotel in Buffalo, New York. More info: www.amps-armor.org.



◀ **DAVID FARRIS**
MADISON, ALABAMA
Referring to stills from the 2013 movie *Captain Phillips*, David painted Tiny Leads' 75mm Somali pirate, Muse, with artist's oils over acrylic base coats.

▲ **SHAWN HAYS**
SAN DIEGO, CALIFORNIA
Shawn added a ton of new parts to Asuka's 1/35 scale Firefly 1C including: Panda individual-link plastic tracks with duckbill extensions; an Aber turned-metal gun barrel; Tiger Model Designs road wheels, headlight guards, and tools; and Friulmodel Churchill track links for supplemental armor. He painted with Tamiya acrylics and weathered with Tamiya Panel Line Accent Colors and oils.



◀ **RON DAMRATOWSKI**
TINLEY PARK, ILLINOIS
 Ron's diorama epitomizes "Mishaps," the theme of this year's contest. He added a mine-roller from an ESCI kit to Tamiya's 1/35 scale T-55, which he detailed with Eduard photo-etch and an R.B. turned-metal gun barrel; the hapless crew is from Evolution. He scratchbuilt the bridge with abutments of pine clad with Plastruct stone-pattern sheet styrene and basswood for the shattered supports and decking.



▲ **AARON ALDRIDGE**
FAIRFIELD, OHIO
 "The police have themselves an RV," says tech expert Theo in the 1988 movie *Die Hard*. Aaron replicated the Los Angeles SWAT vehicle using Tamiya's 1/35 scale M8 Greyhound detailed with scratchbuilt and spare parts. He painted it with Vallejo acrylics, then marked it with dry transfers and 1/24 scale police-car decals.



▲ **RYAN SPINDELL**
SPRINGFIELD, ILLINOIS
 Working with Trumpeter's 1/35 scale Fennek, Ryan modeled German forces supporting NATO operations in Afghanistan. After replacing the kit wheels with Def.Model resin, he masked and painted the desert camouflage with Vallejo acrylics.



► **PETER ESPADA**
CAMP HILL, PENNSYLVANIA

Pre- and post-shading with progressively lighter grays started the weathering for Peter's Marder III; he finished the process with AK Interactive pigments and True Earth washes. Markings and a simple base put the Tamiya 1/35 scale German self-propelled gun on the Eastern Front in 1942.



**GREG HANCHUK
BEREA, OHIO**

After dressing up Trumpeter's 1/35 scale Russian BMP-1 with Voyager photo-etch, S.P. Designs resin, and Masterclub tracks, Greg posed it on a scratchbuilt base to put it in Grozny during the First Chechen War. He painted the vehicle with Tamiya acrylics; weathering includes hairspray chipping, artist's oil paint rendering, and mud, dirt, grime, and pigments from AK Interactive, Ammo by Mig Jimenez, Wilder, and Mig Productions. The Grozny sign is scratchbuilt.



**▲ GERRY GARDINER
FOREST HILL, MARYLAND**

On the constantly changing battlefield of North Africa, tanks often found themselves under new management. Building Tamiya's 1/35 scale M13/40 out of the box, Gerry replicated an Italian vehicle conscripted for Australian service. He painted it with Tamiya acrylics, including minor post-shading, and weathered it with a brown wash and pigments. The base is Durham's Rock Hard Water Putty with a Royal Models well and scratchbuilt tree constructed over a wire armature.



**► HARVEY LOW
TORONTO, ONTARIO,
CANADA**

Canada modified older M113A2 personnel carriers to produce the TLAV, or tracked light armored vehicle; many served in Afghanistan. Harvey's 1/35 scale scratchbuilt TLAV comprises about 1,000 parts, including bar armor assembled on a jig. The only kit part is an Academy M113 lower hull. He painted it with Tamiya acrylics and used chinchilla sand for the anti-slip texture. All of his work paid off when the model won the Dave Lockhart Judges' Best of Show award.



▲ CHRIS TOOPS
LANCASTER, OHIO

Chris improved AFV Club's 1/35 scale M24 Chaffee with Friulmodel tracks, Formations pioneer tools, Eduard photo-etch, and some scratch-built details, including solder grab handles to replace those molded on the parts. Progressively lighter layers of Testors Model Master enamels weathered the camouflage; Chris applied a base coat of field drab, then olive drab and SAC bomber tan, and finally added highlights with armor sand.



▲ DUSTIN DIAS
GREENVILLE, PENNSYLVANIA

Imagining that Germany's Panzer VIII had made it into combat, Dustin finished Takom's 1/35 scale Maus as a beleaguered veteran of urban warfare. Over a base of red oxide, he airbrushed the dark yellow camouflage freehand with Ammo by Mig Jimenez acrylics; the circles were applied by dipping several sizes of styrene tube in paint and touching them to the model.



DR. TERRY C. HILL
LOUISVILLE, KENTUCKY

You can feel the cold when you look at Terry's 1/35 scale vignette of U.S. Marines at the Chosin Reservoir in Korea. Def.Model resin figures occupy and march alongside Tamiya's jeep; Terry improved the latter with resin snow-chained wheels and extra stowage.



◀ **DAN DRAKE**
ROANOKE, INDIANA

"Stuff happens," says Dan, describing his diorama of a Soviet T-34/85 that has gone a little too far onto the ice. He sliced apart the hull of Dragon's 1/35 scale kit and submerged it in ice made from clear acrylic. Also added to the doomed tank were photo-etched details and foil straps for the fuel tanks.



MAC JOHNSTON
SALISBURY, NEW HAMPSHIRE

Mac equipped MiniArt's 1/35 scale armored D7 bulldozer with LZ Models' LeTourneau compactor trailer. Working on the 'dozer's solid foundation, he added fuel lines, handles, electrical wiring for lights, ignition wire, and modified parts to pose the blade raised. Smoothing over black primer, he built up olive drab with several layers of Tamiya acrylics. Pigments, artist's oils, and a silver pencil finished the job.



This model came in an MPC box (No. 1-4407), but it was based on the Airfix A-10 Thunderbolt II — perhaps better known to all by its nickname, *Warthog*.

The first Warthog

Easy modifications give an old kit new life /// BY DARREN ROBERTS

When a friend who builds armor models won an old MPC 1/72 scale A-10 in a raffle at a local model contest, he gave it to me on the condition that it would be completed for next year's contest.

While lacking some details, especially in the cockpit, it was actually a decent kit in spite of its age (née Airfix 1983). The biggest hurdle was deciding on the paint scheme. I found my answer in one of my favorite books, *The Great Book of Modern Airplanes* (Mike Spick, editor, Salamander, ISBN 978-1840651560). It was a picture of the rollout of the YA-10A, resplendent in a beautiful aircraft gray paint scheme, the same color applied to the likes of the F-101, F-102, and F-106.

Modeling this aircraft would require some modifications, as there were several small differences between the YA-10 and the production version.

80%

Shots the A-10's 30mm cannon can place within a 40-foot circle from 4,000 feet at 3,900 rounds per minute



1 I drilled out the exhaust vent on the left fuselage half using a micro bit in a pin vise.



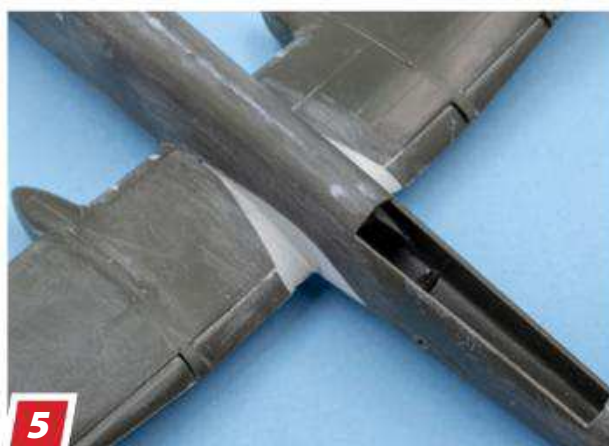
2 Next came one of the bigger changes: The production A-10 has a large fillet where the wing joins the fuselage, but not the YA-10. Since the fillet was molded in, I cut it away ...



3 ... and filled the void with sheet styrene, cut to shape.



4 I also cut off the large blade antennas on the underside of the fuselage.



5 I glued the fuselage and attached the wings, filling the root gaps with two-part epoxy putty and scribing the line for the flap.



6 I also used the putty to fill in locating holes for the Pave Penny mount, vents, and strakes, none of which were on the prototype.



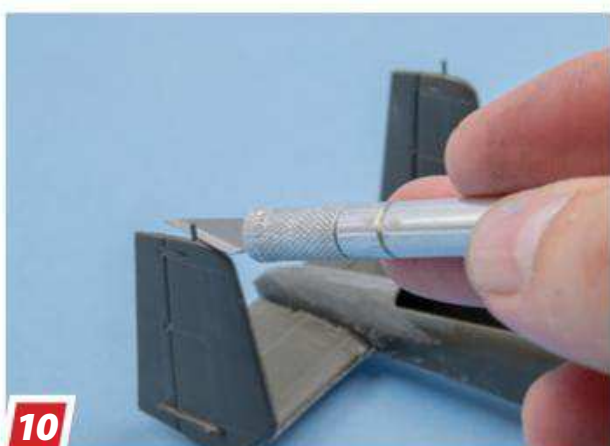
7 The vertical tails were different, too: The original's leading edges reversed direction near their base. I cut the kit parts with a hobby knife ...



8 ... and shaped them with a coarse sanding stick.



9 Five minutes' work produced the desired result.



10 Then I realized I hadn't removed the antennas; a hobby knife quickly fixed that.



11 The same went for the ECM antenna on the aft fuselage.



12 I filled in locating holes for the leading-edge slats with more two-part epoxy and sanded them smooth.



13 Any flaws revealed by Alclad II gray primer with microfiller were filled and sanded.



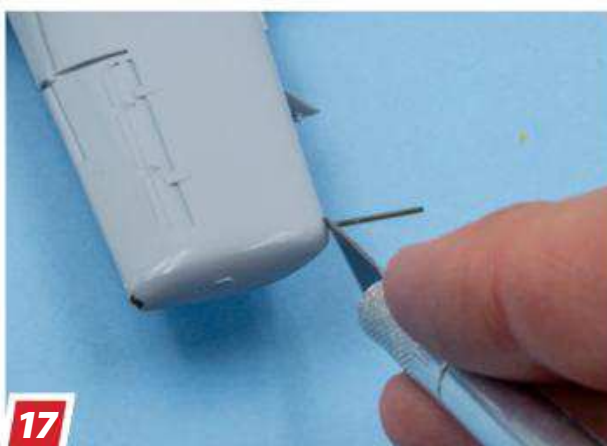
14 The YA-10 didn't have that 30mm gun on its rollout or first flight (it was fitted with a 20mm gun). This was easily replicated by cutting out a rectangular section of fuselage ...



15 ... inserting a piece of styrene rod, and filling around it.



16 For the test boom in the YA-10's nose, I made a styrene-rod mount and installed a nose probe from a Monogram 1/48 scale F-106.



17 I glued the wing pitot probe, then cut it off at the leading edge and sanded it smooth — the YA-10 didn't have one there.



18 The kit's pilot was no prize, so I got another from a spare kit. It fit after the amputations; good enough for an in-flight model.



19 I sprayed another coat of primer for uniformity, then misted several coats of Testors Model Master Acryl aircraft gray (aka ADC gray).



20 Intake warning chevrons from a 1/72 scale F-4 Phantom sheet, and red and black stripe decals on the engines and wings.



21 The numerals are from a 1/72 scale USAF letters/numbers decal sheet.



22 It wouldn't look like a Warthog without a bomb load that defied belief. My spare parts box supplied adequate ordnance for all those underwing pylons.



I took the Warthog to my 4th grade classroom to promote our wonderful hobby. It was met with *oohs* and *aahs* — and I hope it will spark one of my students to start building models. **FSM**



Build an *Iranian fighter*

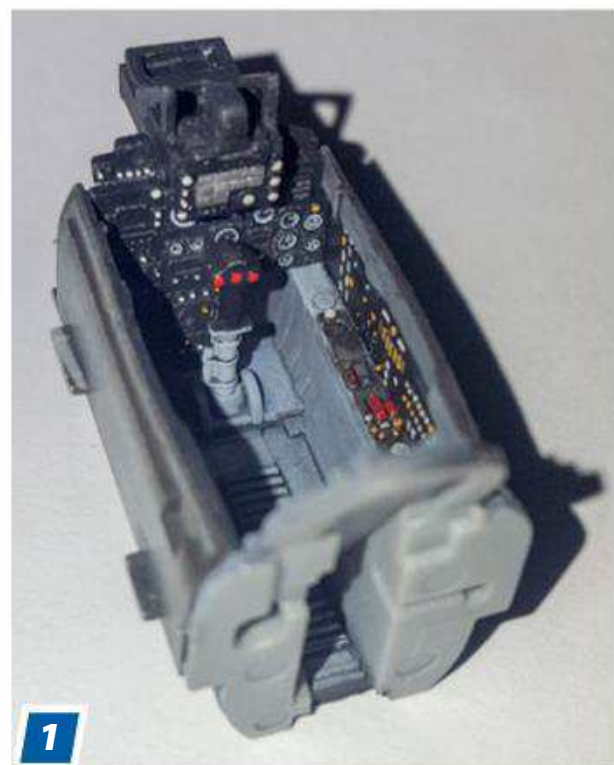
Distinctive colors and camo are key for this jet /// BY ALIREZA BEIGI

The first production of this aircraft in the People's Republic of China was called the J-7. By its third generation in Chinese production, this license-built MiG-21 was known as the F-7.

Offering low weight, high thrust, and excellent visibility, the F-7 carries an arsenal that includes bombs, air-to-air missiles, air-to-ground missiles, and other ordnance.

The Iranian air force has optimized the F-7 for training and tactical purposes. Iranian pilots say it's a good aircraft that can climb very quickly and change angles and directions in the shortest time.

To model it, I chose Trumpeter's 1/48 scale J-7B (No. 02860).



1

After the primer dried, I applied post-shades of black and Ammo by Mig Jimenez light compass ghost gray thinned with Ammo's Transparator.



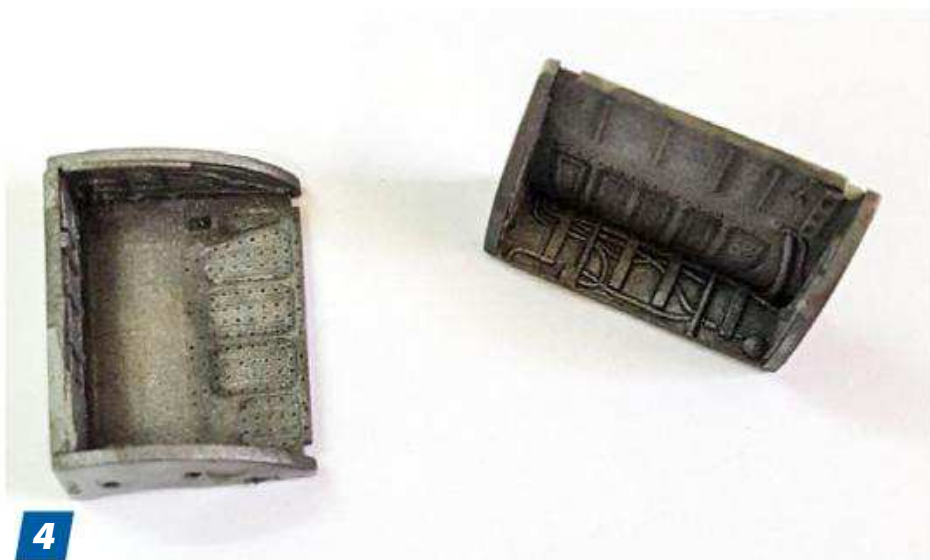
2

The kit provides a one-piece decal for the instrument panel, but it doesn't match the gauges. I cut up the decal to fit.



3

On the engine, I concentrated on the exhaust. After primer and shades of black and gray, I applied various shades of aluminum and steel, and followed with jet exhaust burnt iron from Ammo. A flat clear and dark wash finished it off.



4

I painted the gear bays with a similar process. After the blacks and grays, I applied Ammo steel.



5

Ammo's dark NATO camouflage wash added depth and details.



6

Referring to the real wheel, I primed the hardware with gray and covered it with aluminum. I used Ammo's rubber and tires (No. 033), then a dusting of Ammo sand pigment.



7

Poor fits up front were a harbinger of extensive filling and sanding.



8

Masking the canopy marked the end of major construction.



9

Then came Ammo gray primer followed by a mix of Ammo flat black and Transparator to pre-shade panel lines.

MiG-21/Chengdu J-7/F-7



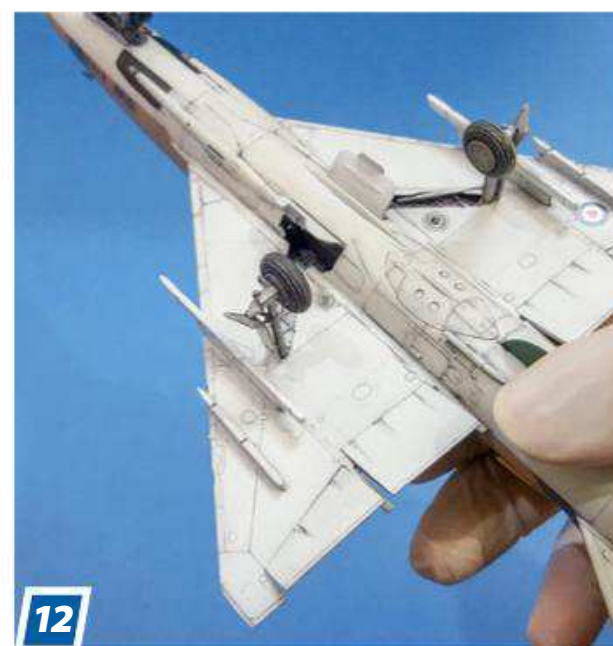
Originally, the Soviet MiG-21 (NATO reporting name "Fishbed") was offered to Mao Zedong by Nikita Khrushchev to be built under license by China as the Chengdu J-7 (production began in 1964). The F-7 emerged as the export version of the Chinese-built aircraft. Although production halted in 2013, the aircraft still flies with air forces from Afghanistan to Zimbabwe, and from Nigeria to North Korea. Iran operates 20 F-7s.



With Blu-Tack for masks, the acrylic paints in order were: 1) sand, 9:1 Revell flat Africa brown (36117) and white; 2) any kind of tan; 3) Mr. Hobby dark green (H309, FS34079); and for lower surfaces, Revell light gray silk (36371, FS36622).



Next, Ammo panel-line washes outlined edges and deepened recessed details on upper surfaces ...



... and underneath as well. Dark washes give salient features greater contrast, too.

Meet Alireza Beigi

Alireza, from Bushehr, Iran, began modeling about 12 years ago by trying to build a 1/72 scale MiG-29. He recalls, "My finished work, like that of new modelers, was bad and funny. But I did not give up, and I have tried to make better models in the next steps. The MiG-29 was my first experience, and I still enjoy it.

"One thing that attracted me to modeling was my interest in the military, with my father being a colonel in the Iranian air force. I find I can catch my dreams with scale models."



Decals designed by Mohammad Jafar Tabib and printed by Arash Ghazi Moradi in Iran. **FSM**

NordicCon 2017

BY BOB MADERICH III AND JOHN R. ROSS /// PHOTOS BY SEAN BRZOZOWSKI

Hosted annually by the Minnesota Military Figure Society, Oddball Modeling Group (OMG), RPM Car Club, and the Twin Cities Aero Historians, the NordicCon model contest draws contestants and spectators from throughout the Midwest. The 2017 show featured 341 entries by 75 modelers along with 102 visitors. The exhibition's theme was "Over There," an homage to the 100th memorial of the U.S. entrance into World War I. But the variety of models spanned many eras and genres.



▲ **JEFFREY CAMPBELL**
EDEN PRAIRIE, MINNESOTA
Jeffrey loaded HobbyBoss' 1/72 scale A-7E with an Aires cockpit, Wolfpack wing fold, and Kora Mk.82 bombs. He painted it with Testors Model Master acrylics.

► **TOM FINCH**
WYOMING, MINNESOTA
After being finished with Zero Paints and Gravity 2K Clear, Tamiya's 1/12 scale Honda RC211V received Pit Wall and Scale Motorsport decals.





◀ **SCOTT PRIMEAU**
ST. PAUL, MINNESOTA

Scott painted Young Miniatures' 1/10 scale bust of an SAS driver with Vallejo and Jo Sonya acrylics.



▲ **CHARLIE KUCERA**
CEDAR RAPIDS, IOWA

In World War II, the six-engine Ar E.555I was one of Arado's answers to the Reichsluftfahrtministerium's call for an *Amerikabomber* capable of striking the United States from Germany. Charlie had better luck building Revell Germany's 1/72 scale kit.



▲ **JOHN BERNIER**
SPRING LAKE PARK, MINNESOTA

With the ICM 1/48 scale Spitfire Mk.XVI kit in hand, John swept the aftermarket to model this fighter from No. 485 Squadron, Royal New Zealand Air Force. He painted the plane with Testors Model Master colors.



▲ **HOWARD QUEDNAU**
MINNEAPOLIS, MINNESOTA

Adding extra resin tires and a mechanic helped Howard present his 1/12 scale Tamiya Ferrari 312B in a favorable light. He finished the Formula 1 car in Tamiya bright red.



**KEVIN RICKBEIL
RICE, MINNESOTA**

Alclad II lacquers and Testors Model Master enamels brought Monogram's 1/48 scale B-17G to altitude as *Little Miss Mischief*. Kevin's Flying Fortress won several awards and was the People's Choice at the show.



**▲ KIRBY HUGHES
ST. FRANCIS, MINNESOTA**

Kirby reengineered AMT's 1/25 scale Silhouette Show Car and painted with Testors One-Coat gold and candy orange lacquers. Why? He built one 50 years ago and wanted another.



**▲ BILL KREUGER
CEDAR RAPIDS, IOWA**

Referring to a photo of the Japanese entry into Shanghai in 1937, Bill displayed IBG Models' 1/72 scale Type 89 tank on a scratchbuilt diorama base.



▼ **R.H. "CHIP" CHILDS**
MINNEAPOLIS, MINNESOTA

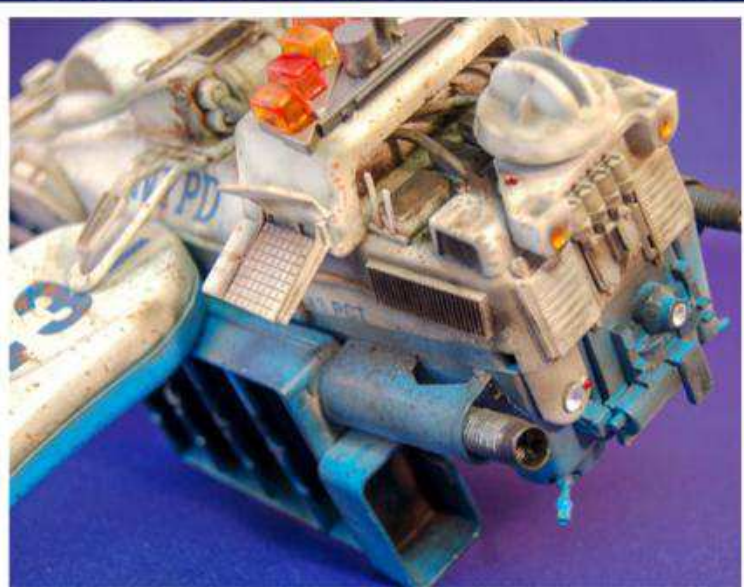
"Chicken for Dinner" is what Chip calls his vignette featuring Tamiya's 1/35 scale SU-85. A gaggle of aftermarket and scratchbuilt accessories brought the scene to life.



STEVE SHAFFER
HASTINGS, MINNESOTA

Steve built Spacecraft Creation Models' 1/35 scale Buck Rogers Starfighter, adding a scratchbuilt pilot's helmet and modifying the canopy to display it open.





NYPD PATROL CRAFT

Materials *Hull*: swim goggles container; *Swing-wings*: correction-tape dispensers; *Thrust channels*: razor-blade dispenser; *Exhausts*: bendable straws; *Details*: 1/35 scale armor and 1/24 scale race car parts, costume jewelry, M.V. Products lenses, styrene rod, headset cord piping, model railroad resin, and Chimneyville Hobbies police light bar.
Finish *Base coat*: Tamiya acrylic; *Weathering*: watercolor, Mig pigment, and Testors Dullcote; *Decals*: Chimneyville NYPD over Pledge Floor Gloss (PFG).

TRASH your model

Upcycle your way to a one-of-a-kind
sci-fi craft

BY JOHN BROSINAN

For as long as I can remember, I have been an armor modeler. If it had tracks, a turret, and a big gun, I gleefully built it, cutting my teeth on old Aurora and Monogram kits.

Science fiction was an outgrowth of this fascination with machines. Aren't space cruisers, blasters, and walkers futuristic versions of today's tanks, helicopters, and ships?



ALIEN CRUISER

Materials *Hull*: large Advil bottle; *Nacelles*: two shampoo sample bottles; *Main thruster assembly*: various caps; *Nose*: child-safety outlet plug; *Details*: ship model and other miscellaneous parts from spares box.

Finish *Base coat*: Alclad II; *Weathering*: Tamiya acrylics and Testors Model Master Metalizer lacquers; *Panel markings*: airbrushed through a 1/72 scale scribing template.



It is no surprise, given the historical aspect of our hobby, that armor kits greatly outnumber sci-fi kits. Because of this dearth (not Darth), I look to other means for creating fantastic and fascinating craft.

And where did I turn? The household garbage can.

Over the years I have developed a knack for creating spacecraft and vehicles by combining cast-off household goods and kit parts.

Turns out that garbage modeling can be a fun break from the pressures of historical armor modeling.

Why build from the trash

When designing your own sci-fi craft, it's all about imagination.

Who can tell you that the paint job on your star fighter isn't historically accurate? Or that those blaster cannons weren't introduced until much later in your made-up space conflict? Since there are no earthly constraints, there are no limits to what you can build.

Tip: If you're going to succeed at modeling garbage, you'll need to develop an eye for interesting shapes found at home, the supermarket, and around the office. I find myself staring at futuristically shaped toiletry bottles, food containers, and miscellaneous bits of plastic.

Like traditional kit building, garbage modeling is a patience-building exercise. You may need to wait as the family slowly works through a shampoo bottle that just

screams "Turn me into a space cruiser!"

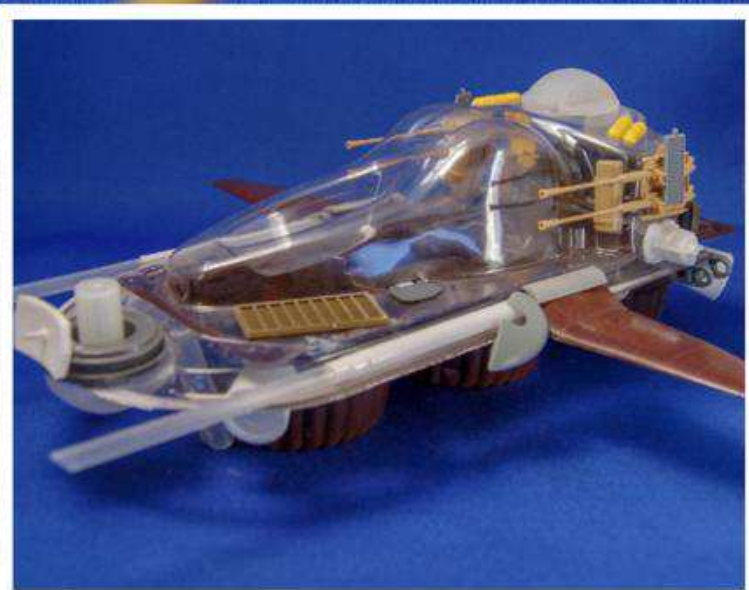
Another benefit: We all know that armor modeling can get pricey when adding up the cost of the kits, aftermarket parts, photo-etch (PE), track sets, lenses, resin figures, and the like. With garbage modeling, costs are low, as there is no aftermarket to shop or fuss over.

You probably have the majority of materials you need in your house and in your spares box. My most frequent purchases are glue, accelerator, plastic stock, and paint.

What to look for

When collecting raw materials, I separate them into three components: main shapes, secondary shapes, and details.

Main shapes are the larger found objects



MINING SCOW SS SABRE

Materials Lower and upper hull: cupcake and headphones packaging; Thrusters: toothpaste caps; Turrets: child-safety outlet plugs; Piping: wireless headset cord; Escape hatches: dishwasher-soap caps; Hatches: model railroad aftermarket pieces; Details: razor blades, 1/32 and 1/35 scale armor, miscellaneous ship, and 1/24 scale race car parts.

Finish Base coat: GSI Creos primer, Metalizer on guns; Airbrush: watercolor wash; Weathering: Mig pigments, Testors Model Master acrylic flat coat (Dullcote not used for fear it would melt the plastic); Decals: Gundam and FineMolds Y-Wing over PFG; Rocks in hopper: real rocks.

that serve as the craft's primary hull. Interestingly shaped conditioner and cough syrup bottles, discarded electronics, even food packaging make great starting points.

Secondary shapes are added to the hull to flesh out the function and look. These smaller pieces, when detailed and painted, create the illusion of engine nacelles, jets, thruster packages, etc. Useful materials include razor blade and Post-it note dispensers, travel-sized toiletries, toothpaste caps, mini highlighters, outlet plugs, and soap pumps.

Details from smaller, more refined pieces add realism. The No. 1 source of detail parts

is my armor spares box. I keep multiples stored together because pairs of parts on a vehicle mimic what's seen in real life — sets of air cleaners, headlights, sponson boxes, and the like.

Styrene rod, squares, and scored or ribbed styrene come in handy for additional detail work. Bendable straws are another favorite for angled pipes.

To join these pieces, you'll need super glue, accelerator, a No. 11 hobby knife, and a clean, well-ventilated work area.

Tip: Disguise unsightly glue spills and built-up goop as battle damage or corrosion.

Designing the craft

I start with the main hull, which determines if the craft's overall appearance is clunky or sleek.

If the hull is made of compound objects, secondary shapes should also resemble an amalgamation of bits and bobs. If the hull is streamlined, then I add accessories and tubing that are consistent with that look.

Trying to keep parts in scale is a challenge. A thruster made from a toothpaste cap might look great, but if it's too large for an escape pod it will destroy the effect.

Once the basic shape is together, various scraps adorn it. Because sci-fi tech needs to



PIRATE RAIDER

Materials *Hull*: shaver packaging; *Nacelles*: coffee creamer and Advil bottles; *Exhausts*: cough-syrup caps with toothpaste-cap engine bells; *Weapons*: Post-it note flag dispenser; *Upper turret*: child-safety outlet plug; *Details*: razor blades, contact-lens case, miscellaneous armor and aircraft parts; *Engines*: Model railroad parts in engine area.

Finish *Base coat*: Tamiya acrylics; *Camouflage*: acrylics over Silly Putty masks (cockpit masked with Tamiya tape).

look like it actually works, I cluster kit part gizmos — especially in pairs — around the engine, vents, and weapons.

Tip: Tubing should start somewhere and end at a logical destination, such as a junction box, just like on real-life machinery.

Painting

As armor modelers know, after combining styrene, PE, and resin, an even coat of primer ties everything together. Bonus: It is truly exciting to see what was once a strange hodgepodge of found objects (OK, garbage) take shape as a spacecraft when primer is applied. I use spray can Tamiya

white or gray fine surface primer.

When the primer is dry, I airbrush Tamiya and Gunze acrylics and Alclad II lacquers. I use Tamiya HP-C and Iwata BCS Eclipse airbrushes, setting the compressor between 15-30 psi.

As you are not limited by earthly color schemes or historical data, the sky (or space) is the limit. But if I want something familiar, I'll follow schemes found on armor and World War II landing craft.

As with regular model building, I'll then weather with oils, watercolors, pigments, colored pencils, and pastels. Exhaust stains, chips, and cracks add to the story.



Finishing

I raid my decal folder for anything that might add to the ship's functional appearance. Redundant stenciling and numbers are useful.

Tip: Apply a coat of PFG and let dry before adding decals — they work better on smooth surfaces.

The final step is an airbrushed layer of Testors Dullcote to flatten the finish.

So, if you're tired of olive drab or panzer gray and looking for something a bit different, try your hand at garbage modeling.

No need to take out the trash — just move it onto your workbench! **FSM**



Reasoning with resin

It's all about preparation

Once almost solely the province of aftermarket details and small manufacturers, resin seems to be as prevalent today as photo-etch and plastic. Mainstream manufacturers often include resin details or figures in their kits and the number and quality of all- or mostly resin models increases every year.

This means that you need to know how to work with resin. Ultimately, “parts is parts,” and the models go together the same, albeit with super glue or epoxy rather than plastic-solvent cement that has no effect on resin. But cast-resin parts usually need a bit more prep work before assembly. Here's what you need to know.

Pour plugs



Most resin parts come attached to lumps of excess material referred to as pour plugs. Small plugs can be sliced off with a fine razor saw held close to the edge of the part. The material is relatively soft and easy to cut, so don't use a lot of pressure. Also, constantly check the blade's alignment as you go to avoid cutting into the part itself.



If you cut close on small parts, you can finish cleanup with a sanding stick. Again, don't apply a lot of pressure, and try to keep the abrasive surface flat against the part. Check your work and stop once the area is flat and uniform.



For large pour plugs, use a cutoff wheel in a motor tool. Set the speed low to avoid melting the resin, and don't cut hard up against the mating surface — it only takes one slip to slice deep into the part.

Mold seams



Unfortunately, that leaves a larger tab; remove most of it with a sanding stick or metal file. To ensure the mating area at a wing root is flat, hold the part against sandpaper taped to a hard, flat surface and move it in small circles until the area is flush. It's important to work slowly, keep the part aligned, and check your progress frequently.



Just as with injection-molded plastic, resin cast in two-part molds can show mold seams. Fine lines are easily eliminated with a sanding stick or sandpaper. Take care to avoid scratching the surrounding surfaces or damaging detail.



In tight spots, such as behind the knees of Hunk of Junk's 1/6 scale Xev Bellringer (from the TV series *Lexx*), remove mold seams with a hobby knife. Eliminate all traces of the blemish with sandpaper thin enough to get into the narrowest recesses.

Fixing warped resin



A quick check of Xev's legs showed that the lower sections bent up slightly and wouldn't sit flat. The part may have been molded that way, or it may have warped during removal from the molds or in storage.



Boil water in a container large enough to submerge the warped part. The thickness of the resin determines how long it should stay in the hot water. Thinner parts don't need much, but the thicker material of Xev's legs required 25-30 seconds.



Immediately after removing the part from the water, apply gentle pressure and bend it to the desired position. A quick dip in cold water will set the resin in its new position.

Cleaning



Many resin parts are coated in a mold-release agent to ease removal from the mold. Unfortunately, that substance can prevent paint from sticking to the resin. To remove it, soak the parts in an aggressive detergent such as Westley's Bleche-Wite tire cleaner. Wear gloves and eye protection, and avoid splashing it on bare skin as it can cause burns.

Pinholes



Air trapped in resin as it hardens produces small voids in the material. Fill each with a drop of super glue and sand it flush. Before painting, prime resin parts to check for problems and promote paint adhesion.

Safety



Resin dust can be irritating: Wear gloves and a respirator when sanding or cutting resin. Eye protection is essential whenever a motor tool or corrosive cleaners are used. **FSM**



Kitty Hawk Su-35: Big kit, big detail

Kitty Hawk is the first company to market a 1/48 scale Sukhoi Su-35 “Flanker-E.” Before, the only way to build an Su-35 was to modify the Academy Su-27 — no small feat if you wanted an accurate replica!

The news that Kitty Hawk was producing a Su-35 engendered lively debates within the modeling community, even before the kit’s release. The box art has caused some controversy, too, as it shows an Su-35 shooting down a U.S. F-15E.

The box contains 628 parts in light gray plastic and 14 in clear. Adding detail are 31 photo-etched (PE) brass pieces for the seat/cockpit, intakes, wheels, and pylons. Three decal sheets round out the contents.

Note that 416 parts are on the weapons sprues. Obviously, one jet cannot carry it all, so your Russian spares box gets a welcome boost! Looking at photographs of Su-35s, it is rare to see them heavily loaded. I decided on a fairly common load, with pairs

of R-73 and R-77 air-to-air missiles. The box art shows 10 R-77s, but the kit includes only two; if you want more, you’ll have to find some spares.

The kit represents a late-prototype/early-production aircraft, with chaff/flare dispensers mounted atop the tail stinger. Later production moved these to the underside.

The Su-35’s high maneuverability owes to its thrust-vectoring nozzles. The kit only includes parts for nozzles in the “neutral” position. A subsequent boxing of this kit provides additional resin parts for both the later tail stinger and under-mounted chaff dispensers along with drooped thrust-vectoring nozzles (appropriate for a parked, powered-down aircraft). There are also several aftermarket resin options for updating the prototype kit.

Detail is good throughout. The cockpit is quite complete and accurate, with well-defined panels and heads-up display. The

seat is well done, too; my only gripe is that PE belts are provided, which I have not yet mastered. I would prefer a resin seat with molded-on belts.

The wheel wells and undercarriage are well represented, if a bit simplified. This model will be a “tail sitter” without nose weight — but the nose gear is sturdy enough to hold up. Some parts would require modification to vary their pose, such as the cockpit canopy and braking-parachute door. The tail planes are posable, but, since the exhausts are pointing straight back, I parked the tail planes in neutral. Removing the locating lugs on the tail planes allows you to leave them off until the end of painting/construction.

Some have complained that the kit’s wings are separate panels that have to be attached, as opposed to having the entire upper and lower fuselage/wings as one piece. But this is a nonissue, as you may attach the wing tops and bottoms to their



respective fuselage halves to create one-piece top and bottom assemblies. Attach the intake trunks to the lower fuselage half before combining the top and bottom halves. Since the fuselage piece is somewhat flexible, the intake trunks can be glued and fitted very precisely. Doing this after the fuselage halves have been joined may make getting a good fit tricky.

One disappointment is the lack of interior intake trunks, leaving an odd view if you look down the intakes.

Decals provide six markings options, a choice made more difficult by the appealing nature of all of them! I chose the “eggplant” scheme, as I thought it would reduce painting time. But this is a big airplane — no matter which scheme you choose, painting is going to take up some time!

For the colors, I chose the Mr. Paint version of the eggplant color. I’m not convinced that Su-35s are painted in such a purple-gray, so I lightened the base to

match the color I saw in photographs. Same for the underside, which ended up being a 1:1 mix of GSI Creos Mr. Color RLM 76 and white.

The decals presented no problems, apart from some of the yellow “Lift Here” symbols disappearing into the underlying gray (I didn’t use those).

Overall, this is a pretty good effort by Kitty Hawk. I would rank it equal to or slightly better than kits such as the Hasegawa F-15 or F-14 in regards to buildability, accuracy, and detail. Yes, Kitty Hawk still needs to work on its instructions, which are plagued by misnumbered or unmentioned parts, and there are some quirks to look out for — but nothing too difficult to overcome. I enjoyed the build and would happily do another. There is a striking yellow, green, and brown splinter scheme appropriate for this aircraft, and since I do have another copy of it ...

— Matthew Walker



Kit: No. KH80142 **Scale:** 1/48

Mfg.: Kitty Hawk,
www.kittyhawkmodel.com

Price: \$81.99 **Comments:** Injection-molded, 642 parts (31 PE), decals

Pros: Good fits; easy build; great detail

Cons: PE seat belts; errors in instructions

Rye Field Panther Ausf G

The German Panther tank was an important vehicle in World War II, and no fewer than four manufacturers are issuing new Panther kits this year. First to fire is Rye Field Model with its Panther G (early/late). It features a full interior, and in the initial release the hull top and turret pieces are molded in clear plastic to show off the interior. They and the rest of the tan plastic parts are well molded with excellent detail and almost invisible parting lines. The clear parts are very transparent, and while there are some unavoidable ejector-pin marks they are well placed to be less visible.

The kit includes two sheets of photo-etch (PE): a thicker one with the floor rails and crossbeams, and a thinner one loaded with details and full screens for the rear deck. Also included are some extras: a pair of steel-rimmed road wheels (seen on the rear of some Panthers) and a couple of additional wheels with no bolts and separate vinyl rims (if you want to show maintenance in progress).

The expansive instruction booklet has large assembly diagrams; interestingly, steps for the early version are printed green to alert you to construction options.

Decals cover three Panthers, and there is a large sheet of stencils and details for the interior. Three-view color drawings are provided for each

subject, along with color CADs of the interior to help with painting.

Unlike most armor models, assembly begins with the turret. You can add a spring to the gun so it recoils. If you decide to build the early G, you will need to remove some details from the outside of the clear turret. Early on, the instructions add small detail parts to the outside of the turret; I waited until final assembly to add them to avoid knocking them off.

I mostly used Tamiya thin cement with the clear parts, but you have to be very careful; I did get a few glue marks here and there. For adding the small parts to the outside, I found Testors 8872 liquid cement worked well.

Two sizes of soft lead wire are provided to make some of the piping in the turret basket. I was impressed with how well everything fit. The only real problem I had was with the two-piece ventilator hose (parts B16 and B14). While I got the two parts close, I could not get them to match as they should.

Next came the hull top. While assembling the bow machine gun, my tweezers sent the interior mount (J16) into Neverland. So, I left out the gun.

Since I was making a late G, I needed to remove some detail from the clear hull for the front ventilator. I was worried about the damage showing, but the parts covered most of the area. You have the option of adding the heater to the rear deck. It's not clear, but I believe you only use the shutters (G8/G9) if you use the heater option.

One of the most frustrating jobs was adding the PE spare-track brackets to their rails. Although the kit provides rails for mounting *schürzen* armor, none is included.

I left the rails off my kit.

The lower hull is where you'll spend most of your time. Start by adding the side pieces to the bottom

plate. Even using the rear plate and engine bulkhead as spacers as shown, I found the PE cross members would not fit. I pulled off one side (leaving it attached at the rear), added the cross members and the torsion rods, then glued it back in place to get everything to fit properly.

I found it easier to add the engine compartment PE rails (Z17, Z19, Z20) after the engine bulkhead was in place. While building the engine, I managed to install the manifold (K28) backwards. (I think I may have removed a locator during cleanup.) I installed the rear plate before adding all the details to it.

The tracks are single-piece individual links held together with small pins (like the real thing). A jig lets you do six links at a time; the pins require a tiny dab of cement to hold them in place. I used 87 links per side, as instructed, but I think one less link would have looked better. Perhaps I didn't adjust the idler mount properly.

I spent 56 hours building the Panther, quite a bit more than usual. But then there is a lot more to this kit than most. If you want to show a Panther during manufacturing, under maintenance (either minor or major), or just want to leave some hatches open, everything you need is supplied.

The finished model matched exactly the dimensions found in Squadron/Signal's *Panther in Action* book. Also valuable was the Uwe Feist/Bruce Culver book on the Panther.

You'll need modeling experience to tackle this kit, but I found the detail and fit excellent.

—John Plzak



Kit: No. RM-5016 **Scale:** 1/35

Mfg.: Rye Field Model,
www.ryefield-model.com **Price:** \$103.99

Comments: Injection-molded, 1,907 parts (96 PE, 18 vinyl), decals

Pros: Unique clear upper hull and turret; highly detailed interior; individual track links **Cons:** Some PE extremely small, difficult to add without marring clear parts

Takom Panther Ausf A

Following Rye Field in the rush of new Panthers were Takom's three Panther A kits — early, mid-production, and late. Molded in gray plastic, these kits also feature a full interior.

While the main body panels feature a nice rolled-steel texture, sadly, there is no Zimmerit, the nonmagnetic paste applied to thwart mines and sticky bombs. Since the A models were built during the time Zimmerit was factory-applied, all but a few early ones wore it. While the aftermarket will respond with solutions, Takom has already announced a late-model A with molded Zimmerit. A command tank as well as a normal late Ausf A can be built from this kit. Additional radios and antennas are included for the command version.

Instructions feature large assembly diagrams, but sometimes the location arrows get lost in the clutter. Color CADs of the model provide painting instructions for the interior, while five-view color drawings are supplied for camouflage and markings. Two small frets of photo-etch (PE) provide engine-deck screens and the crew's foot antennas for the command version. Markings are provided for four vehicles, along with a sheet of stencils for the interior. Tracks are link-and-length, but you need to install the guide teeth. Two jigs are provided to set the suspension arms and build the tracks.

Assembly starts with the hull. The sides are added one at a time with their respective torsion bars in place. It takes quite a bit of fiddling with the bars to get the second side in place; start at one end and work your way down. Eventually, you hear that satisfying click as everything sets into place.

For some reason, the instructions are to install the inner engine compartment walls before the rear bulkhead is in place. It's a lot easier to do it the other way around. The engine is well detailed.

Just the tops of the shells are provided for the upright bins of ammo. Watch out adding parts to the fighting compartment: Some will get in the way of installing the floor if you add them too early.

Adding the guide teeth to the links is made simpler by molding them on a sprue that matches the links on their sprue. You'll need a fine-point sprue cutter, however, to remove the guide teeth sprues. I tried to use the track jig to assemble the tracks, but I couldn't get the front individ-

ual tracks between the long top run and the drive sprocket to fit. If you build the tracks on the jig as shown, I'm not sure how you're supposed to get the finished assembly in place over the front road wheels.

Building the upper hull went smoothly. Since I chose the splinter camouflage, I painted the hull before adding many of the detail parts. This made it easier to mask the hard-edge camouflage. Then I masked the detail pieces, leaving only the smallest ones to be brush-painted.

The upper hull assembly is where you start running into changes between the command and standard version. These steps are listed as -1 for the command vehicle, and -2 for the standard. (I wound up marking the steps I didn't need to do with big, red Xs after I accidentally did a command tank step.)

As I was working on the upper hull, I decided I wanted to be able to remove it so all of the interior could be viewed (and photographed by *FSM*). Since the front plate is tabbed to the hull sides (like the real thing), I carefully sawed off the tabs and installed them in their respective slots. I also discovered that the front fenders mounted to tabs on the inner front plate, so I removed those tabs as well and glued them to the fenders.

Assembly of the turret was straightforward. The periscope covers for the commander's cupola are molded in position on a circular sprue so they can all be installed in one step. The rear hatch is workable, but the latch mechanism is molded in place in the unlatched position. A flexible vinyl piece is provided to run from the fume-extractor fan on the turret roof down to the turret basket. Additional radio equipment is provided for the command-version turret.

It took me 49 hours



Kit: No. 2099 **Scale:** 1/35

Mfg.: Takom, www.takom-world.com

Price: \$69 **Comments:** Injection-

molded, 977 parts (9 PE, 1 vinyl), decals

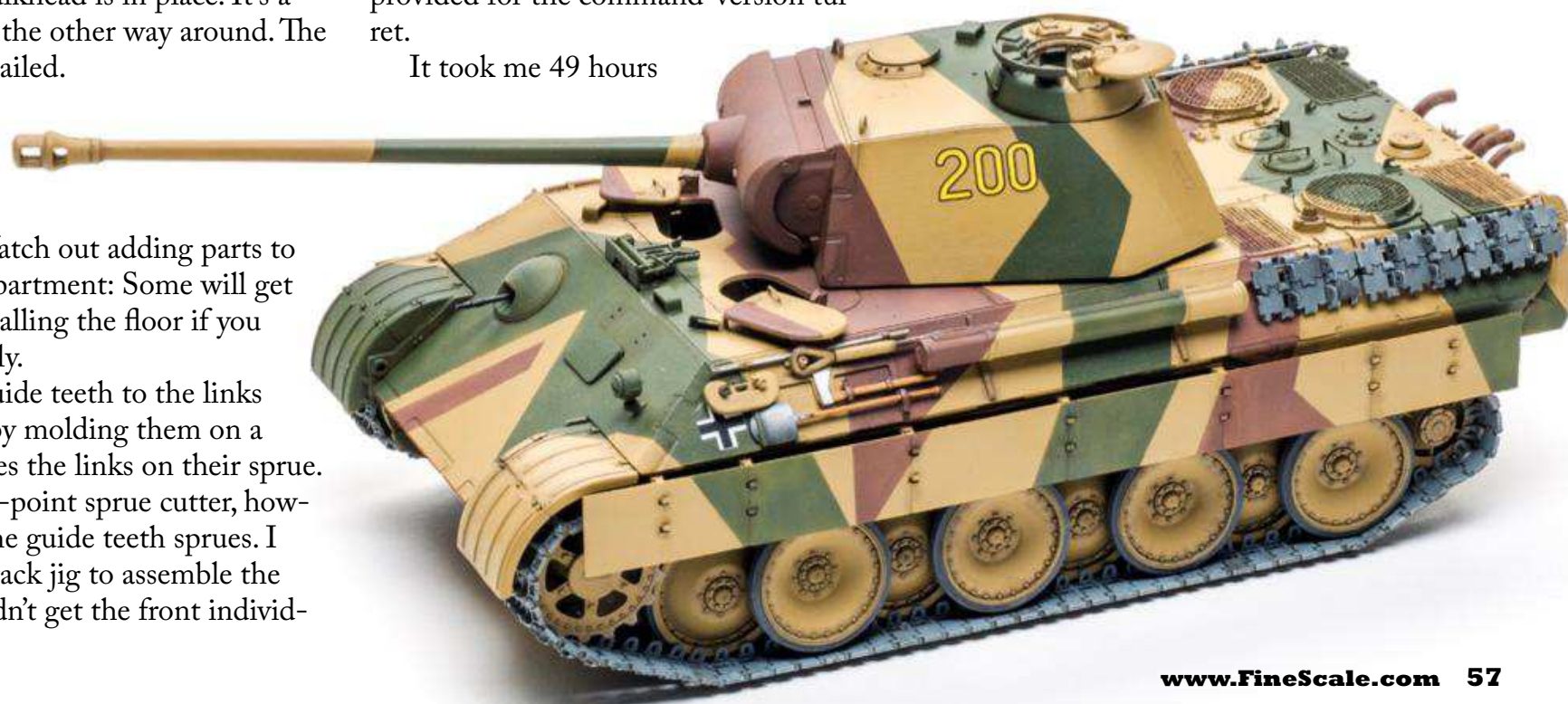
Pros: Full interior; link-and-length tracks; suspension arm/track jig; thin, flexible wire for track cable; color photo painting guide **Cons:** No clear parts for periscopes; front and rear plates tabbed to sides; no Zimmerit

to build the Takom Panther Ausf A — almost as long as the Rye Field Panther. You'd think with half the parts count it would be a faster build. But having to paint the entire hull and the complicated camouflage scheme added to the build time.

The finished kit matched exactly the dimensions found in Squadron/Signal's *Panther in Action* book.

It's still going to take an experienced modeler to deal with all of the interior work, but I found the Takom kit was a less stressful build than the Rye Field. However, I think the Rye Field kit has a slight advantage in the quality of the moldings and the amount of detail — but you'd better like PE!

— John Plzak





Meng Jeep Wrangler Rubicon

Since 2003, the Jeep Wrangler Rubicon has been dominating the off-road trails — and the 2013 10th Anniversary Edition is no different. With locking front and rear differentials, electronic sway-bar disconnect, a beefed-up suspension, and underbody armor, it can take you places no stock vehicle can — plus you get special badging, a red interior with special Rubicon stitching on the seats, a winch-ready bumper, red tow hooks, and an all-new hood.

Tightly packed inside Meng's box are six red-and-black sprues holding nearly 200 parts. Metal springs are included for the suspension, and reflective lenses for the Jeep branding on the grille and for the mirrors. Vinyl tires are also included.

The molds are finely detailed, but many of the parts are riddled with ejector-pin marks to remove. Clear parts are crystalline and scratch-free.

The 20-page instruction book contains 30 steps along with a parts-tree breakdown and color guide referencing AK Interactive paints. The instructions are clear, error-free, and easy to follow.

The first two steps build up the rotors and axles. These won't actually be mounted until steps 6 and 7. The suspension is workable (nice touch). Metal springs help make the suspension articulate, but they don't look quite to scale. The bumpers look just like the real thing, though, and they

have the proper Jeep markings finely molded into the plastic. The exhaust and skid plates look great, too. This is a curbside kit; no full engine.

I painted the wheels gloss black, then detailed the rest of the wheel with silver. Just like on the real thing, Meng gives you decals that replicate the little Willys Jeep markings that are on each of the wheels.

The tire tread pattern looks accurate. Missing is the BF Goodrich KM2 sidewall detail, perhaps due to licensing agreements.

Interior detail is fantastic, and with the top off it can be fully seen. The instrument panel looks convincing, with dials, switches, and vents all where they should be. Also nicely replicated is the subwoofer found in the rear of the Jeep. However, the Rubicon stitching is missing from the seats. Also missing are the latches that hold the Freedom Top panels down (but those won't be seen once the top is on).

This model depicts an automatic, and the shift lever and 4WD controls look good. Meng even did a nice job of molding in the actual Jeep floor mats.

I ran into trouble mounting the windshield panel to the body. The roll cage kept interfering; I had to cut part of the cage short to make it fit. The rest of the body panels fit with no problem. Both the grille and the hood are nicely replicated in scale. Meng even molded the washer-fluid sprayers on the hood!



I painted the body panels while the parts were still on the trees, using decanted Tamiya gloss white. This made adding the body panels to the interior much easier without risking paint overspray on the interior. Decals, though few, went on well. Then I sprayed a coat of gloss over the body panels. Once that was dry, I started to add the body panels; they seemed to click right into place.

The roof can be kept on or you can take it off. Same goes for the doors — just like the real thing! The top fits snugly, but I prefer to leave it off to show the interior.

My model took about 16 hours to complete — much less than I anticipated when I opened the box. The fit of the parts was outstanding. That, plus a fairly low parts count, made for a fast build.

Now I hope there is an aftermarket company that will create a full Pentastar engine and the correct tires for this vehicle. And will Meng make a four-door Jeep? I hope so!

— Chris Oglesby



Kit: No. CS-03 **Scale:** 1/24

Mfg.: Meng, www.meng-model.com

Price: \$75.99 **Comments:** Injection-molded, 202 parts (4 white metal, 5 vinyl), decals **Pros:** Outstanding fit and detail **Cons:** Rubicon stitching on the seats is missing, as are the roof latches that hold the Freedom Top panels down; windshield panel didn't fit without modifying the roll cage; numerous ejector-pin marks

Azur FrRom Breguet 1050 Alizé 1G

The Breguet 1050 Alizé was a carrier-based antisubmarine warfare aircraft that entered service with the French navy in November 1957, replacing its aging Grumman Avengers. Initially used in the submarine hunter-killer role, it was later relegated to coastal and sea surveillance until retirement in 2000.

New from Azur FrRom is a short-run injection-molded kit molded in a soft gray styrene featuring fine recessed panel lines, injection-molded canopy, and decals for three different versions. A small photo-etch fret contains just the oleo scissors. The 12-page, 29-step instruction booklet is printed in color with clear CAD-style drawings for each step. Painting instructions are somewhat limited, though, so check your favorite references.

Construction starts with the three-man crew compartment. The cockpit is well detailed, with all the electronic boxes and gear molded as individual pieces. My personal library is limited, but a quick internet search showed that most of the cockpit is black or very dark gray. I used Tamiya NATO black for the floor and bulkheads, and semigloss black for all of the gear. A little dry-brushing picked out the highlights, but most of this work is invisible once everything is completed. I did have to trim down the front of the floor to allow the fuselage halves to fit together; positioning of the floor is a bit vague, though, so it may have been my error. In any case, test-fitting is a must.

The radar dome can be placed in either a retracted (parked) or lowered (in-flight) position. I assembled the compartment as

instructed but left the dome off until final assembly to ease masking and painting. I added a little more than the specified 8 grams of weight to the nose, but it turned out to be nowhere near enough. There's plenty of room for more, but I'm not sure the landing gear would be able to hold up.

As with most short-run kits, there are no alignment pins or locator holes between parts. Fortunately, the fuselage halves matched pretty well, and the wings' fit was surprisingly good. Fit of the nacelles to the wings was a little more work, though; they matched the lower part of the wing but needed filler to smooth the top seam.

I had trouble with the main landing gear, too. There are flat pads on the lower wing that appear to be where the main supports (parts D38-D41) attach, but they're too close together to fit the struts. I ended up filing the struts to fit and pinning them with a piece of wire. The plane has a bit of a nose-down stance which I'm not sure is correct.

I decided to leave the underwing stores off. There are six HVAR 5-inch rockets, two AS. 12 missiles, and two Matra F2 rocket pods included if you prefer your plane fully loaded.

The three marking options are all similar, with a medium blue-gray over off-white. I used Testors Model Master Flanker blue gray for the topside, and a mix of flat white and camouflage gray for the underside. Gear wells were painted armor sand.

The decals' print quality and color are excellent, and they settled into panel lines with just a touch of solvent.

When I first opened the box, I was surprised at how big this plane is. But it scales out very close to the dimensions listed on Wikipedia — just a tad short on wingspan



Kit: No. FR0028 **Scale:** 1/72

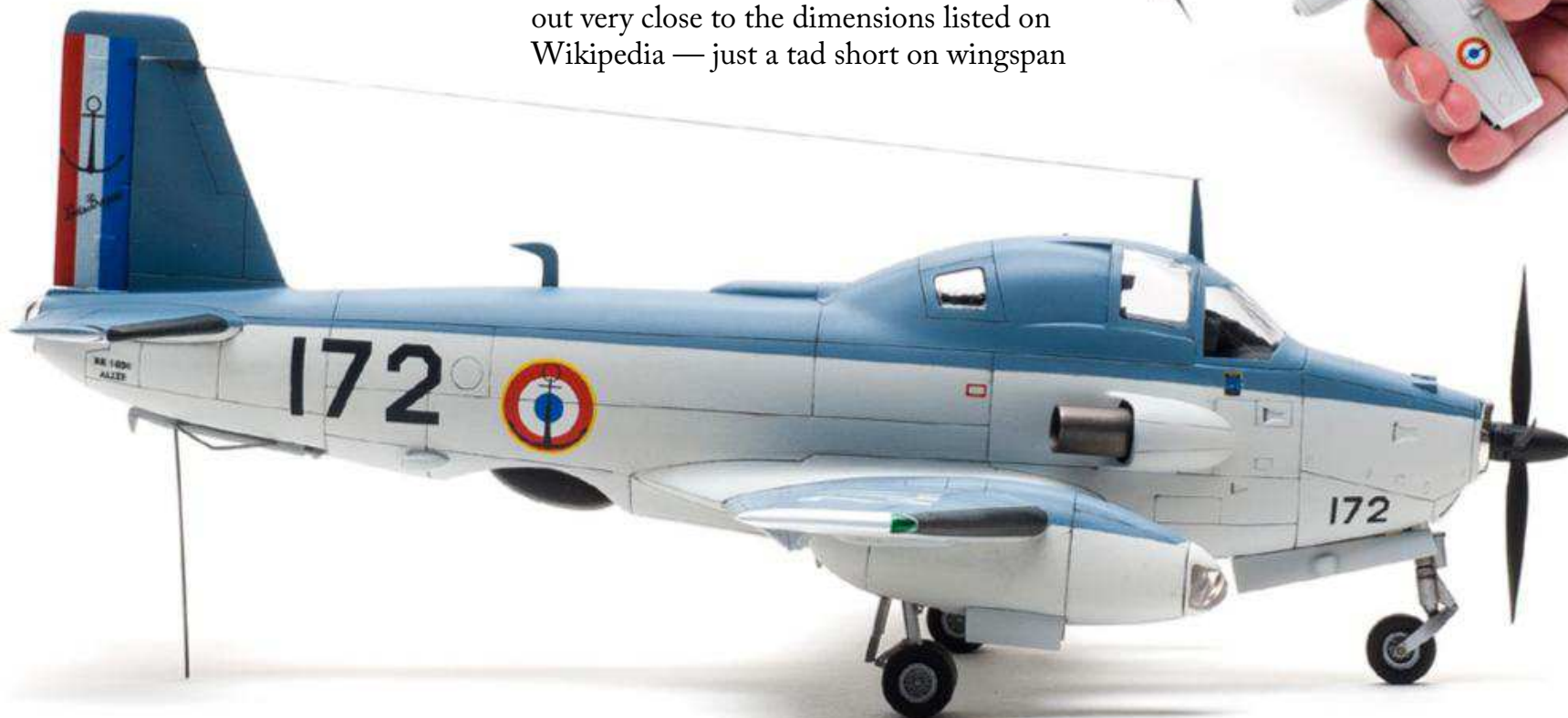
Mfg.: Azur FrRom, www.frrom.com

Price: \$42 **Comments:** Injection-molded, 175 parts, decals **Pros:** Good cockpit detail **Cons:** Parts location is vague; landing-gear assembly involves guesswork

and a little long. Height is a little off, too, but probably because that nose-down attitude has the tail too high.

Because of the vague nature of some of the fits, I would reserve my recommendation of this kit to experienced modelers. Overall, I'm happy with the outcome, but if I were to build another, I would probably spend a little more time correcting the stance and possibly eliminating the need of a tail stand.

— Mike Klessig



Academy Panzer IV Ausf H

The German PzKpfw IV Ausf H was one of the most widely used of the numerous German tanks, serving on all fronts until the end of the war. Academy's kit is labeled "German Panzer IV Ausf H 'ver. MID.'"

Many of the 471 parts in the kit are meant for different versions, so be careful and study the options in the instructions. There are 45 Zimmerit decals; they should be attached to the specific parts before assembly because of the locating holes that need to be opened by drilling or punching. I found that the Zimmerit decals needed a small amount of white glue to keep the edges down.

With the help of the 22-page instruction manual, the build went along with no problems. All the parts fit well with no filler needed. The only exception was the turret-

to-hull fit, which was tight enough to prevent the turret from turning. Just trim the opening.

The one-piece vinyl tracks were well done and went together with no hint of the connection area. Even the acrylic paint adhered well.

I deviated from the camo paint scheme of the box art and color prints in the instructions to present something different, painting a tricolor scheme with Testors panzer dunkelgelb and Tamiya olive green and hull red. An overcoat of Pledge Floor Gloss was applied



before decals so they would settle into the Zimmerit. I finished with dry-brushing, a wash, and a final coat of Testors Dullcote. I attached the tracks and other different hand-painted parts (tools, guns, muffler etc.) last.

Academy did a nice job on this kit — it's a good, solidly detailed model that

Dekno Howard DGA-15P/NH-1

Kits of civilian aircraft are relatively rare in 1/72 scale, and even more so if they're from the Golden Age of the 1930s and '40s. Dekno Models of Spain is one company that offers interesting options from this era in resin, although many come with military markings — sheep in wolves' clothing.

Dekno's newest release is a Howard DGA-15P — dubbed *DGA* (for *Damned Good Airplane*) by its designer, Benjamin Howard.

The robust, stylish personal transport was pressed into military service in World War II, serving the U.S. Navy as an NH-1 "blind flying" instrument trainer as well as overseas as an ambulance with Free French

forces. Both options are included in the Dekno kit.

Cast in an eye-catching powder blue resin, the parts are detailed and well defined. The smaller detail parts are a bit over-scale and are difficult to remove from their pour plugs. However, it was a pleasant surprise that the resin struts were easily removed, thanks to the molded-in gaps in the plugs. The resin is resilient and reasonably strong — I didn't have to replace any broken parts. Clear resin windows are included, and while they were quite thick they fit exceptionally well. I added Pledge Floor Gloss (PFG) to the windscreen to enhance its clarity,

along with a touch of filler at the top where it meets the wing.

A full interior is included, along with a separate cabin door that can be posed open — although the thickness is over-scale. Be aware that the decals are sealed with a carrier film over the entire sheet, not the individual images. I found that out while attempting to apply the instrument panel decal — better then than later! The fuselage halves needed sanding along the mating surfaces to even them up prior to gluing them — my sanding must have been a bit too exuberant, because I had to restore some material at the nose

with a piece of styrene rod stock. I painted the detailed one-piece engine casting and mounted it inside the one-piece cowl prior to adding it to the fuselage using the alignment tab molded on the nose — well-designed, Dekno!

I had chosen the Navy NH-1, which includes green stripes on the wing — Testors willow green — so I left





Kit: No. 13516 **Scale:** 1/35

Mfg.: Academy,
www.academyhobby.com

Price: \$59 **Comments:** Injection-molded, 473 parts (vinyl tracks, thread), decals

Pros: Good fits, detailed instructions; Zimmerit option; tracks fit and take paint well **Cons:** Needed white glue to keep some of the Zimmerit decal edges down

doesn't need aftermarket photo-etch. I spent 35 relaxing hours building and painting, and I would recommend Academy's PzKpfw IV to anyone who has a couple kits under their belt and can follow instructions.

— Ted Horn



Kit: No. G.A.720700 **Scale:** 1/72

Mfg.: Dekno Models,
www.deknomodels.com **Price:** \$39.99

Comments: Resin, 45 parts, decals

Pros: Great fits **Cons:** I would have liked a civilian version

the struts off for masking. Otherwise, the full airframe was assembled and painted, leaving off only the prop and petite tail wheel. After first spraying the stripes, I masked them and applied Tamiya flat aluminum. Decals were trimmed as closely as possible, then applied; they settled down nicely. After the window masking was removed, I added simple rigging lines at the tail — not shown clearly on the artwork or mentioned in the instructions — and the Howard was finished.

I spent a little more than 10 hours on this charming little kit and, while I wish it had at least one civilian decal option, it was an impressive and simple build. I will have to try some more of Dekno's forgotten flyers, like a Stinson Reliant, or ...

— Chuck Davis

Valom J2F-1 Duck

Grumman's Duck was a biplane amphibian that could also operate from aircraft carriers. The J2F was developed from the similar JF and had an enlarged hull that could carry passengers beneath the cockpit.

Valom has released a pair of Duck kits, a J2F-6 and this J2F-1. The parts in both kits are the same, but for this earlier version you need to cut off the forward fuselage and replace it with alternate parts. The kit comes with photo-etched (PE) detail parts for seat harnesses, rudder pedals, and instrument panels. Photo-film instruments are also provided, along with a pair of vacuum-formed canopies. Decals for a camouflaged and a "yellow-wing" Duck look good.

The surface detail on the main parts is well done. The fuselage is molded to the contours of the later J2F-6 with its raised engine mount. The instructions show where to cleave the forward fuselage and add the alternate parts. Careful cutting and assembly will reduce the amount of filling and sanding on this step.

The cockpit has good detail and fits into the fuselage without trouble. Valom provides a basic machine gun for the rear-seater, but there are no attachment points to hold the half-ring gun mount. One little detail: Valom's color code in the instructions says "blue" for items that should be flat black.

It isn't clear exactly how and where the parts for the firewall and landing gear mount inside the fuselage in Step 3. Photos show a wide variety of intakes and vents in the forward fuselage. A photo of the example I chose to model shows no scoop (part No. 64 in Step 6), so I left it off.

The illustrations for installing the landing gear are poor, so I browsed the web to find photos of how the multi-armed retraction mechanism should look.

The biggest hurdle was mounting the upper wing. There are shallow divots to show where most struts should go, but there are no divots for the forward pair of cabane struts. Complicating matters is the misnumbering of the cabane struts in the instructions. You should mount the longer and wider ones to the rear. There is no forward view in the instructions to show the angles at which the struts should be placed. I used solvent cement to attach the cabane struts to the fuselage, then quickly dry-fit the upper wing and adjusted the angles of the struts before the glue set.

In Step 11, the short N struts that brace



the float on the right wing are shown backwards — just rotate them 180 degrees and install. The kit's vacuum-formed canopy is clearly cast and fits well to the fuselage.

One of Valom's markings options was a Duck assigned to the carrier USS *Saratoga* (CV-3). The drawing shows this aircraft in blue gray over light gray, but a photo in Al Adcock's *U.S. Navy Flying Boats and Amphibians in World War II* (ISBN 978-0-89747-556-3, Squadron/Signal) shows this aircraft in the short-lived 1941 overall light gray scheme that I chose. The decals are well printed, but they are thin and rubbery. I applied a coat of Microscale Liquid Decal Film to the decal sheet to get them to handle more easily.

There is no guide for rigging in the instructions. The box art helps a bit, but I had to consult references to figure it out.

I put 31 hours into the Duck, not bad for a detailed biplane in this scale. I think beginners would have trouble building this model, but experienced modelers should be able to handle it.

— Paul Boyer



Kit: No. 72112 **Scale:** 1/72

Mfg.: Valom, www.valom.net **Price:** \$28

Comments: Injection-molded, 103 parts (23 PE), decals **Pros:** Good surface detail; alternate parts for early and late Ducks; good vacuum-formed canopy with spare; fine PE details **Cons:** Instruction errors impede assembly; no rigging diagram; thin, rubbery decals

By Mark Hembree

Messy Messerschmitt

Q I am trying to improve my air-brushing techniques, but I still have problems getting the paint to spray as neatly as I think it should. I was working on a Tamiya Bf 109G-6, and the mottled camouflage did not go well. My brush tends to spray too wide, and I cannot get the cloud-like effect I want. It looks like it is splashing and spreading.

Here are the details: Paasche single-action brush with 1.5 tip at about 10 psi; Harbor Freight compressor, no tank; paint thinned about 2:1.

Also, I cannot get a nice soft line — there is always a wider spread of paint speckles. Is this a matter of pressure, poor compressor, cheap air-brush, or just lack of skill?

I am 71 and love the mag, but I get frustrated when I see what real modelers can achieve. At least I have not spilled paint recently!

— *Dave Lykens, State College, Penn.*



Dave wanted dappled, not speckled, camouflage and asked us to troubleshoot.

A Congratulations on not spilling paint! People like me are the reason aprons are made. Here are some suggestions:

The speckles on the edges suggest the paint is drying a little before hitting the surface. Especially at 10 psi, get closer to the surface so paint doesn't dry on its way to work.

If you are shooting at pressure as low as 10 psi, you may need to thin the paint more. You also might mix in a little clear flat to give it more body, without giving it more color, as you slowly build up the layers. (Just to be safe, the clear should be of the same type and brand as the paint.) Again, work closer to the surface.

That dark topside should have a soft but straight edge. Such a long, straight line is tough to do freehand. Your better bet is to roll out a line of poster putty as a mask at the line of demarcation. Press it lightly onto the surface, trying not to flatten it. Then hold the airbrush perpendicular to the line; don't angle paint down into the edge, but, rather, past the line of putty. Pull the putty off and you should have a straight but soft-edged demarcation.

Some may be able to produce the dappled pattern freehand, but others get the effect by shooting through raised masks. Make sure the mask is sufficiently raised; too close to the surface and you will have hard-edged dots, and that won't look good. (I have personally proved this.)

Varying skill levels

Q I recently purchased the 1/48 scale Revell F4U-4 Corsair from the Korean War (kit No. 85-5248). I noticed that a box with identical art was marked as Level 2 skill level, yet mine is marked as Level 4. The kits look identical, right down to the 1963 copyright stamped in the fuselage. Why the difference in skill level?

— *Gregory Randis
Melba, Idaho*

A This kit has been reboxed and rejiggered many times since 1963. The difference in "skill level" may well be that Revell USA had a 3-tier

rating system, while Revell Germany uses a 5-level rating based on the number of parts. So, the rating depends on who boxed it.

Raised masks and putty

Q I'd like to try paper masks with poster putty for a camo scheme, but I can't seem to find exactly what "poster putty" is. The closest I have found is "low-tack adhesive." Is that the same stuff? And are there are any brands to stay away from?

— *Greg Kolasa
Wantage, N.J.*

A Blu-Tack is the brand of choice. Other

"brand-X" putties may look the same, but they can be oily or too adhesive. So, while there are other brands, you must take care to test before use. Describing it as "low-tack adhesive" works for me. Silly Putty might serve, but you have to move fast because it settles.

Probably the best place to find Blu-Tack or something like it is at a craft store such as Ben Franklin or Michaels.

Don't stop the presses!

Q A subscriber for some years, I read every page of *FSM* with enthusiasm. I have noticed that digital references appear more frequently, and I appreciate that readers can use their keyboards to gather more information. But the "all digital" approach worries me — I would be disappointed if the paper version of *FSM* were to disappear. For me, there is nothing like taking my glasses (age!), my cigarettes (bad habit!), and a glass of whisky (to cure arterial tension, of course!) in the evening to enjoy reading a magazine that brings knowledge, imagination, and pleasure. Am I the only one?

— *Christian Stock*

Le Pin, Deux-Sèvres, France

A You are not alone, Christian. Our paper subscriptions outnumber our digital readers by tens of thousands.

The digital pub makes sense for foreign subscribers who may have trouble receiving the "hard copy" intact, and our digital component is important for staying current with our readers. Still, the vast majority prefers the physical magazine. We all spend too much time looking at screens as it is. I would no sooner read a book onscreen — I'm much more comfortable with a book in my hand. And on a summer evening in Wisconsin, it's best not to swat a mosquito with an iPad.

Fear not — if you will keep reading the magazine, we will keep printing it.

Where's the modern armor?

Q Why aren't there more companies making modern armor kits, and why are they so hard to find? I'm a former combat engineer looking for models of the MRAPs like the RG-31 and Buffalo, and the uparmored M1116 Humvee to do a diorama for my former battalion.

— *Michael Heffner
Indianapolis, Ind.*

A One of my own pet theories is that modern AFVs have been scarce because of whatever information about them that was classified

until recently. It may involve some small detail, but that's all it takes.

Nonetheless, more have been appearing lately. Meng, Kinetic, and Bronco are among the manufacturers who have been releasing kits of contemporary armor. Meng has a Cougar; Kinetic has an RG-31; Bronco has a Buffalo and an uparmored Humvee.

And there are more at www.FindModelKit.com/category/tags/mrap.

Hope that helps. Good hunting!

Shades of gray

Q I am building a Boeing 787 in United's new colors. The underside of the fuselage is gray. What color of gray is that? Is it Testors Model Master light gray?

— *Troy Julius Sr.*

Cincinnati, Ohio

A The gray on the 787 looks lighter than the old livery. There may be ongoing debates about it, I suppose, but to me it looks like "Boeing gray," evocative of Boeing's current house colors and scheme. So, my guess is FS16515 (Canadian Voodoo gray).

That Federal Standard number is available in several brands of acrylic and enamel paint.

Wishing on a Shooting Star

Q Do you know if anyone makes a kit of the P-80 Shooting Star in 1/72 scale? The only ones I can find are an out-of-production kit from Sword and an Airfix kit that needs lots of work to make a decent model. If none other is available, do you know if there is one on the horizon?

Dick McGee

Fountain Inn, S.C.

A In a quick search, the only kits I found in that scale in addition to what you mentioned were by Eastern Express (kit No. 72110) and Gran (7202). My guess is those, like the Sword kit, are short-run kits that will present special challenges.

We have not heard of any plans for another, but we generally don't report a kit until we see it released.

Why not spray cans?

Q Is there a reason why spray-can paints

GOT A MODELING PROBLEM?

Our Questions & Answers column is here to help. Email questions@finescale.com, or visit FineScale.com and click on "Contact Us." We are not able to conduct lengthy research, such as answering questions on markings and unit histories. Mail volume and space limitations prevent us from printing every question. Please include your name, town, state, and a daytime phone number.

from craft or hardware stores should not be used on models? I have used spray cans and brush-painting and it seems fine for me.

— *Bill Pugnetti*

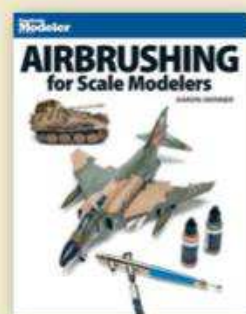
via email

A There is no reason at all that you can't use Rust-Oleum or other "hardware store" spray-can paints. Some people even decant them for airbrushing if it's a color they need but they want to airbrush it. And even regular airbrushers may opt for a spray can to prime a model or paint something especially large.

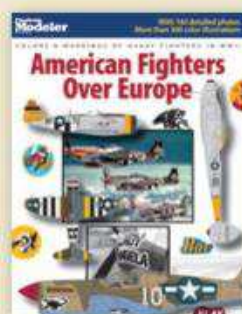
If it looks good to you, it is! **FSM**

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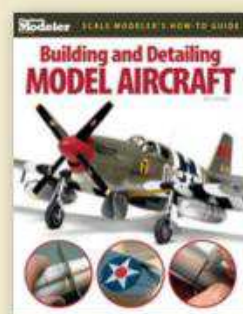
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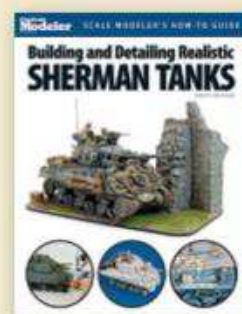
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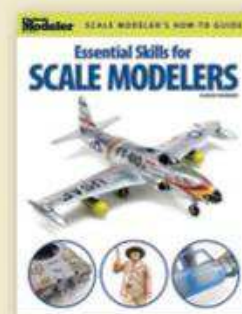
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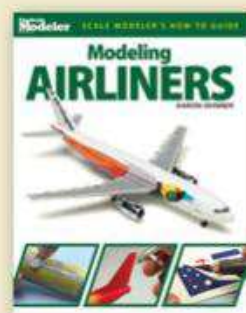
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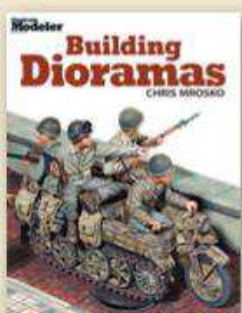
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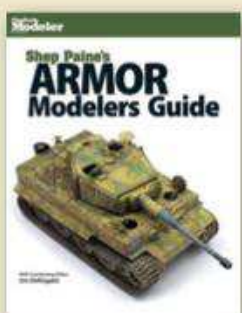
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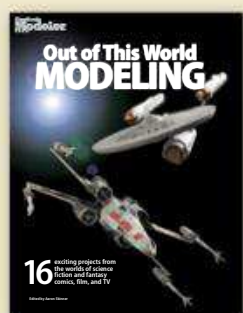
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IL, SCHAUMBURG: The Military Miniature Society of Illinois holds its 44th Annual Chicago Show Saturday, October 20, 2018 at the Chicago Marriott Schaumburg, 50 N. Martingale Road, Schaumburg, IL, 9:00am-4:00pm. For more information contact Show Chairman Pat Vess (pat@livezey.net 630-730-2492) or visit our website: military-miniature-society-of-illinois.com

IL, WHEATON: September 30th, 2018, 72nd ILLINOIS PLASTIC KIT & TOY SHOW, 150 show tables available, BUY/SELL/TRADE/ or just browse. Come out and have a great time! Cars, Trucks, Airplanes, Trains/Military and more. DuPage County Fairgrounds 2015 W. Manchester Road, Time: 9:00am-2:00pm. Admission: Adults \$5.00, 12 and under \$2.00. INFORMATION: Past-Time Hobbies, Inc. 630-969-1847.

MD, BALTIMORE: Maraudercon 2018 presented by IPMS Baltimore and Washington DC, Level Volunteer Fire Company, 3633 Level Village Road, Havre de Grace, MD, Saturday, November 17, 2018 9:00am-5:00pm. Contest: 70 categories. Registration \$15.00, under 12 and spouses/children of entrants free. Walk-ins \$8.00, families \$12.00. Vendor tables \$40.00. Prizes, Raffles. www.maraudercon.org Email, maltizer1@verizon.net. or garymichel13@yahoo.com, 301-922-5308.

NH, MANCHESTER: IPMS Granite State presents Granitecon XXVI: Falls Event Center 21 Front St. Manchester, NH. Sunday, October 21, 2018, 9AM - 4PM. General Admission \$2. First 5 adults entries \$5. Junior entries Free. For additional details, contact Rodney Currier, 603-726-3876. Visit www.granitestatemodelersclub.org

NY, POUGHKEEPSIE: HVHMG 2018, Celebrating 32 years, Elks Club Lodge, 29 Overocker Road, October 27, 2018. Sponsored by IPMS Mid-Hudson. Registration 9:00am-noon. More information at: www.hvhmg.org or contact John Gallagher at 845-462-4740 or ggallagherjoh@optonline.net

PA, CARLISLE: PENNCON 2018 Model Show and Contest. U.S. Army Heritage & Education Center, 950 Soldiers Dr. Saturday, September 15, 2018, 9:00am-4:30pm. Show Theme: AS SEEN ON TV. 'Make & Take' for kids 15 and under. For more info go to: http://www.cenpennipms.com/ or contact Chet Mohn, 717-774-4803. Email: Magus47@aol.com

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By Mark Hembree

Rare kit, rare build

Collectors are a substantial subset of the scale modeling hobby. Whether investing for financial gain or just trying to rationalize huge unbuilt stashes, people do like to accumulate kits.

True collectors like nothing better than a perfect, shrink-wrapped box. But lifelong modelers like Bob Hickl might be tempted to break into the box and build that thing.

Actually, when he found the exceedingly rare Aurora 1/93 scale *Sealab III* at a garage sale, there was no such dilemma. “It was a glue bomb,” he says. He bought it for 50 cents — not bad for a kit that can fetch \$200–\$500.

For those who may not remember it: At a time when America was enthralled by Mercury, Gemini, Apollo, and the derring-do of astronauts reaching for the moon, the U.S. Navy’s Project Sealab sought to explore “inner space” by placing aquanauts hundreds of feet under the ocean to live and work in a deep-sea environment. *Sealab I* was launched — sunk, actually — in July 1964. Following in August 1965 was *Sealab II*, where former astronaut Scott Carpenter spent a month 200 feet underwater. A congratulatory call from President Lyndon Johnson was comically delayed when a telephone operator had to be convinced to put the call through despite Carpenter’s voice being distorted by the helium he was breathing in a decompression chamber.



The ill-fated *Sealab III* was stationed 600 feet under water in February 1969, but was plagued by problems that led to the death of a diver and the end of the program.

That was shortly before Aurora launched its “Man in the Sea” contest in 1970 to promote its new 1/93 scale kit. By sending in a box end and an essay — “I’d like to live for two weeks on the ocean floor in *Sealab III* because ...” — modelers could win scuba and water ski gear. Unfortunately for Aurora, this and plans for other ocean-going kits, including a Jacques Cousteau *Calypso*, met an early demise.

Nearly fifty years later, Bob was finally ready to go to work on the Aurora kit. He tore into the model to make improvements, using styrene to add a ladder, lift rings, and plumbing

to the tower hatch. The catwalk has Trumpeter 1/350 scale chain railings, with strip styrene for frames, and stainless steel photo-etch for mesh and screening. Habitat fish screens on the side are made of the same, and ballast-tank baskets also received the PE mesh. Plastic habitat outriggers were replaced with metal rod.

Bob says, “Unlike Aurora’s vision of a clear side to show the interior, since that area was a mess on this model I just modeled the exterior.

“A number of other items could be added, but I determined it might look too busy on the base. I chose to add the decompression/rescue chamber. It was scratchbuilt using a wood ball for the domed portion, plastic rings and a 1/24 scale car wheel for the entry, as well as styrene rod for the air bottles

surrounding the chamber.”

All in a day’s work for Bob, who has been employed in hobby shops most of his life (currently at Great Lakes Hobby & Toy in Sterling Heights, Michigan). His *Sealab III* won a silver medal at WonderFest 2018 in Louisville, Kentucky.

It was a challenging project as well as a fond memory. “I was about 9 when this kit was released,” he says. “I thought it was an odd choice at the time, but there was logic to it. While other plastic kit manufacturers were modeling space exploration, Aurora went its own way.”

As President Johnson told astronaut/aquanaut Carpenter, “You’ve convinced me and all the nation that whether you’re going up or down you have the courage and the skill to do a fine job.” **FSM**

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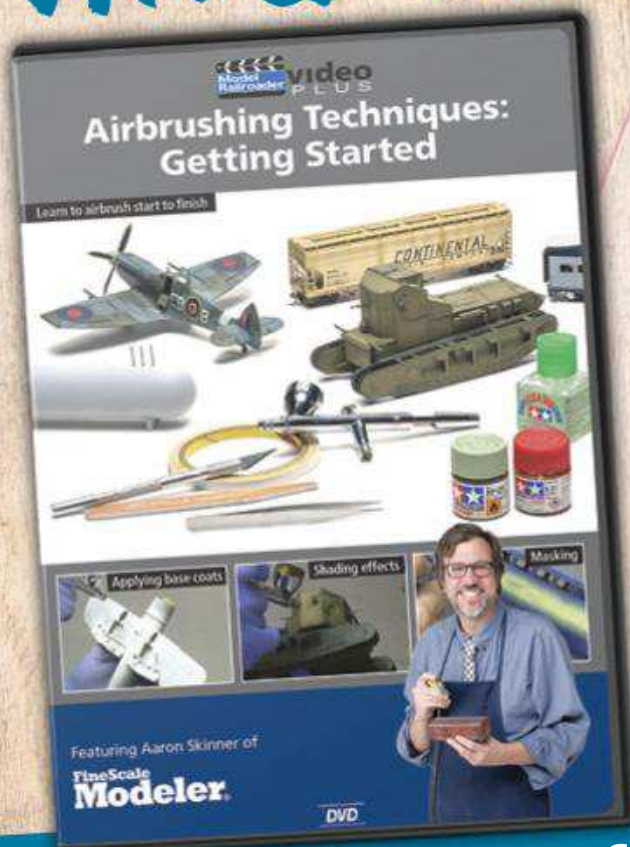
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