A supplement to *FineScale Modeler* magazine

BASIC TECHNIQUES ADVANCED RESULTS

FineScale Modeler MAGAZINE

Adding Detail

ESSENTIAL TIPS TO HELP YOU BUILD BETTER MODELS

SUPERDETAIL

PAINTING

PHOTOETCHING

It's all in the details

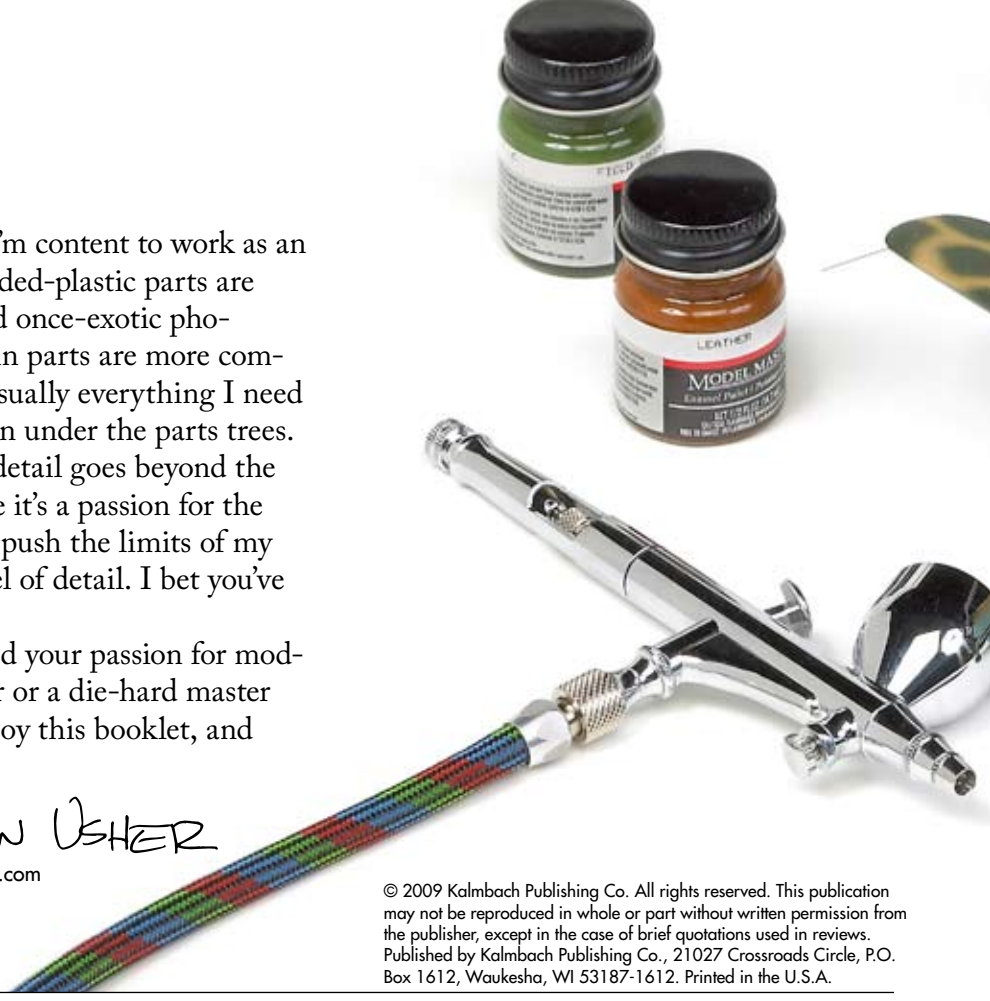
MOST OF THE TIME I'm content to work as an out-of-the-box builder. Molded-plastic parts are more detailed than ever, and once-exotic photoetched-metal and cast-resin parts are more common in off-the-shelf kits. Usually everything I need is provided, neatly bagged and tucked in under the parts trees.

Sometimes, though, my passion for detail goes beyond the boundaries of a box-stock build. Maybe it's a passion for the subject matter, or maybe it's a desire to push the limits of my skill that drives me to add a higher level of detail. I bet you've had the same experience.

FineScale Modeler was founded to feed your passion for modeling, whether you're a weekend builder or a die-hard master modeler. Either way, we hope you'll enjoy this booklet, and thanks for your interest in *FSM*.

Matthew Usher

editor@finescale.com



FineScale Modeler MAGAZINE

1/48 Scale | Construction

Detailing and painting a BATTLE OF MIDWAY BUFFALO

Converting Tamiya's 1/48 scale kit to produce a Marine Corps fighter • BY BART CUSUMANO

Most Japanese aircraft outclassed Brewster's Buffalo when World War II started, but 20 F2A-3s fought hard at the Battle of Midway in June 1942. Bart modeled one of those defenders, converting and detailing Tamiya's 1/48 scale F2A-2.

I am a big fan of Allied World War II aircraft, and I've always liked the look of Brewster's little, barrel-shaped Buffalo. Finding Tamiya's 1/48 scale F2A-2 kit and an old AeroMaster F2A-3 conversion set in my stash – and needing a bit of a break from my usual armor building – I decided to take a crack at this conversion project.

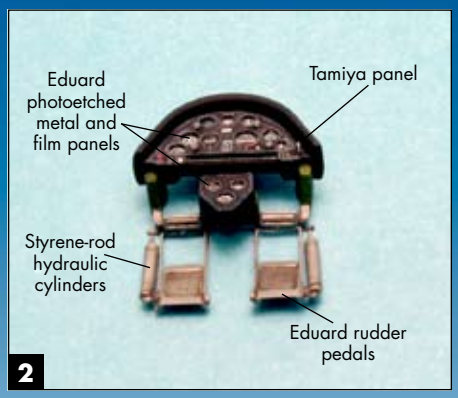
To spruce up the model, I added some Eduard photoetched-metal details and a resin landing gear set from Czech Master Kits.

Fuselage surgery

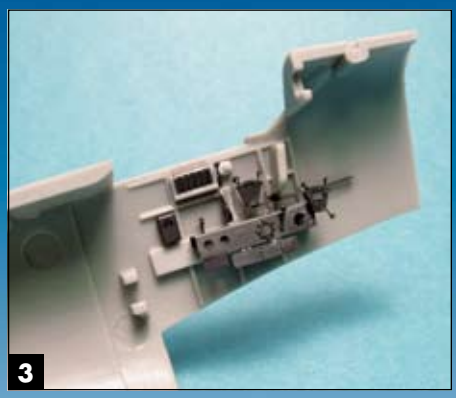
Normally, I start an aircraft model with the cockpit. This time, I felt I needed to see how well the resin conversion piece would fit the Tamiya fuselage. I didn't want to cut the fuselage apart with the cockpit in place.

After cleaning up the parts, I removed the forward sections of the Tamiya fuselage halves (parts 14 and 52) according to the instructions in the AeroMaster set, **1**. Test-fitting showed a good fit between the altered fuselage and the resin part.

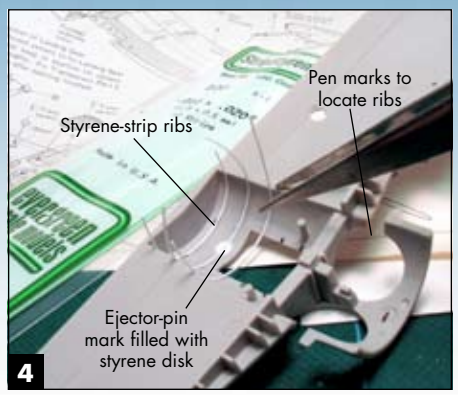
Bart saws off the front part of the Buffalo fuselage halves. AeroMaster resin will extend the fuselage for the bigger-engined F2A-3.



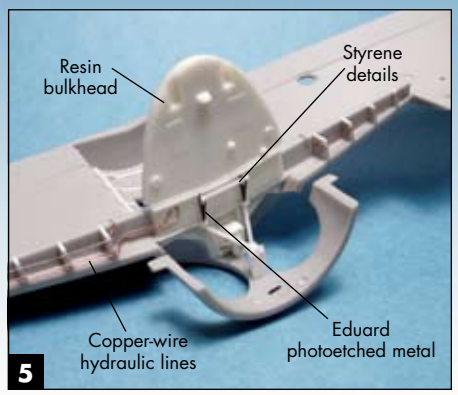
Bart replaced heavy plastic rudder pedals with Eduard photoetched metal and doctored them up with scratchbuilt improvements.



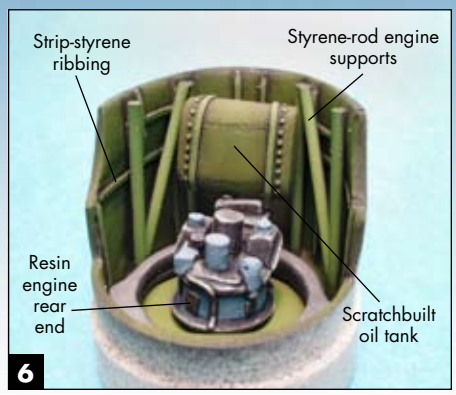
The detail of the old Tamiya Buffalo cockpit isn't bad, but Bart wasn't satisfied. He enhanced the walls with photoetched metal.



Tweezers position styrene strips in the cockpit floor before gluing. Bart trimmed them to fit after the glue set.



After fitting the CMK resin gear-bay bulkhead, Bart combined details from the CMK resin and Eduard photoetched-metal sets, then added copper wire for hydraulic lines.



Bart detailed the interior of the AeroMaster fuselage section, as it would be visible through the Buffalo's wheel wells.

Cockpit

Tamiya's 1970s-vintage cockpit provides OK detail, but it can benefit from additional parts because so much will be on display under the large canopy.

I used Eduard's two-part photoetched-metal instrument panel (be careful to choose the right one; Eduard provides four options). It really made the cockpit come alive. I added photoetched-metal rudder pedals, using short pieces of styrene rod to replace the flat, metal pneumatic tubes on each pedal, **2**.

I enhanced the cockpit walls with Eduard parts, **3**, and replaced the kit's seat with Eduard's photoetched-metal item.

I also added strip-styrene ribbing to the cockpit floor in the lower wing, **4**.

Wheel wells and engine

Good reference material is key here. First, I removed molded details that would be replaced with resin, photoetched-metal, and scratchbuilt parts.

The big addition was the resin wheel-bay bulkhead from the CMK set; it needed dry-fitting and fiddling, but in the end it fit perfectly. I added Eduard photoetched metal and the rest of the CMK parts, and used copper wire for hydraulic lines, **5**.

I detailed the interior of the main AeroMaster fuselage section with styrene-strip ribbing, then added styrene-rod engine mounts and a scratchbuilt oil tank. I had a poorly molded resin Curtiss-Wright engine, but the rear section – the part visible through the gear well – was usable. I removed the rear, added a few details, then attached it and the resin exhaust-collector ring to the AeroMaster section, **6**. Then I cleaned up the Tamiya engine for painting.

Interior decorating

I primed all the interior components (except for the instrument panels) with a mix of Model Master Italian dark brown (No. 2111) and flat black (1749) enamels. I airbrushed panel interiors in the cockpit and most of the wheel bay with Model Master interior green (1715) mixed with my dark brown primer, then misted over both areas. Panels are highlighted with straight interior green to give the colors depth. I hit the rest of the gear bay with Model Master medium gray (1721) highlighted with light gray (2038).

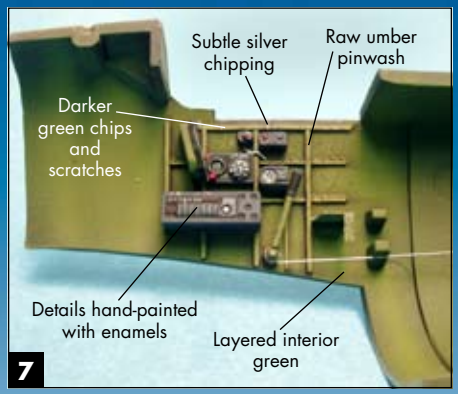
After picking out cockpit and gear-bay details with Model Master and Humbrol enamels, I dry-brushed the engine with a mix of silver printer ink, raw umber oil paint, and Model Master flat black. It's important to note that the printer ink I used is not the type used in computer printers, but an ink used for commercial printing.

After spraying Testors Dullcote on everything (except the instrument panels) and letting it dry for a couple days, I applied a raw umber pinwash. I added scratches and chips with Model Master and Humbrol enamels, and worn-through-to-the-aluminum wear applied sparingly using the silver ink mix, **7**. I finished with another coat of Dullcote.

I installed the interior, then glued the fuselage together and attached the wings.

Nose job

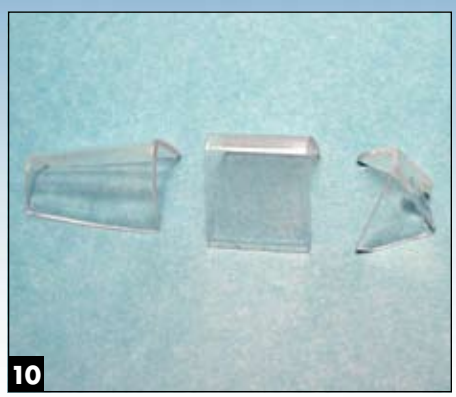
Once the engine was mounted in the AeroMaster part, I attached the Tamiya cowling. The extremely poor fit required a lot of sanding and reshaping, which obscured a lot of panel lines. I had the same fit issue when I mated the forward and rear



Careful painting and weathering brought the Buffalo's cockpit to life. This view shows the starboard wall.

Despite early test-fitting, Bart ended up with gaps at the front and back of the resin fuselage extension.

Bart pulled virtually every trick to blend the resin plug, including styrene strip and stretched-sprue shims, gap-filling super glue, and epoxy putty. All the reshaping obscured engraved detail.



To model the canopy open, Bart cut apart the windscreen and rear sections from the Tamiya parts and combined them with the sliding section of the AeroMaster vacuum-formed canopy, which had the correct F2A-3 framing.

SOURCES

Kit, Tamiya 1/48 scale U.S. Navy Brewster F2A-2 Buffalo (No. 61019). Note: This kit was first issued as No. MA119. It is currently out of production, but Tamiya's B-339 Buffalo (kit No. 61094) contains the F2A-2 parts; it's available from Tamiya America, 800-826-4922, www.tamiyausa.com
Conversion set, AeroMaster (No. HT-4), out of production. Note: Special Hobby, www.mpm.cz, has released a couple of kits of the long-nosed Buffalo, including one boxed as an F2A-3 "Battle of Midway" Buffalo. Much of Bart's work is applicable to this kit.
Decals, Yellow-Wings (sets 48-048 and 48-025), 908-862-7176, www.yellow-wingsdecals.com
Photoetched-metal details, Eduard (No. 48387), 420-47-611-8259, www.eduard.cz
Resin details, Czech Master Kits (No. 4169), www.cmkkits.com

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F2A Buffalo in Action (Aircraft No. 81), Jim Maas, Squadron/Signal, ISBN 0-89747-196-2
Navy Air Colors: United States Navy, Marine Corps, and Coast Guard Aircraft Camouflage and Markings; Volume 1: 1911-1945, Thomas E. Doll, Berkley R. Jackson and William A. Riley, Squadron/Signal, ISBN 0-89747-143-1
U.S. Navy and Marine Corps Fighters, William Green and Gordon Swanborough, Arco Publishing, ISBN 0-668-04121-8

fuselages, **8**. I eliminated gaps and steps using a combination of plastic strip, stretched sprue, super glue, and epoxy putty as filler, **9**.

Canopy

AeroMaster included a vacuum-formed canopy with correct F2A-3 framing. But I've never been satisfied with my ability to blend thin vacuum-formed parts into a model. So, I combined the sliding section of AeroMaster's canopy with Tamiya front and rear sections, **10**. I thinned the exposed edges of the Tamiya parts with a No. 11 blade for better scale appearance.

Before adding the rear canopy section, I built up the rear deck with styrene sheet and strip, **11**, then attached Tamiya's life-raft container and an Eduard photoetched-metal antenna.

I corrected the rear canopy's poor fit with stretched sprue, styrene strip, and epoxy-putty filler. After sanding and blending, the clear parts were a foggy mess; I used water, Squadron polishing sticks, and Brasso to clear them up. I added canopy side rails with styrene strip, then attached the windscreen, blending with epoxy putty.

Stem to stern

I scratchbuilt an arrestor hook from flattened and bent solder, then glued it in the retracted position in the Buffalo's tail. After hollowing out Tamiya's exhaust stubs with a motor tool, I attached a small piece of brass rod in front of the cockpit as a secure mount for the gunsight, **12**.

I super glued the resin AeroMaster propeller hub to Tamiya's prop, hollowed out styrene rod for the wing and cowling guns, and added styrene rod and strip to CMK's tail wheel, **13**.

Scribing and masking

I rescribed missing panel lines using Dymo label tape as a guide. In places with weird and difficult curves, such as the sides of the fuselage and the cowling, thick label tape doesn't conform well. I cut the label tape into thin strips, then reinforced each strip with Tamiya tape to prevent slippage, **14**.

I masked the cockpit, wheel wells, and engine opening with Tamiya tape, facial tissue, and Silly Putty.

Sanding the canopies to fit obliterated the molded framing. I used photos, drawings, and a spare canopy as guides to mask the frames with Tamiya tape, cutting thin strips of tape on glass and applying them to the canopy. For rounded frames, I used an old Verlinden scribing template to trace the appropriate shapes onto tape.

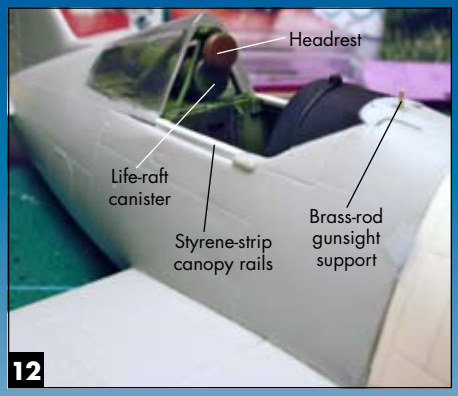
A rubdown with alcohol and my Buffalo was ready for paint.

Painting

I primed the airframe with the same mix of Italian dark brown and flat black used inside. I like to work in thin, airbrushed coats of color from dark to light to give the finish a richer look.

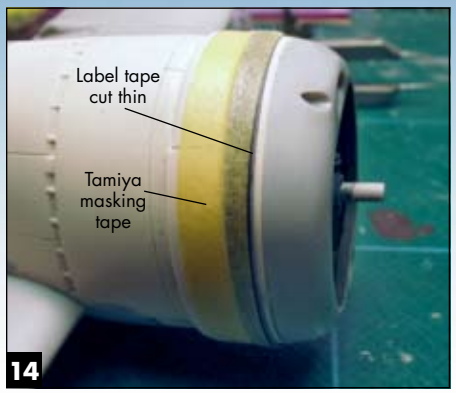
For the underside, I airbrushed Model Master medium gray (No. 1721) on panel centers, leaving dark primer exposed at the

The long deck behind the cockpit received styrene sheet and strip before Bart added the kit's life-raft canister and headrest.

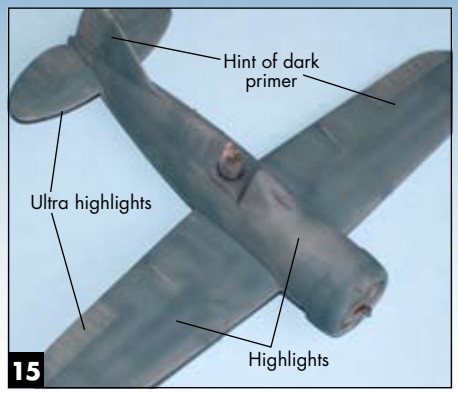


Bart inserted a thin brass rod in front of the cockpit to support the kit's telescopic sight. Note the styrene canopy rails.

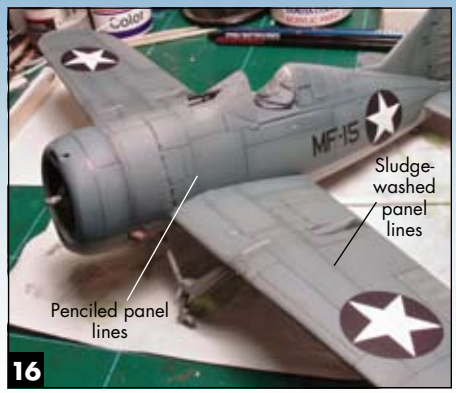
Bart spruced up CMK's resin tail wheel with styrene rod and tube, replacing much of the structure to add realism.



For a curve-hugging scribing guide, Bart cut label tape into thin strips that could be easily bent. He backed the strips with Tamiya masking tape to make sure they stayed put.



Bart achieved layered and weathered camouflage over a dark primer, spraying thin coats of progressively lighter shades.



Bart's rescribed panel lines proved too shallow for a sludge wash, so he drew them in with a gray artist's pencil over a coat of clear flat.

edges. Then, I misted medium gray over the entire model, partially blending the dark brown. Next, I highlighted panel centers with Model Master light gray (2038).

Topside, I airbrushed panels with a mix of Humbrol flat RAF blue (No. 96) and Humbrol gloss midnight blue (15), then misted the entire upper surface to blend the brown primer. I added a little Humbrol steel gray (87) to the blue mix to further highlight panel centers. After adding a little more steel gray to the highlight color, I highlighted leading edges, wingtips, and the low points between ribs on control surfaces, **15**.

A coat of Pledge Future floor polish, airbrushed at 30 psi through a small nozzle, sealed the paint in preparation for decals and weathering.

The U.S. Marine Buffalos at Midway carried few markings. I used Yellow-Wings Decals' national insignia (set No. 48-048) and fuselage codes (48-025) to mark it as the F2A-3 Capt. William C. Humberd flew on June 4, 1942, when he downed a Kate and a Zero. Leftover Microscale decals (they were about 20 years old) supplied the model and bureau numbers as well as the service designation on the tail.

Weathering

To define the panel lines, I applied a sludge wash of acrylic paint and water with a few drops of dish detergent. Unfortunately, the rescribed lines didn't hold the sludge – they weren't deep enough, I guess. I airbrushed Testors Dullcote, then used a gray artist's pencil to draw the rescribed lines. I was constantly sharpening the tip, and the technique was time-consuming, but the results were worth it, **16**. I sealed my work with another layer of Dullcote.

Next, I applied a raw umber pinwash to define control surfaces as well as selected rivets and panel lines. I feathered the effect with a little clean thinner, then further softened it by dry-brushing the base colors around the washed areas.

On faded WWII Pacific Theater fighters, areas of wear show up as darker marks and scuffs. I recreated these by very lightly dry-brushing the base color. I added scratches by thinning the base and applying it with a fine-point brush.

A few restrained chips of bare metal were added around high-traffic areas, such as the cockpit and wing-gun access panels, as well as the leading edges of wings and stabilizers. I used the silver ink mix and placed those chips inside previously applied dark scratches and chips.

I added a little Model Master raw umber enamel to Dullcote, then sprayed and streaked the fuselage behind the cowling, working patiently and building up light coats until it looked right. This toned down the penciled panel lines.

An application of Dullcote sealed everything. Then I removed the canopy masks and added CMK resin navigation and formation lights (set No. 4060), using Dullcote as an adhesive. After attaching the propeller and a stretched-sprue antenna wire, my F2A-3 was battle-ready. **FSM**

www.FineScale.com

To see more of Bart's 1/48 scale F2A-3 Buffalo, visit www.FineScale.com and click on "How-to Articles." Subscribers can also read about Brewster's diminutive fighter and its role at the Battle of Midway.

1/48 Scale | Construction

Superdetail YAMAMOTO'S G4M1 "BETTY"

Scratchbuilt & aftermarket parts enhance Tamiya's kit • BY BOB ZOGLIO

On April 18, 1943, Adm. Isoruku Yamamoto – best known for planning the attack on Pearl Harbor – died when the Mitsubishi G4M1 in which he was traveling was ambushed and shot down by a squadron of P-38 Lightnings over the Solomon Islands. To depict his transport, I've loaded Tamiya's model with a ton of scratchbuilt detail and a few photoetched-metal parts.

Cockpit

Early on, I decided to add visual interest by deflecting the control surfaces. I cut the yokes from the control columns and repositioned them left, **1**. Using a punch-and-die set, I made thin styrene disks, then glued them to the columns and reattached the yokes. I added wiring and a styrene-rod microphone to the control columns.

To left-deflect the rudder bar, I removed the rudder pedals, placed a thin styrene disk between the pedals and bar, then reattached the pedals. For foot straps, I bent brass strips and attached them across the rudder pedals, painting them later to look like leather. I attached styrene grips and brass levers to the throttle quadrant, **2**, later painting them red, blue, and black.

To make sunshades, I painted toilet paper with light gull gray, lots of thinner, and flat base, then applied a light wash of burnt umber and Permtine thinner. I created a closed shade by rolling the tissue around a .020" sprue rod, then attached it by running it between two sprue stops I attached to the canopy. I made a rolled-up shade by wrapping thin brass strip around the paper.

I improved the front of the instrument panel with Eduard photoetched brass and sealed the rear of the panel with styrene strip. Since the panel rear is visible through the nose, I detailed it with styrene rods as well as wire, hoses, and cables, **3**.

I sawed off most of the seats' supports, leaving the tabs to attach the seats to the flight deck. I used a sewing pin to model rivets on the seats, then added lots more detail, such as adjustment levers and bracing made from styrene, brass hooks and clips, brass armrests, and lap belts from my spares box, **4**. Electrical boxes are placed throughout the cockpit.

I planked the navigator and radio-operator tables with scale wood from Kappler Mill & Lumber Co., which I sanded to shape and stained with Minwax, **5**.

Scratchbuilding a radio support, I

... I've loaded Tamiya's model with a ton of scratchbuilt detail ...

To model Adm. Yamamoto's ill-fated transport, Bob improved Tamiya's 1/48 scale G4M1 "Betty" with loads of scratchbuilt detail and a few photoetched-metal parts.

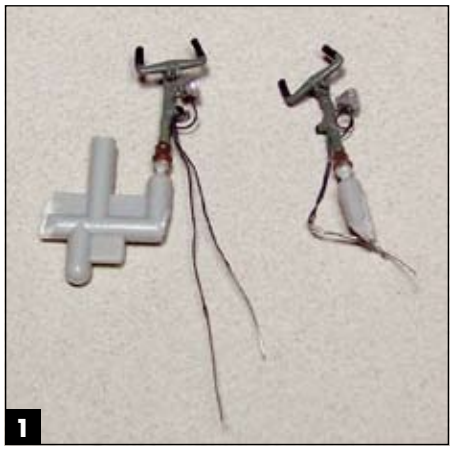
mounted two posts on the deck, placed 5mm hollow rods over the posts, then attached mounting brackets made from plastic sheet. I had a tough time getting the support to fit under the canopy: I had to glue a U channel down the center of the canopy, as well as a sprue stop, **6**.

I rendered the radio box from plastic stock, adding handles, rivets, and a vent hole. To replicate the radio face, I photocopied a scale-size faceplate, used Pledge Future floor polish to attach the copy to styrene, then applied a wash of Future thinned with acrylic aluminum, **7**. Wire and strip sprue produced the headset.

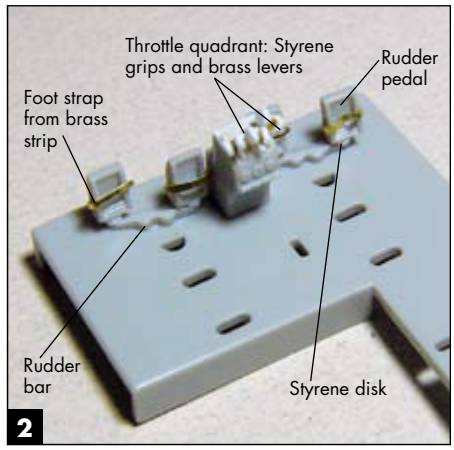
Studying references, I painted the cockpit light green, **8**.

Bombardier and turret stations

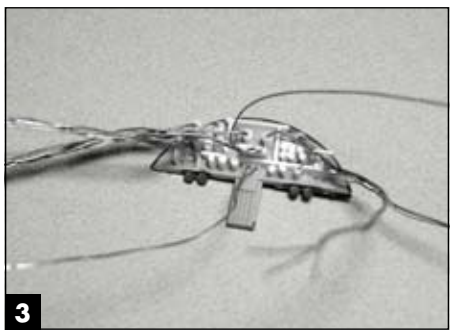
I drilled out four holes on each side of the bombardier's window frame and added t-strip styrene bracing under the bombar-



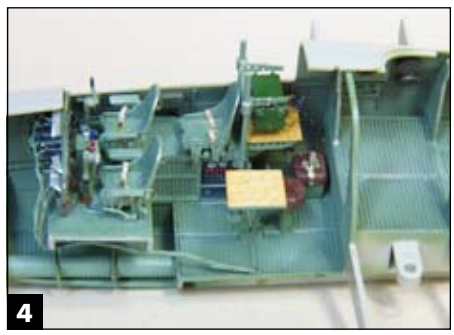
Bob removed the yokes from the control columns and deflected them left.



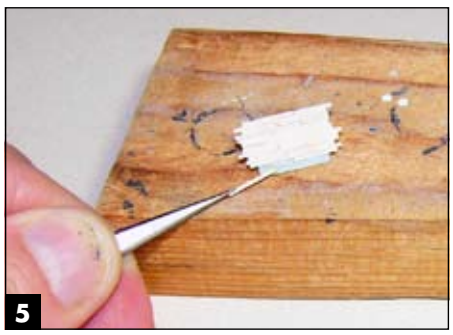
The rudder pedals and throttle quadrant were enhanced with styrene and brass.



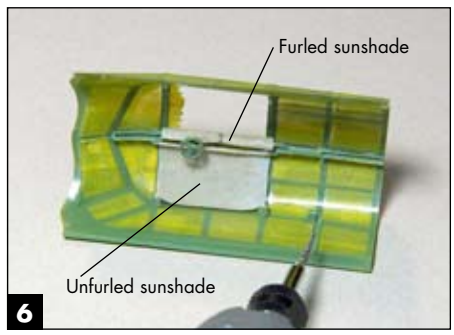
Bob closed the rear of the instrument panel with styrene strip, then installed bundles of styrene-rod detail, wire, hoses, and cables.



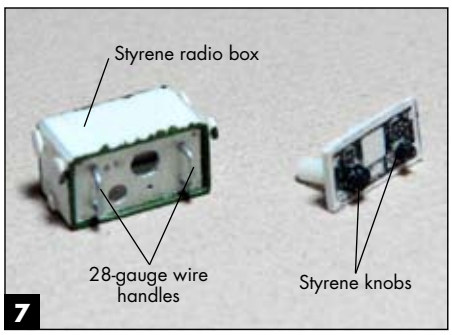
Souped-up seats include brass hooks and clips, brass armrests, lap belts, and adjustment levers shaped from styrene.



Bob super glued .012" x .023" wood from Kappler Mill & Lumber Co. for the navigator and radio tables.



Cramped crew! To get the scratchbuilt radio support to fit, Bob drilled holes and glued a channel down the center of the canopy. He says, "If you're going to add a radio support, I recommend looking for a vacuum-formed canopy." Note the homemade sunshades.



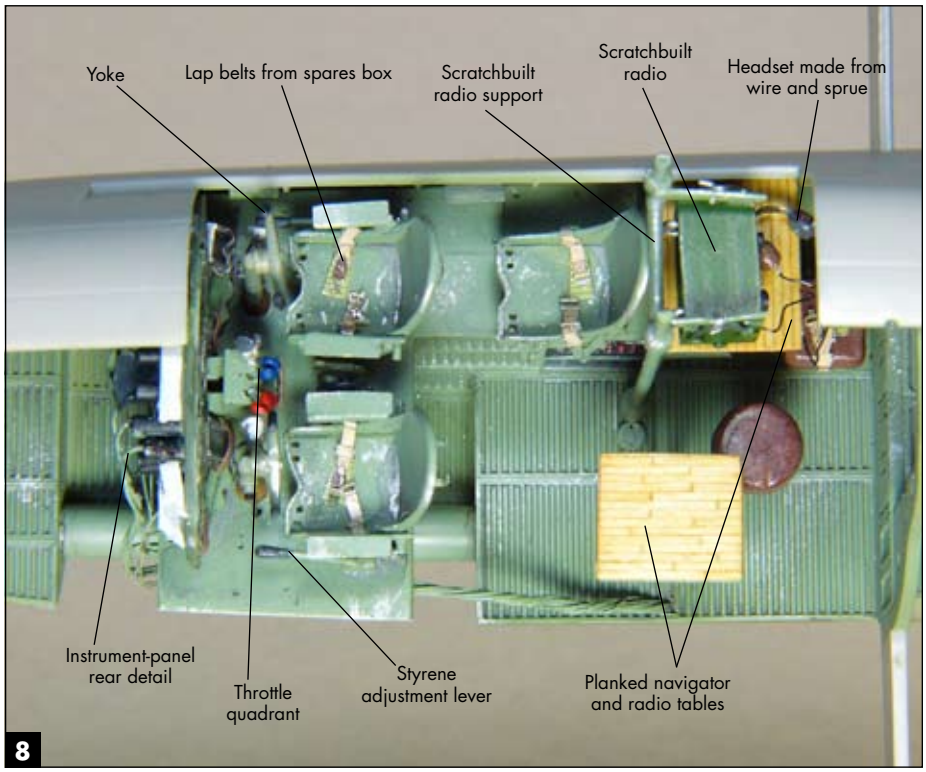
Using a styrene angle as a guide, Bob rendered the radio box from sheet styrene; handles are 28-gauge wire. For the radio face, he glued on a photocopied image and attached knobs made from styrene.

REFERENCES

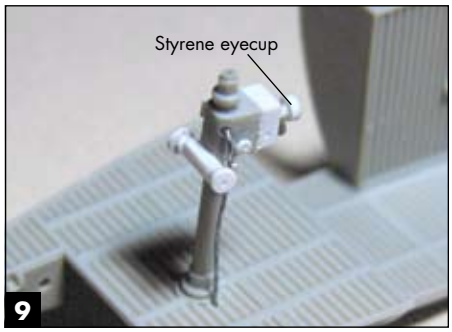
Mitsubishi G4M1 Web site, http://www.aramant.com/chuukou/zukai.html

G4M Betty, Volume 42, Gakken Co. (Japanese text)

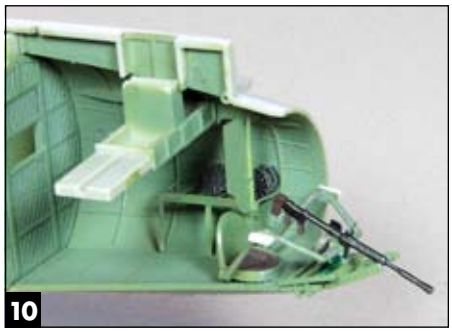
Japanese Aircraft Equipment, Robert C. Mikesh, Schiffer Publishing, ISBN 0-764320-97-1



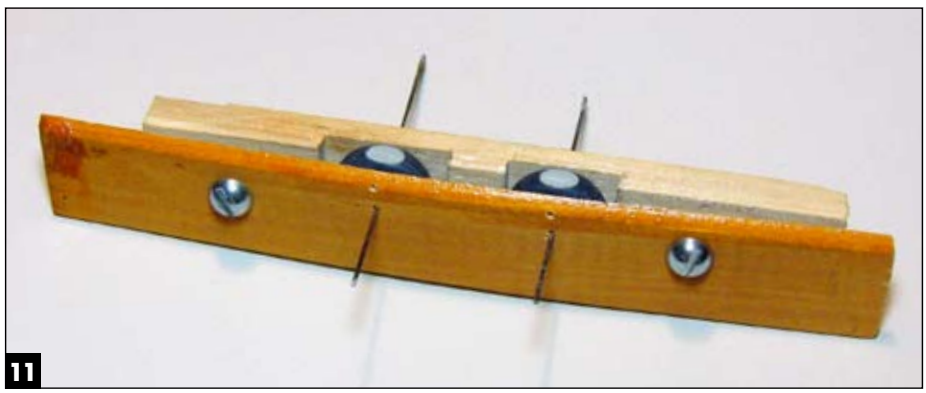
The Betty's cockpit, chock-a-block with detail, was painted light green.



Bob reshaped the bombsight with styrene rod and flat stock, using a punch-and-die set to make styrene knobs and an eyecup.



An Eduard ammunition rack, Lewis canisters, and a scratchbuilt foot extension enhanced the tail turret.



To realistically reflect the weight of the plane, Bob flattened the main wheels with a device he made of scrap wood, featuring holes sized for wheels of various sizes.

Bob used a motor tool to drill out the exhaust stacks, painting the insides flat black.

dier's station. To detail the Type 90 Mk.1 bombsight, I punched-out styrene dials, added knobs and an eyecup, and attached an electrical cable. Plastic rod and flat stock helped me reshape the bombsight, **9**. I sanded to depict the optical lens of the sight, then painted the bottom of the sight charcoal gray; the lens, gloss black.

From styrene rods and strips of sprue, I scratchbuilt a motor for the glass dome in the nose, lightly scoring it with a K&S tube cutter. I replicated part of the turret track by heating a thick strip of sprue and shaping it with a file.

I punched out aluminum bracing for the top-turret post, scattered Eduard photoetched-metal ammunition canisters throughout the gun stations, and bored out the guns.

To the tail turret station, I added an Eduard photoetched-metal ammunition rack, Lewis ammo canisters, and a footrest I made by tracing the shape of the floor on white paper, using a micro ruler to measure items and assembling details from styrene strips and rods, **10**. The tail-turret glass varied on G4M1s; Yamamoto's aircraft had the short version. So I shortened the glass with a razor saw; a motor tool thinned the edge to scale. I shimmed the gun mount to get a better fit. I also shimmed, trimmed, and added stops to fit and reinforce the bomb bay doors.

Nacelles and more

I added a U channel to the nacelles, as well more details: rivets, flight-control cables, a main hose, a brake reservoir made from plastic strip, plus reservoir and hydraulic lines. Before mounting the nacelles, I sprayed them Tamiya flat aluminum, then a mixture of Future, clear blue, flat green, and a few drops of Mr. Color to make it easier to airbrush.

After installing brake lines for the main landing gear, I sprayed them with metallic gray and medium gray and applied a wash.

To replicate the weight of the plane, I flattened the main wheels with a home-made wooden clamp, featuring precisely sized holes to handle large and small wheels, **11**. When clamped, the wood flexes to keep the wheels firmly in place. I deflected the tail wheel by drilling a hole to accept a brass pin mount.

Engines and more

After drilling out the exhaust stacks with a motor tool, I base-coated them with a mix of metallic gray and medium gray, applied a

Engines & Things supplied the resin Kasei 21 engines, which Bob finished with a wash of burnt umber, ivory black, and yellow ochre.

Bob used black artist's oils thinned with Permtine to put oil leaks on the spinner.

Talon acrylic metallics and a dark wash of acrylics helped Bob finish the underside of his Betty.

mix of metallic gray, medium gray, and bronze, then used flat black to replicate soot inside the stacks, **12**.

I installed Engine & Things' resin Kasei 21 power plants (No. 48167), painting the forward part of each engine block and outer cylinders a mixture of aluminum, metallic gray, and bronze; the aft part of the engine blocks dark sea gray (XF-54); and the pushrods black. After a wash of burnt umber mixed with ivory black and yellow ochre, I painted the spark plug wires metallic gray and installed the engines inside cowlings detailed with styrene strip framing, **13**.

Metallic gray, medium gray, and flat aluminum finished the propeller blades. After masking the blades with Parafilm, I sprayed the hubs aluminum, mimicking oil leaks with black artist's oils thinned with Permtine, **14**.

I removed the rudder, ailerons, and elevators, filling gaps in the control surfaces and stabilizers with wood epoxy and drilling lightening holes in the spars along the sides. After rounding the control surface fronts and installing mounting rods, I notched the control surfaces and attached them deflected.

Finishing up

I masked the clear parts with Tamiya tape and Bare-Metal Foil, sealing them with Future. After checking for flaws with a primer coat of Mr. Surfacer 1000, I painted the underside with Talon acrylic aluminum, building up layers of the very thin paint. I sprayed the undersides of the fuel tanks aluminum and steel, then applied a sealing wash of acrylics throughout the underside before selected panels were airbrushed with other metallic shades, **15**.

I airbrushed the upper surface with a mix of Tamiya dark green (XF-70) and a lighter gray-green, making the outer-wing panels darker than the inboard panels and spraying dark spots throughout. I created chips and wear by dry-brushing metallic paint and using fine-grit sandpaper on the tops of the wings, fuselage, and nacelles.

Roy Grinnell (www.roygrinnell.com) provided the "323" decals, which went down well. Since the kit's ID plate decal had a clear background, I cut a rectangle of Bare-Metal Foil, attached it, removed creases with a cotton swab, brushed it with Future, then applied the ID decal.

During the build, I broke a few flap hinges. So, I made a master from plastic, transferred the image to thick stock, and shaped new ones.

I heated Airfix sprue to make antennas, attaching them with Elmer's glue and painting them metallic gray. I attached cable tensioners with Elmer's glue, then tightened the antennas by placing a blown-out wooden match underneath them. With that, my first Japanese bomber was complete. **FSM**

Tons of scratchbuilt detail went into Bob's build of Tamiya's 1/48 scale Mitsubishi G4M1 Model 11 Betty.

1/350 Scale | Construction

BUILD YOUR FIRST WARSHIP

Photoetched metal brings to life Hasegawa's 1/350 scale *Yukikaze*

BY PAUL CHAMPIGNY

I usually model U.S. ships, but I was intrigued by Hasegawa's 1/350 scale Imperial Japanese Navy *Kagero*-class destroyer *Yukikaze*, which looks radically different from its American counterparts. I built Hasegawa's 1940 version of the ship (kit No. 40063; Hasegawa also offers a 1945 configuration, kit No. 40022) and enhanced it with Eduard's photoetched-metal detail set (No. 53032).

Opening the box, I was impressed with Hasegawa's beautiful, crisply molded sprues. The kit includes a two-piece hull and a three-piece main deck, as well as supports for the hull and deck parts. An option for a waterline build is not included. Overall, Hasegawa's parts have excellent fit, making the *Yukikaze* perfect for first-time ship modelers.

It's all in the details

I attached the bilge keels without filler, drilled out the hull portholes, and replaced the styrene propeller shafts with .040" brass rod, **1**.

Instructions for Eduard's photoetched-metal set are complex and thorough. I used Eduard's photoetched-metal torpedo-handling structure girders as well as the twin 25mm anti-aircraft guns, **2**.

Consisting of 14 photoetched-metal parts and two styrene parts, the anti-aircraft gun platform was a nightmare to assemble. After many attempts, I finally aligned all the parts with the platform – the plastic supports, the photoetched-metal cross piece, and the gusset rings. It was worth the hassle, though.

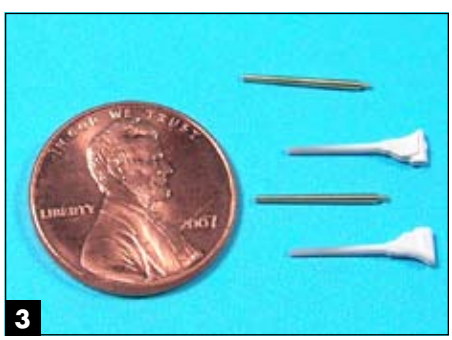
Weapons

After cutting the plastic gun barrels from the blast bags, I drilled holes with a #70 bit and inserted Modell Marine's brass gun barrels, **3**.

Each of the three gun turrets received a dozen photoetched-metal parts, mostly small railings that proved difficult to attach, **4**. I added 18 photoetched-metal parts, including more tiny railings, to the two torpedo launchers, **5**. These subassemblies were difficult to handle – so many small parts to break! – but added a lot to the ship.

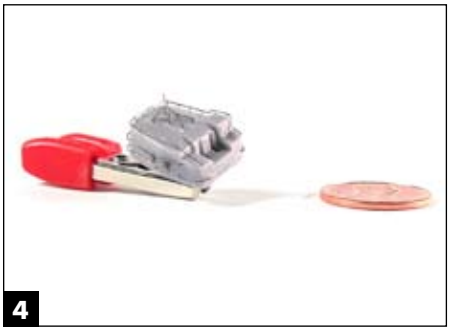
1 Adding small details can provide impressive results. Paul replaced Hasegawa's styrene propeller shafts with .040" brass rod.

2 Time and again, Paul chose Eduard's photoetched metal over plastic kits parts. He calls Eduard's 25mm anti-aircraft guns "exquisite."



3 Paul cut off the plastic barrels and drilled holes in the blast bags to install Modell Marine's brass gun barrels.

To model the destroyer *Yukikaze*, the only member of the *Kagero* class to survive World War II, Paul built Hasegawa's 1/350 scale kit and detailed it with an Eduard photoetched-metal set.



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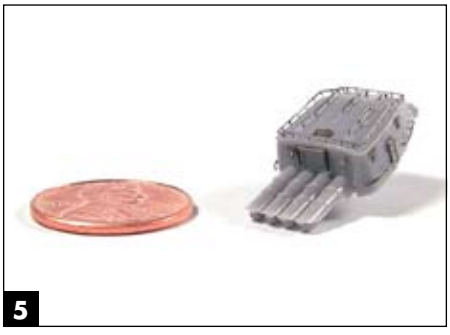
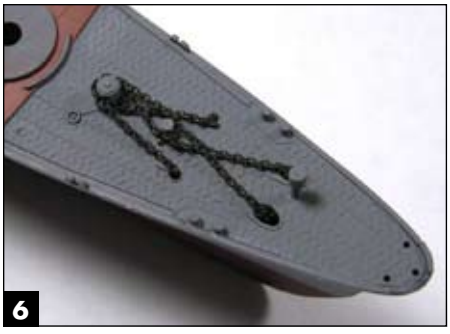
Eduard photoetched metal, including a ton of small railings, improved the gun turrets.



5

Paul added photoetched-metal railings and other details to the torpedo mounts.



6

For anchor chains, Paul drilled out holes on the deck and attached HO scale model-railroad chain.

7

Paul added styrene davits to the four boats. "For whatever reason, the Eduard set only came with two," he says. Photoetched-metal oars improved the rowboats; the motor launches got photoetched-metal rudders and propellers.

Yukikaze: A brief history

A *KAGERO*-CLASS DESTROYER, the Imperial Japanese Navy's *Yukikaze* (Japanese for *snowy wind*) mounted six 5" guns, two twin-mount 25mm anti-aircraft guns, and eight torpedo tubes. It carried intimidating "Long Lance" torpedoes and had a top speed of 35 knots.

As World War II progressed, the *Yukikaze* received several refits to improve its anti-aircraft and anti-submarine capabilities. It fought in many of the major surface engagements of the Pacific without receiving major damage, including Midway, Santa Cruz, the Philippine Sea, as well as the ill-fated Ten-Go offensive at Okinawa.

Of the 19 ships in its class, the *Yukikaze* was the only one to survive the war. On July 6, 1947, it was transferred to China and renamed *Tang Yan* as part of war reparations. After running aground during a typhoon, it was finally scrapped in 1970.

Brass-wire strips broke up the monotony of the brown linoleum deck.

Photoetched-metal ladders and platforms enhance the ship's foremast.

On deck

I encountered one major fit problem: Too much play where the aft stack meets the main deck. I mounted the aft stack too far forward, resulting in the aft torpedo having barely enough clearance to turn. So I used .010" sheet styrene to shim the stack where it mounted to the deck.

To make anchor chains, I drilled holes in the deck and super glued on HO scale (1/87) model-railroad chain (36 links per inch), **6**. After the glue had already dried, I found a photo showing the ship with one anchor chain. I didn't fret and left the chains.

I replaced the three plastic cable wheels with photoetched-metal wheels, simulating cable with .030" styrene rod painted semi-gloss black.

I attached styrene davits to the four boats, then added photoetched-metal oars to the two rowboats, and photoetched-metal rudders and propellers to the motor launches, **7**.

To replicate the deck as it appeared in my references, I glued .006" brass-wire strips across the brown linoleum deck, **8**, which was difficult with many deck fittings already in place.

Unfortunately, I broke off the forward leg of the ship's tripod main mast. So, I made a new one from .032" brass rod. Then I detailed the mast with photoetched-metal ladders and platforms as well as brass wire, **9**.

To the stern, I attached minesweeping paravanes and their handling cranes, adding a plethora of Eduard photoetched-metal parts to the cranes.

I painted the ship with Tamiya colors – Kure gray above the waterline, hull red below, **10**. I lightly weathered with pastels and applied a black wash to highlight louvered areas on the torpedo magazines and hatches as well as various details on the superstructure. The rigging is stretched sprue.

I enjoyed taking a break from U.S. ships to build Hasegawa's *Yukikaze*. It's a well-engineered kit that can entertain modelers of all skill levels. **FSM**

SOURCES

Brass barrels, Modell Marine, www.modellmarine.de
Model-railroad chain, Wm. K. Walthers, 800-487-2467, www.walthers.com
Photoetched-metal details, Eduard, 420-47-611-8668, www.eduard.cz

Paul finished Hasegawa's 1/350 scale *Yukikaze* with Tamiya Kure gray above the waterline and hull red below.