

Winterizing a **MiG-3**



When I decided to build the Trumpeter 1/32 scale MiG-3 (kit No. 02230), I spent considerable time looking for a unique camouflage scheme. Unfortunately, like most Soviet equipment from World War II, my choices were limited to only a few different schemes. In the end, I decided to model “Red 39,” a MiG from the famous 120 IAP (Fighter Interceptor Regiment) in the winter of 1941-42. Red 39 wore the typical Soviet camouflage of green and black on the upper surfaces and light blue underneath. A rough coat of white was applied as winter camouflage, and the application was very rudimentary. In some instances, winter whitewash was

applied with mops, brooms, or brushes. The biggest challenge for me was achieving the faded winter camouflage and weathering caused by the harsh environment this aircraft operated in during 1942.

Painting the cockpit

I was pleasantly surprised when I opened the box. In 1/32 scale, this model is the perfect size, not too large but still plenty of room for details. I added some additional detail to the cockpit interior – control cables, electrical conduits and junction boxes, and other small items. I painted the sidewalls and cockpit floor

Adding winter camouflage to Trumpeter's big-scale fighter

By *Francisco Carlos Alfaro*

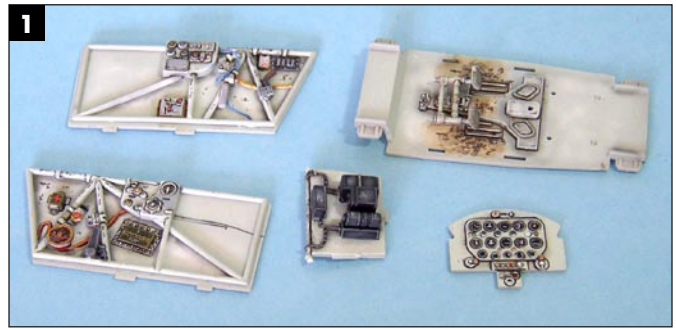


The weathering on Francisco's MiG-3 demonstrates the harsh conditions these aircraft operated in during the winter of 1941-42

with Gunze Sangyo light blue (H314), **1**. This color is close to the photos I've seen, but the information available is varied and subjective. I'm sure the colors varied considerably.

After I applied the base coat, I mixed the light blue with white in a 50-50 mix and sprayed the highlights, usually in the center of the parts. This broke up the monotone look of the cockpit. I finished the process with an overall wash of Tamiya dark gray (XF-24), then applied a diluted wash of Vallejo black (No. 950) with a paintbrush to bulkheads and raised details.

After the cockpit dried, I dry-brushed the floor and sidewalls with Vallejo pale gray (No. 990) and white (No. 919).



1 The cockpit received a base coat of Gunze Sangyo light blue, followed by several washes and dry-brushing to accentuate the details.



2 After he simulated the chipped paint in the cockpit, Francisco installed the completed subassembly into the fuselage. The alignment tabs ensured a near-perfect fit.



3 Francisco sprayed the camouflage colors freehand to achieve the soft-edged demarcation lines. He used Gunze Sangyo acrylics for the green and Tamiya acrylics for the black.

I wanted to add scratches and chips in the paint and mud from the pilot's boots on the floor to simulate wear and tear in the cockpit. I used Vallejo dark gray (No. 994) and a No. 1 paintbrush for the scratches and chips. These scratches and chips should have certain logic in their distribution and shouldn't be overdone. I centered the scratches along the tubular structure of the cockpit walls, on the floor near the pedals, and on the seat. I used the same dark gray and added some Vallejo brown mahogany (No. 846) for the mud effect after the gray dried.

The seat is correctly shaped but lacks seat belts. I made these from tin sheet and leftover photoetched buckles. I painted the



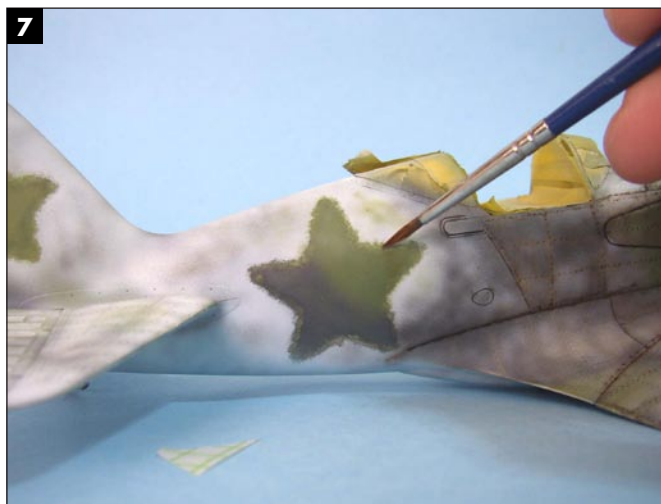
4 The pre-painted wheel wells were masked before Francisco sprayed the underside color with a mix of Gunze Sangyo light blue and white.



5 Using the decal sheet as a template, Francisco cut roughly shaped masks to cover the locations of the national insignias ...



6 ... and sprayed the white winter camouflage. The uneven coat of paint simulates the camouflage applied hastily by ground crews in the field.



7 After the white camouflage dried, Francisco removed the masks and stippled the edges to replicate uneven brush marks.

belts with Vallejo brown leather and used an oil-paint wash of light sienna.

After I finished the cockpit, I added wiring made from copper wire to the radio boxes located behind the headrest. I painted the radios black and dry-brushed them with Vallejo dark gray.

I fit the cockpit into the fuselage and was surprised by the result. The locking tabs align the cockpit tub perfectly, and the resulting fuselage seams around the cockpit are minor, **2**.

The rest of the model went together without any trouble. I glued the wings and stabilizers to the fuselage and filled the minor seams along the wing root. I painted the radiators and wheel wells after assembly, then masked them off. At this point, I was ready to paint the fuselage and wings.

Painting the camouflage

To speed up the painting process, I painted the inside of the canopy frames the light-blue cockpit color and attached them to the model, then masked the canopy sections and cockpit opening to prevent overspray.

I started by painting the upper surfaces in the standard green and black camouflage pattern applied to MiG-3s, **3**. I didn't mask the camouflage colors – I sprayed the soft-edged demarca-

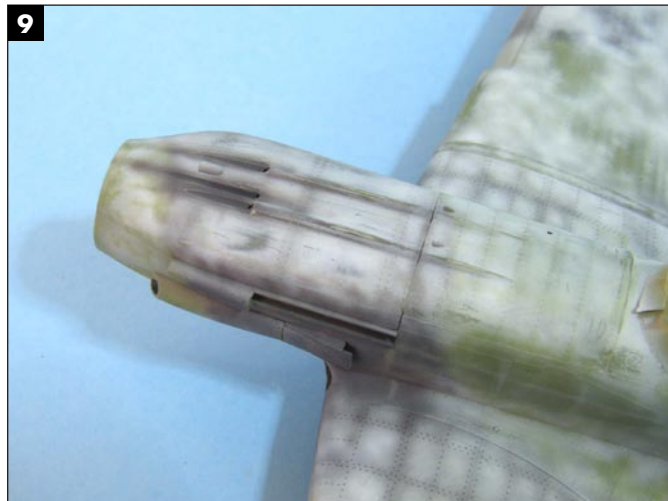
tion lines freehand. I mixed 80 percent Gunze Sangyo RLM 82 (H422) with 20 percent white. For the black color, I used a mix of 75 percent Tamiya German gray and 25 percent black, since I felt pure black was too stark. I sprayed the underside blue with a 60 percent mix of Gunze Sangyo light blue (H323) and 40 percent white, **4**.

Once the camouflage colors were dry, I sprayed a thin wash of Tamiya tan over the green areas, including surface details like panel lines and rivets. On the black portion of the camouflage, I did the same thing but used Tamiya light gray (XF-66). The purpose is to create contrast on the base coat of the model before adding the oil wash. I airbrushed a thin white wash in the centers of the panels to add additional contrast without drastically altering the base color.

I applied a rough-cut frisket film masks over the red-star national insignia locations, **5**, and finished the process by spraying a layer of acrylic white winter camouflage, **6**. I applied a heavier coat of white on the nose and fuselage and a thinner, more-random coat on the wings and high-traffic areas around the cockpit. I used a thin mixture of paint to allow the base colors to show through. I removed the rough masks and stippled the border with a brush to simulate the hand-applied camouflage, **7**.



8 The weathering around the nose, applied with washes, simulates the engine exhaust stains and various fluid leaks from under the cowling.



9 Francisco applied a dark-gray wash around the machine-gun troughs to portray the gunpowder residue.



10 After the oil streaks and exhaust stains were added, Francisco applied a thin burnt-sienna wash to the entire model ...



11 ... then removed most of it using a clean brush and mineral spirits.

After the paint dried, I lightly sanded areas of the white paint to simulate wear and natural use.

Weathering, wear, and tear

After studying photos of typical MiG-3 exhaust patterns, I painted the stacks with Tamiya rust, then applied a black wash. I weathered the exhaust streaks along the fuselage with a thin black oil wash and simulated the effects of fluid leaks caught in the exhaust flow, **8**.

I used Tamiya dark gray to represent the powder stains from the machine guns, **9**. I painted the spinner separately and gave it a slight overspray of white to simulate heavy wear.

After the detail weathering was complete, I applied a burnt-sienna oil wash to the upper surfaces, **10**. I applied an overall wash to the panel lines and rivets. Then, after 15 minutes of drying time, I used a clean brush and clear mineral spirits to remove the excess wash, **11**. After the wash dried, I applied a black wash to panel lines, wing joints, and control surfaces, **12, 13**.

On the underside, I used a thin wash to simulate the dirt resulting from operating under conditions of mud and snow and the streaks created by the airstream, **14**. I also applied a black wash to the wheel wells, followed by a burnt-sienna wash to sim-

ulate leaking hydraulic fluid, **15**.

Once I finished with the washes, I dry-brushed some of the surface details using Vallejo acrylics and applied additional scratches and paint chips, **16**. I made sure not to overdo it and tried to apply chips and scratches where they would logically occur.

I hand-painted the red number "39" with Vallejo red vermilion. I tried to imitate the roughly painted numbers applied by ground crew, similar to the rough demarcation of the winter whitewash.

Decals

I gloss-coated the model in the areas destined for decals. The kit decals are excellent and went down perfectly. I applied the decals using MicroSet, then sprayed a coat of clear gloss to seal them. I applied a thin brown wash to the decals to tone down the red to match the rest of the model. After the wash dried, I sprayed a final coat of clear flat over the entire model, **17**.

Landing gear

I painted the landing gear struts and the inside of the gear doors with Tamiya dark gray. I added a thin layer of sheet styrene to the



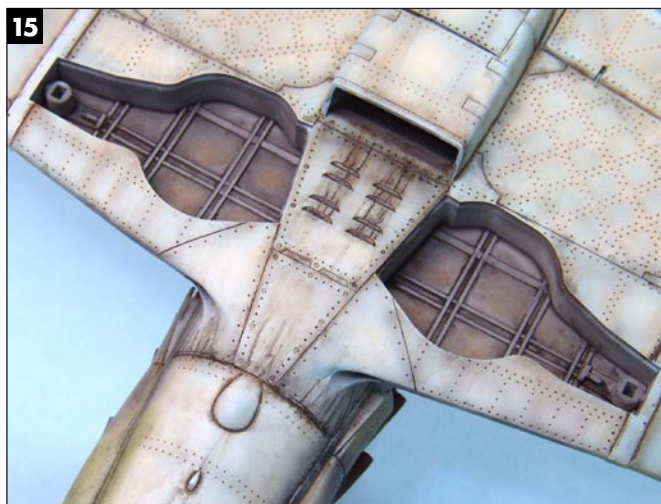
12 A black wash applied to the rivet lines and panel lines accentuates the details and provides additional contrast to the model.



13 Each of the control surfaces received a wash and dry-brushing to highlight the structural details.



14 After spraying a light-sienna wash on the underside of the model, Francisco removed the excess wash from the wing and fuselage panels with a cloth soaked in mineral spirits. This left residual wash in the recesses and panel lines but didn't alter the color of the underside paint.



15 A dark wash and subtle dry-brushing highlight the internal wheel-well structure.

gear door interiors to cover the ejector-pin marks. I gave the struts and doors a black wash, followed by a second wash of burnt sienna, then dry-brushed with Vallejo acrylics. Once the struts dried, I sprayed them with a coat of clear flat and glued them into the wheel wells, **18**.

Prop and spinner

I airbrushed the prop blades with a 50-50 mix of Tamiya dark gray and black, then dry-brushed Tamiya light gray to simulate wear along the edges. The spinner received an oil wash to highlight the rivet detail. According to the instructions, the prop is moveable, but I found the fit to be less than perfect, so I glued the spinner in place.

Finishing touches

I decided to attach the ground-attack rockets and monofilament antenna wire to the model for some added visual appeal, **19**. I removed the canopy masks and outlined the frames of the wind-screen with a black acrylic wash to make them stand out, **20**.

After building the nice 1/48 scale Eduard kit, this big 1/32 scale kit was a pleasant surprise. It was the first 1/32 scale model I've built, and it really appealed to my love of WWII Russian aircraft. **FSM**

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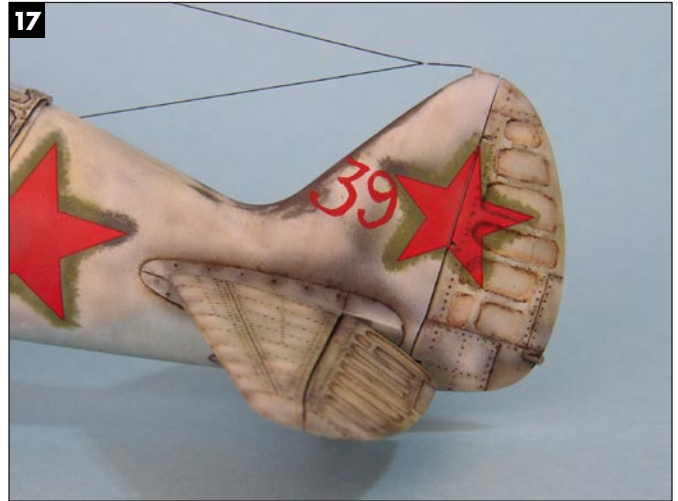
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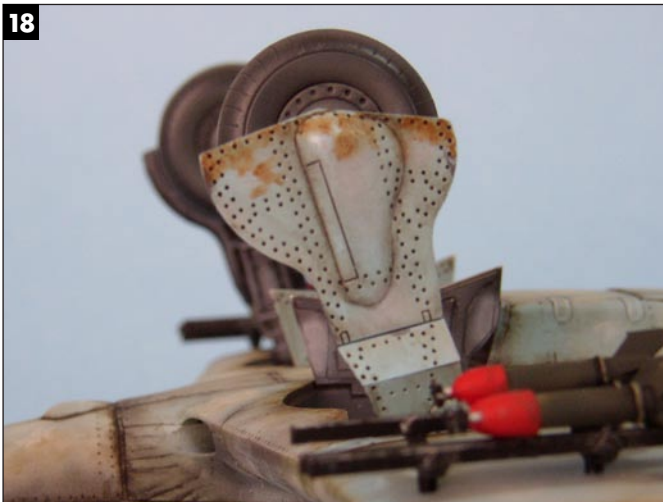
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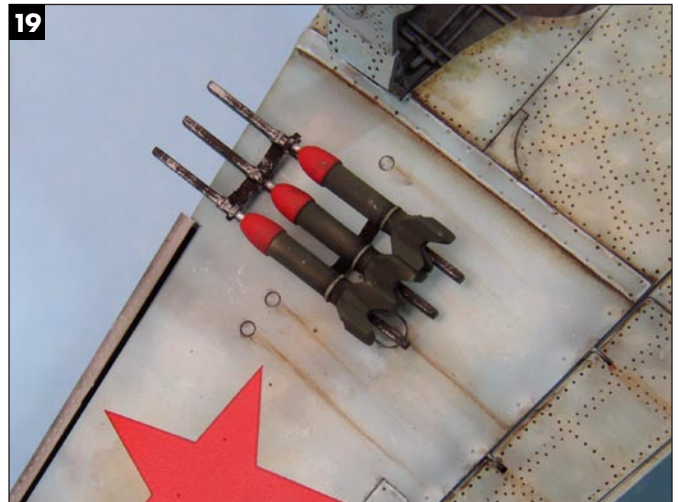
16 Francisco lightly sanded the model in specific areas to simulate scratched and worn paint.



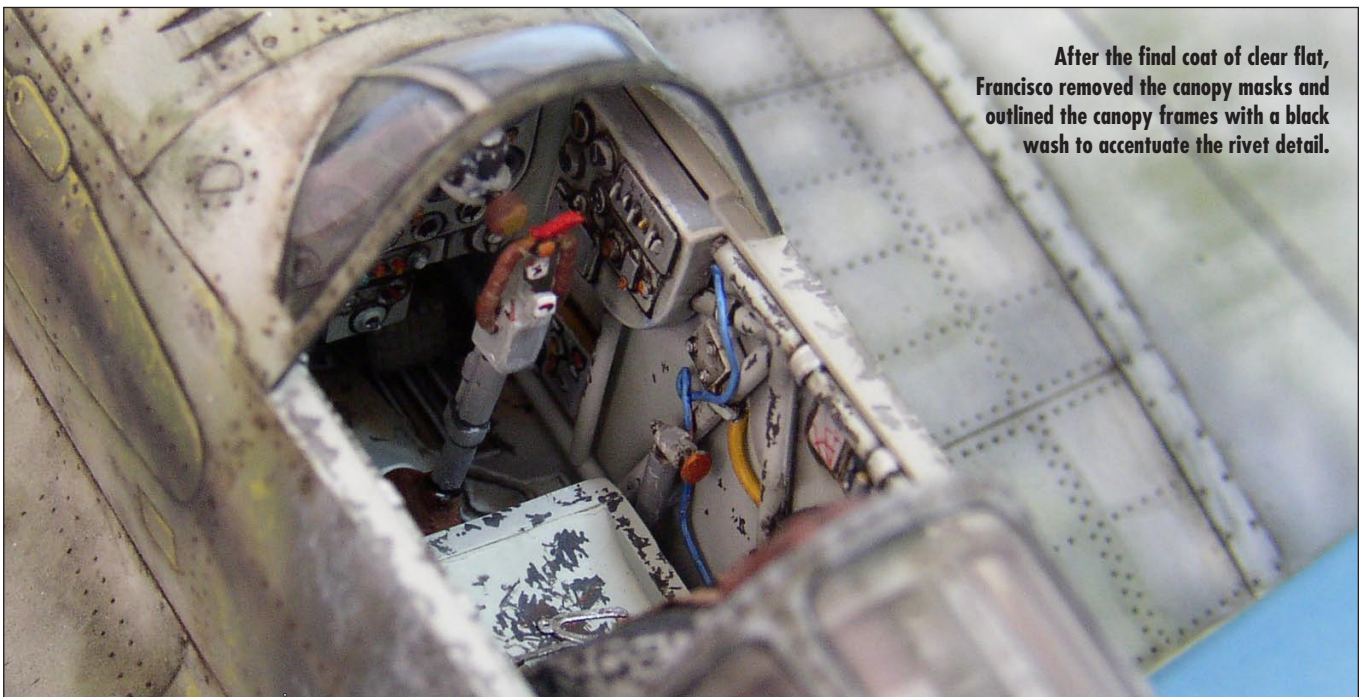
17 Each of the decals settled nicely onto the model, and the stippled border between the white and base colors clearly indicates the rushed application of the winter camouflage.



18 The landing gear was painted and assembled before they were attached to the model. Francisco added a small piece of styrene sheet to the insides of both doors to hide ejection-pin marks.



19 Francisco added six ground-attack rockets, three under each wing, for added visual appeal.



After the final coat of clear flat, Francisco removed the canopy masks and outlined the canopy frames with a black wash to accentuate the rivet detail.