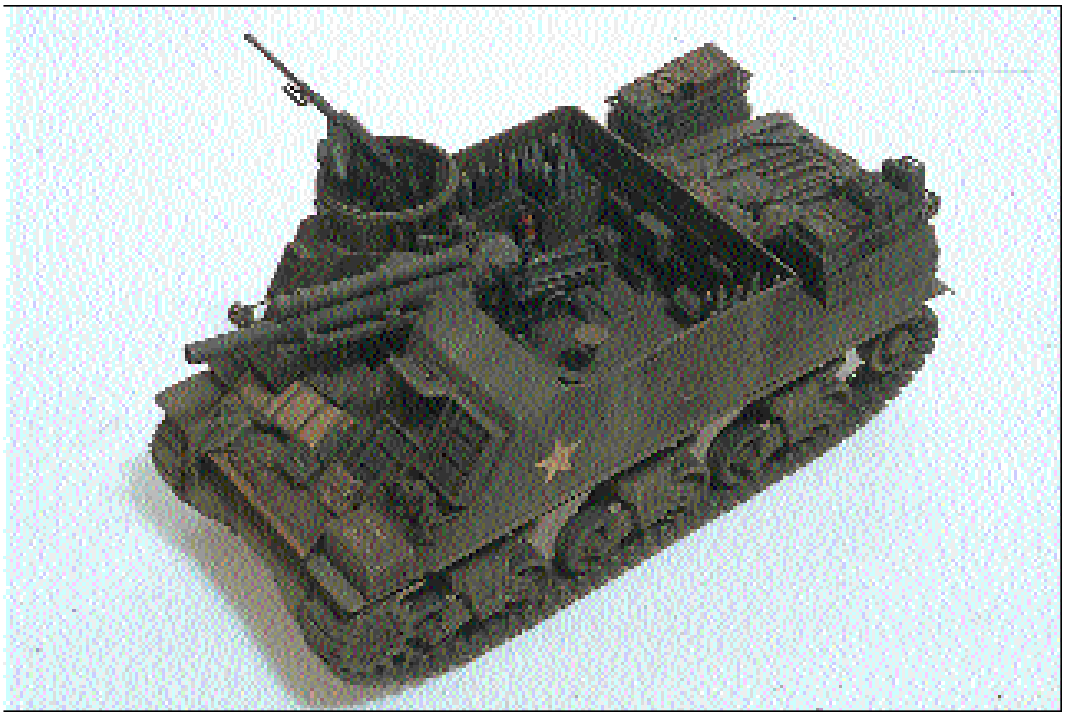

9-1 Doug DeCounter superdetailed this Italeri M7 Priest self-propelled gun with dozens of ammo shells and boxes from Verlinden.

THAT OUTDOOR LOOK

The term "weathering" is used to describe the effects that the world has on an aircraft or armor from the very moment it leaves the end of the production line.Generally, weathering falls into four categories: (1) the effects of the sun in bleaching the paint, (2) the effects of dirt and wind-blown grime, (3) the effects of rain and water, and (4) the effects of using the machine, including exhaust stains or wear from opening doors or panels. The first three types of weathering are often seen in various combinations.

The cardinal rule of model building applies more to making the model look as "used" as its prototype: "Always match your model to prototype photo, never to another model or even a painting of the prototype." Yes, there are cases where you must refer to a painting to determine the colors of the prototype, but go back to the photographs to see how and where the patterns of wear occur.

MIXING WEATHERING WASHES

Weathering is easiest if done with at least two and as many as twenty coats of very thin paint. Remember, however, that you can adjust how thin the layer of paint is by adjusting the airflow or by moving the airbrush away from the paint as well as simply adding thinner to the paint. Experiment with airbrushing weathering colors diluted with two parts thinner to one part paint, four parts thinner to one part paint, and nine parts thinner to one part paint. Try them all and decide for yourself which wash provides the most control.Remember that

even darker stains like exhaust patterns are better built up with several coats of paint, so it better to err on the light side.

Simulating Sun-Bleaching Effects

Sun-bleaching is,obviously, going to occur most on the upper surfaces that spend the longest part of the day exposed to the sun. The upper surfaces of the fuselage, wings and stabilizers on aircraft and the upper surfaces of armor will certainly be a lighter shade than the sides or lower parts of these machines. Also, the dashboard tops, the tops of the seats, the seat pads, arm rests and other horizontal portions of the interior will show signs of fading from exposure to the sun. You can simulate that effect by mixing a wash of a very light beige, about four parts Flat White #1768 and one part of either Sand #1706 or Panzer Interior Buff #2104. Use this wash to subtly drape the model with a bleaching effect, concentrating most of the bleaching on the top and gradually allowing the original full-strength paint near the bottom. This is a very subtle effect. If you can see the line where the bleaching stops and the original paint begins, you've added too much. Do not confuse sun-bleaching with scale effect.

Making It Look Dirty

Dirt is certainly going to be more of a factor in weathering armor models than aircraft. Dirt is likely to stain an aircraft primarily when it is parked on the ground. Some of the aircraft that were based on the dirt runways had noticeable stains from dirt that had settled on the upper surfaces and been washed down the sides as well as wet dirt that had been splashed onto the landing gear. Effectively, the dirtiest aircraft has about the same weathering from dirt as the cleanest armor or soft-skinned vehicle.

For this type of rain-washed dirt and dust, mix another wash using a shade of dirt that will match the dirt in the theater of operations of the prototype. Apply this wash in streaks down the sides to simulate wind-blown dirt that has accumulated on the upper surfaces and been washed down the sides by rain. Apply this wash also to the lower edges of the model to simulate splatters of dirt from rain. The areas where the tires would have kicked up a spray of muddy water are other places to attack with the dirty wash.

Most armor spends time splashing through the mud or, in the desert, wet sand. For this effect,use the full-strength earth color that matches that of the vehicle's theater of operations. Adjust the airbrush to provide those period-size dots and use hundreds of them in an on-again, off-again action, sometimes working the airbrush trigger as fast up and down as you can, to create splatter effects. Again,practice on a painted piece of paper to perfect the technique. It is possible to adjust the air supply low enough and to increase the paint supply so the airbrush itself will splatter. That,however, is extremely difficult

9-2 Adjust the airbrush to produce a period-size pattern to apply final weathering touches like those on Doug DeCounter's Italeri Tiger I tank.

to control. If you want to try it, practice again, and mask off all but the area you want to splatter to minimize the harm it might cause if you overdo it.

Real mud can be simulated using a paint brush and full-strength paint. Apply a thick dab of paint,then sprinkle on some baking soda to create the effect of three-dimensional mud. For a truly muddy vehicle,mix a paste of baking soda and paint and apply it with a toothpick as clods of mud.

The Dry Brushing Technique

Simulate that effect of the stringy splashes of mud by applying just a trace of paint to the first 1/16 inch of a 1/8 inch chisel paint brush. Flick the tip of the brush over the surface so just the barest trace of paint touches the model. This is the "dry brushing" technique.

Powdered Pastel Chalk Weathering

For really dusty and rusty effects, use artist's pastel chalks. The conventional oil-base pastels are too greasy and conventional chalk is too white to be useful for this technique. Buy a color that matches the dirt in the aircraft or armor's theater of operations. Usually, burnt umber will do for brown soil, burnt sienna for reddish soil, yellow ochre for beige soil, or you can mix two or three of these as powders to get the proper color. Reduce the pastel chalks to a powder by rubbing the sticks on a piece of fine sandpaper. Apply the resulting powder to the model to simulate accumulations of real dirt and dust. Model Master II paints produce a relatively smooth finish, so you may want to add a bit of "tooth" to the model's surface by spraying it with a mist of *Clear Flat #2015*. The flat finish will make it easier for the powdered pastel to stick to the surface of the model. The powdered pastels are especially helpful in duplicating the effects of extremely dusty conditions. You can protect the weathering with a very light spray of Clear Flat, but it will reduce the intensity of the pastels by about half, so you may want to repeat the process to get the darker weathering you wish even after the spray of Clear Flat.

Wind-Weathered Effects

The wind will also weather the surface of both aircraft and armor. The wind, in time, will wear away the paint from the most prominent areas and that usually begins with the tops of the rivets, the forward edges of the wings, rudder, and stabilizer of aircraft as well as the forward surfaces of armor. These effects are most prominent on aircraft and armor that serve in the desert theaters,but they are also common on equipment that has received little maintenance.

Use the dry brushing technique to simulate the effect of wind wearing away the paint. Dip the tip of the brush into some Metalizer Gunmetal #1455 or Exhaust #1406 paint, and hit the tops of the rivets. Use a number 00 brush to gently dab the Metalizer color onto the leading edges to simulate chipped

paint. Use those photographs of the prototype as your guide to just how those chips should look and where they appear. The prototype photo need not be of your specific aircraft or armor to serve as a guide for weathering patterns.

The dry brushing technique will also work well to simulate worn wood. Paint the wood to match the prototype colors. Unpainted wood quickly weathers to a light grey, but the prototype may actually have painted wood. Simulate the wood grains by dry-brushing long and wavy streaks of a color at least two shades darker than the basic color. If the model has a molded-in wood grain, you will find that,with practice, you can force the dry-brushing to touch mostly just the raised streaks of simulated wood grain.

Wood grain can also be simulated with a thick coat of the model's color. Let the undercoat dry overnight.Spray on a thin single coat of a lighter color (with about 20 percent white added to the model's color). To simulate bare wood, use Burnt Umber #2006 for the thick undercoat and a light gray for the thin second coat. Let that dry for an hour, then gently scrape the surface with the teeth of a razor saw so the original dark undercoat shows as dark scratches. Jiggle the saw as you scrape to produce wavy wood grain.

Weathering Effects from Use

The humans that operate and repair aircraft and armor can create their own wear on the machinery. The edges of frequently removed panels for access to engines, armament or controls will often be chipped and worn. The areas where the mechanics and operators touch latches or the edges of doors or canopies will eventually wear and chip and, if the vehicle is a light color, show signs of dirty hands. Simulate the chipped paint with dry-brushing Gunmetal or Exhaust Metalizer and match the greasy smudges with period-size applications of Black.

If the exhaust pipes exit near the surface of the aircraft or armor, those areas will be stained with black. Similarly, the areas in the airflow behind guns will be stained from gunpowder residue. Leaking hydraulic fluid can cause similar stains, as can close encounters with explosions. Generally, dark grey is a better choice for the stains that are black. You can mix white with black or use a dark gray like Panzer Schwarzgrau #2094.Mix a wash of this dark grey and apply it in very thin lines,building it up with at least three and perhaps as many as six coats until you get the effect that matches some prototype photo of similar stains.

Simulate the "overheated metal" effects found around jet engine exhausts with three or four shades of Metalizer. Start with the darkest shade near the edge of the exhaust and apply lighter shades working forward. The panel separation lines can be used as a place to change colors but, again, check with a photograph of the prototype to be sure that is the effect you wish to duplicate.

Armor and some aircraft were often repainted by maintenance crews with little regard for perfect color match. Even if the facility had the proper color, the paint on the aircraft or vehicle was often weathered while the touch-up paint was fresh.Simulate those paint repairs by painting just the patches with full-strength color and painting the remainder of the model with the same color with 10 percent or more white added as described in the section on "Scale Color Theory."