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Follow Tony Koester's instructions on page 40 to weather a locomotive like this one.



WEATHERING A STEAM LOCOMOTIVE IN 7 minutes



PanPastels and a sponge make it easy to simulate the dirt and grime of railroading

By **Tony Koester** • Photos by the author



These before-and-after photos of a Walther's Proto 2000 Nickel Plate Road Berkshire show the results of Tony's investment of just over seven minutes to highlight details and show some evidence of the locomotive's daily toils. The trailing gondola was in the fleet of 20 cars he weathered in 45 minutes.

A sizeable fleet of rolling stock is both a benefit and a liability for modelers who have a relatively large model railroad. Each car or locomotive is an actor in an ensemble cast, instead of a star performer as on a small railroad. Since my primary goal is realistic operation, I tend to take reasonable shortcuts when it comes to building up a necessarily large car roster for my Nickel Plate Road layout.

Many of my friends have a rigid rule: Nothing goes on the railroad until it's weathered. Shiny freight cars and locomotives, especially steam locomotives, don't convince anyone that we're striving to model a time when everything even remotely close to the railroad was covered with soot and cinders. And even today's hordes of diesels and freight cars

are usually anything but spic-and-span when you take a close look.

I'd like to emulate their example, but my first goal is to populate the railroad with enough locomotives and cars to achieve my operating objectives. That said, I fully acknowledge that too much shiny stuff is an eyesore.

What to do?

An art product to the rescue

Sometimes need and fate join hands to solve our modeling problems. A couple of years ago, I saw a demonstration of a new product called PanPastels at the annual Railroad Prototype Modelers meet in Naperville, Ill. These products aren't quite like the popular and very useful weathering powders in that they tend to bond to the matte surface being

weathered. I don't even need to apply a fixative (clear coat) after applying them.

PanPastels look a lot like makeup and are applied in similar ways, but they're formulated for artists to use as they would pastel chalks. The manufacturer, Colorfin (www.colorfin.com) of Kutztown, Pa., sells a variety of applicators, mainly soft sponges in various shapes but also small trowel-like tools. After Colorfin saw how popular this product was with hobbyists, it produced a number of colors and even weathering kits with us in mind. A list of local art supply dealers who sell PanPastels can be found on the firm's website.

Quick and, um, dirty weathering

When I activated a spur into a gravel company on my HO railroad, I needed a

supply of gondolas to load with gravel. I realized that I had stashed away eight Accurail 40-foot steel gondola kits. As I was retrieving those, I noticed a dozen Accurail single-sheathed boxcar kits lettered for railroads that interchanged with my Nickel Plate Road and figured I might as well tackle the whole shebang.

A couple of evenings were sufficient to assemble the entire fleet and prepare waybills for them. I now had the needed gons plus about half a train's worth of boxcars. But they were all in factory-fresh paint, which is an extremely unlikely scenario for hard-working gons and old wood-sided boxcars.

My supply of PanPastels, acquired before their weathering kits debuted, included white and black plus several shades of gray from off-white to charcoal. I also had several "rust" colors and one light tan. Using the triangular-shaped soft-foam applicator, I wiped down the sides of the gons with the charcoal color and on all interior surfaces. I then dabbed hints of rust on the ribs and trucks and applied a liberal coating of rust to the interior. A few swipes here and there with a lighter gray created a dry-brushing effect to bring out details.

I then turned to the single-sheathed boxcars and did the same thing to the four sides and ends and truck side-frames. I applied some gray to the running boards to suggest wood that has lost its protective coating of paint.

Total elapsed time for all 20 freight cars: 45 minutes!

I'm not claiming this method is a superior way to weather cars. However, I am saying that I can't think of a much quicker and less painful way to get a fleet of formerly too-new-looking cars out on the railroad.

What worked for cars...

It then occurred to me I also had some factory-fresh steam locomotives roaming the rails. Perhaps PanPastels would work equally well and just as quickly on them.

I pulled one of my few unweathered Walthers Proto 2000 Nickel Plate Berkshires off the railroad and carted it to my workbench. I set up my assortment of PanPastel colors, among them 100.5 Titanium White; 380.3 Red Iron Oxide Shade; 740.8 Burnt Sienna Tint; 800.5 Black; 820.1 Neutral Gray Extra Dark; and 820.3 Neutral Gray Shade. I also found a couple of color printed images on the Internet that showed some NKP Berkshires photographed in service during the 1950s.



Shown are the PanPastel colors Tony routinely uses for weathering along with a prototype color photo. For this job, he used several shades of gray, white, and oxide red for rust. The soft triangular sponge "brush" was the only tool he used.



Medium grays were used throughout the project to lighten the basic black and bring out small details. Tony always applies the colors in a vertical direction to simulate the pattern of rain washing down the sides of the engine and tender.



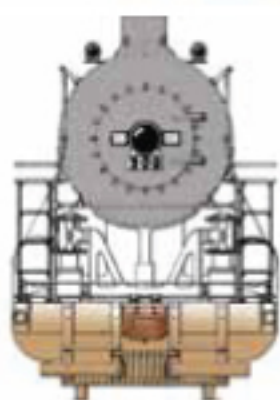
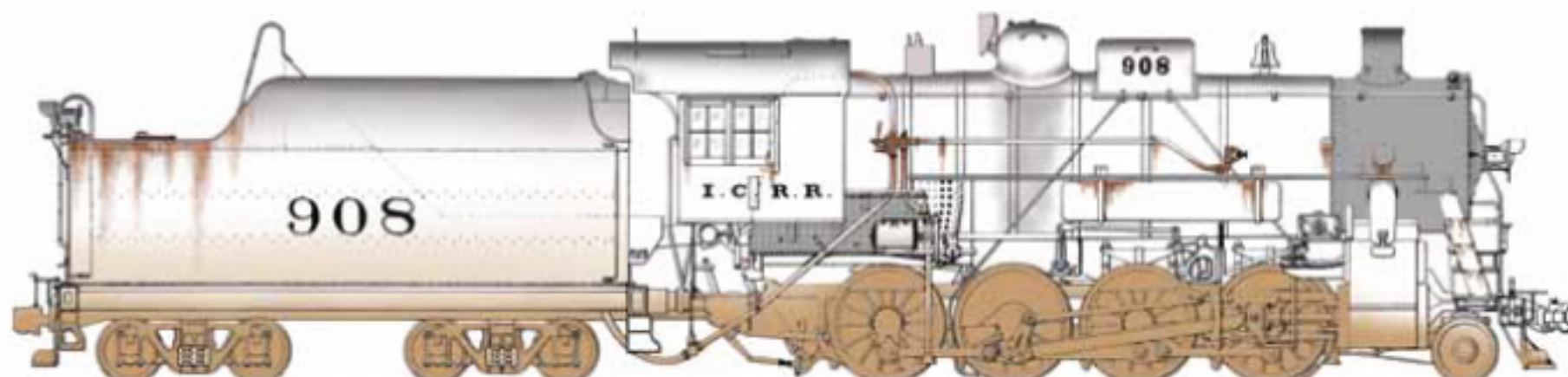
Light gray and tan were ideal shades when Tony was "dry-brushing" tender details to make them stand out and to add dirt and sand effects along the tender's lower surfaces. Tony has just started; the stopwatch reads 10 seconds.

More weathering ideas



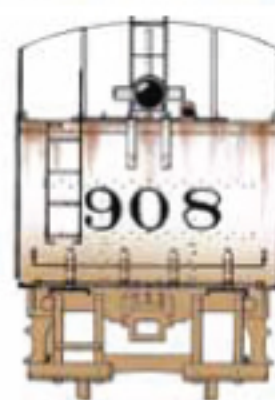
This Illinois Central 2-8-0 Consolidation is the prototype for the Bachmann model that associate editor Cody Grivno weathered using Tony's techniques for the cover photo and the picture in the lower left corner of the next page. Even though this photo is in black and white, the different shades of gray reveal a great deal about how a steam locomotive weathers over time. The lightened

running gear comes from sand that's dropped on the rails ahead of the drivers to improve traction. The weight of the locomotive crushes the sand into a fine powder that blows all over and sticks to any wet or oily surfaces. The paint on the smokebox and firebox has been cooked to a rough surface texture while the insulated boiler jacket, cab, and tender look fairly clean. – *Jim Hediger*








Locomotive colors






Steam locomotives collect dirt from several directions. Cinders and soot constantly rain down on top from the stack while the sand used for traction blows all around the running gear. Dirt also blows up from the ballast if the locomotive is pushing the train.



Tender weathering

Tenders tend to get a good dose of cinders and soot from the locomotive along with the sand and dust blowing back along the running gear. The rear of the tender will accumulate rusty streaks along both sides and the back where water overflows.

-  **Ash gray** – Smokebox, boiler above the firebox and below the pop valves and whistle
-  **Light gray** – Boiler scale drips under check valves, pop valves, washout plugs, and whistle
-  **Rust** – Brake shoes, couplers, journal box lids, pipe joints, springs, and washout plugs
-  **Dirt** – Main frame, lower edges of cylinders, and pilot, bottom of air reservoirs, and trucks
-  **Soot (flat black)** – Entire top of engine, cab roof, and the rear tender deck

-  **Rust** – Brake shoes, couplers, journal box lids, trucks, water hatch and top deck
-  **Dirt** – Underframe and running gear, lower body, truck frames, and wheels
-  **Coal dust** – Top front of tender deck plus small piles of spilled coal on rear deck
-  **Light gray** – Water streaks along upper body from water spilled on the top deck
-  **Soot** – All over top deck and front deck plate (cab end) of the tender

PanPastels and one wedge-shaped sponge in hand, I triggered a stopwatch. When I had finished weathering the locomotive, the total time I had spent was only 8 minutes!

I then located a second Berkshire and tried again, this time pausing a stopwatch at each step when I stopped to take a photo. My time improved slightly to 7 minutes and 13 seconds. I doubt that I'll improve on that going forward, as I'll probably find ways to enhance the process that will also add a bit of time.

Emphasis on 'easy'

To be sure, I've seen better weathering jobs, but that isn't the point. The concern here was to find a simple way to get a lot of cars and locomotives weathered quickly. By using the same tools and materials but taking a little or a lot more time, I'm sure even better results can be obtained with a little practice.

Even so, I doubt you'll find an easier and quicker way to achieve acceptable results. Those of you who are pressed for time, don't own an airbrush, or are intimidated by the usual weathering processes might give PanPastels a try. **MR**



Associate editor Cody Grivno used Tony's PanPastel methods on a locomotive on our new *Model Railroader* project railroad that will debut in January's issue.



Hard water creates white streaks as it runs down the boiler jacketing from the pop (safety) valves and blow-down muffler and dries. This effect is easy to get by using light applications of the white PanPastel color to simulate dried minerals.



By the 5-minute, 29-second mark, Tony was applying Red Oxide and Burnt Sienna to simulate the rust on the locomotive's pilot, cylinder heads, trucks, and other low areas to match his collection of reference photos.



To wrap up as the stopwatch ticked past the 7-minute mark, Tony applied a little more rust to the smokebox front and pilot, then did a bit more dry-brushing with light gray to ensure details stood out and everything blended together.