

PLEASE TURN OFF
OR SILENCE YOUR
CELL PHONES.

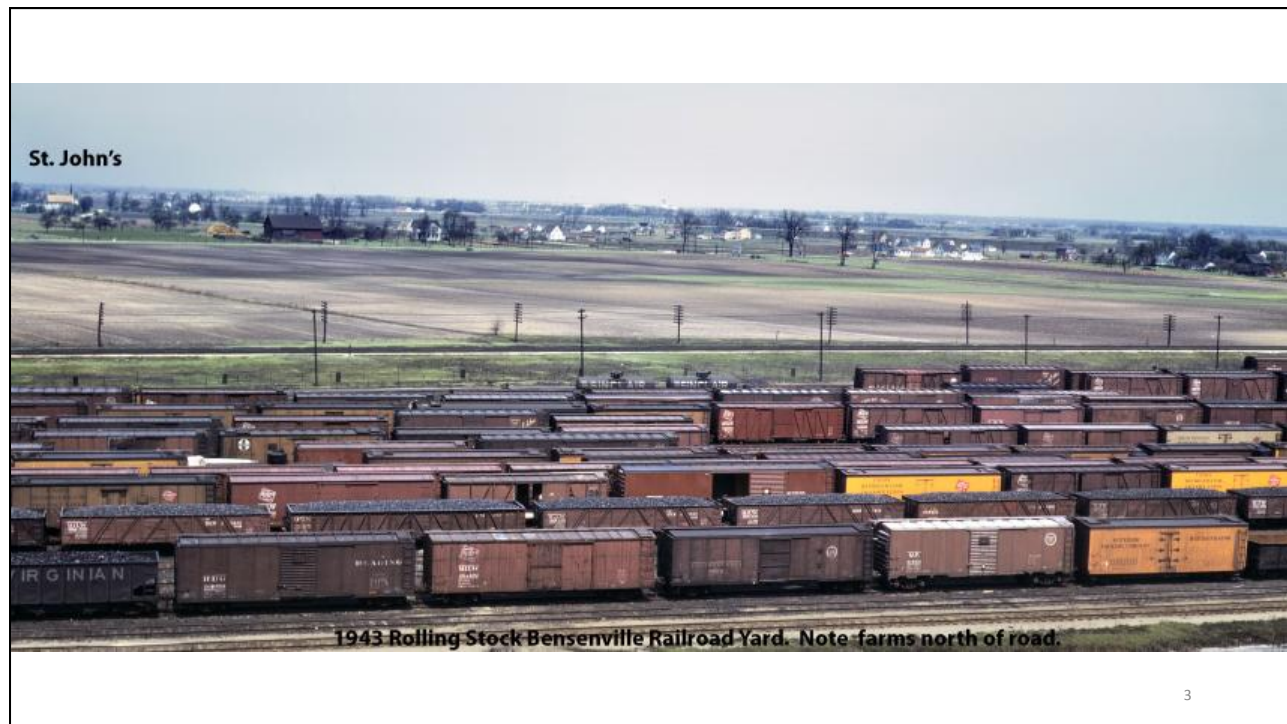
THANK YOU.

1

Adventures in Weathering Freight Cars

A Presentation given for the
Chicagoland RPM
October 2018
by
Chris Vanko

2



TOOLS AND MATERIALS

Oil Paints: Raw Umber

Odorless Mineral Spirits

Burnt Umber

Burnt Sienna

Unbleached Titanium

Portland Light Grey

Payne's Grey

Black

White

5

TOOLS AND MATERIALS

Pan Pastels:

Raw Umber

Neutral Grey Tint

Raw Umber Extra Dark

Black

Raw Umber Shade

Raw Umber Tint

Burnt Sienna Extra Dark

Burnt Sienna Shade

Red Iron Oxide Extra Dark

Neutral Grey

Neutral Grey Extra Dark

6

TOOLS AND MATERIALS

Prismacolor Pencils:

Black
Terra Cotta
Tuscan Red
Dark Brown
Dark Umber
Cool Grey
Warm Grey
White

7

STEPS IN THE PROCESS

- Paint car
- Pre-weather
- Apply major decal lettering
- Weather
- Apply remaining decals
- Finishing touches

8



This Marty Bernard photo of two single sheathed Q cars at Eola late in their lives shows some heavy “weathering”.

9



This is a plastic Intermountain single sheathed car that will be given some above normal weathering to show its age. After including some added detail to the Intermountain car, it was sprayed with Zinc Chromate Primer.

10



After the paint had dried, the car was given a raw umber oil wash. Vertical strokes are used and any excess pooling of the wash at the bottom of the car is removed.

11



After a short while to let the oil wash dry, PrismaColor pencils were used to highlight various boards and seams. Colors used included black, various grays, and various browns. A randomness of the coloring is the desired outcome.

12



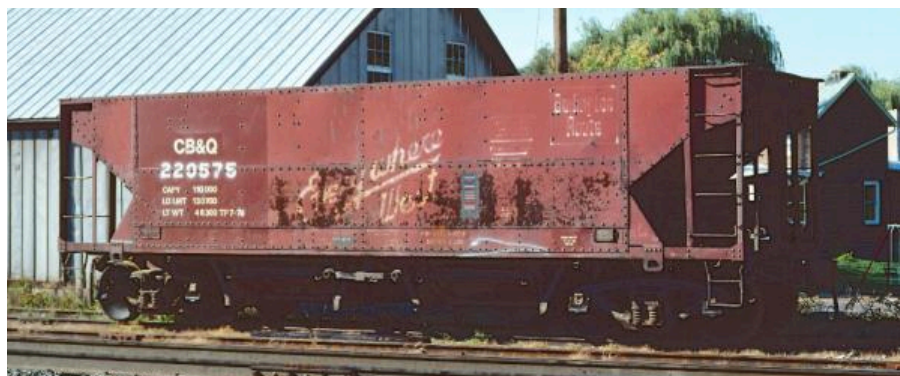
Here is the almost finished car. The treatment given the roof and the trucks will be discussed in future slides.

13



Here is another car given a similar treatment.

14



This December 1976 photo shows a MWB car that has begun to feel its age. One can still see the original herald, load line information, slogan, and car data. Princeton, Illinois. Ed DeRouin photo. Chuck Zeiler collection.

15



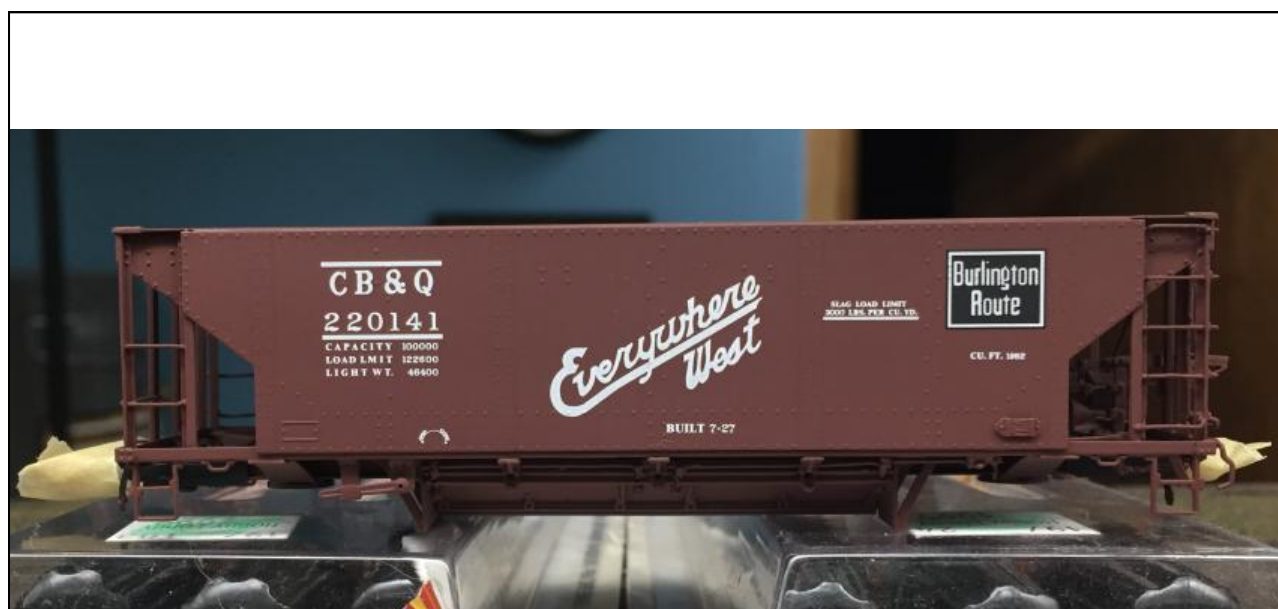
A somewhat earlier photo, July of 1969, taken by George Speier shows similar deterioration of the car sides. This has been caused by repeated hammering of the sides to loosen loads that haven't wanted to drop.

16



This model is a brass import. Out of the box it appears as it would new. The goal is to transform it to a mid-1950s condition.

17



The first step is to spray the entire car with a flat coat.

18



An oil wash of raw umber is then applied. Using vertical strokes the wash simulates wear and tear and highlights the rivets and seams. The wash also gives an overall uniform base on which to build

19



The next step is to lightly dry brush the car with the same Raw Umber oil to enhance even further the rivets and seams.

20



The next step is to start to build up the level of weathering by continuing the dry brushing process until you reach the desired level of "dirtiness".

21



The detail highlights are more fully emphasized by dry brushing with the same raw umber oil. Rust spots were created by stippling.

The following slide shows two additional cars applying the same process with slightly different outcomes. Car 220581 has had some lighter color oil paint work as well. 22



These three ballast cars are not yet finished as they still have some decal work that needs to be done – changing dates, adding repack notations, and adding chalk marks. These will all be done with “patches” or other highlighting.

Future slides will show this work as well as the “inside” weathering treatments.



This Sunshine Models kit of an L&N box car was first painted with a Floquil box car red. After that cured, a clear flat coat was applied. After that coat had dried, the oil wash of raw umber was used to begin the pre-weathering process.

25



A dry brushing with the same raw umber oil has provided an enhancement of the seams and rivet detail. Use vertical strokes. Some extra work was done along the sill to allow some "soot" to gather.

26



A gloss coat is then applied to provide a smooth surface for the decals.

27



The decals are then applied in the usual fashion. The colored decal film "patches" are simulating paint outs for reweigh and repack applications.

28



The new stenciling is applied, then the entire car is given a flat coat to seal the decals. The lighting on this slide seems to have changed the car color – but it is still the same hue.

29



The next step is to add chalk markings. Small patches are re-glossed with Future Floor Polish to allow the application of more decals.

30



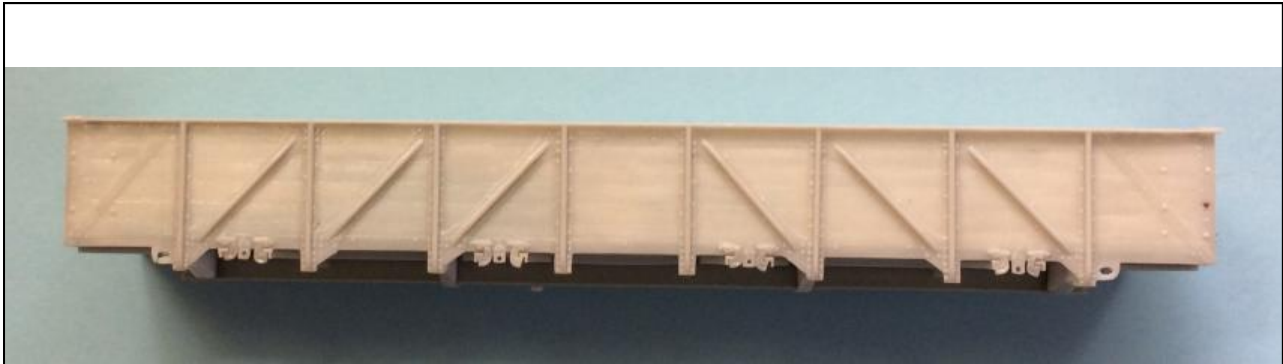
The additional chalk mark decals have now been applied.

31



Another flat coat is applied to seal the decals and, when dry, some additional weathering is applied to the entire car to tone down the lettering and give a final blending. Then a final flat coat is applied to seal everything.

32



Here we have the one piece body for a resin wood end Q drop bottom gon kit. The car will become a GS-8 class car. The railroad built 2,800 cars of this class at Galesburg and Havelock from 1935 to 1938.

33



After completing the kit, the car was painted with True Color paint (#240). An oil wash was applied, some highlighting with PrismaColor pencils was added. Then the car was gloss coated.

34



Major decal work was applied to the car in the normal process.

35



After the decals were applied the car received a flat coat. Some highlighting with oils brings out the rivets and board grain.

36



Small pieces of tape were then applied to the areas where the restenciling is to be simulated.

37



Dry brushing with Raw Umber oil paint and some additional highlighting of individual boards with PrismaColor pencils to both the inside and the outside of the car is the next step. The interior of the car was also given a heavy dose of black Pan Pastels to simulate coal loading. Tape covers areas where “clean” lettering will appear.

38



Some additional highlighting of individual boards has now been added with a light grey oil paint.

* The total time for the last four steps was 12 minutes.

39



Even more grime has been added to the bottom of the car side, as well as an overall dry brushing of the car to tone down the grey of the slats. After that step was completed, the tape was removed to allow for the addition of other decals.

40



The repack area was given a coat of Future and allowed to dry, then the decal was applied.

41



When the decal had set and was completely dry, a coat of flat was applied to seal it. Some additional weathering was applied with Pan Pastels to blend the repack and reweigh dates into the rest of the car.

42

Trucks and Wheel Sets



43



Start by painting the trucks with Rustoleum Camouflage Brown to eliminate the shiny black plastic appearance.

44



The sideframe is coated with an acrylic flat to provide a base for the Pan Pastel to adhere to.

45



Black Pan Pastel is then stippled into the wet acrylic which gives both color and texture to the sideframe. From here additional colors can be layered on (also stippled, not brushed) until the desired appearance is achieved.

46



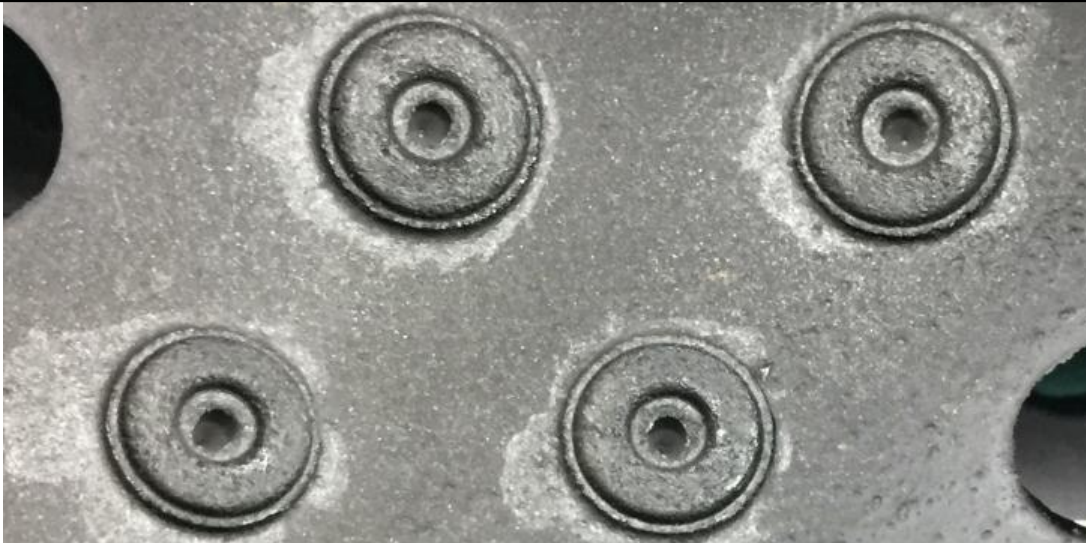
The wheelsets are painted with a flat black for a solid bearing truck. If it were for a roller bearing truck the Rustoleum Camo Brown would be used. After they are dry, the faces are coated with the acrylic flat.

47



Black Pan Pastel is then stippled onto the wheel faces.

48



Blow away the excess powder and this is the result.

49



50

Roofs and Interiors



A fifty foot Western Pacific box car has been treated to create a rusty, peeling, aged roof. The techniques to achieve this look are outlined in the next set of slides.

51



Returning to our Intermountain SS box car, after the flat coat has dried Polly Scale Milwaukee Grey has been brushed on between the roof ribs.

52



Black Pan Pastel is brushed lightly across the entire roof.

53



Acrylic Raw Umber is randomly painted at the edges of the panels and elsewhere on the roof to simulate old rust. When that is dry, Burnt Sienna oils are dabbed along the edges of the acrylic to simulate newer developing rust.

54



A paintbrush dipped in thinner is then dabbed onto the oil paints to blend the oils into the acrylic and onto the panels of the roof.

A complete video tutorial of this process can be found on YouTube at "What's neat in Model Railroading for February 2018"

55



Silver paint is randomly brushed and dry brushed inside the car to simulate the wear and tear to the interior of the car body.

56



Black Pan Pastels are then brushed throughout the entire interior. Heavier concentrations were applied in all of the seams and crevices.

57



Red Iron Oxide Pan Pastels were then brushed on to simulate a light rusting.

58



A final light dusting with a grey Pan Pastel is added to simulate a light color aggregate residue.

59

Cars of a Different Color

Everything illustrated so far has been of the box car red or mineral red color. These same techniques can be easily applied to cars of different colors as well.



60



For a black car the oil wash is changed to Burnt Umber so that it is a bit more visible.

61



Lighter color Pan Pastels are brushed on along the center sill and the lower half of the tank. Some Iron Oxide is also added along the straps to simulate developing rust.

62



Burnt Sienna oils are also dabbed along the straps, then Iron Oxide Pan Pastel is stippled into the wet oils to provide some texture. The Iron Oxide is also brushed across the top of the tank.

63



The oil/pastel treatment is also done along the straps on the sides, as well as some additional pastels over the entire body of the car.

64



65



66



67



68



69



70



71



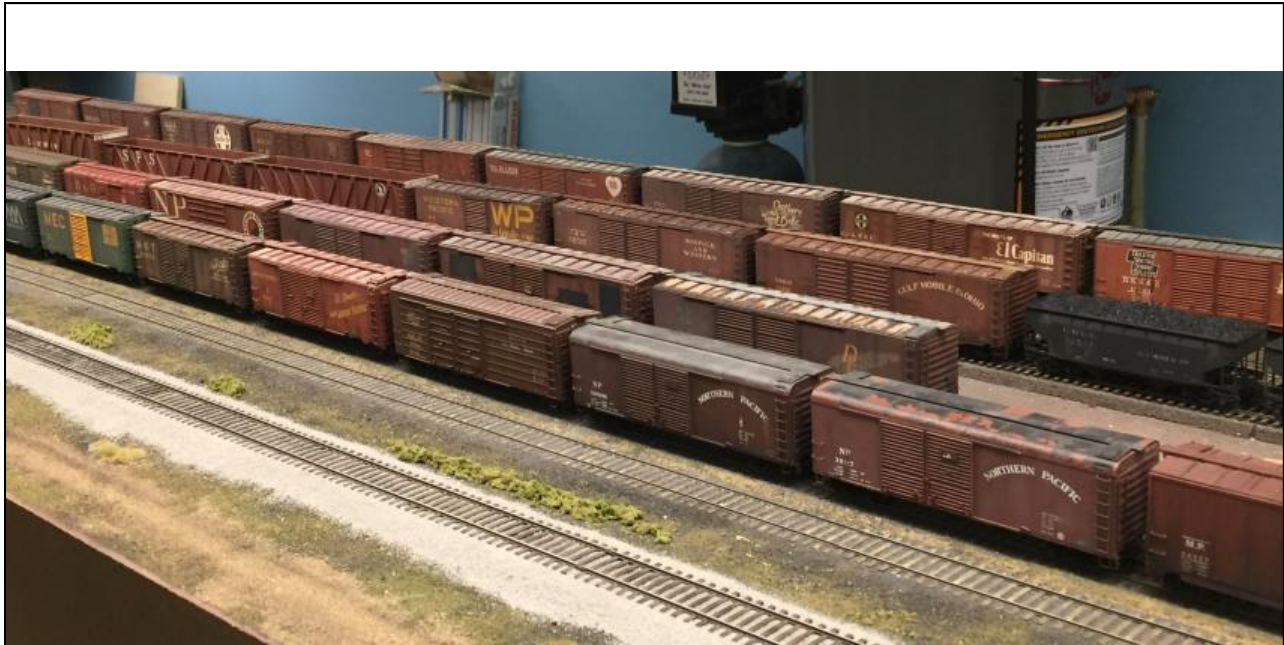
72



73



74



75

REFERENCES

Ken Patterson – Mainline Modeler, December 2005

Matt Sugerman – Pre weathering

Jason Quinn – Roof weathering

Mike Confalone – Weathering series at Trainmasters TV

Model Railroad Hobbyist - <http://model-railroad-hobbyist.com>

Trainmasters TV - <https://trainmasters.tv>

76