

# WHEEL REPORT

WINTER VOL. 21/22 NO.2



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**WINTER ZOOM MEETINGS**

**South Mountain Division MER NMRA is inviting MEMBERS ONLY to scheduled Zoom meetings...**

**Topic: SMD NMRA December Membership Meeting**

**Time:** Dec. 12, 2021; 02:00 PM Eastern Time (*US and Canada*)

Contact the Division by email to request detailed information on how to join this meeting.

[SouthMountainDiv@gmail.com](mailto:SouthMountainDiv@gmail.com)

**Topic: SMD NMRA January Membership Meeting**

**Time:** Jan 9, 2022; 02:00 PM Eastern Time (*US and Canada*)

Contact the Division by email to request detailed information on how to join this meeting.

[SouthMountainDiv@gmail.com](mailto:SouthMountainDiv@gmail.com)

**Clutter from the Super's Desk** - With Thanksgiving upon us, I would like to take this moment to wish South Mountain Division a happy holiday season! With vaccines in circulation and boosters available, we can only hope that 2021 will begin a return to normalcy for so many of us. On that note, the Division's officers and advisory committee will be meeting in December to discuss the possibility of returning to in-person meetings starting in February 2022. If you have any thoughts on the matter, please join us for our December or January Zoom meetings, or simply reach out by email. Furthermore, if you're comfortable hosting a meeting through May of next year, or even after September, we'd love to hear from you. As the new year begins, you can expect some exciting things from the Division, including a revival of the MMR program in the SMD and planning for the return of a post-pandemic Mini-Con in 2023!  
 -Alex Polimeni, Superintendent

The *Wheel Report* is the official publication for the South Mountain Division of the NMRA. The newsletter is published three times annually. Please send your letters, articles, and pictures to

[SouthMountainDiv@gmail.com](mailto:SouthMountainDiv@gmail.com).

**2021/22 submission deadlines:**

- Spring 2022.....February 15
- Fall 2022.....August 15
- Winter 2022/23.....November 15

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**Assistant Superintendent:**

Mike Shockey

**Clerk:**

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## Real Men Don't Read NMRA's Recommended Practices

In 2000 I changed from HO to O scale. In HO a 36-inch minimum radius was a nice-looking curve. I figured that 50-inch would be fine for O scale, particularly since I was modeling the South Shore which was an interurban line. I also did not consider that if I found a [Little Joe](#) it would require a larger radius because of its two eight-wheel trucks. But real men don't read [NMRA's Recommended Practices \(RP\)](#).

Now, jump forward 20 years to modeling the [PRR's Northern Central branch](#) from [Baltimore](#) to Harrisburg, and the recent purchase of two PRR EMD E8 units. These engines have all-wheel pick-ups and are close-coupled. They run poorly on my curves. Then I added some 80-foot passenger cars, and the derailing began. My disregard for radius had come back to bite me.

According to the NMRA Recommended Practices, six-wheel trucks and 80-foot cars require a 58-inch minimum radius. Due to existing constraints, I am compromising with a 60-inch minimum. The RP also recommend a #6 switch. I have dozens of Atlas #5s. Fortunately when I built the Penn Station area, I had laid large radius curves. I did the same at the site of my north bound staging representing the New York area.



The worst area (above) is that area previously known as Warren's Gap. The inside track was 49" radius and the outside track 53" radius. So, I removed the track and roadbed and rebuilt that area with inside track at 60" and outside track at 64".

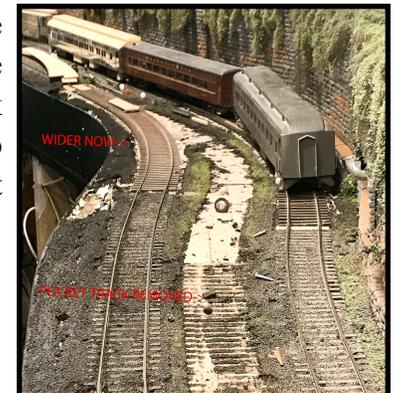


This will become New Freedom with a small town (above), a business or two, plus the PRR passenger station.



A second area (above) had a pocket track left over from South Shore days and because of the switch and pocket track there was an "S" curve of about 48" radius.

I removed the switch and the pocket track (right) to eliminated that problem.





Another major area that requires widening (above) is the area entering Baltimore. It includes an Atlas double track truss bridge. The approaches to the bridge in both directions varied from 48" to 60". I am still in the process of removing the old track and extending the benchwork (below) about 3-4 inches to allow for 60" and 64" standards.

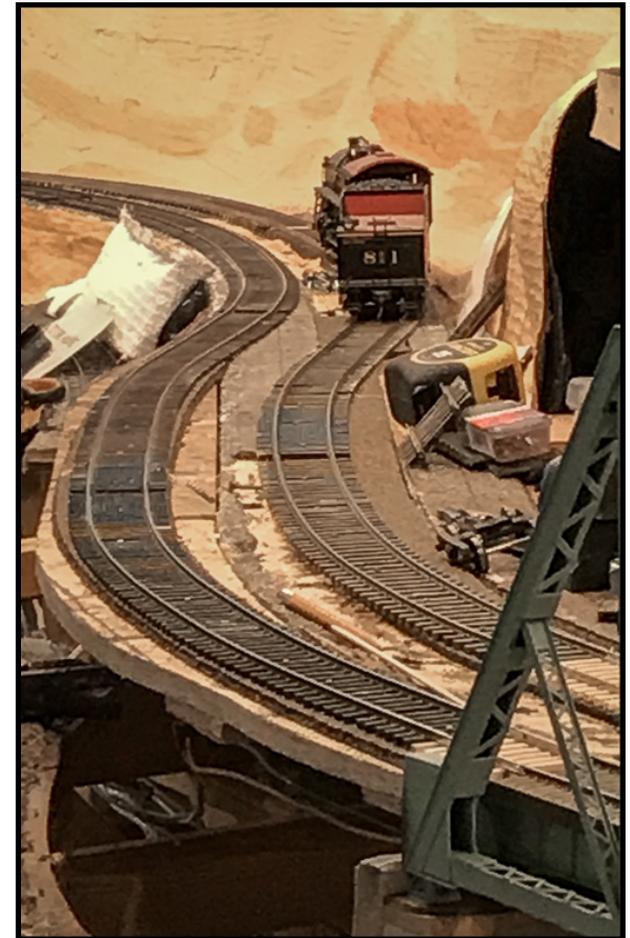


I am not sure if the bridge will still fit so the tracks at the end of the bridge (right) may need to be re-laid to 60" radius. The photo shows the tracks before being enclosed by a tunnel.

There are many more areas on the layout that may require radius corrections. They will be addressed in the coming months. I plan to build #6 switches using [Fast Tracks](#) and replacing all my Atlas #5 switches. The nickel-silver plating is wearing off most of those switches anyway, and a #5 is below the recommend practices. In addition, the frogs are very difficult to solder leads to for powering.

So, what have I learned in this process? Standards and recommended practices have a purpose. My advise is to do your homework. Pay attention to what others say and have experienced. You may be able to apply their methods to your work.

After building a large layout I feel I could write a book about things to do and not to do.



Consider layout height so you can sit underneath to work on switches and wiring. Consider sectional construction so you can move without destroying years of work. Keep detailed spread sheets of everything on the layout for the sake of your heirs. I feel I could go on and on.

*Photos by Jay Beckham and Wilbur Snyder*

It's a quiet right now in [Robertsdale, PA](#). But the mail train will soon arrive. So the post office clerk has positioned the pushcart into the spot where the crew will offload mail from the combine. The clerk will then push the cart over to the Post Office building, and toss the mail through the window. Every time he does this chore I'm sure he asks himself, "why could they bother to lay this track, but not bother to put in a door!"

That's the way it was on the EBT. That's the way it is on Pete and Jane Clarke's HON3 EBT as well.



- Thank you to Wade Woodcock for the 3-D printed "Old Post Office" kit. Frank Benenati assembled the structure.



I model the waning years of the Western Maryland (WM) when the Chessie System colors were rapidly erasing any visages of the WM from the rails. The Western Maryland had 105 “[Northeastern](#)” style cabooses on the roster. A complete WM caboose roster is located at [alphabetroute.com/wm/rosterpdfs/WMCabooseClass.pdf](http://alphabetroute.com/wm/rosterpdfs/WMCabooseClass.pdf).

Lifelike produced a huge number of these caboose years ago. They are readily found at train shows and on eBay. I acquired a few of these in both the boxcar red “Speed Lettering” and “Circus Color” paint schemes, and need to bring the “Speed Lettering” cars forward, erasing, into the 1980’s.



Starting with a Proto 2000 Steel Center Cupola Caboose I used the following material to complete this project.

- MicroScale Industries 87-700 Western Maryland Cabooses decals
- [Tru-Color](#) TCP-33 Aluminum paint
- [Tru-Color](#) TCP-305 Chessie Yellow
- Badger ModelFlex – UP Harbor Mist gray – used as a primer, use whatever primer you like best

Note: For the Vermilion sash and door trim you could use Tru-Color TCP-307 Chessie Red-Orange. I used an bottle of the actual Chessie Vermilion that was given to me decades ago by a WM shop foreman. I have carefully kept it sealed all these years and it was still usable after being thinned for the brushwork.

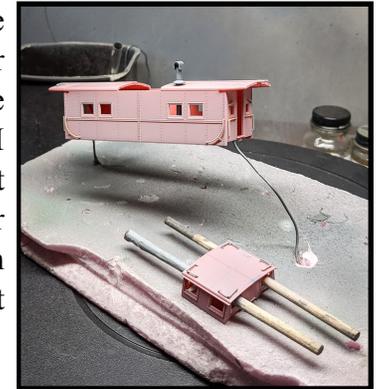
Note: [Tru-Color](#) paints require acetone cleanup. You may want to substitute your favorite water based acrylic based paints as I find that [Tru-Color](#) are difficult to airbrush and cleanup.



Disassemble and paint-strip the caboose. 90% isopropyl alcohol in a glass jar works very well to strip paint. Let it soak overnight. Scrub with a toothbrush and let it soak another evening.

After round two the paint will be gone. Wash in hot soapy water, rinse well, and let dry. All the parts stay in a project box until needed.

The first trip to the paint booth is for the primer. I use whatever gray I have on hand, shot through a Badger dual-action brush and spray at about 15 psi.



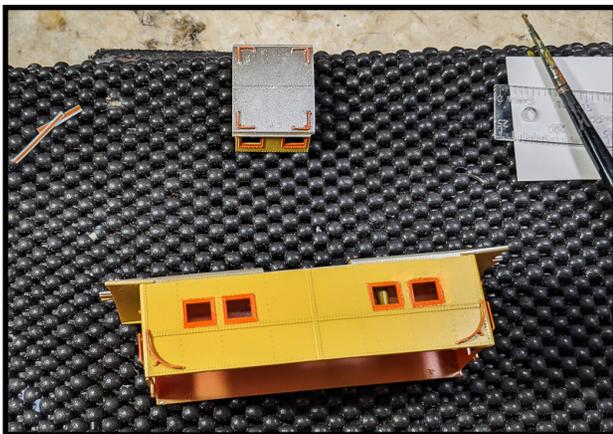
Next, mask the body and shoot the aluminum paint for the roof. 3M #2098 Ultra Sharp Lines Multi Surface painters tape is my favorite masking tape. Rarely will there be paint bled-through and the edge of this tape is razor sharp.

After the roof color has been applied, mask the roof and shoot the yellow next.



Now the tedious part comes into play, painting the window and door sashes. I use [MicroScale Industries Micro Mask](#) and a 2/0 or 0-size brush to carefully apply the Micro Mask to the body around the window sash. This is in lieu of using the 3M tape which is very time consuming to cut and apply.

Using a 2/0 brush apply the vermilion color to the sashes and door frames. The key to a professional looking finish is being comfortable while applying both the Micro Mask and vermilion paint. I work at a well lit work bench, use an Opti-Visor with LED lighting, and a foam based car cradle to hold my work. I also rest my painting arm and elbow on a soft towel so that I don't become uncomfortable and rush the work.



Another trip to the paint booth to shoot a gloss coat on the car, I use MicroScale Micro Gloss and thin it slightly before airbrushing. I have also had success using Pledge Liquid Floor

Gloss. Thin it with water and brush it on the areas where you will be applying decals.

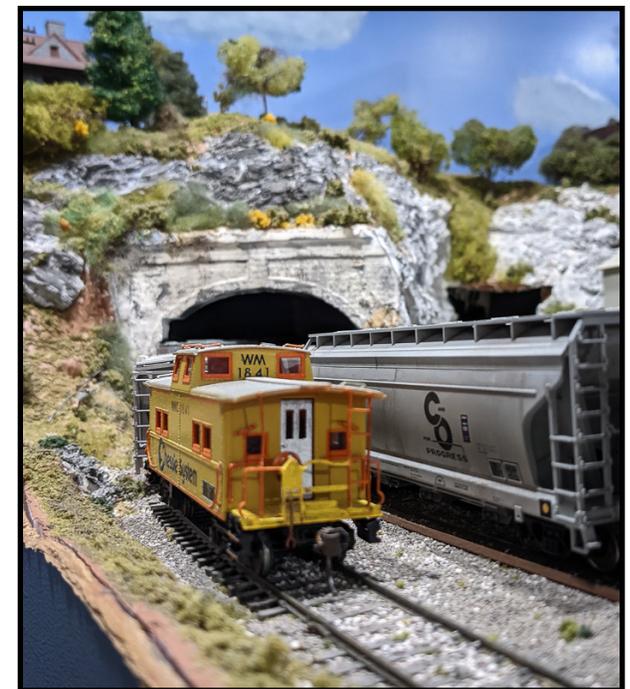
I consider the best book written on WM cabooses to be ["Western Maryland Cabooses" by Dwight Jones](#). Another valuable photographic resource for these cabooses from the Chessie era can be found at [hebners.net/Caboose/bowm.html](#).



Using a prototype photo, cut the decal sheets to obtain what you need. I cut the decals as close to the artwork as possible using either a hobby knife with a fresh blade or manicure scissors. Apply the decals after letting them soak just long enough to slide off the backing paper. Position in place and let dry. After the decals are fixed in place apply your favorite decal

setting solution, in my case that is slightly thinned [Walthers SolvaSet](#). This wetting/softening solution is very aggressive and older decals may start dissolving or falling apart if you use it without thinning.

I model the early 1980's so a Clean, Oil, Test, and Stencil (COTS) decal was applied. Notice there is no ACI label. The railroad industry gave up on the ACI car identification system in the late 1970's due to the unreliability of reading the labels and the cost involved in maintaining them.



The end platforms were hand painted using the [Tru-Color](#) Chessie Yellow and the end rails were done in my vermilion color.

Again, images of the ends of the car are very useful as there seems to be a wide variation as to what safety appliances (hand rails, step tread edges, and grab irons) got the vermilion color depending on who did the repaint.

One last trip to the paint booth for a shot of clear flat to hide the decal edges, I use Badger ModelFlex 16-601 Clear Flat or if I want to go “old school” I’ll shoot Floquil Flat Finish.

Finishing up the model included painting the wheel faces and backs with a muddy/grime color, I use a cheap acrylic paint from [Hobby Lobby](#) made by FolkArt called #940 “Coffee Bean”. It has just the right amount of brown and dark tints that makes for a convincing wheel finish. The Kadee couplers are lightly painted with the same color using care not to gum up the workings of the knuckle.

Weathering involves using light gray, black, and brown powders that I get by shaving art pastels. I shave the individual colors into an egg container compartment. This technique has worked very well and is inexpensive compared to buying weathering powders sold for model railroad applications.

After weathering, the car is complete and ready to get back on the rails. It takes me about 4 hours in total to do one of these way cars, spread over a week of evenings. I hope you enjoyed this how-to feature and picked up an idea or two.



I have a double-sided backdrop on my layout where there will eventually be a “Loads In - Empties Out” function. The St. Maries side has a plywood mill, currently in place, which will receive empty bulkhead flatcars and produce loaded cars. The door will be a rollup type.



On the other side of the backdrop, Marengo, there will be a plant of some kind that receives loaded bulkhead flatcars and produces empty cars. I was looking for a quick way to put a building in place on the Marengo side. I was constrained by existing trackage.



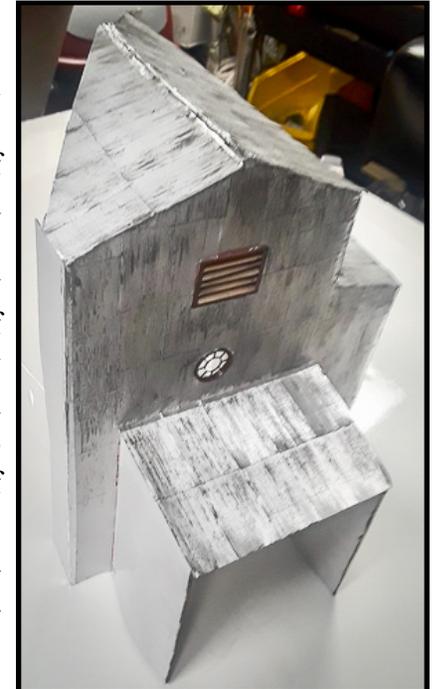
Rummaging through my stuff, I came across a Broadway Limited Cannery kit. I had three of these at one time since they are very flexible. The kit has material to build a factory with corrugated sides and roof, using plenty of heavy styrene sheets, factory windows, and aluminum corrugated siding strips.



So I devised a way to place the building on an angle so that a single car could be placed inside.

It took quite a bit of trial and error to create a design that would clear the cars adequately. I used miscellaneous plastic pieces to strengthen the styrene joints.

The conventional swing doors are made of wood and will be operated by some kind of screw mechanism attached to the tops of each door. This will be a subject of a future exercise.



I weathered the structure, but maybe too much.

