

The Potomac Flyer

April-May 2024

The Newsletter of the Potomac Division, MER, NMRA



Inside This Issue:

Meet the Member: Deane Mellander, MMR #68

What Is Digitrax LWN1?

Build a Western Union MoW Car

The Real Train Engines Challenge



Coming Up:

Sat. April 13, 10 AM Hobby Barn Clinic, Tinkercad

Sun. April 21, 3 PM Virtual "Portrait of a Railroad"

Bill of Lading

(These are now clickable links directly to articles)



- P 3 From the Business Car**
- P 5 Candidates for the Board of Directors**
- P 7 Achievement Program Report**
- P 10 The Square Foot Challenge is Coming**
- P 11 Creation of Our Division and Its Name Change**
- P 13 Meet the Member: [Deane Mellander](#)**
- P 16 The Great Real Engines Challenge**
- P 30 Digitrax LWN by [Brian Sheron](#)**
- P 33 Norfolk Southern Staging Yard Project by [Ernie Little](#)**
- P 38 Western Union MoW Car by [Martin Brechbiel](#)**
- P 43 Liquid PSA and Gallery Glass by [Greg Cassidy](#)**
- P 46 The Choo-Choo Barn by [Alex Belida](#)**
- P 49 Flyer Bits and Pieces**
- P 54 Paymaster's Report**
- P 55 Calendar of Events**
- P 57 Hobby Shop Business Cards**

Cover: Norfolk & Western 4-8-0 on the Strasburg Railroad ([Stoermer Photo](#))

The Potomac Flyer

Submission Deadlines – Issue

Nov. 1 for Dec.-Jan.	Jan. 1 for Feb.-Mar.
March 1 for April-May	May 1 for June-July
July 1 for Aug.-Sept.	Sept. 1 for Oct.-Nov.



Business Ads:

If you are interested in advertising in *The Flyer*, please contact the editor at: Potomac-Flyer@potomac-nmra.org Advertising rates for one year (6 issues) are as follows, and must include camera ready art (text, doc/docx, jpeg, pdf, tiff formats):

Business Card sizeFree for Local Hobby Shops

Quarter Page ad.....\$65

Half Page ad\$115

From the Business Car

by Ernie Little, MMR, Potomac Division Superintendent



As I write this, Spring has sprung and the cold temperatures have receded, giving way to milder weather. It has been a busy two months in the Division and several activities have taken place. The first I will speak of is the election process. The candidates for the Board positions of Paymaster and Assistant Superintendent have been announced, and voting will commence on April 13th and then close on April 20th. Voting will take place through eBallots for those members who have current emails on file with the Division and mailed ballots to those that do not.

Both members running for these two positions are the incumbents who have served the Division well. I thank them for their willingness to run again, although it would be a great thing for them to have some competition to allow the opportunity for other members to serve on the Board of Directors. But no one has stepped forward to express interest so we will, with the vote of the membership, move forward with what we have.

The Division Annual Meeting is coming up, and planning has started for it. We have a venue, and it will be part of a Division meet that will include clinics and layout tours. There will also be a presentation of the Division's Marshall Abrams Award.

We held our first virtual discussion of model railroading in January and a second one in February, both of which were successful and informative. These discussions will continue in future months as time permits and if they can be scheduled without interfering with our virtual and in-person clinics.

As I mentioned in my last column, the Division has a need for clinicians for both in-person and virtual clinics. Here is an opportunity for you to give a presentation on a topic you enjoy reading or talking about or a project you are working on, and at the same time earn points toward the Volunteer Achievement Program certificate. If you are interested in presenting a clinic, please contact Jerry Stanley, or another Board Director to get on the schedule.

We are still working on scheduling an Operations Saturday. However, the amount of activity by our members with their own operations sessions is making it difficult to find an open date.

The Board has been in contact with the Chesapeake and James River Divisions regarding joint MiniCons in the Summer and Fall. As soon as we have dates established, they will be shown on the Division's website.

Welcome New Members **February-March 2024:**

Rodney Basco, Vienna, VA
Thomas Braithwaite-Berg,
Laurel, MD
Thomas Matty, Derwood, MD
John Lyon, Rockville, MD
Todd Smith, Manassas, VA

The Potomac Division, Mid-Eastern Region, National Model Railroad Association includes the District of Columbia; Calvert, Charles, Montgomery, Prince George's and St Mary's Counties in Maryland; Arlington, Fairfax, Fauquier, Loudoun, Prince William, and Rappahannock Counties in Virginia, as well as all area independent cities.

The Division Crew:

Superintendent Ernie Little, MMR
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media@potomac-nmra.org

The Mid-Eastern Region Convention in Durham, North Carolina has had to change dates from September to October 17-20, 2024, due to construction work that will be taking place at the Marriott Hotel. This move has resulted in the room rates being reduced by Marriott to compensate the Region for the inconvenience of changing the dates.



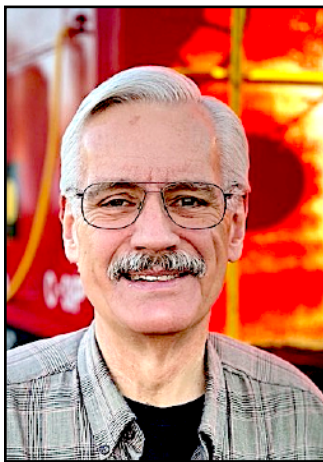
I want to thank Cam Green and Sean Hoyden for opening up their layouts for tours in late March. Sean's Dominion Southern layout is under construction, but he has made considerable progress since our November 2023 visit. If you are willing to open your layout for Division member visits, please contact Ken Wilson or Paul Hutchins, who have been coordinating our layout tours.

Finally, we were fortunate that Greg Cassidy found *Dixie/Potomac Flyers* from 1993-1996 and was able to scan them. This allowed them to be posted on the Division website. We are looking for other issues from between the Fall of 1996 and Fall of 1999. Perhaps you have a box of stuff that you haven't looked into for a long, long time, and maybe it has copies of these newsletters in it. If you have any, it will be greatly appreciated. The Board of Directors would love to hear from you.

The 2024 Candidates for the Potomac Division Board of Directors & Voting Information

The Nominating Committee of **Mark Gionet** (Chair), **Paul Hutchins**, **Bill Demas** and **Brian Sheron** has submitted the following candidates for the positions of Assistant Superintendent and Paymaster on the Potomac Division Board of Directors. We thank these members for their willingness to serve on the Board. There were no other candidates. Despite this, we still need your votes.

Ken Wilson, Candidate for Assistant Superintendent



I recently retired from Fairfax County Public Schools after 43+ years, mostly as a fire prevention and protection specialist and managing a theatre safety program. I'm an HO modeler with time now to build my 1944-era railroad and expand my service to the members of the Potomac Division. In addition to model trains, I'm a collector of railroad artifacts ranging from uniform buttons on up in size to a steam locomotive bell. However, I find buttons a bit small, and I barely have space for my one bell, so I tend to focus on the roughly 400 lanterns in my collection.

Why I am running:

I'm seeking votes from the membership to be elected as the Assistant Superintendent. I have served in this position since I was appointed in April 2023 to fill the vacancy created when Ernie Little became Superintendent.

Working with the Board of Directors has given me some insight on the relationship between the Potomac Division and the national NMRA leadership. For many years we all have been concerned with the dwindling number of members and the Board has worked hard to attract new members. We've had some success from our presence at train shows, and we picked up nine new members recently, mostly from Virginia areas that were not assigned to a division until now. That's good news for those folks and I'm sure they will be impressed with The Potomac Flyer, in-person and virtual clinics, and our MiniCon.

The bigger issue to me is how do we serve the several hundred existing members who do not participate? Working with Paul Hutchins, we are striving to expand the number and frequency of layout tours. Attendance has been down from the numbers before the pandemic, along with the willingness of modelers to host tours. There are so many railroads that have not been seen and I'm sure there are a great many members who have skills that could be shared through future clinics. I have presented three clinics

in the past few years and I can attest that it is a rewarding experience and much easier than I thought it would be.

If elected I would like to focus on rekindling participation from our current members by learning what they would like from the Potomac Division, and how the Board can help fulfill those needs.

Jerry Stanley, Candidate for Paymaster



I am seeking re-election to the Potomac Division's Board of Directors as the Paymaster. This would be my third term. My duties as Paymaster have included the following tasks: receiving bank statements; making and verifying deposits; keeping track of and paying invoices; reporting the financial statement each month to the Potomac Division Board of Directors. My other Board duties include participating in monthly virtual meetings, reporting on the current financial status of the Division, helping to find clinicians for in-person and virtual clinics and developing the build and take schedule. I assisted with organizing the James River-Potomac Divisions joint meet and organized the NMRA

Potomac Division Greenberg train show presence. I hope to work to add more activities, continue to help the Board of Directors and create a bigger vision for our Division. I would appreciate your vote for Paymaster again. Thank you.

Here is the voting schedule:

April 1, 2024 - The Potomac Flyer and emails from the Division will provide a list of candidates for office for the membership to consider. Ballots will be mailed out to those members without email addresses on record.

April 13, 2024 - eVoting will commence. **[PLEASE VOTE!](#)**

April 20, 2024 - eVoting will conclude; deadline for receipt of mailed ballots by the Nominations Committee.

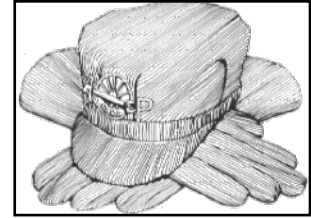
April 27, 2024 - Candidates will be notified of election results.

May 21, 2024 - The new Board of Directors will meet.



Achievement Program Report

by Martin Brechbiel, MMR, Potomac Division AP Manager
Photos & Models by Greg Cassidy



I was expecting something of a quiet month or two and, oddly enough, that was the case. Other than the lovely models ([photos below](#)) from Greg Cassidy, who should be well on his way to getting his Structures certificate, the AP aspect of the Potomac Division has been very quiet. This seems off to me as this time of the year tends to be when much modeling does get achieved! Maybe next month?

But, since questions about **Master Builder-Scenery** have been simmering on the back burner a bit, I'll try to offer some clarity.

The first point is the minimum required amount of scenicked model railroad. That's contingent on scale. You need 60 square feet in O scale, 45 square feet in S scale, 32 square feet in HO scale, or 18 square feet in N scale. Other scales are proportional to HO scale. This requirement does not have to be a single section of layout—or even a layout; modules (eight square feet minimum) and the like can qualify. Outdoor (garden) railways can qualify as well; however, the modeler must demonstrate the creation of a miniature railroad.

The scenic elements of **Terrain, Structures, Background, Lighting, and Realism/Conformity** are evaluated to assess whether a realistic model railroad scene has been presented. The goal is to earn at least 87 1/2 points.

These are the definitions of the various elements:

Terrain accounts for 35 points.

This includes all the ground and natural features such as rocks, water, trees, hills and depressions, as well as such man-made features as railroad roadbed, cuts, fills, drainage ditches, embankments, streets and roads, etc. This also includes appropriate vegetation and the effects of weather and of animals. Detail on streets and roads, whether in urban or rural areas: sewers/storm drains, manhole covers, shoulders, cracks, patches, road wear marks, oil stains, and tire ruts in dirt roads as appropriate to locale and era—this all must



Dardin's Mill is a Carolina Craftsman Kit in HO based on the mill in Elkins, West Virginia adjacent to the Western Maryland yards. This structure was three stories on the front and two on the back where the railroad loading was handled. This kit was modified from the CCK kit to fit the configuration for the layout where it will be installed.

make sense. So when you self-evaluate your layout, ask yourself if everything you see and have placed on it makes good rational sense and is appropriate. Does it all “connect,” or is it just random scenes? Does the scenery tell a consistent story?

Structures account for 20 points. This is not Master Builder-Structures! Structures in **Master Builder-Scenery** are evaluated from the standpoint of appropriate prototypical suitability, placement, and appearance. The basic question being asked here is: Do the structures belong and make sense as scenic effects? This is just about everything that’s not **Terrain**. Extra features add value; structures should be incorporated into the landscape and not just plopped on top. Anything that doesn’t belong or make sense needs to be hidden or disguised.

Background accounts for 25 points. The background or backdrop should be a part of the “illusion of reality” that the rest of the scenery is projecting visually. Again, the visual should make sense and look appropriate to the eye with a smooth transition from layout to backdrop to reasonably depict depth, distance, horizon, and sky. Seeing other parts of the room should be minimized!

Lighting accounts for 20 points. There’s lighting in the room and then there’s lighting on the layout (think structures, cars, signals, streets, etc.). The more lighting effects in the room, the better overall. Evidence of lighting is what’s needed to earn points; operational lighting adds value. But make sure that, once again, it makes sense. Lighting the room as entirely daylight is acceptable, but having day and night cycles and all of the lighting on the layout synchronized achieves a higher level.



Weigh Scales was a Scale Agency Office on the Pennsylvania Railroad Shamokin Branch. It was a combination of a scale house and the yard agent's office at a small coal hopper classification yard in, ironically, Weigh Scales, Pennsylvania. This is an O scale scratchbuild based on some photographs for a 1950's PRR layout.

Realism/Conformity accounts for 25 points. This actually seems straightforward. Just how real does everything on the layout look, and how close does it mimic reality? This really is the sum total of the other areas—just how close did you, the modeler, get to making your vision look like the real world? Here’s where having actual prototype photos to justify and support the appearance of scenes becomes critical. Of course, if you are freelancing, demonstrating prototype practice and inspiration can be equally valuable. So, how close did you get to making it all “real” is the question being answered in the score.



Elkins Station is a Carolina Craftsman Kit in HO of the Western Maryland passenger and freight station next to the yards in Elkins. This has a detailed interior with lighting installed on the second floor which will be at eye-level when installed on the layout.

The Dreaded Paperwork. (a) You need to generate a set of photographs (or video recording) with a written description that explains what you have intended to display with your layout scenery, setting, and scenic details including towns or cities, etc. This is not a photo contest! Provide good enough photos, including an overall picture of the layout (might take a few for some folks), and the pictures of all the parts need to be included in that write-up along with some narrative information. (b) Write up a description of the materials and methods of construction you used to create the scenery (Terrain, Background, and Lighting). Keep it simple but complete! Make it all a PDF if you can! (c) Attach a copy of everything in a & b above to the Statement of Qualifications (SOQ) for the evaluation process (available as a Word doc at bottom of <https://www.nmra.org/scenery>). (d) Schedule an evaluation and earn at least 87½ points. (e) Submit that completed SOQ and the attachments, and the signed evaluation forms to...me! I'll get it all sent up the line and hopefully be able to present you with your AP certificate for **Master Builder-Scenery!**



Piedmont Junction

NEW Dates ! NEW Rates!

October 17-20, 2024

23 Layout Tours

44 Clinics

10 Operations Sessions

3 Prototype Tours

Model Contest, Company Store and More!

Raleigh - Durham Marriott at Research Triangle Park
4700 Guardian Dr., Durham, NC 27703

Hotel Rate is \$79 USD per night, hotel registration is open NOW! Go to convention website for the link on the "Location/Hotel" tab.

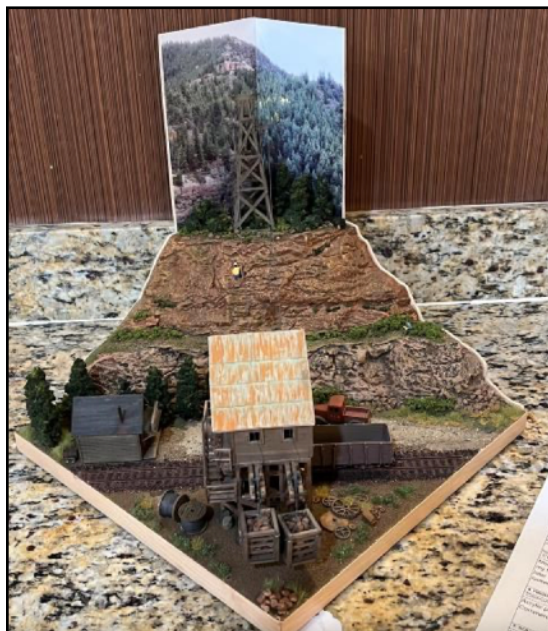
Website: PiedmontJunction.org

Registration Opens in April



The Square Foot & T-Trak Module Challenge!

We have a challenge for the popular model contest that we plan to have in November at our usual joint meet with the James River Division. We're calling it the *Square Foot Challenge*, a contest other NMRA divisions have held, but adding in T-Trak modules as an option.



All you have to do is build something railroad-themed, in any scale, on a one-square-foot platform of your choosing or on a standard T-Trak module with dimensions of 12-1/2" x 14-1/2". There's only one requirement—submissions must include a piece of track.

(Photo left from Pacific Coast Region contest)

There is no limit on the height of your submission. For those doing square foot projects, it doesn't have to be an actual 12" x 12" square; it just can't exceed 144 square inches, enabling you to consider a longer but narrower display—8"x18", 10"x14", 6"x24".

Exercise your creativity and demonstrate your model-making prowess! Even if you have a layout, you should have time to build a little scene for this contest. Maybe you can integrate your little diorama into your layout.

The Potomac Division Board of Directors urges you to start now so you can bring your entry to Battlefield Baptist for the November meet!

(Photo right from Turkey Creek Division contest)

We can guarantee the winner a colorful certificate. We'll also see about finding a real prize as well.

Get to work!



The Creation of Our Division and Its Name Change

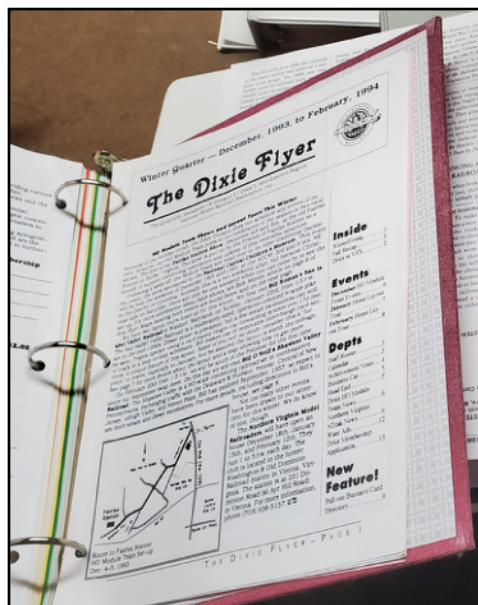


Deane Mellander, MMR (back row left), found this photo and shared it with the *Flyer*. It depicts the folks who formed our Division, then called the Dixie Division, in 1969. The sign being held by the late Charlie Eckstein, MMR, reads as follows:

Dixie Division
The second division of the MER
Will hold its first meeting
Saturday, April 19, 1969
Here
Starting at 2 PM to elect officers
RSME will hold open house
After the meeting

The picture was taken in front of the original visitor's center for the National Capital Trolley Museum. The Rockville Society of Model Engineers occupied the right side of the building and had a large layout that was installed in 1967. Today, the Inter-County Connector occupies this area, and the museum buildings have been relocated further back on the other side of the highway.

The Dixie Division was renamed the Potomac Division in 1994. Member Greg Cassidy, going through some old stuff in his basement, came across some binders with back issues of *The Flyer*.



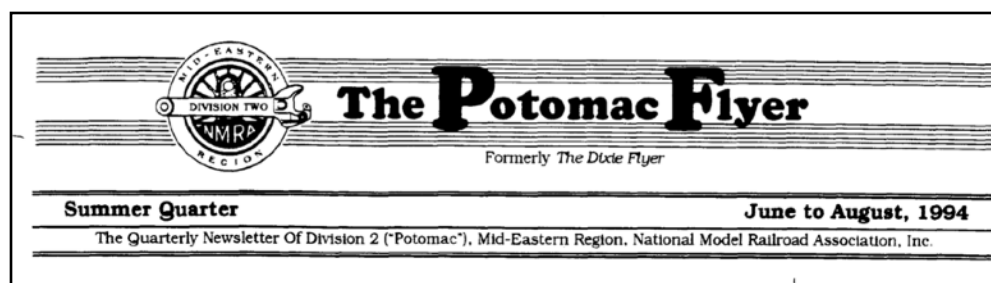
Take a closer look at the logo on top of that 1994 newsletter in the photo on the left.



Yes, in 1994, the *Flyer* was called *The Dixie Flyer*. One issue later, it became *The Potomac Flyer*.

The Board at the time said that *Dixie* was misleading because it didn't accurately describe the Division's area. While acknowledging that the region was below the Mason-Dixon line, "*this is not the Dixie that springs to the mind*" of most people.

Some members suggested names like "Capital Division" or "National Capital Division" or "Potomac River Division."



The Board said any of these would "*provide a name that is both more modern and more 'politically correct.'*" (There is a Dixie Division in Alabama in the Southeastern Region of the NMRA, but it is listed as inactive.)

The name change was approved at a MiniCon held at Oakdale-Emory United Methodist Church in Olney, Maryland on March 12th, 1994. *The Flyer* reported that over 70 members attended, but the actual vote on the issue was not noted.

Editor's Note: We have posted 12 Flyer issues from 1993-1996 on our website library. These issues, which we did not previously have, were given to us by Greg Cassidy. If you have old, missing issues, contact us at Potomac-Flyer@potomac-nmra.org

Meet the Member: Deane Mellander, MMR #68

Editor's Note: This feature is designed to promote greater knowledge about members of the Potomac Division and their model railroading interests. If you are willing to participate, please send an email to potomac-flyer@potomac-nmra.org. The following text is by Deane Mellander, who also provided the photos. Deane was among the first members of the Division to achieve Master Model Railroader status. He became MMR #68 in 1976.



Deane running EBT No. 15.

How did you get started in the hobby? How long have you been an NMRA member? How long with Potomac Division?

I believe I joined the NMRA in 1963. I had recently become a member of the Rockville Society of Model Engineers (RSME), which at that time had its club layout on the second floor of the Rockville B&O station.

What's your favorite Division activity – open houses, MiniCons and meets, clinics in person, virtual clinics?

I enjoy all the aspects of the Division's activities, though if I had to rank them, I would put layout visits first. Various family responsibilities have limited my activities in the Division and Mid-Eastern Region (MER) in recent years, so I haven't been as active as in the past.

What do you model now: layout, scale? Do you still have your first engine/train set? What was it?

My layout represents a freelance narrow gauge line that connects the Western Maryland (WM) Lurgan line with the East Broad Top (EBT) near Neelyton, Pennsylvania. It is mostly On3, but the WM is represented with a circle around the basement perimeter and a couple of hidden storage sidings. The Cumberland and Susquehanna is patterned on the EBT, being primarily a coal-hauler. We lease a number of EBT locos (time frame is the mid-50s) but have some home road power, too. All the track was in, though one of our more rambunctious cats had torn out some of the upper yard tracks. There is no scenery, and I haven't had any time recently to even get that fixed, let alone get the layout back in operation. I am

A Kemtron Shay Deane built from a kit.

hoping that I might get things running by spring, if I can get the track and some recalcitrant switch machines fixed. First train? An old Marx set I got for Christmas when I was about five. Later came an American Flyer set with the New Haven Pacific and standard passenger cars. I got seriously into the hobby



when I was a junior in high school, which is about when I joined the RSME. The Marx and American Flyer stuff are long gone, of course. My first HO loco was an Athearn PRR F-7 with rubber band drive.

What's your favorite part of the hobby? How about your least favorite? What projects have you been working on recently?

Model building, followed by operations are my favorites. One thing that has taken much of my time is that we own a second house near Pittsburgh where we spend a lot of time. It does have the virtue of being a few blocks from the McKeesport Model Railroad Club. I have been working on installing a trolley line on their layout when I can get down there.

Describe your model railroad philosophy? What to you is the value of the AP program? Is shooting for MMR worthwhile?

First, you need to take pleasure in the hobby. In general, I subscribe to the "good enough" philosophy. Not everything needs to be 100% superdetailed as long as it fulfills the need. Yes, foreground models need more detail, but the ones three feet away, not so much. The AP program provides a path to expanding your appreciation of the hobby and the NMRA's role. On the construction side, you gain experience by participating in the contests or merit judging, and you learn how to be a better modeler. Participating in the organization's activities exposes you to different people with different philosophies, modeling preferences, and outlooks on the hobby, thereby expanding your own horizons. Pursuing the program to MMR gives one a real sense of accomplishment.



A superdetailed NWSL Spartan Mogul running through the interchange yard with a WM Russian in the background.

What advice do you have for newcomers to the hobby?

Subscribe to the hobby magazines, go to the big train shows, attend open houses when the

opportunity occurs, and absorb all that you can. Understand that there are almost no "big mistakes" that you can make. As you progress, you will understand that there are different fields of interest that you may wish to pursue. Don't get hung up on just one thing. Enjoy the diversity.

Tell us a bit about your life, where you grew up, what jobs you held?

I grew up in the Wheaton area. We moved into our house there in 1949 when I was three. I joined the Rockville Society of Model Engineers in 1962. I had gotten the railroad bug back a year earlier by trying to scratchbuild a J&L 20,000-gallon tank car from a 1954 Model Railroader article. I still have it somewhere. I kept it as my "humility car"—a reminder that we all have to start somewhere. I put in four years with the U.S. Navy, then 30 years as a city planner with the Maryland-National Capital Park and Planning Commission. After retiring from there, I put in another 20 years with the City of Rockville, retiring in 2021 as the Zoning Administrator. I was in HO for years, but the On3 bug bit while I was in the Navy. I began a layout when I moved into my first house in 1983. I moved again to my current residence in 1990. The dual gauge yard came with me and is still in service. I'm still a member of the successor Rockville Model Railroad Society, and also a member of the McKeesport Model Railroad Club. I also have been a serious railfan and photographer, and I am a founding member of Friends of the East Broad Top.



The Great Real Train Engines Challenge



Last year, Potomac Division Clerk Lee Stoermer wondered whether our Challenges would allow the submission of photos of actual—not model—railroad features. After some thought, we decided it was a good idea and a welcome change of pace. Here are the submissions we requested for photos of real engines.

Our previous Challenge was focused on train stations. We wanted models, but our enterprising Superintendent managed a *two-fer*, sending in both a real station (a lovely one at that) and a model.

Our members' favorite was Bryan Kidd's **1892 Depot** and he earns our most-favored star. Congratulations!

For our June-July Challenge, *The Flyer* is looking once again for real railway photos that you have taken. This time, it can be anything railroad-related—engines, freight or passenger or MoW cars, stations, roundhouses, bridges, signals, anything. Please send only photos you have taken, not something plucked off the Internet. The deadline for submissions is May 5th (*note new deadline.*)

(And a heads-up: Our August-September Challenge will be for kitbashed models.)



Send them, as well as your votes for your favorite in the Real Train Engines Challenge to the usual email address: potomac-flyer@potomac-nmra.org

Thank you.

Alex Belida, MMR, Editor & Publisher

(The following items appear in the order in which they were received. The texts and photos are by the modelers who submitted them unless otherwise noted. Some texts may have been edited for length and/or clarity. We welcome submissions from members of other NMRA Divisions in the MER.)

1. Alex Belida's Steam Locomotives



I took this photo [\(above\)](#) last fall while on a daylong East Broad Top excursion at the 2023 *Round The Curve to Altoona* MER Convention. We were able to ride the narrow gauge train in new cars made specially for the EBT. On another convention excursion, we rode the Western Maryland Scenic Railroad's 2-6-6-2 #1309 [\(below\)](#), a mighty steam beast. **Alex Belida, MMR**



2. Greg Cassidy's Western Maryland F7



This was in 2002 at the B&O Museum in Baltimore, and they had just finished a thorough restoration of one of the last Western Maryland F7s to survive. I had to get photos of it, but this is the only one that came out OK. I don't have many locomotive photos. Usually when I'm out railfanning with others I would take photos of the buildings instead of the locomotives (I know-you're shocked). We were given a ride behind it later in the day. I don't remember what the celebration was but it was WM inspired and the museum was showcasing their WM equipment including #236, the latest restoration. *Greg Cassidy*



3. Mat Thompson's Prairie 2-6-2



I took these pictures on June 24, 2012, in Garibaldi, Oregon. McCloud River RR #25 was heading a tourist passenger train on the Oregon Coast Scenic Railroad. The short ride was from Tillamook north about 25 miles along the Pacific Ocean. The OCSR had acquired the 2-6-2 (Prairie) engine about a year earlier. The engine is still running and as far as I know is still lettered for the McCloud River.



Interesting to me is that the engine was used in the movie *Stand By Me*. The movie was filmed in and around Cascade Locks, Oregon, along the Columbia River. That's where I lived when I was about the age of the boys in the movie but long before the

movie was made. My friends and I spent a lot of time in the woods, just as in the movie, but fortunately we never found a human body.

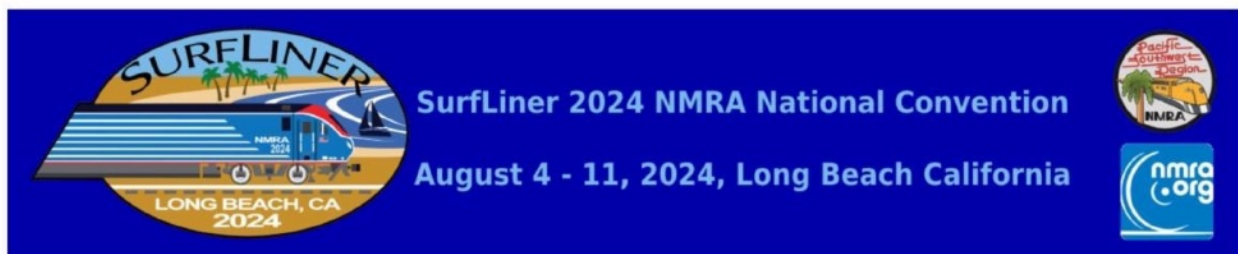
I call my HO scale railroad the Oregon Coast Railroad but didn't know about the Oregon Coast Scenic RR when I settled on the name. **Mat Thompson, MMR**

4. Bill Schultheiss' Vermont Railway GP-38



I love this photo because it ties the past to the present and it was a favorite railfanning spot for me when I was a kid and now as I return home as an adult. The former Central Vermont Railway (now Genesee and Wyoming New England Central) roundhouse built in 1923 is still in use and allows for larger engine repairs other smaller roads can't handle such as this Vermont Railway GP-38 (former Southern). The Vermont Railway is a testament to the will to keep railroading when all hope seems lost as it carries on the Rutland Railroad dream. The red VTR scheme contrasts beautifully with the Vermont landscape! *Bill Schultheiss*

SurfLiner 2024 - NMRA National Convention



5. Stan Knotts' WW&F #10



I took this photo in August 2011. It is the narrow gauge, rear tank Forney 0-4-4RT of the Wiscasset, Waterville and Farmington Railway that served Maine's mid-coastal Sheepscot Valley. The engine was built by Vulcan Iron Works in 1904. **Stan Knotts**



6. Ernie Little's Switcher



My submission is Loco 1000, a NW2 switcher built in 1939. It was originally a demonstrator built for the Union Pacific Railroad and in 1966 it was retired from service by the UP. It was then sold to the Stockton Terminal and Eastern Railroad and then traded to the Western Pacific Railroad and transferred to the Sacramento Northern (WP's subsidiary) in 1973 where it worked the Stockton Yard. The loco was retired again in 1984 and donated to the Nevada State Railroad Museum where it still resides. *Ernie Little, MMR*



7. Bob Gifford's Greenbrier 4-8-4



This is former C&O J-3a #614, completely restored and serving as head end power for the Chessie System Safety Express during the early 1980s. It represented the epitome of what C&O passenger power evolved into and was one of the last new steam engines the C&O received.

This is probably the first engine that really got me interested and involved in railfanning and I chased it and the Express (a vehicle for promoting Operation Lifesaver) all over Virginia, West Virginia, Maryland and Pennsylvania. This is on the viaduct in

Richmond, Virginia departing Fulton Yard westbound. (As a total aside, I won the photo contest at the NMRA National with this.)

Bob Gifford



8. David Arday's WMSRR 2-8-0



This photo of Western Maryland Scenic RR 2-8-0 #734 was taken at about 9:30 a.m. on 18 October 2010, during a rail-fanning trip organized by Karl Franz. I shot it from the inside of Helmstetter's Curve. The engine, nicknamed "Mountain Thunder," was originally built by Baldwin in 1916 for the Lake Superior & Ishpeming RR. The WMSRR acquired it from the Illinois Railway Museum in 1992 and restored it to service.

Unfortunately, #734 has been out of service for about eight years, awaiting a Federal Railway Administration mandated rebuild, while the WMSRR has devoted most of its resources toward restoring and now operating ex-C&O 2-6-6-2 #1309.

David Arday, Chesapeake Division



9. Nigel Phillips' The Wylam Dilly

One of my favorite places whenever I visit Edinburgh is the National Museum of Scotland, located in the Old Town and a five minute walk from the Castle. In the museum is my favorite locomotive. The Wylam Dilly, a 0-4-0, two cylinder locomotive is one of the two oldest surviving railway locomotives in the world (the other is its brother locomotive Buffing Billy). Built



around 1813, it was designed to haul coal on the Wylam Wagonway. The five mile long single-track wagonway (with passing sidings) was built in 1748 and transported coal from the Wylam Colliery near Newcastle-on-Tyne to the coal staithes (elevated platforms) at Lemington on the River Tyne. Oxen or horses were the original motive power. Steam locomotives were used from 1813. Originally laid with wooden rails, cast iron plate ones were used from 1808.

William Hedly, a manager at the Wylam Colliery, researched a practical adhesion steam locomotive during a miners' strike in 1810 before building Puffing Billy in 1813 and then Wylam Dilly ("Dilly" refers to the coal wagonway). With two vertical cylinders on either side of the boiler and rocking beam cranks on top, the smoke stack was next to the firebox and there was a separate water and coke cart tender. They pulled seven to eight coal wagons at a top speed of five miles per hour making up to five return trips a day. There were no side rods connecting the axles, the vertical piston rods were connected via the beams and motion rods to an underframe cranked pinion gear train. This powered both axles with flat, flangeless wheels, making it a 0-4-0 locomotive.

The rocking beams also drove the water pumps on either side of the boiler. The piston exhausts were combined and connected to the stack, providing a vacuum draft for the firebox (an idea probably borrowed from George Stephenson's Blücher of 1815). The boiler was return-flued and did not have the efficiency of later multiple flue tubes. That invention came about in 1826. One large diameter flue tube ran in a U-shape from the firebox to the front and then to the back of the boiler and the stack, maximizing the surface area available for heating without the issues around multiple

boiler flue tubes and the then relatively high boiler pressure of 50 psi. The locomotive was briefly taken off the rails in 1822 to power a paddle steamer ferry transporting strike-breaking miners across the River Tyne. Wylam Dilly was transferred to Craghead Colliery, Northumberland, in the early 1860s, working until 1883.



Its weight was too much for the cast iron L-profile flanged rail plates, and it was rebuilt as an articulated geared 0-4-4-0. This configuration lasted until around 1830 and the introduction of a more robust wrought-iron rail when it was converted back into a 0-4-0 with flanged wheels. Stone setts (paving blocks) would have been used to support both flanged and regular rail, a design still being used with reinforced concrete in the UK during WW2. I suspect the dynamic downward forces generated by the opposed vertical pistons (piston hammer blow) were partially responsible for cracking the cast iron plates.

The museum also has a Balton and Watt beam steam engine, built in 1786. The same principles, a rocking beam, vertical piston, and vertical motion rod drive a gear train. I suspect the design of the Wylam Dilly engine was heavily influenced by the work of James Watt, and the reason why this locomotive is in a Scottish museum. George Stephenson was born in Wylam and was appointed as engine wright in 1812 at the Killingworth Colliery, just 15 miles away, and was well aware of these locomotives. No accident that some of the Wylam Colliery locomotive design elements can be seen in George Stephenson's Killingworth locomotives (and *vice versa*) and Robert Stephenson's original Rocket. **Nigel Phillips**

10. Jeff Jordan's N&W 611



This is my favorite prototype locomotive, N&W 611. I took this photo last fall while 611 was operating on the Buckingham Branch. *Jeff Jordan*

Let People See Your Layout

The Potomac Division sponsors layout tours quarterly and is on the lookout for willing hosts. Layouts don't have to be complete. Layouts in various stages of construction are just as interesting and informative to members. If you would like to host an open house on a Saturday afternoon contact our Layout Tour Coordinators Ken Wilson (Asst-Super@potomac-nmra.org) or Paul Hutchins (ff3hutch@aol.com)

11. Lee Stoermer's Locomotives



A Norfolk & Western 4-8-0 #475 pulling into the station on the Strasburg Railroad (photo left). July 2023. Cass Scenic Railroad's Shay #2 pulls into the station after refilling the water tender. June 2022 (photo left below). The front boiler cover

and headlight number board of the Southern Pacific's 2-8-0 Consolidation #2521 on display at location of original SP 1878 depot, Yuma, Arizona (photo right below).

Lee Stoermer



12. Bryan Kidd's Engine 1309



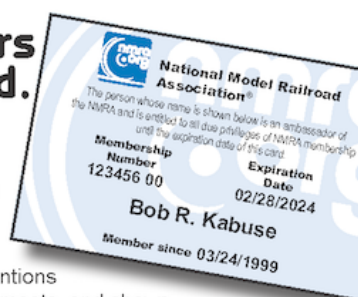
This photo is of Western Maryland Scenic Railroad, Engine 1309, a 2-6-6-2 (originally Chesapeake & Ohio, built in 1949). It was taken in November 2022. *Bryan Kidd*

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Control Your Digitrax DCC System with Your Smartphone

by Brian W. Sheron, MMR



The purpose of this article is to provide a brief overview of how to use your smartphone as a wireless DCC throttle when using Digitrax DCC systems.

Digitrax is now offering a more advanced series of throttles. These include the UT6, UT6D, DT602, and DT602D. These essentially are upgrades to the UT1, DT400, DT402, and DT500 series throttles. The UT6 and UT6D will cost you about \$100 and \$150 respectively, and the DT600 and DT600D will cost you about \$170 and \$225 respectively.

Many of us though, are still using such older versions of the Digitrax throttles as the UT1, DT400, DT402, and DT500. In the past, if one of these throttles malfunctioned you could simply send it off to Digitrax for repair. However, since the COVID pandemic, Digitrax has said that it can no longer obtain repair parts for these older throttles and has discontinued repairing the UT1, DT400, DT402, and DT500 series throttles. Thus, if you have one of these older throttles and it malfunctions, you can replace it with a new version or you can, perhaps, find a replacement for the one that malfunctioned on eBay or at a train show, etc. However, another option is to replace an older malfunctioning throttle by using your smartphone as a throttle.



So how do we use a smartphone as a throttle? Digitrax now makes the LocoNet WiFi interface (LNWI), a device that plugs into the Digitrax LocoNet and provides a WiFi signal for smartphones.

Two LNWIs connected together (photo left)

A LNWI costs about \$70 on eBay. The LNWI will support up to four smartphones at one time. If your operations crew needs to use more than four smartphones, you can connect a second LNWI to your first one with a short LocoNet cable. This will now provide you with the ability to use eight smartphones on your layout at the same time. Digitrax says that you can connect up to eight LNWIs per LocoNet, or enough for thirty-two smartphone users! Each LNWI generates a unique SSID (service set identifier), and access can be password-protected. Since each LNWI comes with a PS14 power supply, you will need a 120 VAC outlet nearby.

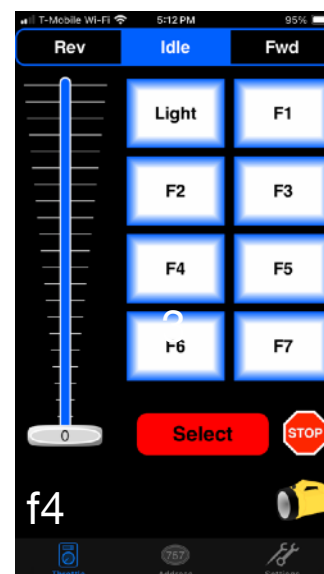
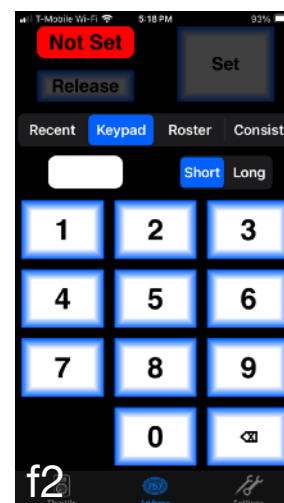
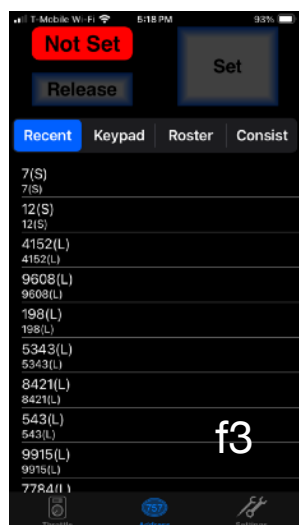
In addition, you will also need a short LocoNet cable to connect the LNWI to an open port on your LocoNet system, such as found on a UP5 universal panel, a booster, or a command station. You then must download a throttle app to your smartphone to access the WiFi signal now coming from your Digitrax LocoNet. If you go to www.digitrax.com/throttleapps/, this site will provide you with a list of supported apps for your smartphone. There are apps that provide access to throttles for both Apple and Android smartphones. These are free. The LNWI instructions provide links to access more advanced ones that you can purchase or for a fee. I have an Apple smartphone and found that the free throttle app is sufficient for my needs.

The LNWI comes with instructions that clearly explain how to install and connect the LNWI to your LocoNet, as well as how to set up your throttle screen on your smartphone. Using a WiFi throttle is not difficult. Figures 2 through 6 (f2-6 marked in white on photos) are screen shots for the iPhone throttle app. Throttle apps for other phones may appear slightly different.

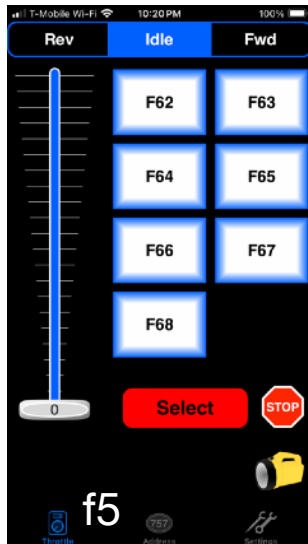
The first screen that will come up when you tap the “Address” icon on your smartphone screen is the keypad (photo right). This is where you can acquire your engine. If the address is a short address (two digits), you tap the “short” button, then enter the two-digit address. If your engine has a three- or four-digit address, you tap the “long” button and then type in the three- or four-digit address. Once you enter the address, it will be stored in the “roster,” which is a list of all of the engine addresses you have entered previously. Photo left shows the roster of engines I have previously run using my smartphone. If I wish to acquire any of these engines, rather than enter the address again, I can simply tap on the address in the roster. Finally, you tap on “Set” to complete the acquisition of the engine.

Note that on the bottom of the screens in figures 2 and 3 there are three icons with labels below them that, from left to right, read “Throttle,” “Address,” and “Settings.”

In the “Address” mode, I have acquired the engine I wish to run. I now tap on the throttle icon in the lower left corner, and the throttle screen appears (photo right). On the left side is the throttle. When you place your finger on the gray slider at the bottom (that says 0) and slide it up, your engine will start to move. You set the direction of the engine at the top of the screen. In



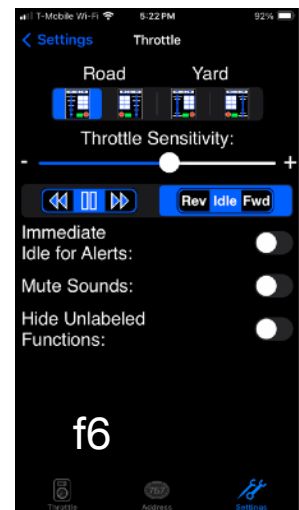
addition to “Forward” and “Reverse,” there is also an “Idle” setting, which means that your engine will not move if you move the throttle.



A bonus feature of this smartphone throttle is the FUNCTION buttons. On Digitrax throttles, the FUNCTION buttons only go up to F9. In most newer sound decoders (e.g., Paragon 4 decoders), the decoders have several additional sounds and features through F28. Using your finger to scroll the FUNCTION keypad up makes additional FUNCTION buttons up to F68 appear at your fingertips (photo left).

The “Settings” icon is in the lower right corner of the screens. When you tap on it, the “Settings” screen will appear (photo right) and you can make certain adjustments to the throttle, such as to its sensitivity.

One drawback of using your smartphone as a throttle is that, unlike the Digitrax DT throttle series where your throttle can access two engines at the same time, you can only access one engine at a time (like a UT1 throttle).



Finally, during operating sessions (at least on my layout), operators are provided with a clipboard that holds such instructions as switching assignments. Sometimes the operators might need to put their throttle down to read their switching assignments, and at other times they may need to put both the clipboard and the throttle down while they uncouple cars. I have hooks on my layout fascia where they can hang clipboards and throttle pockets which hold Digitrax throttles. Unfortunately, the throttle pockets are not wide enough to hold a smartphone.



Amazon has a host of smartphone holders. I found a smartphone holder on Amazon (KEPEHE 4 Pcs Phone Holder Wall Mounted, Phone Stand) that cost \$15.99 for four. I bought two packs and mounted them on the layout fascia at locations where operators would be doing switching duties (photo left).

Brian Sheron, MMR, is a former Superintendent of the Potomac Division whose Long Island Rail Road (LIRR) covers a total of about 310 sq. ft. He hosts regular operating sessions.

Norfolk Southern Staging Yard Project

Article and Photos by Ernie Little, MMR

With the winter months upon us, I have been able to get more involved with my HO scale model railroad. There have been many projects I have thought about, but after going to New Jersey last November to participate in an interchange operation program, operations came to the top of the project queue.

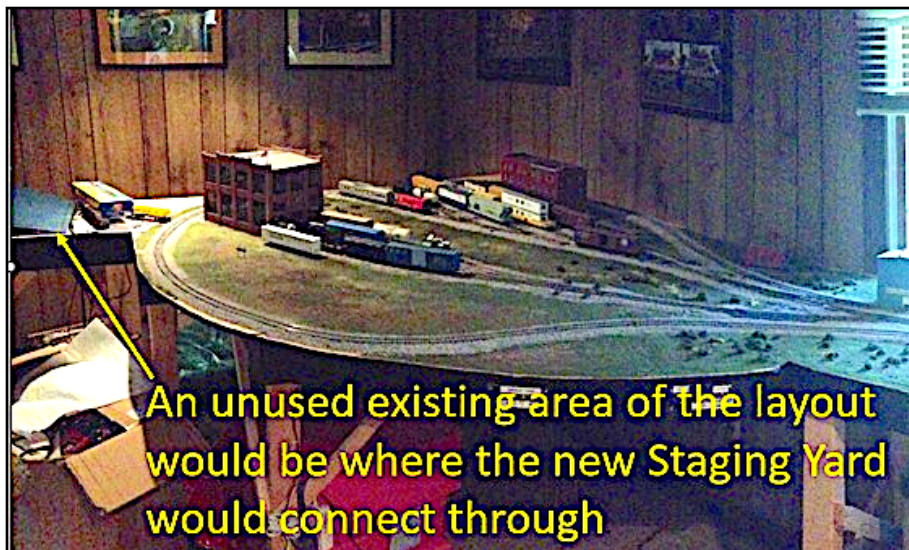
In January, I decided it was time for me to do what was necessary for my Norfolk Southern Connector to add live operations sessions to its capabilities. I had to determine what I needed to do to make it so. From the beginning I can say that I never had a layout design in mind but rather had started with a track plan from an Atlas catalogue that contained an intermodal facility and a couple of small yards. This track plan evolved to a single dogbone in design and then into a single dogbone connected to a helix providing access to a second level. However, a staging yard was never built into the railroad.

After much thought and discussion with my fellow model railroaders who conduct operations on their layouts, I came up with a list of needs.

1. I needed to have a staging track to allow trains to come onto and off the layout. The staging track would also be an area where train consists could be built.
2. I needed an interchange track that would allow trains from other railroads to come onto the Norfolk Southern Connector. During my conversations with my railroad friends we had always discussed the possibility of trains running on different layouts just like the prototypical railroads run through another railroad's territory.
3. I needed to install two new switches on the existing main to tie the main into the staging track. I had an unused area on the layout ([photo below](#)) that had been purposed to be a future yard but had never been

constructed. This provided an opportunity to add the staging track to the existing layout by adding two new switches on the west end of the dogbone.

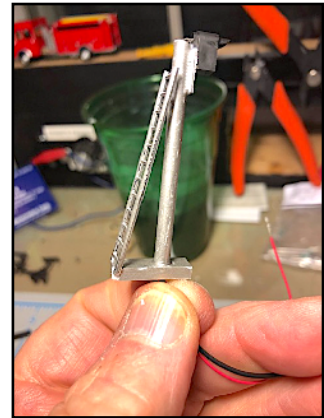
4. I needed signals to indicate the status of the switches connecting the main line to the staging track would be



needed to provide an engineer the ability to see the status of the switches involved.

Now that I had a list of what had to be done, I entered the implementation stage by constructing signals [\(photo right\)](#) from materials I had on hand in my kitbash and modeling boxes. Using Oregon Rail dwarf signal heads, 3mm red/green LEDs with appropriate resistors, rectangular shape and 5/32" styrene tubing, and some left-over ladders, five signals were scratchbuilt.

I purchased PECO SL-86 and SL-87 double right and left hand Insulfrog curved switches and installed them on the existing main at the appropriate locations. I used these switches as they have 30" inside radius and 36" outside radius curves of which the 30" matched what I have on the existing layout.



Both switches [\(photos left and right\)](#) would be controlled by Tortoise motors which would also allow me to control the signals. The Tortoise motors would be controlled by DPDT power switches located remotely from their location. My first learning point took place immediately after installing the PECO switches; this was due to the PECO



switches' power routing nature. From the entry end, I had to install power jumpers to assure that power was provided at all the track connection points. The way I was using them would not allow the power to be routed properly without the jumpers.

With the installation of the PECO switches, I could now proceed with the construction of the staging yard transition area. This required me to add some benchwork to the layout to allow room for the eastbound track lead to connect to the westbound track lead at a switch. In the photo you can see the two PECO switches and the interchange track which comes off the westbound track lead near the main line.

My second learning point occurred when I realized the connection of the eastbound and westbound track leads would create a polarity issue that would have to be addressed. I addressed this by creating a double isolation gap at two locations on the



westbound track lead and using a DCC Specialties PSXX-AR auto reverser to power the isolated section of track. I treated the situation just like a wye would be addressed. (Isolation gaps marked in yellow, photo left)

With the completion of this area, I was ready to move on to installing the Tortoise motors for the two PECO curved switches and the signals.

Now I had to contend with the “ugly” Tortoise motors which I didn’t want to be seen. I had to install them on the top of the benchwork due to the location of benchwork support members that would prevent the Tortoise motors from being installed under the two switches. I went back to the kitbash box for parts of a building that had been left over from a past project and turned a plastic vitamin bottle into a water tank.



(Photos left and right show concealed Tortoise motors)

I then installed the two DPDT switches that control the PECO curved switches in a scratchbuilt styrene box which I installed at the entrance to the staging track. I also installed another small electrical box with two female banana plugs connected to track power. (More on this a little later in the article.)



Now work moved onto the construction of the staging yard. Trying to keep expenses down is always a challenge and I was able to decrease the cost by repurposing my Civil Engineer Achievement Program demonstration board to become a portion of the staging yard.

I had to take a time out at this point to give some thought to one of the most important things that I would face. How would I keep easy access to the bathroom, staging track, and work room without having to duck under or climb over something? The solution was to make the staging track have a moveable hinged section that would allow access.

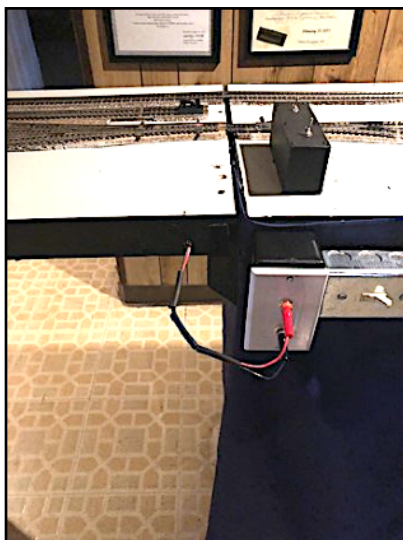


And now my third learning point took place. When you provide a hinged panel (photo left) that has track on top of it, you need to offset the hinge vertically so the track will not get pinched when you fold the panel up. To work properly the pivot point of the hinge must be at or above the top of the track. In my case this resulted in installing a 3/16" spacer between the hinge and the benchwork to provide the proper location of the pivot point on the hinge. In the pictures below you can see the pivot points and the location where the track would be pinched if the offset was not done.

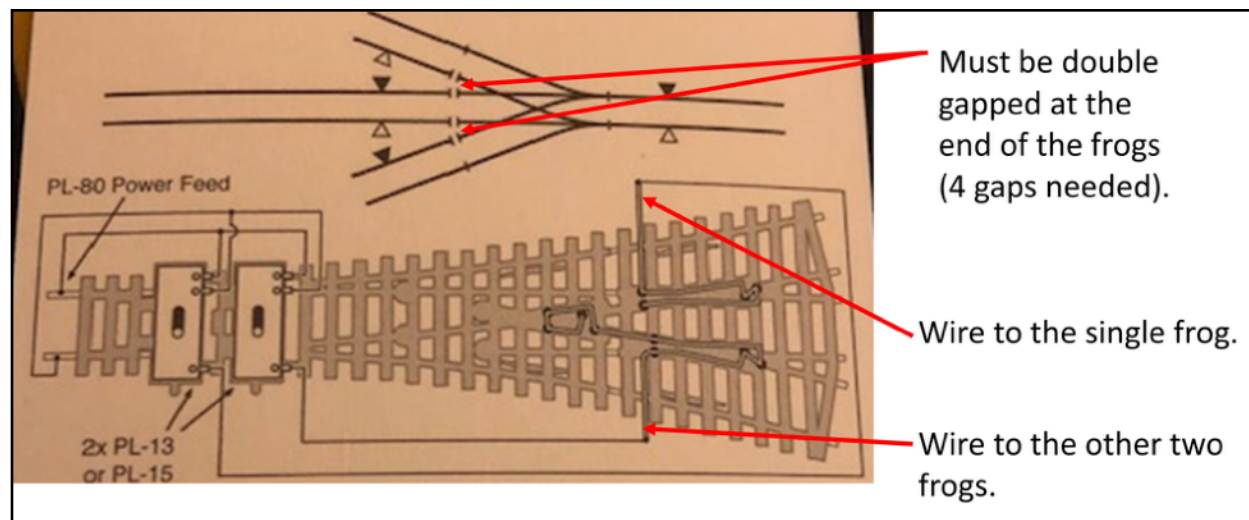
And yet another learning point which was that the wiring between the

permanent and folding staging yard sections had to be arranged so it would not be crimped between the two sections. A slight twist of the wiring made it possible for two staging sections to fold and not crimp the wiring (photo right).

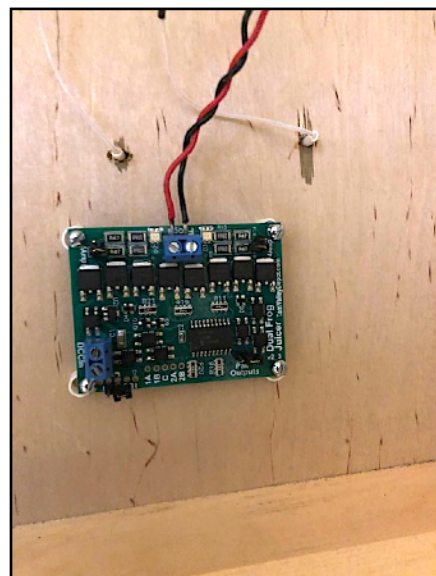
The next step was to wire the staging yard which involved creating a bus to carry track power to the tracks (both the staging and the interchange tracks). The staging tracks were put on a power bus and connected to male banana plugs (photo below) which plug into the power box on the existing layout mentioned earlier.



Then came yet another learning point, which was to use a three-way PECO SLE-99 Electrofrog switch at the entrance to the staging yard. I purchased this switch after attempts to install a used Shinohara three-way switch, which had been given to me some time ago. Upon completion of the wiring, I encountered a short that I could not fix. So much for reusing a switch. (Note to myself: "never" try to use a used switch without closely inspecting it.) The PECO Electrofrog three-way switch has three frogs which must be powered from track power and must be electrically isolated from other track to avoid shorting. Two of the frogs are connected, leaving the third frog to be powered by itself. The wiring must be able to switch the power polarity to allow proper operation of a locomotive through it as the polarity of the frogs is dependent upon



which route through the switch you select. There are several ways to achieve this using two SPDT switches, switch motors with SPDT contacts, or a frog juicer.



I used the frog juicer option and purchased a Tam Valley Depot DFJ003U dual frog juicer/auto reverser to control the polarity of the frogs. The PECO three-way switch has two wires that power the frogs, so all I had to do was connect the provided wires to the frog juicer output and provide track power to the juicer (photo left).

At this point the staging yard is in service and ready for use. I still need to ballast the new track and switches, add such scenery items as grass, gravel, and a roadway, and put decals and details on the water tank.

From here I still need to create an operations plan. The car cards system will be used. I also need to finish reading a book, "A Compendium of Model

Railroad Operations," that I purchased from the Operations Special Interest Group when I joined the group. I will have more to come in a future article.

Ernie Little, MMR, is the Potomac Division Superintendent. He discussed this project in a Division Forum held virtually on Jan. 22, 2024 which can be viewed on YouTube at [Discussion of Model Railroading](#).

Western Union MoW Car in O Scale

Article and Photos by Martin Brechbiel, MMR



This story starts with an unlikely component that provided the impetus for the building of this car—a set of old and dusty decals for a Western Union Maintenance of Way (MoW) car. The schematic for the car was interesting enough to prompt me to look for more information. I found that Ambroid had made a kit for this car in HO—another HO kit that never made production into O scale. After some deliberations, I most serendipitously stumbled across an Ambroid kit at an unsurprisingly low price at an NMRA meet. I bought it and left it on the shelf to gather a good ¼” of dust before taking on translating this into an O scale car.

In the meantime, I collected a handful of photos of completed cars as references. It seemed a somewhat odd car, which only added to my interest in building it. Fortunately, the kit supplied a rather nice set of instructions that included scale drawings. After clearing the dust, and armed with a trusty scale ruler, I determined that scratchbuilding this car could be fairly straightforward by just replicating the HO parts in O scale and assembling per the instructions.

I started making the basic body parts—the floor, roof, and ends. I had to make the floor from 1/8” sheet basswood, ripping it to a scale 50’ long by 8½’ wide. The milled floor in the kit had an unusual profile on the sides that I replicated by gluing two pieces of scale 2”x4” stripwood to a piece of 4”x4” stripwood and then appending that to the floor. With the help of the instructions, I realized that this profile provided a “ledge” for the scribed wood sides to rest on, as opposed to the sides being glued against the floor.

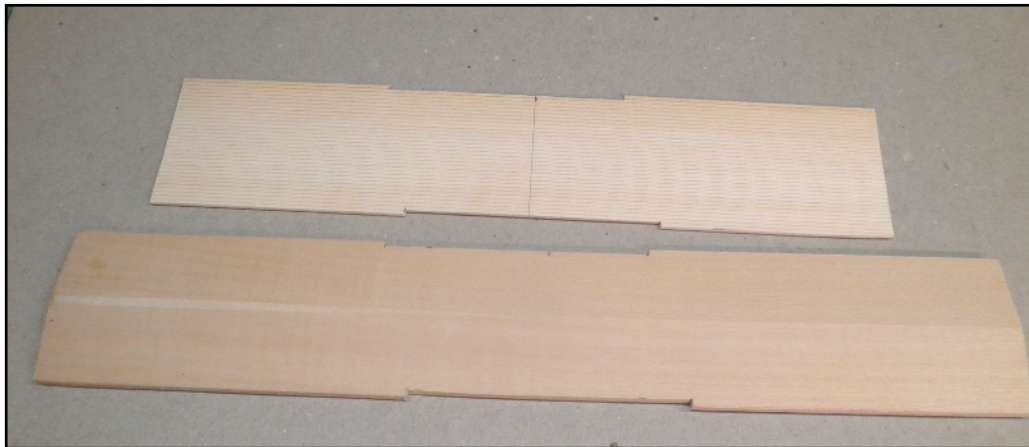
A section of regular commercial milled freight car roof stock was the starting point. However, this had to be narrowed, removing the overhang from each side to match the style and profile of the kit roof. I also used some 1” basswood stock on each end

to cover the end grain of the roof stock. Sadly, a lot of kits for rather nice cars fail to address the unsightly end grain of the roof, which only becomes more evident with painting. Fortunately, you can “fix” this.

The ends (photo right) were a bit of a surprise. These were the usual end blocks to tie the roof to the floor, but they also had scribed siding that extended beyond the width of the block to meet the car siding.



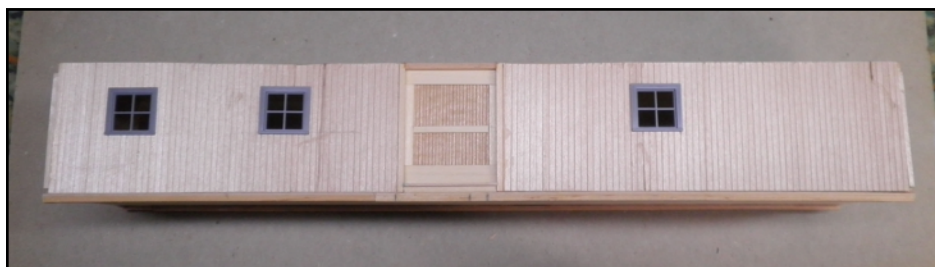
The roof was notched out (photo below) for the door to provide a slot for it to act as a pocket door between the siding and the roof at the top. I fabricated a scribed siding



flooring overlay, similarly notched to function as the lower slot for the door, and glued it to the floor stock in alignment with the roof.

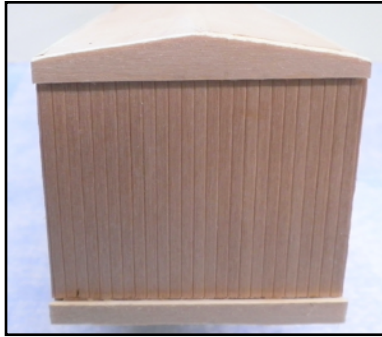
Assembling the sides was done using 1/16” thick scribed siding, bridging the gap in front of the door with stripwood and then also adding some on each side of the door opening as framing (4”x4”). A step surface (2”x8”) was added on top of the lower bridging stripwood, but before the sides could be added, the doors had to be fabricated and inserted into the pockets (photo below). Once there with the sides in

place, the doors were captive but could still slide in their respective pockets.



Doors were made from 1/32” scribed

siding with 1" stripwood applied for framing. This kept the doors from being too thick for the space where they would function. Once in place, I glued the sides to the floor ledge, flush to the roof and up against the overhanging scribed siding on the ends. Windows from Tichy (No. 2056), that were very close to the style and size in the scale drawings in the kit, were added as well. Other details would be added later.



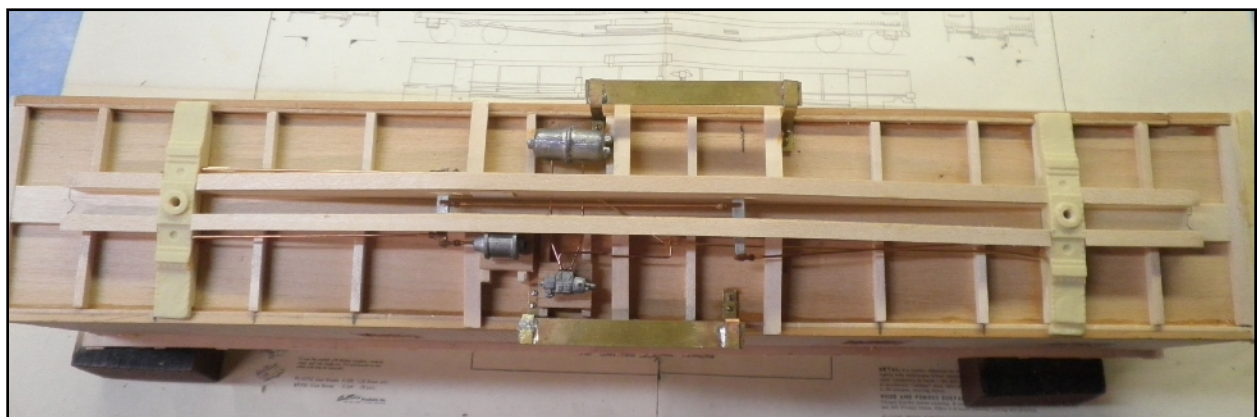
An upper end was added over the scribed siding and an end sill was added to one of the ends (photo left). The other end received the same two additions, but I added a passenger car end sill made up from two resin castings that were merged together on top of the wood end sill. A closed off Grandt Line vestibule door (No. 3804) was added inside 1/4" x 5/32" stripwood side framing and 5/32" x 1/8" across the top. This end was then fitted with a passenger car diaphragm as per the prototype (photo

right). Luckily, I had some of these in one of the parts bins.

In this project, the underbody was built out, too. First, two car bolsters, drilled and tapped for 4-40, were added. These bolsters had to be slightly modified to fit inside the side profile. Being resin, they were easily filed and sanded to shape before being secured with Goo and CA.

I fabricated a fish-belly center sill (photo below) derived from the plans in the instructions from 3" stock and glued it into place between the bolsters.

This was capped over with 2"x8" stripwood. Cross-members (14) were cut from 4"x6", and then 4"x10" was cut to a trapezoidal shape (6) and installed and 2"x8" caps added. These parts were drilled to accept the train line wire that runs between the bolsters. A set of white metal AB brake castings was mounted into place on 4"x6"



stock and some scrap stripwood, and the plumbing lines connecting all these parts were added along with the brake lever rigging. The steps below the side doors were fabricated from brass angle and flat stock soldered together, shaped to fit, glued, and then pinned into place. A 4"x22" piece of wood was added in between the bolsters and the car ends for mounting the couplers. Some 3"x8" and 4"x10" scale stripwood was used to extend the center sill to where the coupler box was set to be located.

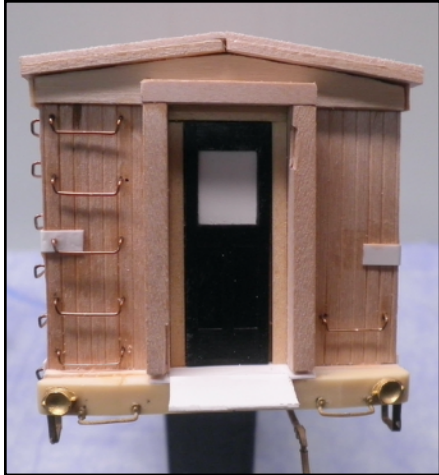


The roof ([photo above](#)) was made from some 1/8" flat basswood stock cut to 5' length sections. This was applied over the milled roof with 2" stripwood applied along with the end roof walk supports. The roof walk supports were white metal castings from Berkshire Valley (No. 318). The roof surface was then covered with two or more layers of single-ply napkin affixed in place with aqueous carpenter's glue.



I applied and cropped a 1"x8" letter board over the doorways and added grab irons from Tichy ([photo above](#)). Corner brackets were formed from 0.010" x 0.35" styrene. Grab irons and handles at the doors were made from 0.025" wire (Tichy) along with stirrup steps and air hose castings (PSC, No. 4278).

The brake end ([photo left](#)) received a brake stirrup and brake wheel on a shaft mounted at the roof using a ratchet & pawl casting. All of these parts were from PSC



(Nos. 4171, 40776, 40441, respectively) along with the grab irons on the end sill (No. 5623). The rest of the grab irons were from Tichy. The poling pockets were from Wiseman Modeling Services. The other end ([photo left](#)) received the same parts as the brake end sans brake parts.

The roof walk was made from HO 3"x12" with the end roof platforms made from HO 2"x6". I painted the roof Lark Dark Gray, the entire body Coach Green, and all the underbody and other parts Steam Black (Floquil for all colors). Gloss coat was done, and those old decals were applied with a coat of clear matte used to seal them. A pair of All Nation

trucks completed the car ([photo below](#))



That ends another HO to O scale translation exercise. This kit taught me a few tricks, like those captured pocket doors, which, perhaps, I can apply to some other projects.

—

Martin Brechbiel, MMR, is the Potomac Division's Achievement Program Manager and an avid O scale modeler.

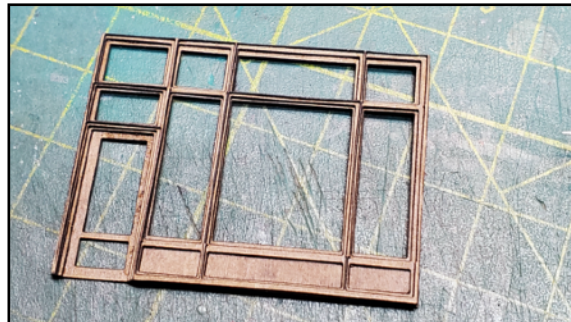
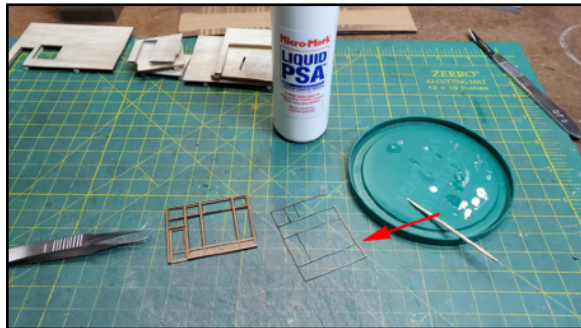


Product Tip: Using Liquid PSA and Gallery Glass

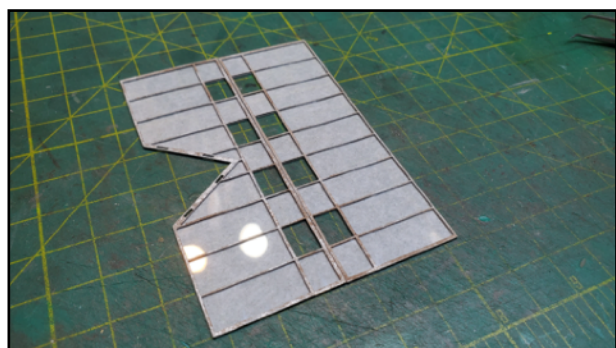
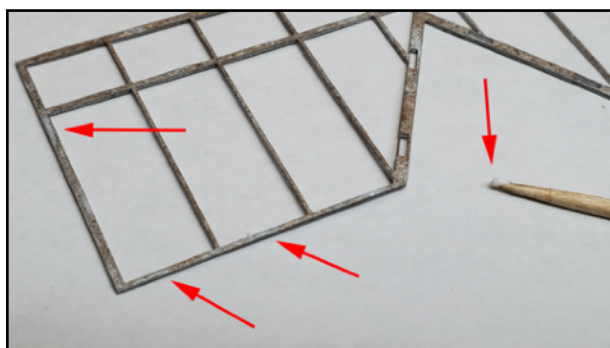
Article and Photos by Greg Cassidy

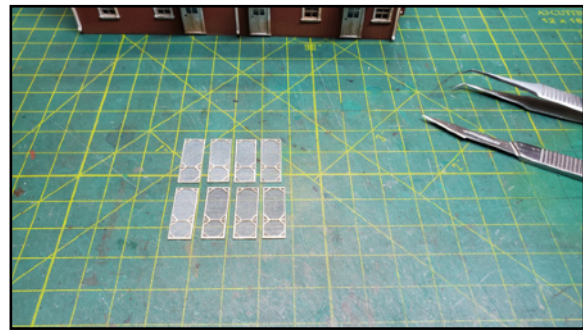
Most of my time is spent building structures, mostly laser cut kits, but I do build some that are scratchbuilt and a few that are plastic. These are mostly for clients, as my layout is full, and the shelves are filling fast. I'd like to share a couple of products I've been using for years that may help you someday.

The first is **Liquid PSA**, which stands for Pressure Sensitive Adhesive. This is a glue that goes on similar to a canopy glue, but cures to a tacky adhesive that allows you to then press your item in place. This avoids any chance of glue squeezing out and marring your surface. In [photos 1 \(left\) & 2 \(right\) below](#) I used Liquid PSA on a very finely cut piece of laser board that makes up a store front. I apply a small dot on my glue pallet (I save all my coffee lids for pallets) and then use a toothpick (the modeler's #1 tool) to apply it.



Once you apply the PSA, you give it a few moments to cure and then you can press it in place. In [photos 3 & 4 below](#), I was attaching acetate to a window frame. Using canopy glue or super glue in this case runs the risk of it squeezing out. Again, I used a toothpick and applied it. Once it's cured, I position the glass and press it down. It allows you a slight amount of movement to line things up.

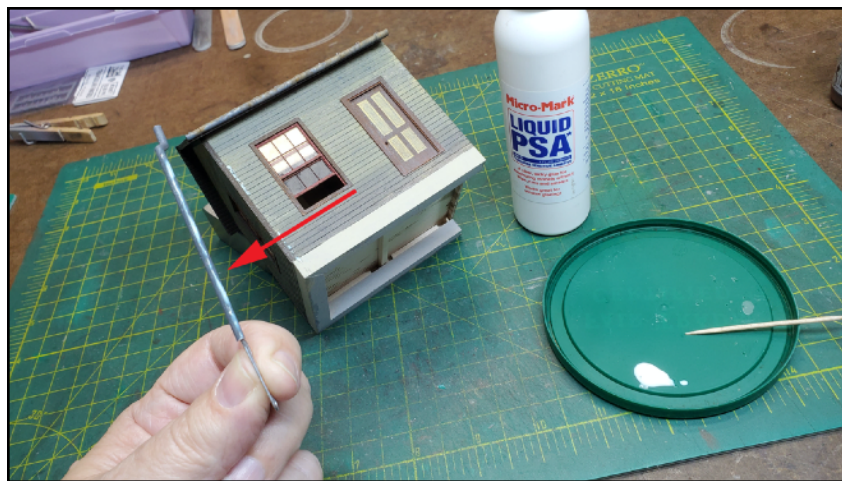




Photos 5 & 6 above show it being used to attach screens to screen doors. It's great for this type of work. And **photos 7 & 8 below** show it being used to attach downspouts to a building. This allows for easy positioning when attaching it and no glue being squeezed out. I use the Micro-Mark version. It's the only one labeled as PSA. There is a similar product called Scotch Clear Glue, available in an applicator

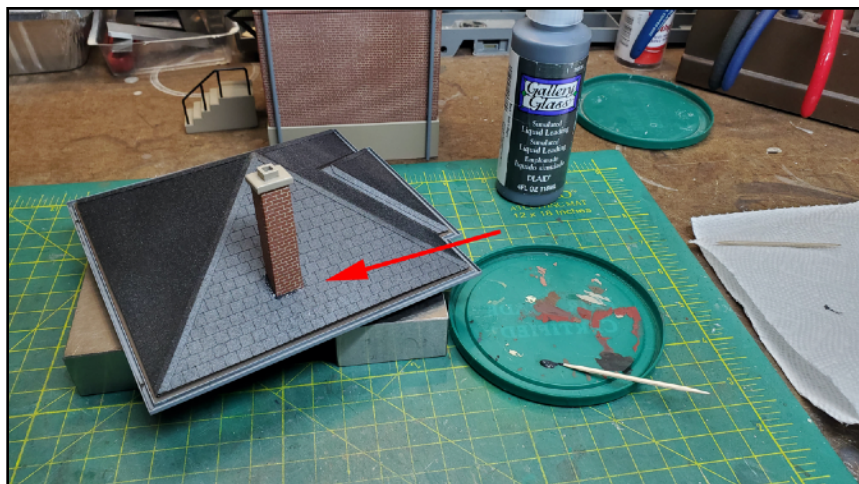
bottle that I've used, but it's harder to apply.

Aleene's makes a glue called Tack-It Over & Over that I'd like to try, as it's cheaper than the Micro-Mark. I just don't know if it works the same. And there may be other types out there, but this bottle of PSA will last me a lifetime, as I use it by the toothpick full.



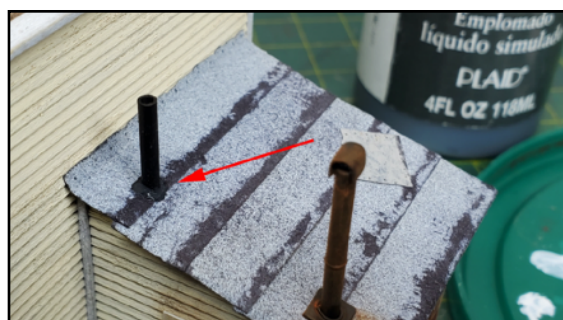
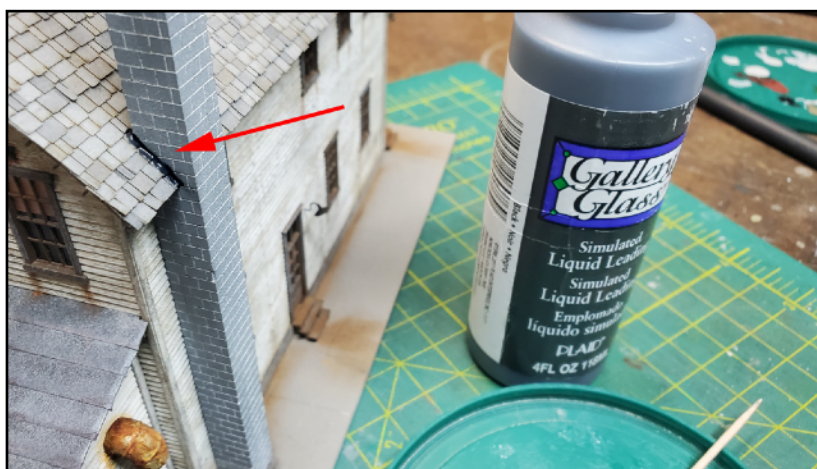
The other product I use on almost every structure I build is **Gallery Glass**, specifically, their Simulated Liquid Leading in Black. In most cases on older buildings, and some newer ones, you'll find a tar-like substance sealing around anything





poking through the roof. It was as common as caulk is today. So anytime I have a chimney or plumbing vent pipe going through a roof I'll seal around it with Gallery Glass. You do have a plumbing vent pipe in any structure you build with indoor plumbing, don't you? I'll just use my toothpick

(again) and apply a fine bead around whatever's coming through the roof. You only have to be as careful as the original roofers would have been (which is not very careful). You can see it being used in [photos on this page](#) around chimneys and a vent pipe. I've also used it for tar lines if you want to show sealing between strips of tar paper on a roof. For decades this has been done by modelers by mixing black paint with white glue. I've done that in the past. However, I find this product to be much easier and more controllable to work with, and it's already mixed up!



If it looks like either of these products might help you in your construction, I urge you to give them a try. I find I'm using one or the other almost every day. And if you'd like to see them in use, I have How-To videos of them both on my YouTube channel: Greg Cassidy's Workshop. They are in the How-To Playlist.



Greg Cassidy's YouTube channel can be seen at <https://www.youtube.com/channel/UCkJSFn1zdzE2pqadEV9czg>

The Choo Choo Barn

Article and Photos by Alex Belida, MMR, *Flyer* Editor

My adult children enjoy tourist trains as much as my wife and I do. But their children, our grandchildren, four of them ranging in age from one to 11, need a bit more excitement than merely sitting back and riding in an old railroad car behind a vintage engine.

So, during a family outing to Lancaster, Pennsylvania last summer, we skipped the well-known Strasburg Railroad (much to my dismay), and stopped at the nearby Choo Choo Barn.



I know. Cringe. Toy trains. Scoff, scoff.

But put your doubts aside. I did. The Choo Choo Barn is a remarkable achievement in scale and craftsmanship, especially when it comes to mechanical animation. There are over 150 animated figures and vehicles. Visitors are given a printed details sheet challenging them to find 28 examples ranging from a baseball pitcher turning his head



towards third base, to a farmer matching wits with a groundhog, to a worker inside a non-OSHA-approved trench.

There are skiers, mountain climbers, Amish barn builders, cows walking into a barn, a zoo, a parade, airplanes, a hang glider, and a complete circus, including the circus train. There is even a fire scene with real squirting water. Local Lancaster County attractions are present throughout,

including a model of the Dutch Wonderland amusement park.

The lights fade from time to time to give visitors a sense of night with lights glowing around the massive 1700 square foot layout with its 22 operating trains. There are steam and diesel engines and trolleys. All are O gauge, three rail.

The Choo Choo Barn was the creation of George Groff, who launched his project in 1961. His son Tom took over in 1979, expanding the layout to what it is today.

Tom died in 2019. His wife and daughter ran the business, including an adjacent hobby shop, until this year when they





sold to train collector Gary Russell who intends to preserve and modernize the Choo Choo Barn layout.

Back when it opened in 1961, admission fees were 50 cents for adults and 25 cents for children. Today the adult fare is \$10. Tickets for kids cost \$6. There are lower rates for groups.

The Choo Choo Barn (<https://www.choochoobarn.com>) is located at 226 Gap Rd, Strasburg, PA 17579. The Railroad Museum of Pennsylvania and the Strasburg

Railroad are less than half a mile down the same road.



Alex Belida, MMR, is a retired journalist who serves as Senior Assistant Superintendent of the Potomac Division as well as Editor & Publisher of the *Potomac Flyer*.

The Potomac Division Website

The Potomac Division website is loaded with useful information. Members should check it often for the latest news as well as updates on events like our clinics, workshops and layout open houses. There's also a whole archive of past clinics, a list of modeling resources and a library of previous issues of *The Potomac Flyer*. Bookmark this link if you haven't done so already: <http://potomac-nmra.org/PDnewsite/Main/Home.php>

Flyer Bits & Pieces

Another Successful JMRI DecoderPro Clinic



George Meyrick (standing), Chuck Wood (seated), Thomas Washburn, Paul Dunham, Bill Lyders, and Randy Smith

On February 10 at Jerry Stanley's Hobby Barn in Hume, Virginia, the popular clinic "Programming Using JMRI" was conducted for the fourth time. This clinic was developed by Ernie Little and George Meyrick as the first Potomac Division "Technical Clinic," and a full description can be found starting on page 53 in the October/November 2023 edition of the *Potomac Flyer*.

Ernie was unavailable this time, but George handled it superbly on his own and was able to answer all questions from the five participants. A variety of locomotives were tested and analyzed using DecoderPro. Unlike previous times, all were HO scale, but an N-scale test loop was on hand just in case.

Using DecoderPro takes practice, and like many software applications, it is usually most successful when used soon after a learning session such as this clinic. Not having a layout (yet), I was an observer filling in as the Hobby Barn host since Jerry had another commitment. Even though I did not bring a locomotive, listening to George's instructions and the questions from the other participants, I still gained an appreciation of DecoderPro's capability.

No doubt this clinic will be repeated in the future, but I am certain there are other topics that members might like to see. If you have a suggestion for a regular modeling clinic or another "Technical Clinic," contact any BOD member listed on page 3. If you have a special skill, consider developing a clinic of your own! **Ken Wilson**

Looking for a Cars AP Challenge?



Are you stumped in looking for a project towards achieving your Master Builder-Cars certificate? Why not model a U.S. Air Force Mobile Simulation Training Center? These were railroad cars that housed a computer training center for crews of B-52s and KC135s. The idea was to bring the center to the crews instead of having them travel to a fixed base simulator. The only remaining set of cars is at Fairchild Air Base in Washington State. Just Google “B-52 Flight Simulator Trains” for a very good description. *Tim Tilson*

Rolling Carts for Tools & Modeling Supplies



I had been storing supplies and tools on an old computer desk on wheels that I pushed under my benchwork. I was desperate to get rid of it and find a replacement that was less bulky and unwieldy. I found these three-bin roller carts at The Container Store. I had to assemble them, but that was no problem. Now, when I need tools or supplies, it's much easier to roll one or both of these where needed.

Alex Belida, MMR

Model Train Stuff Closes...And Reopens



The closure was announced in December: *"We regret to inform you that MB Klein Inc. (Model Train Stuff) has now ceased trading. Thank you for your custom and support over our incredible 111 years of continuous operation."*

But in February a mysterious notice appeared saying it would be back.

On March 12th, an email was sent out by Joe Grubba, President of Factory Direct Hobbies, saying his North Carolina-based firm has acquired M.B. Klein and ModelTrainStuff.com. He said ModelTrainStuff will return and his team will be *"making it even better"* with faster shipping, a rewards program and more. No date was announced and hobbyists were urged to check ModelTrainStuff.com for updates.

Score and Snap Styrene

Here are some tips for using the *"score and snap"* technique when cutting sheet styrene. Be sure the area you are working in is well lit. Carefully mark the fine line you wish to score with a pen. Use a fresh blade. Make the first pass of your blade lightly. When scoring, be sure to steady your hand by allowing your pinky and ring fingers to brush against your styrene as you hold your hobby knife while tracing the line you have drawn for the snap. Once you have created the initial furrow you have a great path you can follow. Take another cut or two. You should have your styrene rest on a solid flat table with the part you wish to snap off hanging in the air. Hold the balance of the styrene tightly against the table and snap. **Nicholas Kalis**

Editor's note: When asked about this technique, another member said he preferred using a scalpel blade up against a steel ruler when cutting styrene (and other materials). This member added: *"Depending on my fingers seems to put them at risk so I keep them well out of harm's way."*

Did You Know?

The Potomac Division has its own Groups.IO site where members can discuss all aspects of model railroading and exchange information on techniques, products, prototypes, and much more. If you haven't joined, please do so. Go to <https://groups.io/g/PD2MERNMRA> and follow the link to sign up.

The Potomac Flyer Needs **Your** Help!

We are looking for Potomac Division members to contribute to our regular *Flyer* features in 2024 & 2025: *Meet the Member*, *Layout Profiles*, *What Does Your Workbench Look Like?*, and *Flyer Bits & Pieces*.

If you are willing to provide material for any of these features, please refer to the information below. (And if you're interested in becoming an Assistant Editor, contact Publisher Alex Belida at the Flyer email address below!)

Send your submissions to: Potomac-Flyer@potomac-nmra.org

Meet the Member:

Please respond to as many of these as you wish and add anything you want. Please send a photo of yourself with your layout visible in the background plus two or three layout photos. You can follow the Q&A format, or, if you prefer, you can write a narrative that includes the basic information sought here.

How did you get started in the hobby? How long have you been an NMRA member? How long with Potomac Division?

What's your favorite Division activity — open houses, MiniCons and Meets, clinics in person, virtual clinics?

What do you model now: layout, scale? Do you still have your first engine/train set? What was it?

What's your favorite part of the hobby? How about your least favorite? What projects have you been working on recently?

Describe your model railroad philosophy? What to you is the value of the AP program? Is shooting for MMR worthwhile?

What advice do you have for newcomers to the hobby?

Tell us a bit about your life, where you grew up, what jobs you held?

Layout Profile:

Please respond to as many of these as you wish and add anything you want. Please send a headshot photo of yourself plus several layout photos to illustrate your answers. Please keep your answers as brief as possible.

1. What is the name of your layout?
2. What scale is your layout?
3. Does your layout have a specific era and/or location?
4. What are the overall dimensions of your layout?
5. How do you control your layout?
6. When did you start making your layout?
7. Do you host operating sessions or would you consider doing so?
8. What type of track (sectional, flex track or hand laid) and switches are on your layout and what is its code?
9. If you were to brag about your layout what would you describe as its outstanding feature(s)

What Does Your Workbench Look Like?

Send a single photo of your workbench and describe in one or two paragraphs what is on it. This could involve a photo explaining a modeling project that's under way, or discussing a particular array of tools or paints or other supplies you use frequently and why, or it could be a confession about why the photo shows your workbench in a particular condition (unused, in disarray, whatever).

Flyer Bits & Pieces: These can be any modeling tips, brief news, suggestions or questions you want to share with Division members.

Please review recent issues of *The Flyer* to see examples of these features.

Send your submissions to: Potomac-Flyer@potomac-nmra.org

We welcome other article ideas as well. If you have an idea, please send an email outlining your proposal to the same address.

Thank you, Alex Belida, MMR, Editor & Publisher

Paymaster's Report



by Jerry Stanley, Potomac Division Paymaster

1. Checking account (beginning balance)	\$ 5908.73
2. Cash on Hand (Hobby Barn)	\$30.00
3. <u>Total assets as of 02/29/2024 (end balance)</u>	<u>\$5936.73</u>
4. Deposits by date	
a) \$0	
5. <u>Total Deposits</u>	<u>\$0</u>
6. Individual Deposits	
a) \$0	
7. <u>Total Deposits</u>	<u>\$0</u>
8. Total payouts	
a) \$2.00 Bank fee	
9. <u>Total Payouts</u>	<u>\$2.00</u>
10. Checking account balance as of 2/29/2024 (Lines [1+5]-9) =	\$5906.73
11. Total Cash on hand 2/29/2024	\$30.00
12. Total Assets (lines 10+11)	\$5936.73





Calendar of Coming Events

Saturday, April 13, 2024, 10:00 AM **Hobby Barn Clinic** "Using Tinkercad"
Clinician: Kurt Thompson, MMR

Tuesday, April 16, 2024, 7:30 PM **Virtual** Potomac Division Board Meeting

Sunday, April 21, 2024, 3:00 PM **Virtual Clinic**
"Portrait of a Railroad" Clinician: Jonathan Jones

▶ Saturday, May 4, 2024, 9:00 AM **Division Annual Meeting**, Arcola Volunteer Fire Department Annex, Sterling, Virginia

Saturday, May 11, 2024, 10:00 AM **Hobby Barn Clinic**
"Building Ships" Clinician: Bernie Kempinski, MMR

Sunday, May 19, 2024, 3:00 PM **Virtual Clinic**
"The Long Road to Achieving a Golden Spike and other APs"
Clinician: Greg Cassidy



South Mountain MiniCon April 6:

The South Mountain Division and Mainline Hobby Supply host their 10th annual MiniCon at the Blue Ridge Fire Hall, 13063 Monterey Ln. Blue Ridge Summit, PA 17214. Come enjoy from 9 AM to 3 PM this one-day free event across the street from Mainline Hobby Supply, consisting of prototype and modeling presentations, formal and informal clinics, modular displays, interaction with fellow hobbyists and beginners, plus a 10% discount at Mainline Hobby Supply. This free admission, wheelchair accessible, educational event is open to the public for promotion of the hobby of Model Railroading.

NMRA's Partnership Program



PARTNERSHIP PROGRAM

NMRA members can log in and click on the **Benefits** tab to view the **NMRA Partnership Program**. Please patronize all of our partners for some fantastic discounts as an NMRA member!

Bespoke Rail
CatzPaw Innovations
CB Train Junction
Clever Models, LLC
Coastmans Scenic Products
Composite Designs, Inc.
CMR Products, LLC
Conowingo Models
Cowcatcher Magazine
Daylight Sales (Merchandise)
Deepwoods Software
Deluxe Materials
Diorama Hobbies
Dwarvin Enterprises, Ltd
East Coast Circuits
Enterprise and National Car Rental Services
Evan Designs
Feight Studios
Fusion Scale Graphics
Gatorfoam
Great Decals!
Green Frog Productions
Highways and Byways Model Railroad Graphics

Hot Wire Foam Factory
ITLA Scale Models
K.I.S.S Method, Inc.
LaBelle Woodworking Co.
LARC Products
Logic Rail Technologies
MAC Rail
Micro-Mark
Mine Mount Models
Miniprints
MrTrain.com*
MRC (Model Rectifier Corp)
Model Train Catalogue
Modelers Decals & Paint
Motrak Models
Mudd Creek Models
New Creations Victorian Railroad Buildings
Nick and Nora Designs
Northlandz
NScale Works by Mike Holly
Old Depot Gallery
Old West Scenery
RAM Track
RR-CirKits

R & J Details
Scale Model Plans
Scale Railroad Models
Scenery Solutions
Showcase Miniatures
T-Trak by Denniston*
Team Track Models
The N Scale Architech
The Old Depot Gallery
Tichy Train Group
Touch of the Brush Model Weathering
Train Installations, LLC
Train Show, Inc.
Trainmasters TV/Model Railroad Hobbyist Store
TRAINZ.com
TSG Multimedia
UGEARS
USA Airbrush Supply/
Badger Airbrush
WiFi Model Railroad, LLC
Yelton Models

[New Partners in **RED***]

March 2024

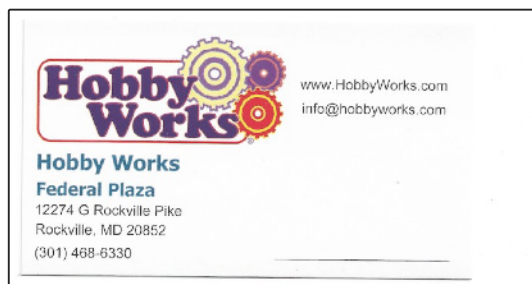
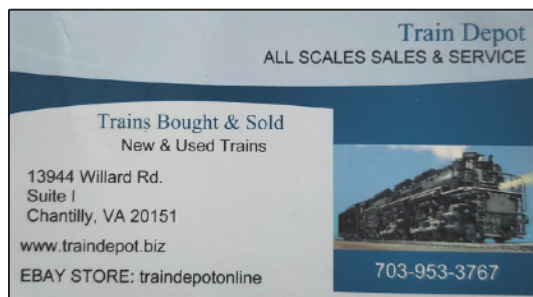
Partnership Program

To receive your member discount codes, log into the NMRA website and click on the **Partnership Program** link on the top line (or the **Benefits** link lower down). You'll see a complete list of participating firms and learn the special discount codes to use in your purchases.

Remember: You must have an NMRA member login to get the discount codes!



Hobby Shop Business Cards



Note: Train Depot has moved to 7249 Gabe Ct., Manassas, VA.

