*Volume 81, Issue 1* *Mid-Eastern Region/NMRA* *Jan/Feb 2026*

NMRA Mid-Eastern Region

# The Local

*Official publication of the Mid-Eastern Region, NMRA – A tax-exempt organization*

SEARCH





***Riding on the Reading T-1 class engine Number 2102: Article and Photos by John Sokash on p. 21.***

# About Model Railroaders

By Greg Warth

As I look back over what we have accomplished during the past year inside and outside *The Local,* I am impressed by a sense of imagination and creativity, shaping something meaningful with our hands and our minds. What we do is truly a form of applied art and narrative. Landscapes tell stories. Track plans imply purpose. Even constraints can become fuel for creativity. Challenges are not stopping points but rather mountains to be conquered.

Model railroaders are down to earth, detailed, searching for truth in every pebble, never leaving a stone unturned. There is very little speculation. If there is a question that plagues us, we look for the answer. Why does this locomotive not work? Where is this short circuit coming from? How can we make this scene more realistic? We do not create conspiratorial theories to explain what we don't understand. We constantly look for the truth. Education is key. Deception is our nemesis.

We are not critical of each other, but rather very forgiving for our mistakes and mishaps. We try to be helpful to others at every turn. We are patient, quiet, selfless, transparent. If someone makes a mistake, we point it out, but not as a criticism but rather as a learning point, or an explanation.

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We are proud of our work but not overly impressed with ourselves. There are no pedestals upon which we stand in judgement. We do not judge. We evaluate.

We recognize our problems, but we don't expect everything to be fixed at once. We define a clear path to follow to get us where we want to be eventually. We tend to be eternally optimistic believing that if we understand the narrative, we will make better choices in the long run and the result will be a better future for all of us, by design, not fate.

So, thank you, model railroaders everywhere, for being who you are and for creating this environment of goodwill, inspiration, art and craftsmanship. I am proud to be part of this group.

Best wishes to all for a very happy, wonderful, and creative New Year!

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Once again, I would like to thank our outstanding editorial staff for all their hard work, not only for this issue but for all they have done over the last several years:

Alex Belida, MMR

Jack Dziadul, MMR*

Martin Brechbiel, MMR

And special thanks to all our authors. Without them, we would have nothing to show you.

Happy railroading,

*Greg*

***Jack Dziadul, MMR** has been one of our excellent proofreaders and behind-the-scenes editors for many years. His expertise along with that of Martin and Alex, has been instrumental in making *The Local* what it is today. Jack however is moving on to bigger and better things. He will now serve as your **Business Manager** following the years of fine service given by the retiring Howard Oakes. We will certainly miss Jack in our editorial staff department, but we welcome him in his new role. At the same time, we want to say how much we appreciate what Howard did for us during his many years as Business Manager.

And the cycle goes on with the periodic changing of the guard. These are not forever jobs. They just represent taking our turn at the wheel. Now if we can just find a new Editor/Publisher!

# From the Business Car

By Jack Dziadul, MMR

In the immortal words of Admiral James Stockdale, "Who am I and why am I here?" My name is Jack, and I am the Mid-Eastern Region's Business Manager effective November 30, 2025.

First, please join me in expressing appreciation to **Howard Oakes** for his service as MER's Business Manager over the past six years. Thank you, Howard!

Howard joins the following list of distinguished volunteers who previously held the position.

Past Business Managers*

- Howard Oakes 2019-2025
- Bob Price, MMR 2013-2018
- Fred Miller, MMR 2005-2012
- Rita Lynam 2001-2004
- Nelson Garber 1996-2000
- Stan Knotts 1993-1996
- Clyde Gerald 1982-1993
- George Owen 1972-1982

*Dates are approximate.

My objectives in assuming the Business Manager position include:

- Simplifying and making the monthly reports to Division leaders more reader friendly.
- Provide the membership with information on the corporate management of the MER. With a better understanding of what elected and appointed officials do, it is hoped that the Nominating Committee and MER President will see better responses to calls for volunteers.

The following new volunteers were announced at the Philly Express convention:
**Laura Bateman** is the new **Executive Convention Chairman** (ECC) replacing Acting ECC Gary Brown. Gary did an admirable job of setting up conventions from 2024 through 2027.

Ballot Committee – **John Hoyt** is the new Ballot Chairman succeeding long-serving **Bob Minnis, MMR**. Bob has been a key figure in managing the elections process for as long as I have been in the MER, so since at least 2005. John ably handled the election vote process in 2025 and will be continuing in the position. John also serves as the Assistant Business Manager. Thank you, Bob and John.

I congratulate the NMRA volunteers and participants who are into social media applications such as Discord (http://www.nmra.org/members/nmra-interchange). I confess that I am behind the times when it comes to social media, so I'll need to add Discord to my 2026 goals.

One of my Business Manager responsibilities is to send renewal invitations to those whose memberships have expired. I was curious as to how a Business Manager got involved with the membership renewal status, so I explored the process with NMRA HQ. It turns out that between mailings and emails, HQ contacts folks 4-6 times starting 90 days before the expiration of the membership and extending to 90 days after expiration before a member is dropped from the rolls. That is direct communication over a six-month period.

Aside from the Soddy Daisy effort, Division Superintendents receive monthly reports that show the status of members including upcoming renewal dates and dates that have already passed. It is well recognized that the Divisions are primarily where the value of NMRA membership rests. The sponsored as well as *ad hoc* events and the social engagements are the glue that holds things together. The Superintendents are the difference makers when it comes to engagement. Kudos to those Divisions that are on top of member engagement throughout the year. This is the most effective and efficient approach to membership renewals and for attracting new members.

I look forward to serving you as Business Manager. Feel free to contact me with questions and comments.

Contact information for MER elected officials and MER staff, and the Division superintendents appears on the "Board of Directors & Administrative Staff" pages in each issue of *The Local*.

# Here's Your Chance to Give Back to the MER!

**Positions are now open and available for:**
**Treasurer and Editor/Publisher**

## Advertising in *The Local*

If you have a model railroading business and would like to place an ad in *The Local*, please contact the Editor. The rates per year are shown on the right.

Your ad may appear as text, photo, art, or any combination thereof. Art must be of high quality and camera-ready. Formats must be in txt, doc/docx, pdf, jpeg, bmp or tiff only. The content must be related to model trains or railroads or provide a benefit specifically to model railroaders. If you need help with your ad, please don't hesitate to ask the Editor.

| Advertising Rates (per year) | |
|---|---|
| Divisions & Clubs | Free |
| Clinics & Education | Free |
| Convention Ads | Free |
| Full Page - Color | $100.00 |
| 1/2 Page - Color | $60.00 |
| 1/4 Page - Color | $35.00 |
| Business Card | $10.00 |
| Text Only | $7.00 |

Kurt Thompson, MMR

# NMRA Achievement Program Update

**By Kurt Thompson, MMR**
**MER AP Manager**

**Update for Jan/Feb 2026:**

Since the last issue of *The Local*, our fellow MER members have earned these Achievement Program certificates and Golden Spike awards:

### Division 1, New Jersey

| | |
|---|---|
| Rick Stoneking | Association Official |

### Division 4, Tidewater

| | |
|---|---|
| Alan Balma | Master Builder - Cars |

### Division 5, James River

| | |
|---|---|
| Glenn Lapkin | Golden Spike |

### Division 11, Susquehanna

| | |
|---|---|
| Alan Mende | Association Official |

### Division 13, Carolina Piedmont

| | |
|---|---|
| Kevin O'Connor | Master Builder - Cars |
| Michael Rossi | Master Builder - Cars |

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| | | | | | |
|---|---|---|---|---|---|
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|  | **Tidewater Division 4**<br>John Robey<br>(571)217-0599<br>jrobey2019@gmail.com<br>*Division web page:*<br>nmra-mer-tidewater.org | | | | |


*Holiday Inn on Greenwich Road in Virginia Beach, VA: Site of the 2026 MER Convention, "Tracks to Tidewater."*

## UPCOMING MER CONVENTIONS

- 2026 — Tidewater Division — October 15-18, 2026 — "Tracks to Tidewater," Holiday Inn, 5655 Greenwich Rd. Virginia Beach, VA 23462
- 2027 — South Mountain Division — Location: Hagerstown, MD

## MER BOARD OF DIRECTORS MEETING SCHEDULE

- Board of Directors Budget Meeting — 1pm January 10, 2026, (virtual - https://us02web.zoom.us/j/7161954603?omn=84887934378)
- Board of Directors Business Meeting - 10am, April 18, 2026, Holiday Inn, 5655 Greenwich Rd. Virginia Beach, VA 23462

## ANNUAL MEMBERSHIP MEETING

- Call to Order at 7pm Oct. 17, then recessed until 10am on Oct.18, 2026 Holiday Inn, 5655 Greenwich Rd. Virginia Beach, VA 23462

# UPCOMING CONVENTIONS

**Save the Date:**

## Tracks to Tidewater

October 15-18, 2026 Virginia Beach, VA

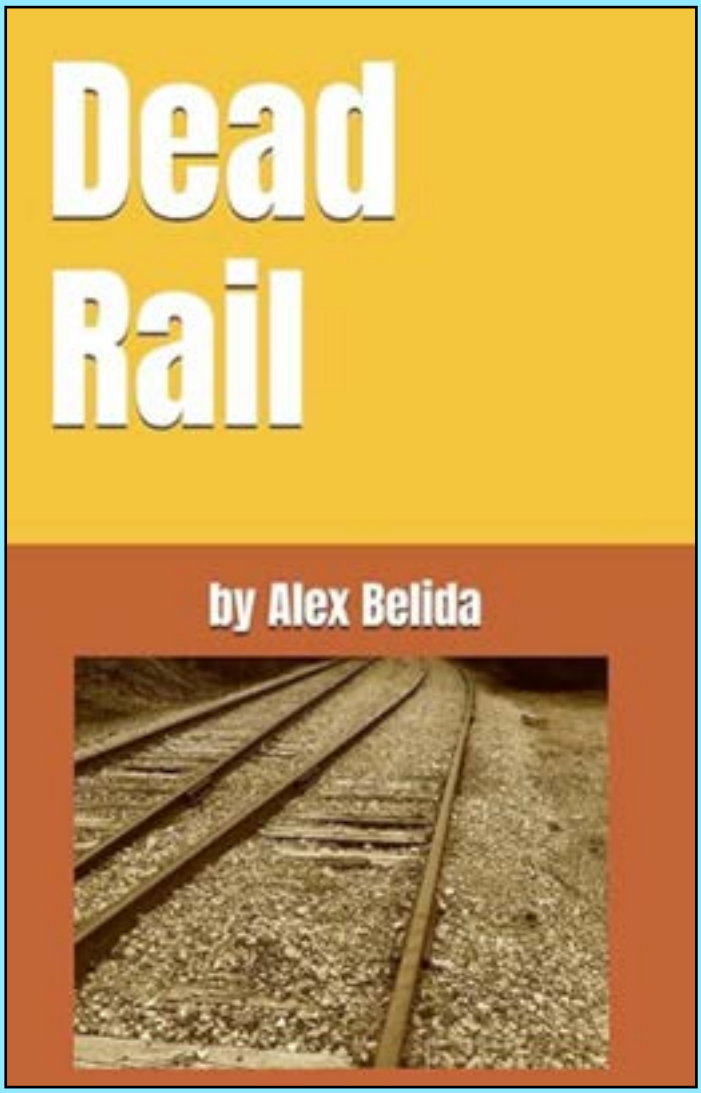
2026 NMRA National Convention

July 27 to August 2, 2026

2026 SCENIC CITY EXPRESS CHATTANOOGA NATIONAL CONVENTION

www.facebook.com/NMRATakesChatt

nmra2026.org




**Alex Belida, MMR** has written a model railroad thriller:

At a crowded national model railroad convention, the disappearance of a rare brass locomotive sets off a chain of events no one expects. What begins as a theft soon escalates into murder and a conspiracy threatening national security. An expert model railroader and a determined reporter follow the trail to uncover a shadowy espionage scheme. As the truth comes into focus, they discover the model railroading world can conceal deadly flaws. *Dead Rail* is a suspenseful thriller that proves even the smallest rails can carry the deadliest secrets.

**Now available on Amazon in paperback and for Kindle. Also as an eBook-on Apple, Barnes & Noble, Smashwords & Kobo.**

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Mark your Calendar now!

2026 MER Convention

October 15-18

TRACKS TO TIDEWATER

# New Guy in the Contest Room

By Dan Peele

I am honored to be considered for the position of Mid-Eastern Region Contest Chair (*awaiting final approval at the next Board Meeting on January 10 - Ed.*). First things first: Thank You Alan Mende, MMR, for your tenure in this position. Under his leadership I became an evaluator at my first regional convention. This experience motivated me to learn more about the evaluation process which led to a significant increase in my knowledge of the hobby we all enjoy.

As contest chair, I am obligated to attempt to inspire each of you, beginner to lifelong model railroader to bring some of your work to either display or be evaluated in the contest room. The introduction to the MER's Bylaws states one of the objectives as, "Improve and publicize contest judging standards and procedures." Hopefully, we are all aware that all contest judging is done in accordance with NMRA's Achievement Program Judging Guidelines. I will be sharing these in more detail with you in the future.

You may ask, "Are the contests going to be any different?" Well, to that I answer, "I'll give you a definite maybe." The rules of the contest and the guidelines for evaluating the entries will not be changed without direct guidance from the NMRA and/or the MER Board of Directors. However, I plan to simplify the recording and archiving of the contest data. My goal is to have contest results and all awards ready to be presented before each convention banquet and then submitted to the webmaster, *The Local* editor, and archivist within seven days from the close of each convention. I would also like to bring the MER's awards in line with the NMRA's guidelines. Do we really need more categories just to provide more awards? And just how many popular votes do we need? I will not change the existing guidelines without direction from the MER's BOD.

My first request, for those of you that may be considering submitting a *model* for competition, PLEASE use the latest NMRA Form #901. Please note this form is for the NMRA National Contest. The MER does not presently provide for all contests, nor do our categories align perfectly.

Those of you that desire to submit a *module*, please use NMRA Form #901b. I would request you add a "Value $xxx" somewhere in the Entrant/Modeler Section of the form as this line is presently not available on the 901b. Using the correct form assures you that you are entered in the appropriate contest. The NMRA provides different guidelines for evaluating each contest.

Some of you have excellent handwriting; however, for others like me, typing the form allows the contest room personnel to log your entry into our system with minimal risk of transcription errors. For those looking for a Word format of Form 901 or Form 901b, I have seen them available online, but not the NMRA's website for now.

My next request is a plea to help me do my job. The MER has previously discontinued the Photo Contest, Arts & Crafts, and Railroad Pass Contest. From what I have discovered, there appears to have been a lack of participation in those events. I do not have the dates this may have been approved although I have found where it was suggested in 2010. Personally, I would welcome them as non-

interest we can host these contests at a future convention. Of course, by your increased participation you may force me to lobby for a larger contest room.

You can also help if you have copies of any documentation related to awards sponsored by your division or other special awards, or any documentation related to the various contests. I would like an electronic copy for information and archival purposes. Per the MER's Executive Handbook, all special awards shall be approved by the MER BOD every two years. This presently includes: The President's Award, The Chuck Hladik Memorial Award, The Clyde Gerald Award, The New Jersey Car Inspector Award, The Philadelphia Division New Modeler Award, and The Ray Bilodeau Award.

Next, I offer a plea for all to consider being an evaluator. In the past, I have seen five teams of three evaluators and five teams of four evaluators. My desire is to have eighteen evaluators comprising five teams of three with three alternate evaluators as alternates in case an evaluator has entered a model/ module in the contest and must recuse themselves from that category. More details to follow on evaluators in the future.

Finally, I would also like to see more entries by more people. Our recent Philly Express had 42 entries from just 20 modelers. Assuming 150 NMRA members at the convention, these 20 modelers represented just 13.3% of all in attendance. From personal experience, the knowledge learned combined with the "WOW" factor as an evaluator has served to motivate me.

Some of you may be wondering, "What makes the contest room and what happens inside so important?" The NMRA's website states that the evaluated model contest is typically considered the prime event at a convention. I cannot argue with this statement. After all, why else would we end the banquet with the awards ceremony?

Others of you may be thinking, "I am not talented enough to compete with (fill in the blank)." Well, not all the plaques and certificates covering the walls of the homes of some of our best model builders were awarded for merit award winning models. Therefore, why not enter your work, you may do better than the experienced ones. Our recent Philly Express, a new modeler, first time entering a model in a contest, achieved the second highest score in the contest. A very impressive model I might add. Also, remember that credit toward the completion of the various Achievement Program categories can be earned.

If you are planning to attend the "Tracks to Tidewater" convention in October 2026, please consider two things. First, volunteer for several hours in the Contest Room. First time evaluators will join a team led by a Master Model Railroader. And second, perhaps more importantly, enter one or more models for evaluation or for display. Plus, the MER provides lunch on Saturday for the evaluators.

The NMRA's website has a good deal of information concerning contests. In fact, on the NMRA's Contests Forms page, the NMRA's National Contest Chairman, Bill Brown, has a committee that is available to assist you in filling out your paperwork. Properly completing all paperwork results in your model being awarded the maximum number of points possible.

The NMRA has provided guidelines for eligibility and entry for contests. You must be a member in good standing to participate. You are not eligible if you are engaged in the business of the contest entered (i.e., Commercial Model Builder or Professional Photographer). There is a five-entry limit to any category in the model contest with a maximum of 25 entries per individual per contest. Entries that have previously won first place in their category are not eligible to participate in the same category at another contest.

The NMRA strives to provide an objective and consistent evaluation of the skill and effort in the building of models and employing a uniform point scoring system. The staff and evaluators' agreements include being fair and honest, helpful, and instructive, not being biased to any modeling aspect, and providing positive and constructive written comments. Entrants agree to fill out all forms in a truthful manner, describe their model accurately and concisely, and be respectful of any decision, if needed, by the Contest Chairman or Chief Evaluator.

Last, but not least, I would like an MMR to volunteer to be Chief Judge. This individual will be the final decision for any questions regarding evaluations. I also need one or two volunteers to assist with the administrative portion of the contest room. This will include, but not limited to, logging of entrants and entries into our record keeping system, assisting with contest room security, popular vote contest, and evaluated model contest data tabulation.

You can find the above-mentioned documents on the NMRA's website under Education/Contests.

Please contact me with any questions or thoughts you may have to help me be the best contest chair I can be.

# Better Wood Plank Platforms and Loading Docks

By Alan Balma (Photos by Author)

***Photo 1: Covered loading dock platform using the techniques in this article.***

Many kits come with scribed MDF or laser etched platforms. With skillful painting and weathering techniques they can look good. But to look great, nothing is better than properly prepared real wood planks. If you are working on the Master Builder - Structures Category of the Achievement Program Award, this adds a super-detailed, scratchbuilt element to your structure (**Photos 1 and 2**). The interior floor of the station is laser etched material from the kit. The exterior platform is built board by board using some of the techniques in this article.

***Photo 2: Scratch built exterior platform vs. a laser etched kit supplied inside floor.***

This article focuses on the decking and not the underlying structure. I usually scratchbuild the framing, posts and piers. This allows customization and sizing to fit the requirements and period of your layout. But one could start with the framing and piers that come with the kit.

Aesthetically, I like scale 2” x 8” or 3”x 8” boards, followed by 2” x 10” or 3” x 10”s. For my eye 2” x 12”s look too large and 2” x 6”’s too small. I model in S scale and the aesthetics might be different in other scales. You will need to experiment. Boards used on the prototype are usually not shorter than 4’ unless they are patches, and not longer than 16’. I typically use prototypical 4’, 6’, 8’, 10’, 12’, and 16’ length boards. Also, my underlying floor joists are on 2’ centers. (Since the underlying joists are usually hidden, I use 4x’s. This gives me a wider surface to glue two end butted boards to the joist) Finally, you want to source your boards from suppliers that provide products as smooth as possible which means less sanding of the inevitable planer fuzz. Stained planer fuzz does not look very good.

The following are the steps that I use to prepare my deck materials before staining. They are in the order of the most visual gain for the effort. For a front of the layout or contest model, you might want to do them all, and not so many for those in the background.

The most important tool in the process is a "Woodwrecker" to quickly scribe multiple grain lines on each board. This tool comes from a Gerry Leone, Model Railroad Video Plus, "Back on Track" episode **(Photo 3)**. It is constructed from 1/4" square brass tubing and about 10 used No. 11 blades. The blade tangs may need to be filed down to fit into the square tube handle. They are glued into the handle with CA. Be sure that all the blade tips are in alignment.

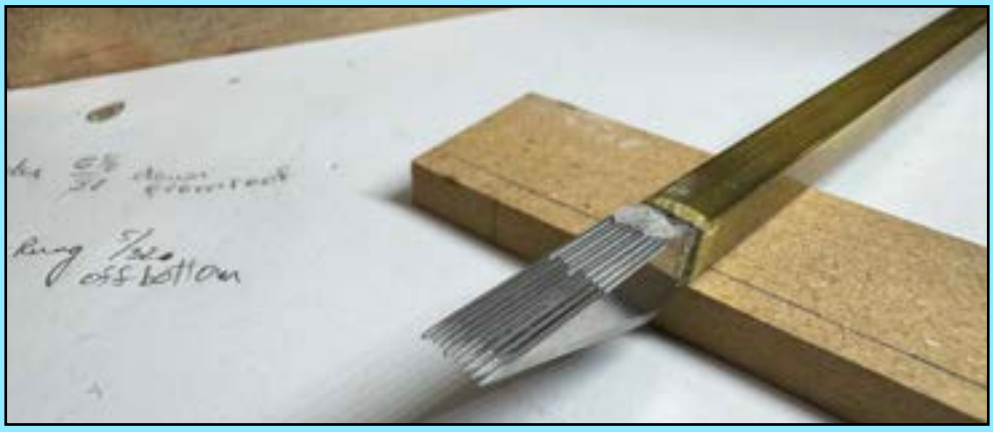


***Photo 3: "Woodwrecker"***

I usually run the "Woodwrecker" tool in a grain like wave down the full length of a stock board before cutting the boards to the desired lengths **(Photo 4)**. Boards from the manufacturer that have planer surface fuzz are lightly sanded with 600 grit paper or 0000 steel wool. I then use a NWSL Chopper to cut multiple boards to the same length.

***Photo 4: Comparison between stock boards and "Woodwrecker" treated boards.***

The first step in the board detailing process is to remove the inevitable "hangnails" that can occur when a "Woodwrecker" blade gets near an edge, as well as the splinters on the end of the boards when the Chopper does not leave a perfect cut (**Photo 5**). I use a small 120/240 filing board. If you do not do this, staining will accentuate these two defects. The next step is to chamfer the long edges with a filing board. Two to three light passes at an angle to the edge will relieve the sharp edge. The reason is that if you put square edged boards tightly together, it will not show the definition between the boards. Great for hardwood floors but not for model platforms where you want to see some definition.

***Photo 5: "Hangnails" and splinters that need to be removed.***

This step adds aging to the boards (**Photo 6**). The more pronounced you make them advances their age. It is best to vary how much is done to each board. Using a No.11 blade, more deeply chamfer the long edges of each board. Small sections and irregular locations work the best. Boards can be aged further by gouging out the whole side, which will expose what is under the platform. (Just be sure that what is under looks realistic or has been painted black.)

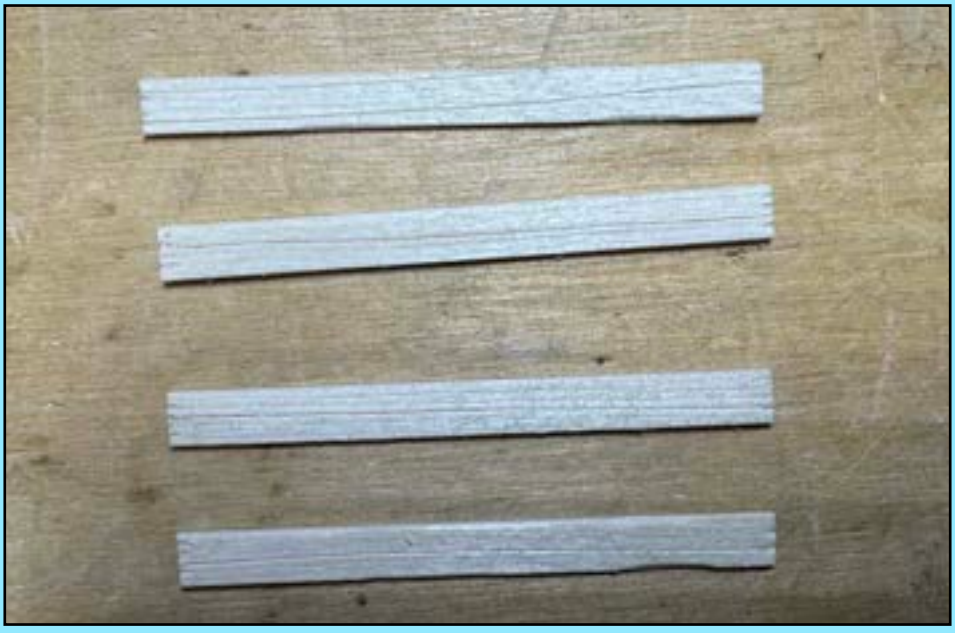


***Photo 6: Carved edge chamfers and roughed up board ends.***

The exposed ends of the boards need to be roughed up a bit. Checks in the grain go through the board at its ends (**Photo 6**). Using a No. 11 blade continue the grain lines through the depth of the board to about 1/32 of an inch into the board. More weatherbeaten boards might have small chunks of wood taken out of the end.

Additional effects include simulating a few knot holes. Careful, this can become cartoonish if overdone. In very aged and probably little used platforms, break pieces out of some boards showing what is below.

Before staining the boards, I remove saw dust and chips with a rag. I like the Hunterline stains, but other stain brands and India Ink in alcohol work just as well. The two colors I use the most are Hunterline's Driftwood and Cordovan Brown. I have not had good luck staining boards 2 or 3 different colors. The zebra stripe looking result does not look natural to me. I like to get color variation between boards by the length of soak in the stain. The tone is the same, but the depth of the color varies. This is pleasing to my eyes. I suggest making some extra boards and experiment with coloring to get what you like.

I use Canopy Glue to secure the planks. This glue is strong with a quick tack time. Its best property is if you make a mistake. It is usually easy to pop out a piece and scrape off the rubbery glue remains.

My final step after construction is to use Pan Pastels and weathering powders. Use a couple of soil-colored powdered pigments to mute the brightness of the stains. I use other colors to simulate the activities that occur on the platform, e.g., wear tracks from dollies, spills from products, rust from stored equipment. Another platform example is in **(Photo 7)**. This structure is a scratchbuilt freight station on my layout.

***Photo 7: Another example of a scratch-built platform.***

# Model Railroading on the Twelve Inches to the Foot Scale

By John Sokash

Following my clinic presentations at the Philly Express Convention, I had the chance to ride behind Reading Steam Engine No. 2102 on a run from Reading on up to Jim Thorpe and back. The cost of the Fall Foliage Excursion put on by the Reading & Northern (R&N) Railroad was $99 for an entire day of fun. I had purchased the ticket very early in September figuring it would be quickly sold out, and it was!

Reading T-1 class engine No. 2102 (**Photo 1**) was one of four steam engines (Nos. 2100, 2102 and 2124) that were rehabilitated after retirement around 1956 to participate in the famous Reading Rambles excursions from 1959 through 1964. The T-1 class of 30 locomotives were built in the Reading shops during the latter years of World War 2, specifically the Spring of 1945. They were the brain children of Reading Superintendent of Motive Power and Rolling Equipment W. Paul Gangewere.


***Photo 1: The Reading T-1 Class engine No. 2102***

The bulk of the boilers for the new T-1 class came from 30 huge I-10sa 2-8-0 Consolidation locomotives, which were retrofitted with longer 111" smokeboxes to accommodate the new frames, running gear, drivers and other parts fabricated by Baldwin Locomotive Works and General Steel Castings in Eddystone, PA. The I-10sa locomotives were originally outshopped in 1923-25 with their grate area and consequently the T-1's with an enormous Wootten style firebox of 94.5 square feet. The rebuilds featured the same size cylinders of 27" diameter by a 32" stroke, but ran on 70" drivers as opposed to the I-10sa's 61.5" drivers. These cylinders were integrally cast with the locomotive frame. Ever frugal to the max as most anthracite roads were, the leftover parts from the sacrificed locomotives were used to upgrade their earlier I-9sb to I-9sc classes.


***Photo 2: "The consist was one power car plus 15 passenger cars, being 10 coaches, one Superdome car and three Pullman Parlor Cars plus the Observation Car. All told, the engine was pulling more than 1600 tons".***

The T-1s were modern 1945 era locomotives, having Worthington SA feedwater heaters, boosters and many other features. They ran with 240 pounds per square inch boiler pressure. They were equipped with duplex stokers under the cab. Tractive effort was calculated at 67,984 pounds plus another 10,100 added with the trailing truck booster. Dual air pumps were pilot mounted behind a wide radiator shield. Aesthetically, much of the piping was hidden and the boiler appearance clean. The tender followed the same dimensions as the Reading's equally massive K1sa/b classes 2-10-2's, holding 26 tons of coal and 19,000 gallons of water.

The excursion train left promptly on the advertised at 9 am sharp from Reading's and Northern's "New" Outer Station located just up from the origination of PA Route 61 in downtown Reading.

***Photo 3: Crisscrossing the Main Schuylkill River just below Port Clinton***

The term "New" refers to the fact the original wooden "Outer Station" complex was located at the Wye or geographical split of the various Reading lines in downtown from Philadelphia in the southeast, to the west and Harrisburg, and to the northern coal fields. It burned down in the late 1970's. The elevation at the "New" station was about 305' above sea level. Other than hearing the usual whistle toots, the start of the run as super smooth. The train was sold out—no spare seats available. There were 974 coach passengers aboard, with another dozen to be boarding at the R&N Headquarters up the Schuylkill River in Port Clinton. There were another 250 or so passengers in the premium parlor and full dome cars. I was riding in the fourth coach, fifth in line after the engine and the power car. Half of the seats in our car were occupied by a large group of young Mennonite families out for a joy-ride behind steam. The consist was one power car plus 15 passenger cars, being 10 coaches, one Superdome car and three Pullman Parlor Cars plus the Observation Car. All told, the engine was pulling more than 1600 tons (**Photos 2 and 3**).

All along the route, the narrator was calling out important historical and industrial customer information. The Reading and Northern has done considerable work in bringing in customers along what easily could have been an abandoned route. Many of these are smaller customers that a larger Class One railroad would have ignored. It was the featured cover-story in the April 2025 issue of Trains Magazine.

About 20 miles north was the little hamlet of Port Clinton, the corporate hub of Reading & Northern operations. The original Reading Lines came up the western side of the Schuylkill River from Reading, the Pennsylvania Railroad's Schuylkill Branch up the eastern side. This PRR Schuylkill Branch continued northwest eventually to Pottsville and Delano Junction. Just before Port Clinton, the Reading lines pass under busy US Route 22 and the former's route/bridge, now abandoned above Hamburg.

The reason many of the towns along the river are back to named Port "Something" dates back to the time before the Philadelphia & Reading Railroad when the movement of coal was done using barges in the canals. Historically, Port Clinton was also where the split occurred between the Reading lines that followed the Big Schuylkill River to Pottsville and the Little Schuylkill River to Tamaqua. Considering the size of the Little Schuylkill River, some would call it a large creek by Pennsylvania standards. It's not easy to imagine how coal carrying canal boats even made it downstream to the railheads.

Visible in the steam shops building in Port Clinton was their 4-6-2 Pacific No. 425 scheduled to return to service next year. Speed averaged about 30 miles per hour since leaving Reading. Turning east under PA Route 61 and following the Little Schuylkill River the railroad has numerous tight curves which restricted speed to around 20-25 miles per hour. The area between Port Clinton and New Ringold along PA Route 895 has the largest collection of Christmas tree farms on the east coast. Coming into South Tamaqua means crossing over into Anthracite coal country. The elevation at Tamaqua proper is 870' above sea level.

Blowing through Tamaqua, the engineer was raising hell with the whistle for all the grade crossings. Leaving the central part of the city, the stack talk from 2102 was now impressive as the engineer made the hard run for the Hometown Tunnel near the top of the grade. At this time, the car hosts required the windows in the coaches be closed, as the cinders and smoke from a hard charging engine traversing a quarter-mile long tunnel upgrade would be hard on the passengers. Speed upgrade was a steady 30 miles per hour, averaging a two percent climb. From Tamaqua to Hometown, the track climbs 260' in a looping path to Hometown at 1130' and Hauck's Junction, where the rails wye to head west to Quakake, Delano and Mahanoy City, trading distance for even more elevation. The engine took it all in stride, not even breathing hard. Our route continued east and passing over the Hometown High Bridge at about 1200' elevation and 165' over the headwaters of the Little Schuylkill River. From there, it is a lazy stroll downgrade past Lake Hauto to Nesquehoning at 830' elevation above sea level. This part of the R&N trackage was originally laid down by the Central New Jersey Railroad.

Much of the Reading & Northern mainline was dark territory originally, meaning it was without signaling. One notable item was the presence now of several block signals along the route, but there are no accompanying telephone wires or poles. Evidently the signals may be controlled either using fiber optic or satellite. This might be a detail worth investigating later.

At Nesquehoning, the Reading & Northern has significantly expanded its operations as you are entering the Lehigh River watershed. The railroad has built a new bridge and wye to connect with its operations up the Lehigh River to Penobscot and beyond to Pittston in the Wyoming Valley, all of which was originally Lehigh Valley and Central New Jersey territory. From the wye bridge, a short distance north would take you to Glen Onoko, originally a fashionable Victorian Hotel and Spa. A short distance south takes you into Mauch Chunk or today better known as Jim Thorpe, named after the famous Native American Olympian. The town is at an elevation of 730' above sea level. Located on the hills above the former CNJ Mauch Chunk station was the home of Lehigh Valley Railroad magnate Asa Packer. The area is often referred to as the Switzerland of America. We arrived a few minutes past noon (**Photo 4**).

*Photo 4: Rolling into Jim Thorpe*

*Photo 5: Jim Thorpe Station (Originally the CNJ Station)*

It is no exaggeration to say the crowds of tourists that had come to ride the five hourly departing Lehigh Gorge excursion trains, plus the excursions that had come down from Wyoming Valley and Mahanoy City, plus our train's riders easily added up to the better part of ten thousand visitors. All were crammed into a couple of square miles. I believe I heard every major language on the planet being spoken (**Photo 5**).

After all the passengers on our excursion were off-loaded, the crew took the train back upriver to the wye and turned it for the return trip. I give plenty of credit to the train crews and the local law enforcement for handling the crush of the crowds and all the train movements without any serious disturbances.

Grabbing something to eat ate up the time between our train leaving and returning post wye-turn. The highlight of the stay in Jim Thorpe was being allowed to walk around 2102 as she was being serviced. Since there was no water tower to refill the tank, necessity became the mother of invention as the crew used a gasoline powered pump to fill the tender with water from a large tank car. This was slow and time consuming, but it worked. It wouldn't have been a decent trip if I had not been able to get up into the cab and grab a few photographs (Photos 6-15).

***Photo 6: Backing down into the Jim Thorpe Station…***

***Photo 7: …after turning the train on the Lehigh River wye.***


***Photo 8: Watering the Tender***


*Photo 9: The Throne*

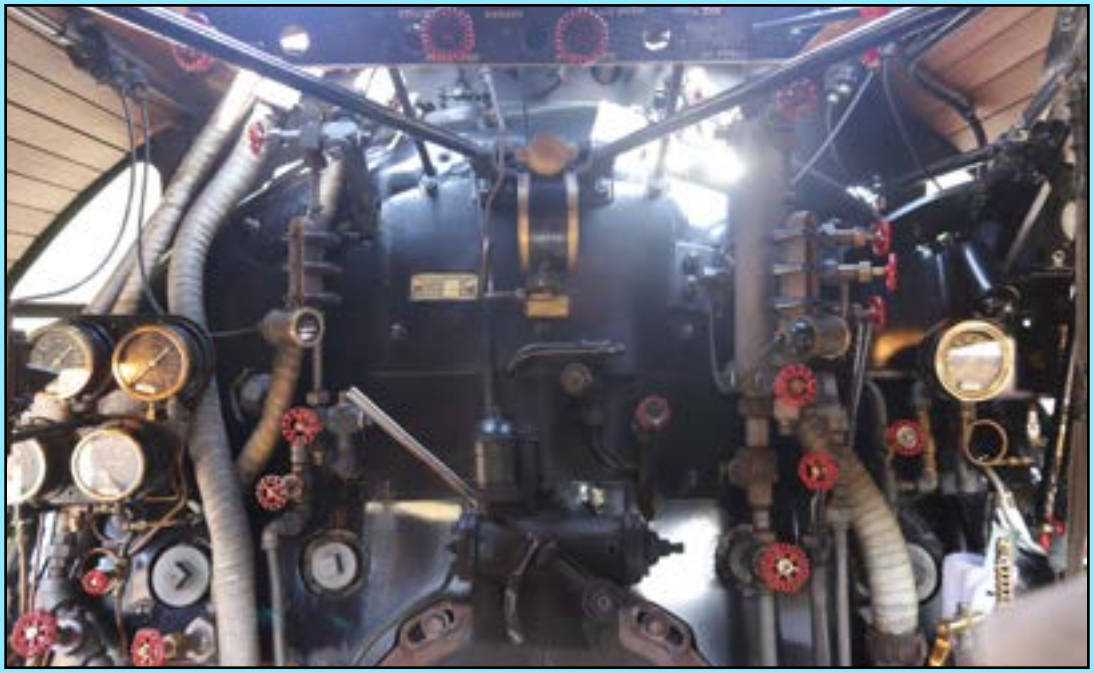


*Photo 10: Backhead*

*Photo 11: Fireman's side of the cab.*

*Photo 12: Priming the injector under the caber; the fireman is reaching down to the valves on the floor.*

*Photo 13: Activating the starter valve*

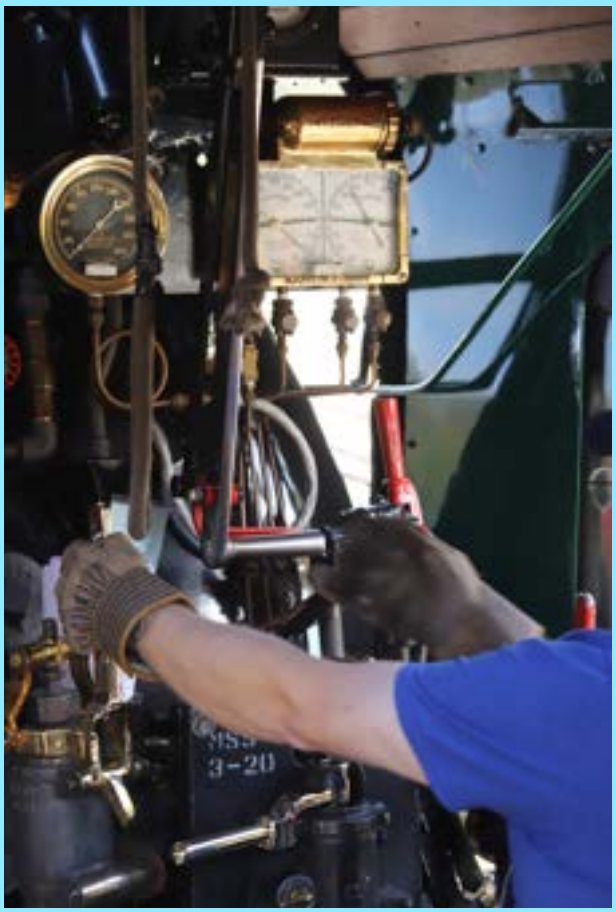


*Photo 14: Engineer's gauges*

*Photo 15: Butterfly Doors into firebox*

And remember the aforementioned Mennonite families from my car? Even the moms holding their children got up into the engineer's seat for photographs. Getting good pictures was problematic given the smoke from the engine plus all the food trucks and the harsh low autumn sun at the bottom of Lehigh River Valley (**Photos 16-20**).


***Photo 16: Engineer's side of cab. Note the head brakeman's window.***

***Photo 17: Valve Gear, Worthington SA pump***


***Photo 18: Admirers***

***Photo 19: Mom's Approval***

Crowd control by the Reading & Northern personnel was excellent, doing what Disney & Universal Studios manage without the fancy herd-lines. Our departure from Jim Thorpe was at 4:20 pm as scheduled. The incentive to get back to Reading caused the engineer to storm out of Jim Thorpe doing a good 25- 30 miles per hour upgrade. On several occasions, the drivers were slipping on the wet leaves on the rails, which were caught on video (Video1). Blowing through Nesquehoning as the grade lessened, the engine was easily doing 35 miles per hour trying to make up some time (Video 2). Crossing the Hometown High Bridge allowed me to video the fall colors (Video 3). Loafing down grade through the tunnel and into Tamaqua, the engineer gave the whistle a good workout. All throughout the trip, people with cameras were lining the tracks at grade crossings, a few when the roads and the tracks permitted tried to pace the train (Videos 4-7).

*Video 1: Upgrade into Nesquehoning: Note the wheel slip toward the end, speed about 25mph.*

*Video 2: Storming through Nesquehoning, speed about 35 mph.*

*Video 3: Crossing Hometown High Bridge, 165' above headwaters of Little Schuykill River.*

*Video 4: Blowing through Tamaqua on return to Reading.*

*Video 4: Part 2.*

*Video 6: Blowing through New Rheingold.*

*Video 7, 8: Pulling into Port Clinton yards to discharge passengers and change engine crews.*

Modeling the 2102 Excursion train would not be difficult, as there are many versions of the Reading T-1 class in brass as well as cast metal. Ideally, on this outing, clerestory coaches would be more accurate, and since the Reading was intimately aligned with the Central of New Jersey, older Athearn standard clerestory coaches with new trucks, body mounted couplers and diaphragms would be acceptable. Do note that the Reading & Northern has chosen to paint their cars in a Tuscan red color as opposed to the original Reading or Pullman green. In reviewing old photographs of the Reading Rambles excursions, the arch roof coaches of Reading were mostly used instead of the clerestory roofed cars. More Reading and Central New Jersey prototypic models were available through John Greene's Bethlehem Car Works, which is now part of White Rose Hobbies in York, PA. In speaking with the new owner recently, they are planning to bring the models back into production.

Diesels may have financially saved the railroads, given the labor-intensive care steam required. But diesels are ubiquitous and lack the personality of a steam engine. Would I repeat the trip again, or try one of the other routes the Reading & Northern has to offer? In a heartbeat; a resounding yes!

# Yard and Staging Control Design

By Alan Balma (Photos by the author)

***Photo 1: Canandaigua Division Point Yard on my PRR Elmira Branch switching layout. The two staging tracks are at the far end along the back-drop.***

The yard and staging area control decisions on my Pennsylvania Railroad Elmira Branch switching layout were driven by the need to manage these areas from two different locations. If I am alone for an open house, I need a second panel near the lift gate entrance to the layout room. This panel needs to control the Arrival/Departure siding and my two staging tracks so that I can run different trains during an event. The walk around control, used in my two industrial switching districts, is topographically impractical.

I use an NCE DCC system for my layout. This article is about the design that I chose to address the above situation. It does not provide detailed wiring diagrams or programming instructions which can be found on the North Coast Engineering (NCE) website. It provides a Black Box architecture and a strategy which can be adjusted for individual situations.
In approaching the design, I wanted to do the following:

1. Control the Arrival/Departure throat and staging yard access from two different locations. The primary location needs to be close to where one can operate the whole yard and uncouple with PICs (skewers). The secondary location is needed at the layout entry so that a single operator can move trains and welcome guests through a lift bridge during open houses (**Photo 2**). For the location of the Main Control Panel, the Sub Control Panel and the layout entrance at the nearby lift bridge.
2. Single button routing from the yard lead into the five-track yard ladder.
3. Turnout alignment with a button press versus a toggle switch.
4. Use of Tortoise switch machines.
5. Not use a throttle to align turnouts. (potentially confusing for new operators).

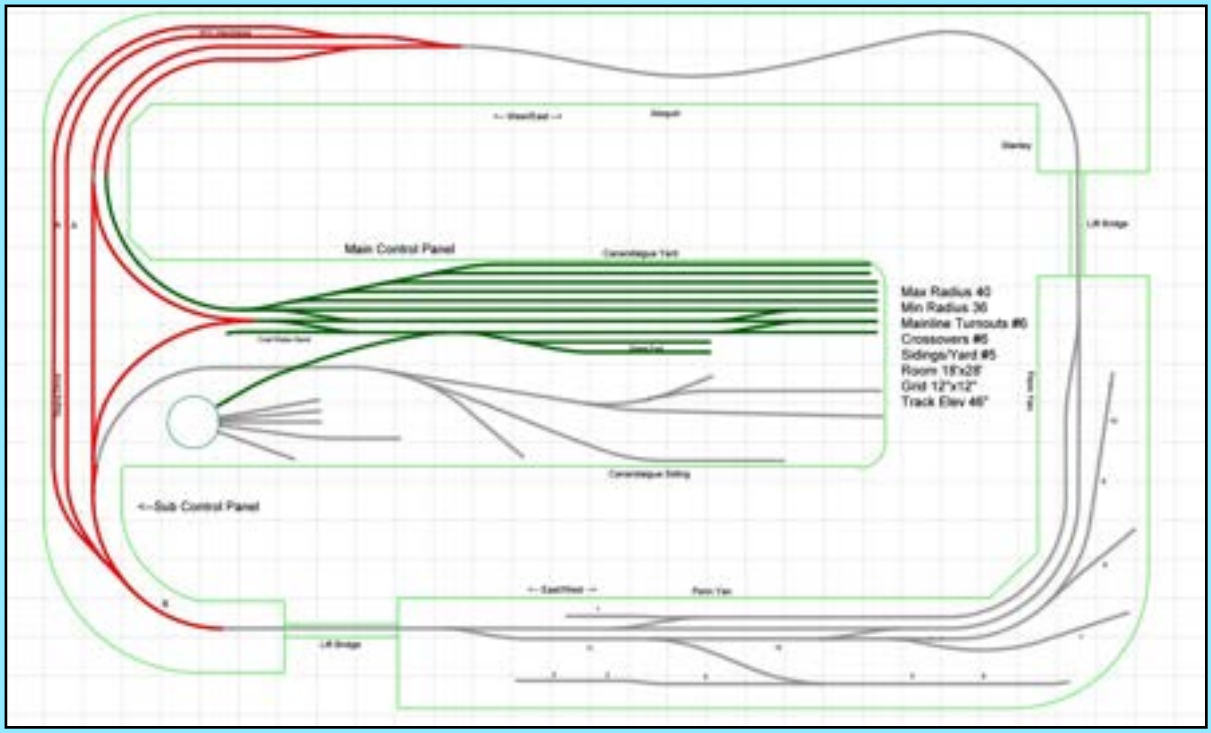



*Photo 2: Map of layout showing where the key control elements are located.*

A search of the internet yielded some possibilities. But they either utilized old technology or electronics or software that required detailed knowledge much beyond the black box level. My layout DCC system is from North Coast Engineering (NCE). A study of their control products gave me a possible solution for the items above using NCE Switch-8s, Button Boards, and a Mini-Panel. First a brief description of each of the products:

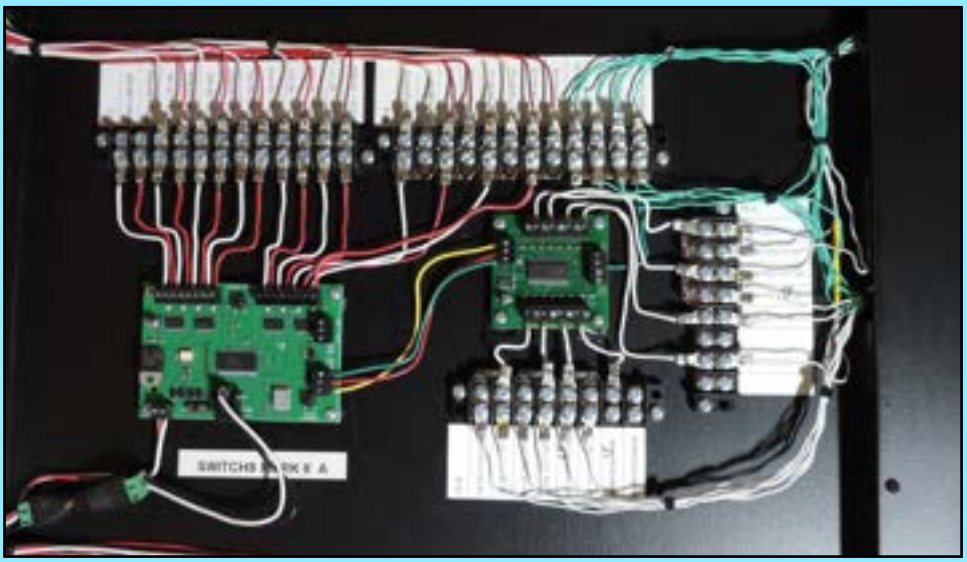


*Photo 3: The NCE Switch-8 Mark II stationary decoder board is lower left. The NCE Button Board is upper right. Spade terminal connections are used through out the layout for ease of trouble shooting.*

## NCE Switch-8 Mark II for Tortoise

The NCE Switch-8 Mark II **(Photo 3).** This circuit board is an accessory decoder that can control up to eight Tortoise or stall motor switch machines. Each of the eight user assignable addresses controls one turnout. How to assign an accessory address and how to trigger it with your throttle are in the product directions. I can also control two turnouts with one address for a crossover. The connections to the board are:

- Track on the bottom left. This is the source of the DCC signal for addressing the stationary decoder from your throttle or other devices.
- Tortoise switch machines on the top. Two wires to each machine.
- Three wires to the Button Board on the right. This allows turnout control by momentary push buttons or momentary toggle switches.
- External 12V DC supply on the bottom center. I use an optional separate 12V supply because I do not want to take power away from my DCC system. There is a switch selectable power source on the board.

## NCE Button Board

The NCE Button Board **(also in Photo 3)** allows the control of eight turnouts with a Normally Open (NO-momentary) SPDT toggle switch, or two SPST momentary push buttons (one on each route), or a single SPST momentary push button. The latter case can be used to toggle between the two routes by setting a Switch-8 Configuration Variable (CV), i.e., set CV548 to 1. I use the toggling feature and will cover this later. The connections to the board are:

- Switch-8, the three wires on the left.
- Switches (Push Button or Toggle) top and bottom. Up to eight switches can be connected.
- Switch commons on the right.

## NCE Mini-Panel

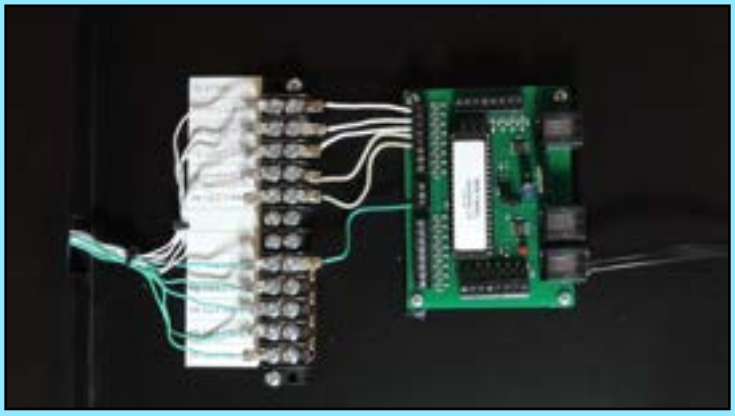


*Photo 4: NCE Mini-Panel Board*

The NCE Mini-Panel **(Photo 4)** circuit board can be used for applications such as control panels for yards, basic automation of trains and control of signals. I am going to focus on the first application. Up to 30 inputs can be attached to this board. Limitations are covered in the board manual. The connections to the board are:

- DCC Bus on the right bottom. It can be part of a daisy chain.
- NCE ProCab connection for programming on the right top.
- Momentary SPST Push buttons or normally open SPST toggle switches on the top, left and bottom. Each can trigger a program.
- Common for push buttons or toggle switches on the middle left.

## The Two or More Panel Problem

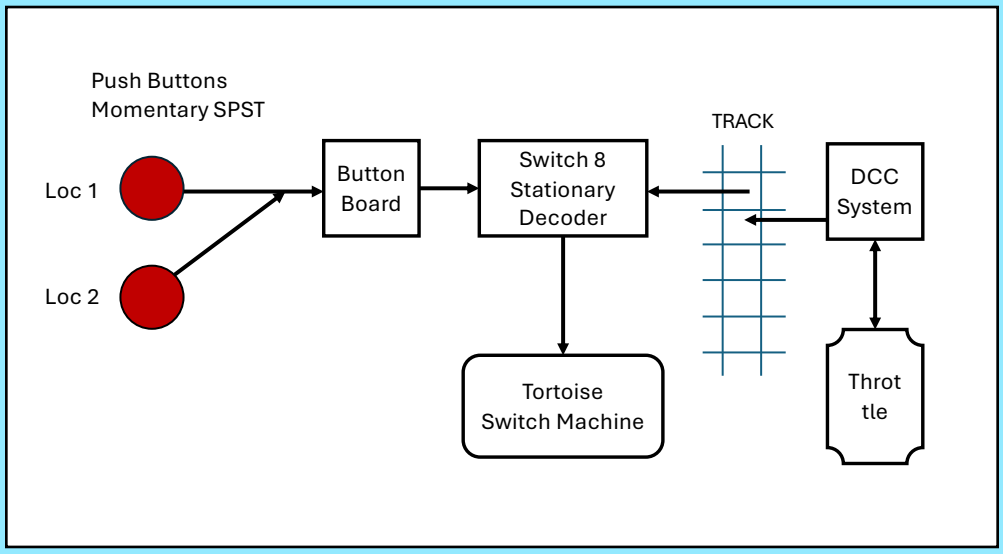



***Photo 5: Diagram of the turnout control architecture.***

The areas to be controlled are colored red and green (Photo 2). The Main Panel controls both the red and green trackwork; and the Sub Panel controls just the red area. By utilizing the Button Board and the Switch-8 toggling feature, turned on by setting CV548 to 1, the problem is solved **(Photo 5)**. A push button at a common turnout on each panel is connected to the same Button Board input. Each press of either button toggles the turnout to its next possible position. The Switch-8 does not care or know where the signal comes from. It just knows that an input from the button board from this button or toggle switch means to trigger the turnout's address and advance it to the next position. I believe this solution will also work for more than two locations, but I have not tested it.

The NCE instructions say the Switch-8 will work with a Digitrax DCC system. Since this device is just a decoder, theoretically it should work with any DCC system that is compliant with the standards. But you should check with NCE for your particular system. If desired, one can also still control the turnout from your throttle using its accessory address.

# Yard Ladder Routing by Pushing a Single Button

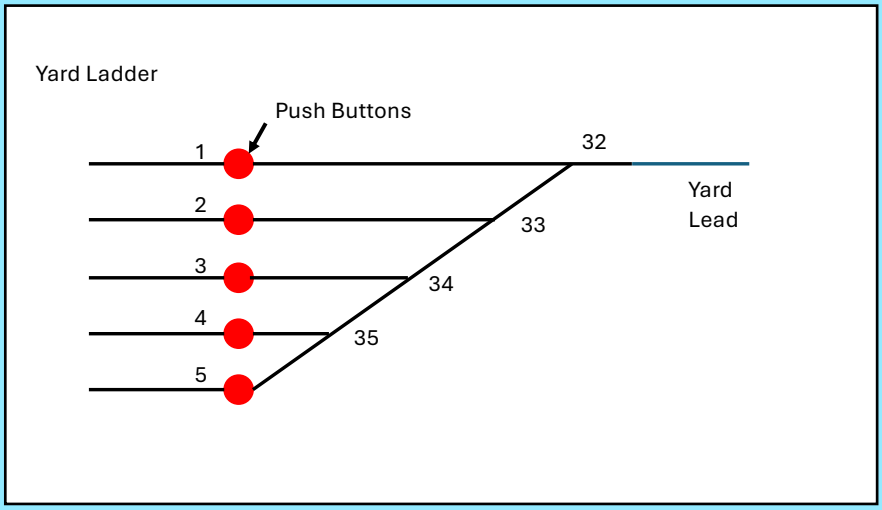



*Photo 6: Canandaigua Yard diagram showing route selection push buttons and stationary decoder addresses for the turnouts.*

- Accessory Address 32, move to position 2
- Accessory Address 33, move to position 1
- Accessory Address 34, move to position 2

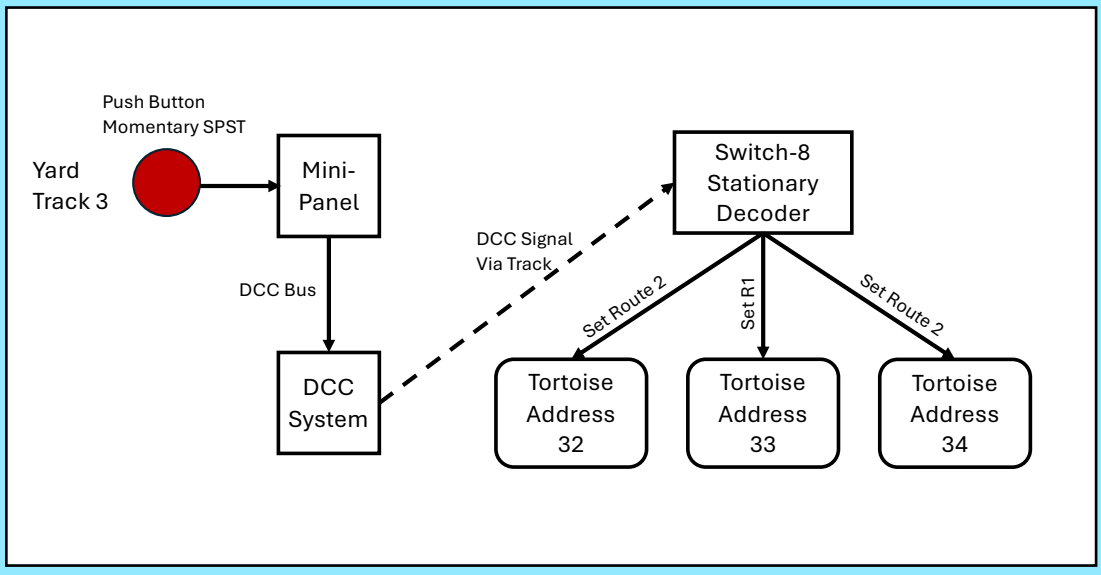



*Photo 7: MiniPanel control architecture for automated routing from the yard lead.*

In **(Photo 8, p. 37)**, the LEDs show the turnout alignment from a button push on Track 3.

With a little bit of patience in reading the manual, the programming of each yard track button, using my NCE ProCab throttle was fairly easy. The wiring of the Mini-Panel is straight forward as well; just a button connection and a DCC bus connection.

I used an NCE DCC system to do this. I do not know if the MiniPanel works with any other system.

## Less Than Smooth Sailing

The control panels were my Covid project. I did run into some problems with the Switch-8s and Button Boards. When the layout was powered up, the buttons on my layout would work properly sometimes and not at other times. On the other hand, the turnouts would work in either case using accessory addressing on my throttle. There was much gnashing of teeth over a couple of months, almost to the point of ripping it out and trying something new. I spent time on the NCE Groups.io web site and finally happened upon a thread that sounded like my problem. It said to power the boards up and down and then up. It worked!!! When I turn the layout on, I have a switch to depower the boards and then repower them. I do not know why it worked. A couple of years later I found the following on the NCE website:

*"The data sync between the BB, the SW8, and the command station can get a little wacky if they use different power sources. Try a couple different sequences of powering different things on first. The SW8 and the BB can be left on 24/7/365 with no issues. That is how I have them setup with external power on my layout. The three data lines between the BB and the sw8 are extremely sensitive to outside interference since it is a 5v low voltage connection. Twisted wires, very short wires, even some type of shielding might improve the situation. I use Cat5e /CAT6 cables with 24 AWG twisted pairs for all the low voltage (5v) data lines on my layout."*

In hindsight, I probably should have tried contacting the NCE Technical Support. I admit to suffering from the gene that does not like to ask for help.

## Other Control Panel Features

This is the completed Main Control Panel (**Photo 8 on next page**). Each of the turnouts that are not in a crossover have a bicolor (Red/Green) LED on each route. The control panel thus shows the route or alignment of the turnout. These LEDs are controlled by the auxiliary terminals on the Tortoises. I feel that this gives new operators a positive way to look at route alignment. The crossovers show alignment in the more traditional way, with green indicating straight through and red indicating the crossover is active. **(Photo 9)** is the Sub Panel.

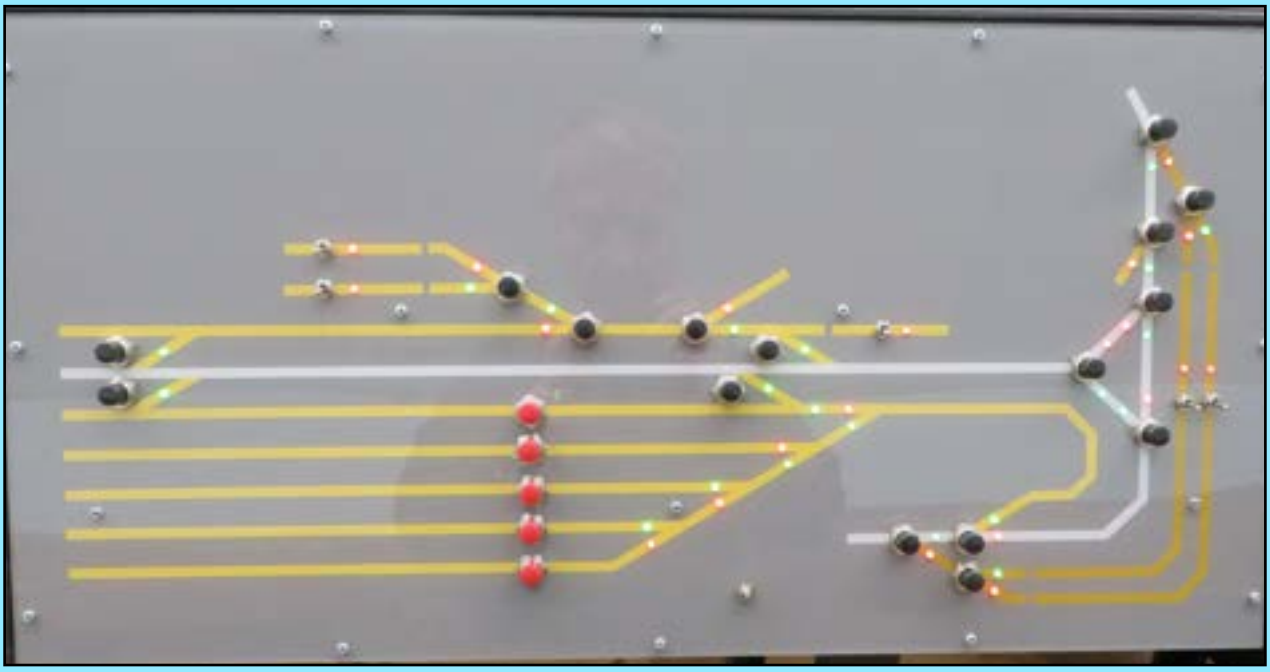


*Photo 8: Main Panel showing turnout control push buttons (black), routing LEDs, and yard routing buttons (red). Note that the Yard Lead is routed to Track 3.*

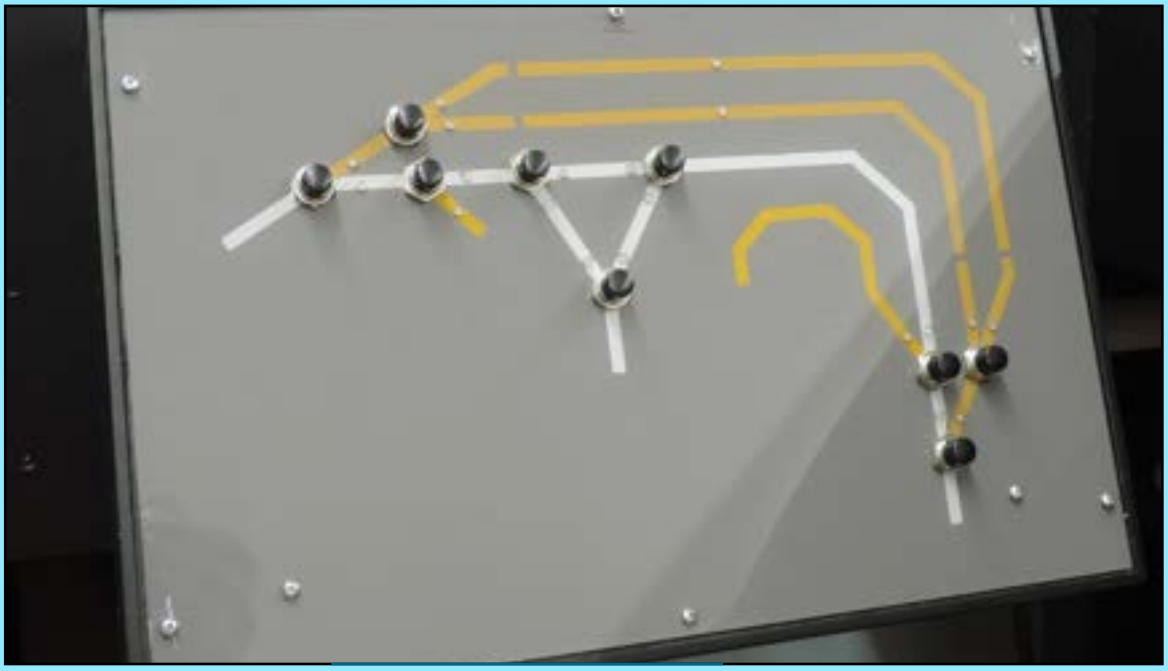


*Photo 9: Sub Panel that is mostly used for open houses.*

# Ops and Car Movements on My Ma & Pa RR

By Rick Stoneking (photos by the author)

As my railroad approached the point of being complete enough to host the Friday Night Round Robin Ops group, I realized that I had to make a vexing decision: How do I manage freight car movements on the railroad? A brief overview of my railroad may not be out of place here, but please keep in mind the first rule of all layout owners, "It's my railroad and I do things the way I want." So, anything you read here that you see as being "not correct" in any way, I can assure you there is no need to point it out as I am almost certainly aware of the discrepancy and choose to do it anyway (I refer you back to rule No. 1). My primary goals are that the railroad be fun to run and manageable for me to set up for Op sessions. I do try to capture the prototype feel of the Ma & Pa, but 100% fidelity is NOT my goal, and rivet counting is not my thing.

This article gives a brief overview of my railroad and describes the method I developed to handle freight car movements. It is not a tutorial on freight car forwarding, car cards & waybills, or JMRI Operations Pro. I do refer to all of these things, but I am simply sharing what I have done on my railroad with the hope that others may find it marginally interesting, or at least entertaining.

The year is 1947 and my railroad represents the entire line from the southern terminal at Baltimore MD (MP 0) to the northern terminal at York PA (MP 77.2 according to Timetable No. 55 that went into effect on "Sunday, May 4th, 1947, at 12.01 O'Clock A.M." In addition to York and Baltimore, the towns of Towson, Bel Air, Forest Hill, and Whiteford/Cardiff in Maryland (I have industries from both towns in the one town I call Whiteford), and the towns of Muddy Creek Forks, Red Lion, Dallastown, and Yoe in Pennsylvania. The railroad is an around the walls design with two peninsulas that come out into the center of the room (**Figure 1, p. 39**).

Overall, the layout is 28' x 30' and has a mainline run of approximately 150' from yard to yard. I model the interchange with the Baltimore & Ohio (B&O) and Pennsylvania Railroad (PRR) in Baltimore, and with the PRR in York. There are three staging tracks that are not really used during operations, since they only held cars that moved on and off the railroad via the interchange tracks on the Ma & Pa.

The full schedule has 17 trains, with six of those being passenger trains, one each way in the morning, afternoon, and evening. The morning passenger trains each do a mail car pickup in the morning and a setout in the evening.


*Figure 1: Track Plan*

The midday trains just run the length of the railroad, making stops at every station and passenger platform. There are morning and evening milk trains that stop at all stations and milk platforms. They typically do some work in Whiteford, picking up and or setting out a milk car or reefer at the creamery in the morning or picking up/setting out a reefer at the meat packing plant.

The York local moves cars between the York yard and the industries in York, which includes the team track and freight house, as well as the PRR interchange tracks. The remaining eight trains are way freights that are either a turn (Dallastown and Staso Mill trains) or run from one end to the other. Two trains are "special" trains that only service certain industries with certain types of cars. They run in alternate directions from one day to the next. The livestock train services only stock cars and will run from York to Baltimore during one session and then run from Baltimore to York the next session.

The same is true of the other special train, the Coal & Oil train, which handles only tank cars and coal hoppers. When the Livestock train is running from York to Baltimore, the Coal and Oil train runs from Baltimore to York. The schedule attempts to minimize having more than one train working the same town at the same time, but as we all know, stuff happens during Op sessions. The train graph in **Figure 2** shows the mythical perfect schedule.

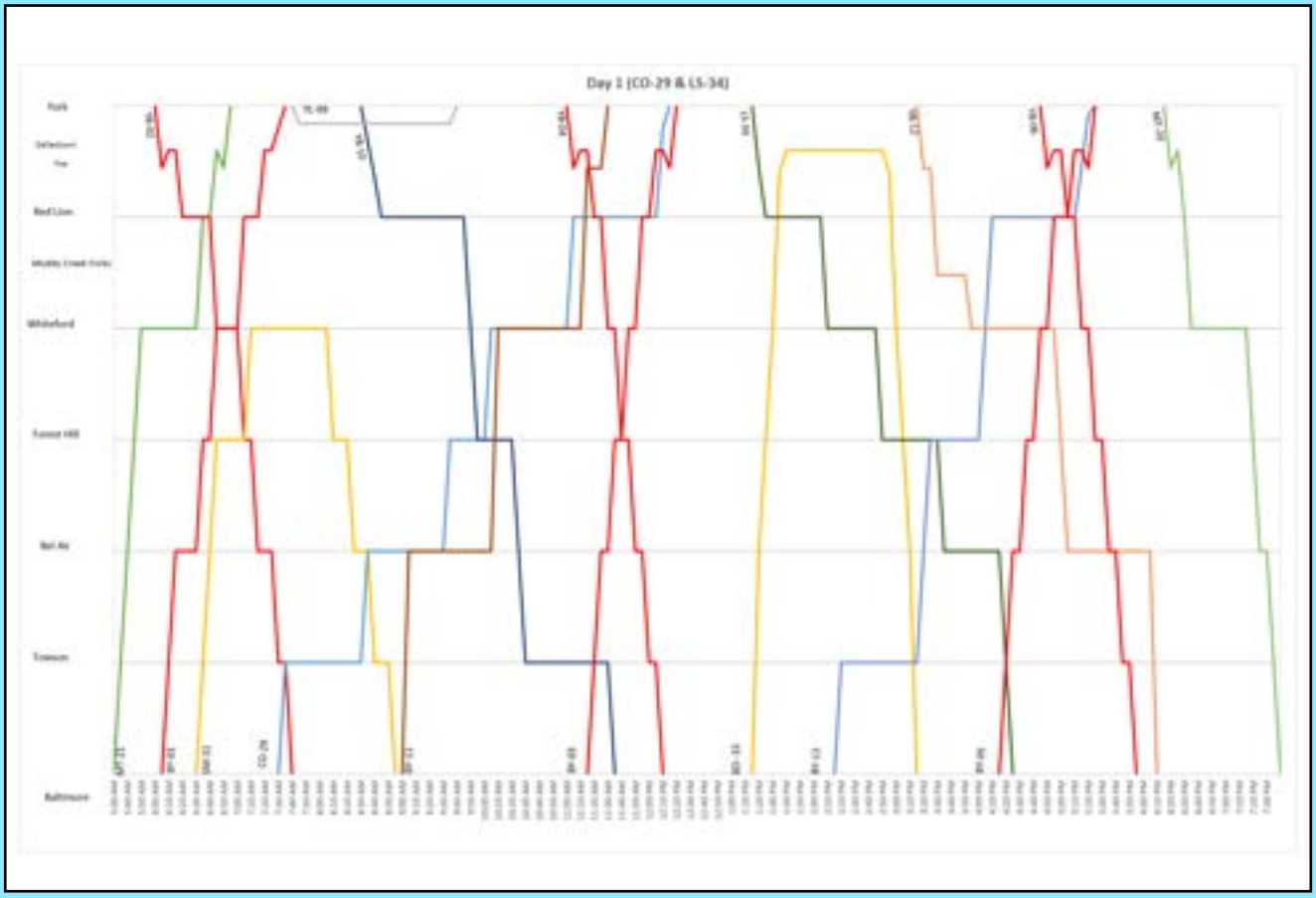



***Figure 2: Train Graph***

The prototype Maryland and Pennsylvania Railroad (Ma & Pa) had no signals and used Timetable and Train Orders to govern the movement of trains; and my railroad does the same. Only the passenger trains are on the timetable, and all other trains run as extras. All communication with the Dispatcher are supposed to occur via telephones located around the layout. The layout runs using a 4:1 fast clock so a 3 – 3.5-hour session spans 12-14 scale hours.

The Dispatcher uses various forms to control, and record, movements of trains. The first is the Dispatcher's Record of Movement of Trains (**Figure 3**) where all "On Sheet" (OS) reports of trains are recorded with the time and station.

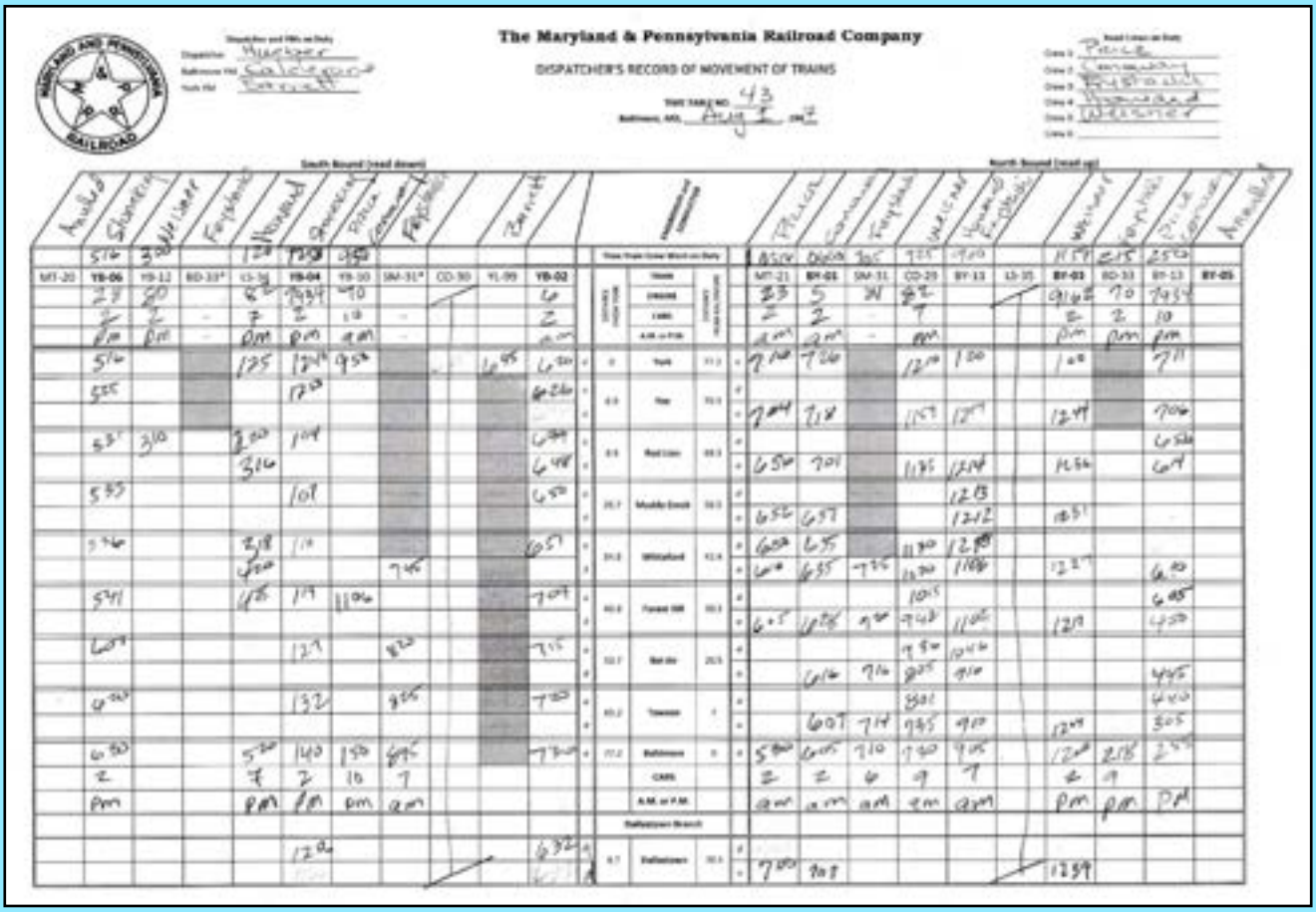



*Figure 3: Dispatcher's Record of Movement of Trains*

The second is a Clearance Form A, which every train must have before it can depart its origin station (Figure 4 – Clearance Form A).

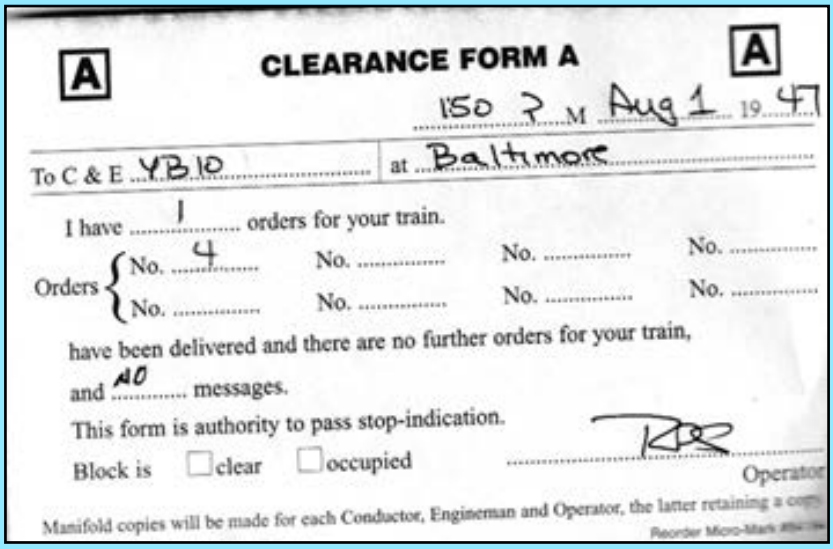
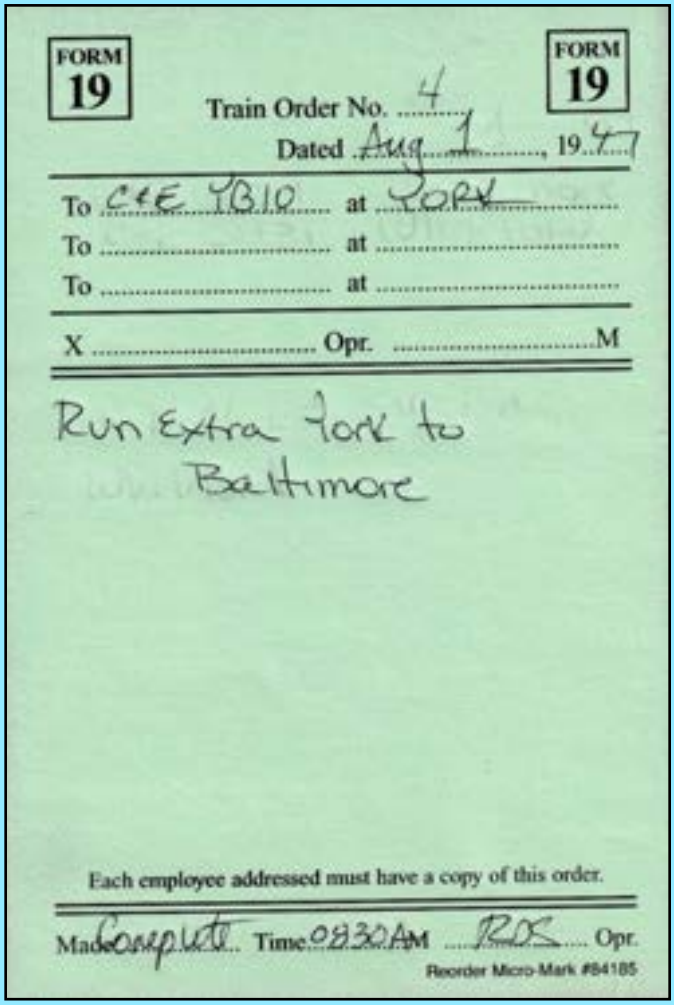



*Figure 4: Clearance Form A*

The Form A only gives the train permission to proceed; it does not provide any movement authority for the train. It must also list at least one Train Order. All train orders on my railroad utilize the Form 19 version, which means the order can be hooped up to the conductor. They do not have to stop the train, go into the station and sign for the order). All trains, other than Timetable trains, must have a Train Order (**Figure 5**). Trains that are listed on the Timetable get their authority from the Timetable and therefore do not need a Train Order to run. They will need a Train Order for any unusual instructions. Meets between a Timetable train and an extra train do not require a Train Order because the C&E of the extra train is required to ensure that their train is out of the way in time (per the employee rulebook) for any meet with a Timetable train. Meets between extra class trains must be planned by the Dispatcher and a Form 19 Train Order issued to the C&E (conductor and engineer) of all trains involved, ahead of when the meet will occur (**Figure 5**).


FORM 19

Train Order No. 4

Dated Aug 1, 19 47

To C&E YB10 at York

To ..... at .....

To ..... at .....

X ..... Opr. ..... M

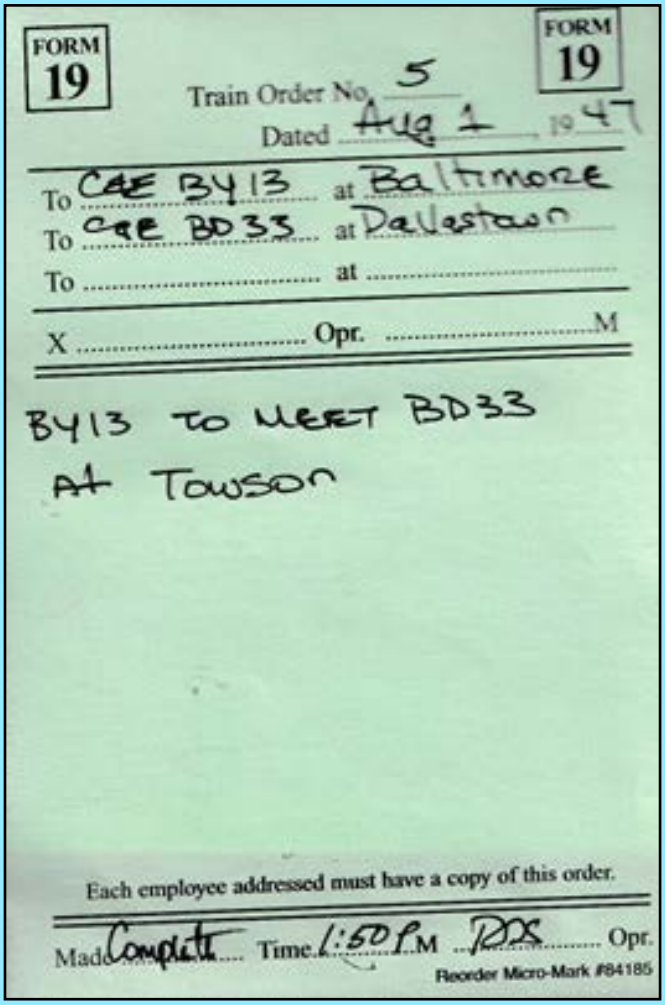
Run Extra York to Baltimore

Each employee addressed must have a copy of this order.

Made Complete Time 0830 AM RDS Opr.

Reorder Micro-Mark #84185

*Figure 5a: Train Order 1*


FORM 19

Train Order No. 5

Dated Aug 1 19 47

To C&E B413 at Baltimore

To C&E BD33 at Dallestown

To ..... at .....

X ..... Opr. ..... M

B413 TO MEET BD33 AT TOWSON

Each employee addressed must have a copy of this order.

Made Complete Time 1:50 PM RDS Opr.

Reorder Micro-Mark #84185

*Figure 5b: Train Order 2*

## *Figure 5: Train Orders*

The final form that the Dispatcher manages is the Train Dispatchers Order Book. The Dispatcher records on this sheet every Train Order that he issues. This includes the time, train order number, the recipients of the Order, where the crew is when they receive the order, the text of the order (which must be identical to what was written on the Form 19), and the time completed (when the order was delivered to the crew) (**Figure 6**).

**The Maryland & Pennsylvania Railroad**

Train Dispatchers Order Book

Office: Baltimore MD Dispatcher: Hueber Aug 1 1947

| Time Issued | Order No. | Train/Crew | Location | Body of Order | Time Complete |
|---|---|---|---|---|---|
| 0525 | 1 | MT 21 | Balt | Run Extra Baltimore to York | 0729 |
| 0455 | 2 | SM 31 | Balt | Run Extra Baltimore to Whitehall & Return | 0700 |
| 0725 | 3 | CO 29 | Balt | Run Extra Baltimore to York | 0729 |
| 0825 | 4 | YB 10 | York | Run Extra York to Balt | 0850 |
| 0853 | 5 | CO 29 YB 10 | FH WF | YB10 Meet CO29 @ WF | 0900 |
| 0859 | 6 | BY 11 | Balt | Run Extra Baltimore to York | 0900 |
| 1042 | 7 | BY 11 YB 12 | DA WF | BY11 Meet YB10 @ FH | 1043 |
| 1311 | 8 | LS 34 | York | Run Extra York to Balt | 1314 |
| 1311 | 9 | BO 33 | Balt | Run Extra Baltimore to Dallastown & Return | 1[illegible] |
| 1445 | 10 | YB 12 | York | Run E | |

*Figure 6: Train Order Book*

Now back to the decision at hand…

I am a member of a Friday night round robin group (you guys know who you are) and all of their railroads use car cards and waybills, with some using four-cycle waybills, some using two-cycle waybills, and one using the modified T. Gerald Dyre method where the 'waybill' is a list of all locations that the car will move to. Slashes and x's are used to indicate where the car is and where it has to go to next. All of these methods have (what I see as) the benefit of having a car card for each car, I like being able to set the cards out on the layout next to where they are going, with permission of the layout owner. The "acceptable to me" downside is that is un-prototypical and puts scenery at risk) Setting the cards out makes switching easier, especially for new operators, or in particularly challenging switching areas. They all also share the biggest negatives (to me), which are that the cars move between the same 'N' number of locations, where N is 2 or 4 or a few more.

I know that there are ways to mitigate this issue, such as by swapping waybills after four cycles, or routing cars to staging on their fourth cycle, then swap the waybills for cars in staging, etc. (I saw a 12-sided waybill in use once during a layout visit. It was like origami to fold it to get the correct 'side' showing. I have no idea how the owner printed them with so many orientations).

The second major issue, and the one that cannot be avoided or mitigated, is the need to create all the possible waybills for every car/industry combination (and keep track as you did so of how many waybills of each car type you have made up for each industry). This also leads to situations where more cars end up at a location than that location can hold, and cars have to be off-sport (which I am

The other option I considered was to do what my local train club does and use JMRI Operations Pro to manage car movements via computer generated switch lists. The BIG advantage to JMRI switch lists is that JMRI keeps track of every time a car is moved and when looking for cars to assign to a train it will look at the cars that have the least number of moves first. This results in very random car movements. The cars on a train are never the same, and (unless you have a flaw in your setup) every car on the layout gets moved over time. This was a huge plus for me, and I really wanted a system that achieved that same randomness with every car getting moved, whether that system was JMRI or some other system. The downside of JMRI switch lists, for me, was the loss of the car cards to assist with switching. Visualizing complex switching moves, involving multiple cars is, at least for me, much more challenging when I am just looking at a list of pickups and set outs on a piece of paper, especially if you are new to the layout or the switching job. The other downside is that the paperwork (the 8.5" x 11" switch list) is more cumbersome to deal with than a pack of car cards in your apron or shirt pocket (this was particularly off putting to one of the guys… and he knows who he is as well!).

The first couple of Ops sessions on my railroad used highly experimental (and equally dubious) car forwarding schemes which came with their own problems. I finally decided to try making the four-cycle waybills that would be needed to do the standard car card and waybill system for my railroad. One of the guys from my round robin group gave me a great Excel file that helps you determine how many waybills of each card type you need for each industry. This keeps track of how many you have created as you go, but I very quickly become overwhelmed and frustrated trying to do this, and scrapped that idea. I started looking for a different approach. I considered things like using JMRI switch lists AND empty car cards so I would get the benefit of cards that can be setout next to destinations and the benefits of JMRI's randomness. But that meant even more paper work for the operators to deal with. They already have the employee rulebook, a Form A, and one or more train orders. Adding both car cards and an 8.5" x 11" switch list was clearly too much.

What I finally ended up with is a JMRI / car cards & waybills hybrid system that works for me, but is almost certainly unsuited for a larger railroad that moves a lot more cars in a session.

My railroad has about 225 freight cars on it, and the normal schedule will move about 160 of those cars.

I use JMRI to create the train manifests (giving me the benefit of all cars getting moved, and in a random order that I really wanted). But instead of using the JMRI generated switch lists, I convert the switch lists into waybills that are inserted into the car cards of the cars that are being moved during the session.

Every car has a car card, the same as it would in a traditional car card and waybill system, and when I am ready to setup for the next session all car card pockets are empty (**Figure 7**).

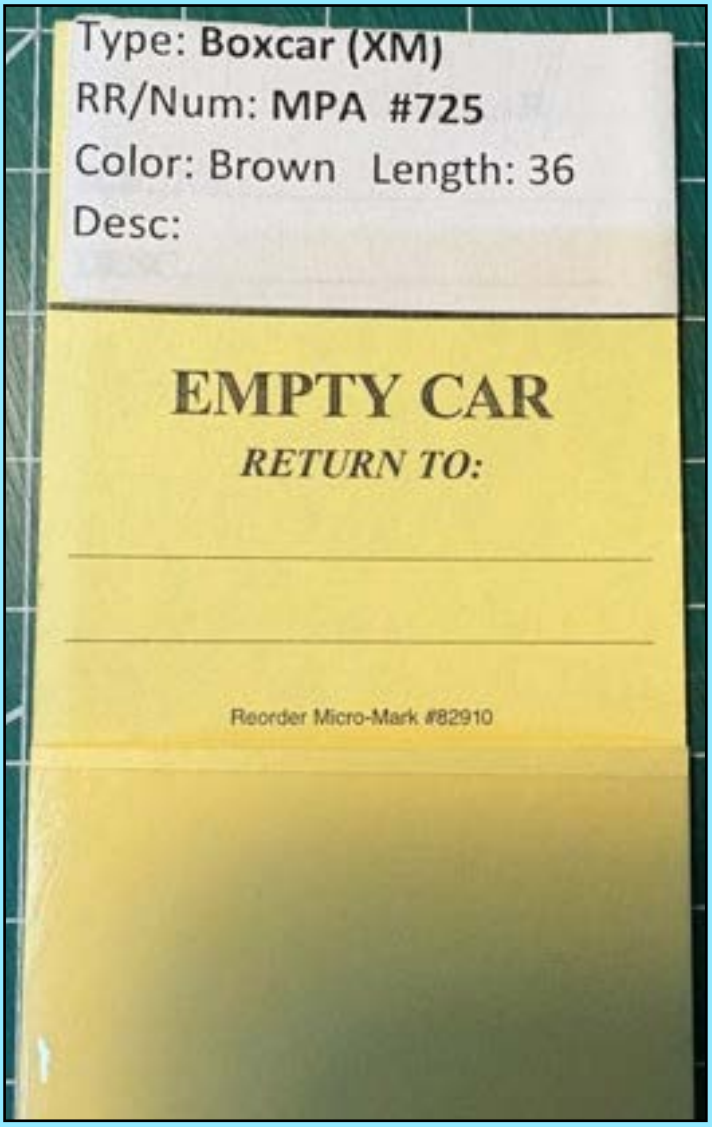



*Figure 7: Empty Car Card*

Trains are then 'created' using JMRI Operations Pro, which results in the creation of the manifests indicating which cars are being moved, where they are at the start of the session, and where they are going through the session. What makes my system manageable is that once all the train manifests have been created by JMRI, the cars database maintained by JMRI now shows which cars are to be moved, what train each car is assigned to, the cars' current location, and their destination location.

JMRI has the built in functionality to 'Export Car Database to .csv file.' I simply export the car database and then open it in Excel to be "massaged" a little bit (**Figure 8a** shows a snippet of the file as exported by JMRI). I wrote a Visual Basic function in Excel that I use to automatically take the raw database file and manipulate it to delete the many columns I do not care about and rearrange some of the columns so that the final printed report has the columns in an order that makes more sense for creating the waybills. It takes only a few seconds to run it on the export file. **Figure 8b** shows a snippet of the report after having been processed by my Visual Basic code, and you can see the first column is blank with the header of "Done." I use this column to check off each car after I have assembled the waybill. This becomes super useful after about the first 50 cars or so!

| Number | Road | Type | Length | Weight | Color | Location | - | Track | Load | Moves | Train | Destination | Track |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MPA | Mail | 50 | 4.4 | White | Baltimore Yard | - | Yard Tracks | L | 12 | BY-01 | Whiteford | Mail Track |
| 2 | MPA | Mail | 50 | 4.4 | White | York Yard | - | Yard Tracks | L | 12 | YB-02 | Red Lion | Mail Track |
| 7 | NYC | Flatcar | 40 | 3.8 | Black | Baltimore Yard | - | B&O Interchange Trk1 | L | 12 | | | |
| 8 | BMOX | Tank Car | 26 | 2.8 | Maroon | Bel Air | - | American Oil Co. | E | 12 | CO-30 | Baltimore Yard | PRR Interchange Trk2 |
| 9 | MPA | Mail | 36 | 3.5 | Brown | Whiteford | - | Mail Track | L | 13 | BY-05 | York Yard | Yard Tracks |
| 10 | MPA | Mail | 36 | 3.5 | Brown | Red Lion | - | Mail Track | L | 13 | YB-06 | Baltimore Yard | Yard Tracks |
| 12 | B&O | Flatcar | 40 | 3.8 | Black | York Industries | - | New York WC - Rcving | E | 12 | | | |
| 44 | MPA | Boxcar - Ventilated | 36 | 3.5 | Brown | Bel Air | - | Southern States - Freight | L | 12 | BY-11 | York Yard | Yard Tracks |
| 48 | MPA | Boxcar - Ventilated | 36 | 3.5 | Brown | York Yard | - | Yard Tracks | E | 12 | YL-99 | York Industries | PRR Interchange Yard |
| 70 | CLCX | Tank Car | 26 | 2.8 | Black | Baltimore Yard | - | PRR Inteechange Trk2 | L | 6 | | | |
| 72 | CLCX | Tank Car | 26 | 2.8 | Black | Baltimore Yard | - | B&O Interchange Trk1 | L | 5 | BD-33 | Dallastown | Goan Oil - Oil |
| 72 | MPA | Reefer | 36 | 3.8 | Brown | York Yard | - | Yard Tracks | E | 11 | YL-99 | York Industries | PRR Interchange Yard |
| 73 | HZ | Pickle Car | 36 | 3.5 | Brown | Baltimore Yard | - | Yard Tracks | L | 8 | BY-11 | Bel Air | Canning Factory |
| 89 | MPA | Ore Car | 22 | 2.5 | Black | Baltimore Yard-1 | - | Ore Car Track | E | 15 | SM-31 | Staso Mill | Staso Mill - Granule Cars |
| 89 | WM | Flatcar | 40 | 3.8 | Brown | Baltimore Yard | - | Yard Tracks | E | 11 | | | |
| 90 | G&D | Ore Car | 22 | 2.5 | Brown | Staso Mill | - | Staso Mill - Granule Cars | L | 20 | SM-31 | Baltimore Yard-1 | Ore Car Track |
| 102 | T&T | Boxcar | 36 | 3.5 | Brown | Towson | - | Murray Metals - Loading | L | 12 | | | |
| 103 | SDX | Pickle Car | 40 | 3.8 | Brown | Baltimore Yard | - | Yard Tracks | L | 4 | BY-11 | York Industries | PRR Interchange Yard |
| 110 | MPA | Gondola | 34 | 3.3 | Maroon | Baltimore Yard | - | Yard Tracks | L | 12 | | | |
| 115 | MPA | Boxcar | 36 | 3.5 | Brown | Baltimore Yard | - | B&O Interchange Trk2 | | 4 | BY-13 | Towson | Clark Concrete |
| 117 | BOW | Milk Car | 40 | 3.8 | Green | Whiteford | - | Wester MD Dairy - Milk | L | 1 | MT-21 | York Yard | Yard Tracks |
| 123 | B&O | Ore Car | 22 | 2.5 | Black | Baltimore Yard-1 | - | Ore Car Track | E | 16 | SM-31 | Staso Mill | Staso Mill - Granule Cars |
| 123 | GN | Flatcar | 40 | 3.8 | Brown | York Yard | - | Yard Tracks | L | 11 | YB-12 | Whiteford | MD Green Marble Co. |
| 126 | B&O | Ore Car | 22 | 2.5 | Black | Staso Mill | - | Staso Mill - Granule Cars | L | 16 | SM-31 | Baltimore Yard-1 | Ore Car Track |
| 150 | MPA | Boxcar | 36 | 3.5 | Brown | York Yard | - | Yard Tracks | E | 4 | YB-12 | Bel Air | Reckord Mill - Rcving |
| 156 | MPA | Tank Car | 26 | 2.8 | Black | Red Lion | - | Atlantic Refining - Tank | E | 11 | CO-30 | Baltimore Yard | B&O Interchange Trk1 |
| 161 | HBCX | Boxcar | 36 | 3.8 | Brown | Red Lion | - | Fiegler Bros. - General | E | 12 | | | |
| 169 | VTR | Boxcar | 40 | 3.8 | Green | Towson | - | Bendix Radio | E | 11 | BY-13 | York Yard | Yard Tracks |
| 189 | MPA | Gondola | 40 | 3.8 | Brown | York Industries | - | PRR Interchange Yard | Ashes | 11 | YL-99 | York Yard | Yard Tracks |

***Figure 8a: JMRI Car Report Exported as exported from JMRI***

| Done | Tra | Numb | Road | Type | Leng | Color | Location | Track | Last | Destination | Track | Loac | Mov |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BO-33 | 72 | CLCX | Tank Car | 26 | Black | Baltimore Yard | B&O Interchange Trk1 | 7/26/2025 14:16 | Dallastown | Goan Oil - Oil | L | 5 |
| | BO-33 | 222649 | PRR | Hopper-Coal | 34 | Brown | Baltimore Yard | B&O Interchange Trk1 | 7/26/2025 14:16 | Dallastown | Merchant Cigar - Coal | L | 10 |
| | BO-33 | 23350 | B&O | Hopper-Coal | 34 | Black | Baltimore Yard | B&O Interchange Trk2 | 7/26/2025 14:16 | Dallastown | Grim Coal & Lumber- Coal | L | 13 |
| | BO-33 | 11052 | UTLX | Tank Car | 26 | Black | Baltimore Yard | Yard Tracks | 4/19/2025 7:49 | Dallastown | Goan Oil - Oil | L | 12 |
| | BO-33 | 93698 | N&W | Gondola | 40 | Black | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Dallastown | DB Kreig Paving | E | 4 |
| | BO-33 | 300755 | PRR | Gondola | 40 | Brown | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Dallastown | Grim Coal - Freight | E | 4 |
| | BO-33 | 604468 | NYC | Gondola | 40 | Black | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Dallastown | Dallastown Coal & Ice-Frt | E | 6 |
| | BO-33 | 6001 | LV | Reefer | 36 | Green | Dallastown | Dallastown Coal & Ice-Frt | 7/26/2025 14:16 | Baltimore Yard | B&O Interchange Trk2 | E | 10 |
| | BO-33 | 8892 | FW&D | Boxcar | 40 | Brown | Dallastown | DB Kreig Paving | 7/26/2025 14:16 | Baltimore Yard | Yard Tracks | L | 11 |
| | BO-33 | 13000 | UTLX | Tank Car | 34 | Black | Dallastown | Goan Oil - Oil | 7/26/2025 14:16 | Baltimore Yard | Yard Tracks | E | 11 |
| | BO-33 | 860123 | PRR | Gondola | 40 | Brown | Dallastown | Grim Coal - Freight | 7/26/2025 14:16 | Baltimore Yard | B&O Interchange Trk1 | L | 5 |
| | BO-33 | 17626 | D&H | Boxcar | 40 | Brown | Dallastown | Merchant Cigar Box Co. | 7/26/2025 14:16 | Baltimore Yard | Yard Tracks | E | 11 |
| | BO-33 | 23511 | SP | Flatcar | 40 | Brown | Dallastown | Merchant Cigar Box Co. | 7/26/2025 14:16 | Baltimore Yard | Yard Tracks | E | 11 |
| | BY-01 | 1 | MPA | Mail | 50 | White | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Whiteford | Mail Track | L | 12 |
| | BY-05 | 9 | MPA | Mail | 36 | Brown | Whiteford | Mail Track | 7/26/2025 14:16 | York Yard | Yard Tracks | L | 13 |
| | BY-11 | 4002 | SA&AP | Reefer | 36 | Yellow | Baltimore Yard | B&O Interchange Trk1 | 5/24/2025 8:48 | Whiteford | Western MD Dairy-Loading | E | 11 |
| | BY-11 | 73 | HZ | Pickle Car | 36 | Brown | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Bel Air | Canning Factory | L | 8 |
| | BY-11 | 20017 | ERIE | Hopper-Cvrd | 34 | Black | Baltimore Yard | Yard Tracks | 5/24/2025 8:47 | Bel Air | Reckord Mill - Loading | L | 11 |
| | BY-11 | 88516 | CNJ | Gondola | 40 | Black | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Bel Air | Southern States - Freight | E | 11 |
| | BY-11 | 90751 | CNW | Boxcar | 40 | Brown | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | Bel Air | McComas Bros - Freight | E | 11 |
| | BY-11 | 5877 | MEC | Boxcar | 40 | Green | Baltimore Yard | Yard Tracks | 5/24/2025 8:47 | Stasio Mill | Stasio Mill - Receiving | L | 11 |
| | BY-11 | 90501 | ERIE | Boxcar | 40 | Brown | Baltimore Yard | Yard Tracks | 5/24/2025 8:47 | Stasio Mill | Stasio Mill - Receiving | L | 11 |
| | BY-11 | 69062 | GN | Flatcar | 40 | Brown | Baltimore Yard | Yard Tracks | 5/24/2025 8:47 | Whiteford | Western MD Dairy - Rcvng | L | 11 |
| | BY-11 | 103 | SDX | Pickle Car | 40 | Brown | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | York Industries | PRR Interchange Yard | L | 4 |
| | BY-11 | 17384 | D&H | Boxcar | 40 | Brown | Baltimore Yard | Yard Tracks | 7/26/2025 14:16 | York Industries | Am. Chain & Cable-Inside | E | 11 |
| | BY-11 | 49300 | N&W | Boxcar | 40 | Brown | Bel Air | Canning Factory | 7/26/2025 14:16 | York Yard | Yard Tracks | L | 11 |
| | BY-11 | 469 | PFE | Reefer | 36 | Orange | Bel Air | Corbin Ice Co | 5/24/2025 8:47 | York Yard | Yard Tracks | E | 11 |
| | BY-11 | 14212 | NP | Boxcar | 40 | Brown | Bel Air | McComas Bros - Freight | 7/26/2025 14:16 | York Yard | Yard Tracks | L | 11 |
| | BY-11 | 44 | MPA | Boxcar - Ventilated | 36 | Brown | Bel Air | Southern States - Freight | 7/26/2025 14:16 | York Yard | Yard Tracks | L | 12 |

*Figure 8b: Manifest Report after processing*

With the printed manifests report in one hand, and a strong cup of coffee in the other, the real work begins for setting up a session. The first thing I do is go to every car card box on the layout and pull all the car cards out and lean them up against their car. This is very helpful for finding car/car card mismatches as well as making it much faster to find the needed car cards for cars in the yards. Once all of the car cards have been pulled out of the car card boxes, creating the waybills can begin. I deal with one train at a time. For each train I take the report, and go to each location where the train does work, and I pick up the car cards for each of the cars on the manifest. Once I have all of the car cards for a given train I sit down and create the waybills. The waybills on my railroad consists of three parts, with each part being a separate piece.


*Figure 9: Train ID Card*

First is the "Train ID" card – this is simply the train symbol printed in bold with a colored background that is the same for all ID cards for a given train (MT-21 are all light blue, YB-10 are all green, etc.). This serves only as a visual aid to the operators (and the Yard Masters) as to what cars are assigned to the train they are running (or building) (**Figure 9**).

The second part of the waybill is the "Destination" card. This has all of the destination information that you find on a standard two or four-cycle waybill: destination town and industry. **Figure 10** shows an image of one of these cards, with one side being for an empty car, and one being for a loaded car. I also have some Destination cards that have two different industries in the same town, one on the top and a different one on the bottom. These


*Figure 10: Destination Card*

The third part of the waybill is the "Origin" card which, again, contains the same "From" information you would find on a standard two or four-cycle waybill: town and industry where the car is currently located. These may also be printed with two From locations (for locations other than the yards), again to add more flexibility when creating the waybills for each car (**Figure 11**).

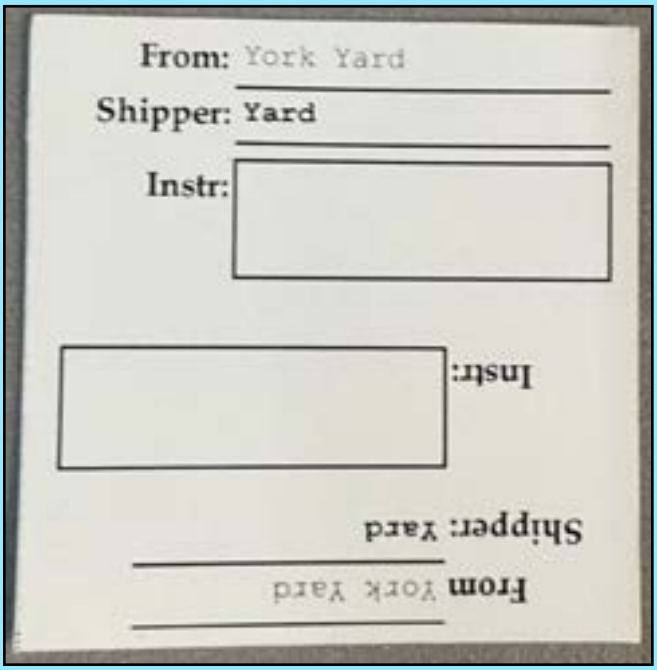



*Figure 11: Origin Card*

Now I imagine that many of you are saying to yourselves, "Why the heck are you using multiple pieces of paper to create a waybill that has the same information that a standard, single piece of paper waybill has on it?" Great question: I am so glad you asked. The Genius (yes, with a capital 'G') of this lies in the fact that I can now have a fixed number of pre-printed Destination and Origin cards and can mix-and-match as needed to move a car from anywhere, to anywhere, on the layout. This greatly reduces the number of pieces of paper that I need compared to printing a one-piece waybill for every possible Destination/ Origin combination on the layout.

The method I have devised means I only need one Destination card and one Origin card for each spot on the railroad. So, for example, for an industry such as the Yoe Team track which has only one car spot, I only need a single Origin card (only one car can originate from a single spot industry) and a single Destination card (only one car can be sent to a single spot industry). Now in reality there is more to it than this as I like my Destination cards to reference the car type on them, so now I need three Destination cards for Yoe, one for a boxcar, one for a flat car, and one for a gondola (I still only need three origin cards because those cards do not include car type). It should be noted that JMRI will not overfill any location, it knows the length of every siding/spot and the length of every car (plus couplers) and will only put a car in a spot if there is enough room, so this also avoids off spots (and gives me an immediate red flag when one of my operators tells me there is not enough room to spot a car. I know instantly that somebody did something wrong and occasionally it is me when I put the waybill together and use the wrong destination card. But of course I actually do that on purpose to make the operators think they are not the only ones who mess things up.

So, setting up each train boils down to the following process:

- Pull all the car cards for the cars assigned to the train
- For each car card, consult the manifest report and insert the Train ID card, the Destination card, and the Origin card into the car card. Each of these is shorter than the previous one so that once they are all in the car card the information on each can be seen and it looks very much like a standard four-cycle waybill with the addition of the Train ID card (**Figure 12**).
- And finally putting all the car cards back into the car card boxes.
    - Any car card that does not have a waybill gets moved to the "Hold" box where the car is located, except for in the yards.
    - In the yards, all cars on a yard track are put into the car card box for that track, in the order of location on the track, and if a car has no waybill, then the YM (yard master) knows that car will not be leaving the yard this session.

This may sound like an awful lot of work, but in reality, it only takes a few hours to get done, which seems on par with what the guys in the round robin group say it takes to "restage" their layout. The six passenger trains, two milk trains, and the captive Staso Mill job have either zero, or very little, switching moves. So, it takes little time to create waybills for them. Nine of the seventeen total trains can be done in about thirty minutes, and the remaining eight trains take about 15 minutes each to get done.

Another benefit that I have not mentioned to using JMRI is that I do not have to restage in the sense of moving a train that runs from York to Baltimore, for example, then back to York before the next session. Every train manifest is created by JMRI using the cars that are currently available in the yard where the train originates. The complete process of getting set up for the next operating session consists of going around and pulling all the waybill cards out of all the car cards that were moved during the last session and putting them into the appropriate storage boxes (I have boxes where I use to keep all the cards for each location together, one for each location).

I also typically audit the location of every car on the railroad (only really possible to do because I have small railroad with a relatively small number of cars, and no hidden staging tracks). Using the car report generated by JMRI, this takes about 40 minutes, and has the added benefit of verifying that all cars are where JMRI thinks they are.


*Figure 12: Complete Car Card with Waybill*

I then go through the process of building waybills for each car to be moved in the next session. I pull all the loads out of coal hoppers that are at industry locations and make sure all coal hoppers in the yards have loads in them. I do the same for the sand cars and the 12 ore cars that are used in dedicated service for Staso Mill. The loads are removed from the cars at the mill and put in the empty cars in Baltimore Yard. The waybills are flipped to show the empties going from Baltimore to Staso Mill, and the empties at Staso going to Baltimore. These use simple two-sided waybills because they only move between the two locations.

Usually, I have to move one or two locomotives from York to Baltimore or vice versa, so the assigned locomotives for each train are in the right spot at the start of the next session. All in all, it takes about 2.5 - 3 hours. I spread out the building of waybills over a couple of mornings (and pots of coffee) to avoid it starting to feel more like work than fun. The system has been in use for about a dozen sessions now and I am very pleased with how it works. I have gotten minimal complaints from the crew, so I found a good answer to the troubling question I started with.

I am looking at further modifications to make the Yard Master's job a bit harder since right now cars

that come into the yards do not go back out during the same session. So, the Yard Masters do not have to do any classifying of incoming cars. For those of you familiar with JMRI Operations Pro, I have defined each of my yards as a single track with a length that is the sum of the lengths of the track lengths in that yard, so JMRI is not assigning specific yard track destinations. It just says the car goes to the 'Yard Tracks,' so the YMs can put the cars wherever is convenient.

I have come up with a way to add some classification work to the Yard Master jobs (yes, another step or two in my process, but it will hopefully make the YM jobs a bit more interesting and challenging) Maybe a future article about how well that succeeded (or how miserably it failed) will be in the works.

The final benefit (or maybe detriment depending on who you ask – me, or the crew) is that by using JMRI, and given the small size of my railroad, it is a fairly easy thing to audit the session performance in terms of how many cars were correctly, and incorrectly, moved/spotted during the session, and provide feedback to the crew, which has been popular (or maybe infamous would be more accurate). Being an engineer by both education and by nature I love to analyze data so it is only natural that I would analyze my Ops sessions!

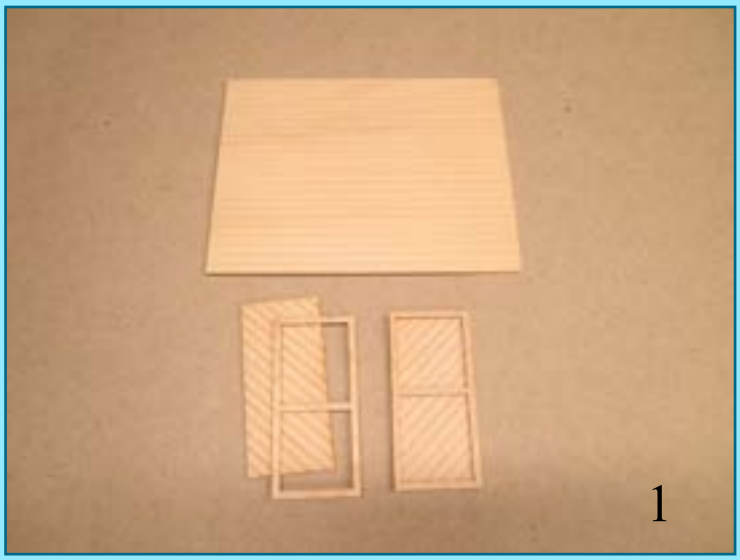
Thanks for sticking with me to the end of this overview of the layout and how the cars are moved. If anyone is interested in more information, or has any questions, please do not hesitate to reach out to me at stonekingr@comcast.net.

***Biltmore Garden Layout in Asheville, NC. October 19, 2022, built by Applied imagination.co. Photo by Greg Warth.***

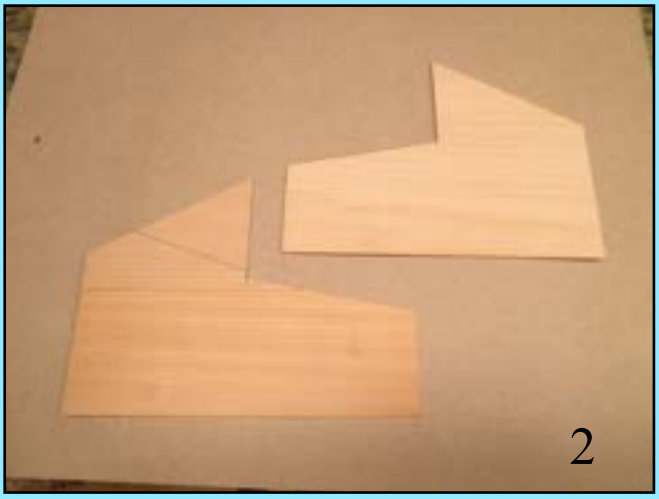
# McCandle's Pipe

By Martin Brechbiel, MMR

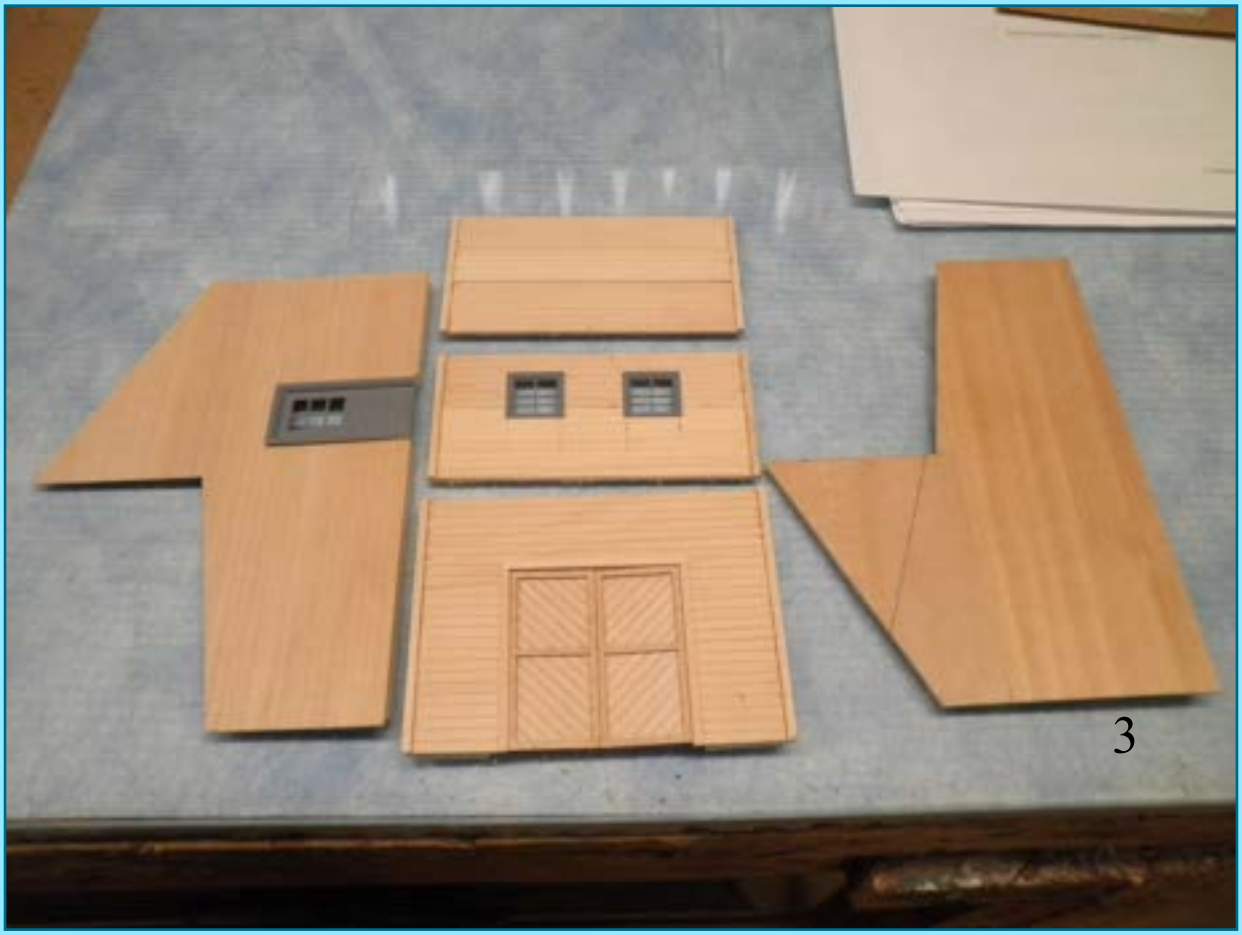
I had a pair of 8' laser cut shop doors from Deerfield Laser left over from another structure project gathering dust on my bench that needed to be put into use. Other doors, windows, clapboard siding and more were sure to find a home in this project, which beats just gathering dust in my shop or taking up space in one of the parts bins. After pondering this situation a bit, I hit upon the next structure for their home. The first step was to map out a wall for their incorporation and assembling these doors (**Photo 1**).



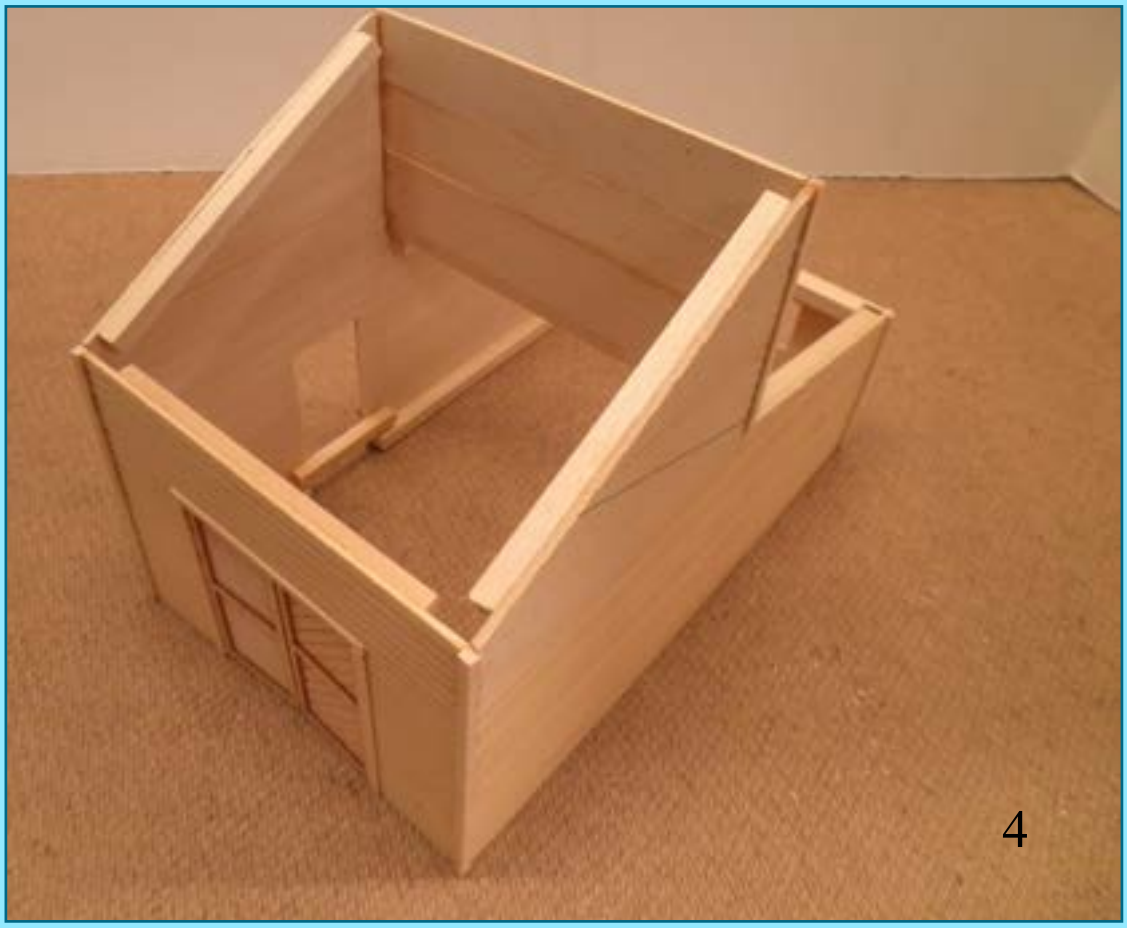

Piecing together some of that clapboard siding out of the storage box made a pair of side walls with an interesting profile for this structure **(Photo 2**). Cutting this is done using a regular utility knife up against a steel ruler with a block of scrap oak shelving underneath rotated to put the grain of the oak at 45 degrees away from the clapboard. This is done to keep the knife blade from catching the oak grain and causing a misaligned cut. Several firm strokes with this knife are needed to get through the 1/16" basswood to do this cutting neatly with square edges.



After the doors were assembled, they were installed in the clapboard wall. This wall set the dimensions for the one end of the two side walls. The two side walls and the wall with the doors then set the dimensions for the back wall and upper level back wall. Once all of these walls were cut out, openings for a 6-light door (Tichy No. 2041) and two work car windows (Tichy No. 2056) were made and the castings were test fitted into place (**Photo 3)**. The openings do not need to be particularly tight since after painting they always seem to shrink. The shop doors in the front wall were trimmed out with some HO 2" x 8" stripwood. Corners were added to the edges of the front and the two back walls using 3/32" square stock basswood. As this involves gluing to end grain, a film of Goo was applied to that surface while the square stock had CA on it. The two surfaces were put together on one of my glass work surfaces to get a good flat joint. That same process was followed for all of these parts.




After all the adhesives had fully set, it was time to assemble the basic structure. Once again Goo and CA were applied as described above for the joinery and the front wall was inserted between the two side walls. Thereafter, the two back walls were inserted between the sides. Cleats and gluing surfaces for the roof sheathing (3/32" square stock basswood) were added along the floor and at the top of the walls and secured with Titebond (**Photos 4-6)**.


4


5

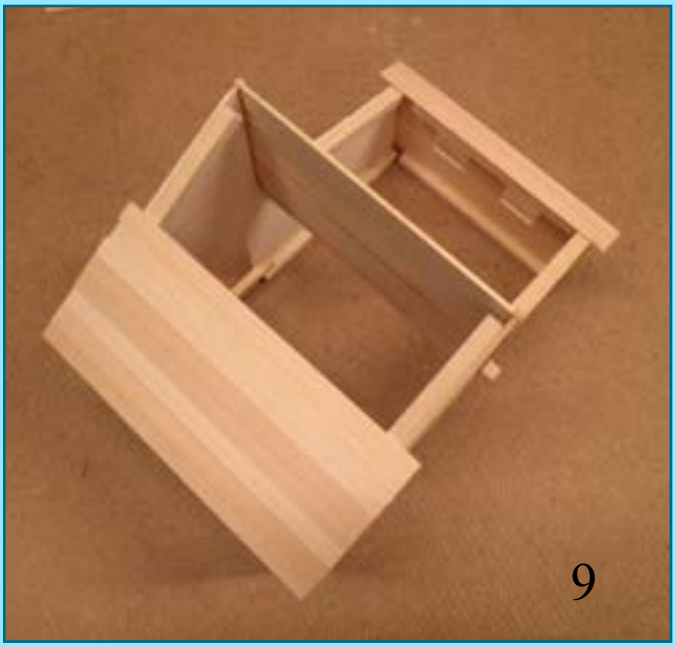

6

I paused here to build a platform onto which this structure would be mounted and onto which additional details would be placed. Now that the basic structure was assembled, I had a solid idea of size and footprint for this platform. I'd rather have the structure as it gets built tell me its dimensions and be correct than make plans and measurements and then be wrong. So, the platform was basic consisting of some 3/16" square balsa that I bought by mistake and some other 3/16" basswood together as floor joists. The decking was individual O scale 3" stock glued into place (**Photos 7, 8**).


7


8

The roof was sheathed using individual HO 3" x 22" and 3" x 20" glued down using Titebond to those interior gluing surfaces that had been added earlier (**Photos 9, 10**). On that lower roof in the back, the roof sheathing was actually mortised around the side walls to fit up under the bottom of the upper back wall (**Photo 11**). Once completed, the two roof sections were ready for roofing material (**Photo 12**).


9

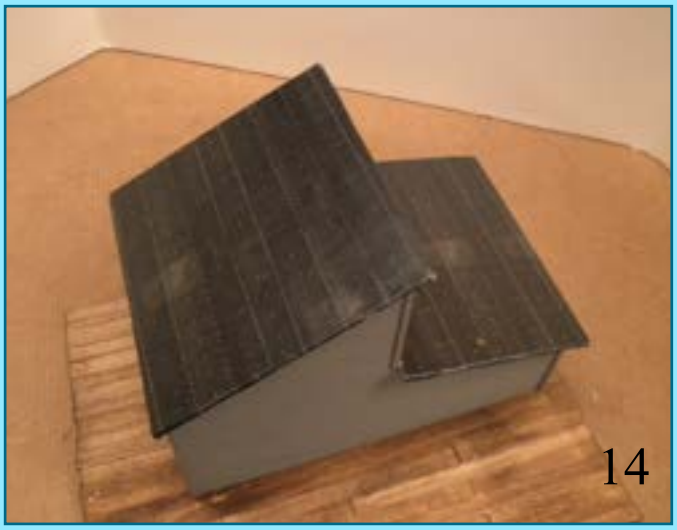

10

I paused here to attend to the door and window castings. These were painted Mineral Red (Polly Scale) and then glazed using acetate or overhead projector film. A little leftover roofing construction paper was used to make window treatments in all three castings (**Photo 13**).


11


12


13


14

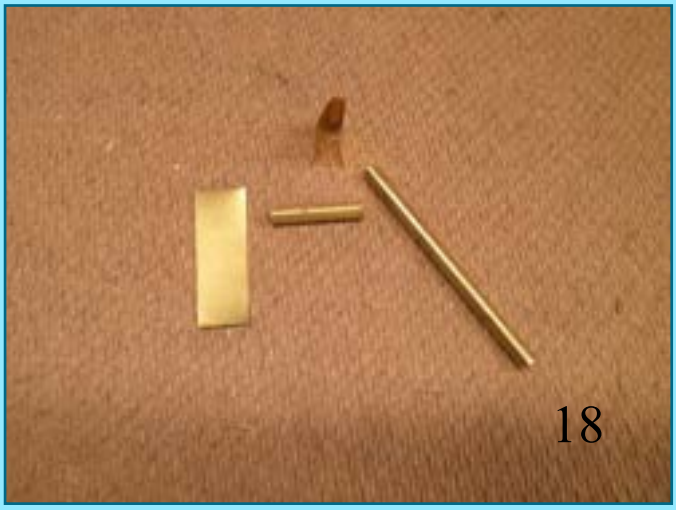
The roofing was a paper product (Clever Brothers or Paper Creek) cut to fit the roof trying to keep the visible nail heads on the sheathing (**Photo 14**). The building was painted Harbor Mist (Floquil) and the laser-cut doors were painted to match the door and window castings which were installed and secured with a small bit of Goo (**Photos 15-17**).


15


16

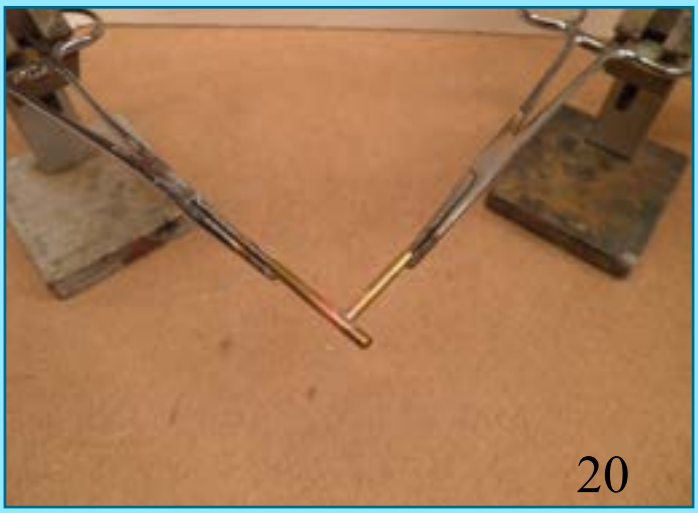
The doors also had handles added made from 0.020” phosphorbronze wire (Tichy) which were painted black along with the doorknob on the side entrance door.

17


18

The smoke stack was assembled from some brass tubing and scrap sheet brass (**Photo 18**). One section of the tubing was dressed with a round file to match the profile of the tubing. In addition of a clean surface, one aspect of soldering that I have found useful to address is the set up and reliable positioning of the parts. A bit of liquid Ruby flux and a small torch using 0.015” solder tends to be my standard (**Photos 19, 20**). A brass washer soldered into place makes for a mounting flange on the wall. The sheet brass was folded over and soldering place. This was shaped in place using a cut-off wheel in the Dremel (**Photos 21, 22**). Once painted, the stack was mounted through the wall into a hole drilled matching the diameter of the tubing, and secured in place using Goo and CA together (**Photo 17**).


19


20


21


22

The business needed some signage. This was created using PowerPoint sizing it to fit the space above the side door entrance. The printed sign was mounted to 1/32" sheet basswood and trimmed about the perimeter with pre-painted (Engine Black: Polly Scale) milled angle basswood. The sign was attached to the wall using Goo and CA (**Photo 17**). At the same time, the building was glued down onto the decking which was in turn stained with my mystery MinWax mix in anticipation of additional details being added.

Details like barrels and crates were added around the freight doors. These were dental stone castings that I made. The coal box, broom, and other open container were Berkshire Valley parts (**Photo 23**). Around back I decided to create a small scene for viewing interest using an Arttista figure up on the roof doing a little repair work along with a pair of tar buckets. The ladder was some leftover brass stock. The trash cans were more Berkshire Valley parts. The oil can clusters were more of my own dental stone castings and the seat was a stray left over resin casting from a passenger car interior project (**Photos 24**). But this was felt unfinished with the large empty space on the one side. Being a pipe supplier, I thought that some display of the wares was in order.


23


24

**From the Divisions…**

# Branch Lines

As *The Local* Editor, I have the distinct pleasure of receiving a copy of all the Division newsletters, which are all very informative and creative to say the least. Here are links to those publications and to their Division Websites for easy access:

| Divisions | Newsletters |
|---|---|
| 1 - New Jersey Division | *Train Orders* |
| 2 - Potomac Division | *Potomac Flyer* |
| 3 - Philadelphia Division | *The Dispatcher* |
| 4 - Tidewater Division | *The Callboard* |
| 5 - James River Division | *Crossties* - *Index* |
| 10-South Mountain Division | *Wheel Report* |
| 11 - Susquehanna Division | *Sidetracks* |
| 12 - Carolina Southern Division | *The Brass Pounder* |
| 13 - Carolina Piedmont Division | *The Herald* |
| 14 - Chesapeake Division | *The Relay* |

Other NMRA Links:

| | | |
|---|---|---|
| Bulletin | NMRA Partners (Discounts) | Events |
| Archives | Education | Turntable |
| Submit Articles | Videos | Clinics |

## Send in Your Articles

We are always looking for new articles, tips, ideas, photos, and comments from our readers. If you have been awarded an AP (Achievement Program) Certificate or an MMR (Master Model Railroader) award, please consider writing an article about it so others can learn how you did it. We always enjoy looking at new layouts, dioramas, and models that our members have created. If you would like to contribute to The Local, please send an email containing your article and photos to The Local Editor.

*The Local* welcomes and encourages articles, photographs, and model railroad related material as contributions to our members' education and enjoyment of the hobby. Materials should have a wide appeal. The Editor will exercise all due care of submissions, but contributors should not send paper/photo originals without retaining back-up copies. Editors, by definition, reserve the right and have the responsibility to make corrections, deletions, and changes to accommodate space. If your item is time-sensitive in any way, please advise the Editor. Otherwise, stories and photos that are accepted are published in approximately the order in which they were received.

We love our authors and we love our jobs in creating *The Local* for you to enjoy. We receive many articles with great content and we are always anxious to publish them. However, so many articles that we receive are not in a good format and require many hours of work to get them ready for publication. When you are preparing your article to send to the Editor, please follow the instructions presented here. It won't require any more work for you in writing the article, but it will save us many hours of proofreading and publishing time. Depending on the size of the article, it may take as many as 10-12 hours to actually get it in the newsletter. We can save at least half that time if it comes to us prepared according to the instructions.

## How to Submit an Article for The Local

(Please Follow These Steps Carefully!)

1. ***Please read*** the article written by Martin Brechbiel, MMR on "Preparing Your Manuscript for Publication in The Local."

2. Compose and submit your text in Word format (.doc or docx).

3. Use Times New Roman font in 12 pt size.

4. The title should be **centered** and in **bold.**

5. Directly under the title should be "By (your name)" - centered, not bold. If you are an MMR, put it there.

6. If the photos are yours, enter in parentheses (Photos by the author) right after your name.

7. Enter your text with no paragraph indents. Justify the text so it is even on both sides.

8. In your text, refer to your photos this way: (**Photo 1**) - in parentheses, bold and blue.

9. Between paragraphs in your text, write "**Insert Photo 1 here**" where you want the photo to appear. DO NOT put your photos there. Otherwise, we just have to take them out.

10. Include the number of the Photo in the file name of the Photo so we know which one goes with which number.

11. Photos must be clear and sharp or they cannot be accepted. JPG, GIF, TIFF and PNG formats are acceptable.

12. Photo captions should be listed at the end of your article, or in a separate Word file, and numbered with the same number as the photo.

13. Send your text and your photos separately by email to The Local Editor. They can all be sent in the same email as long as the total file size is less than 25 MB. If the size is larger than that, you will have to split them into two or three emails.

## What Happens to Your Article after You Send It In?

First, the substance and context of the article has to be reviewed. Is it original? Has it been used before, or published elsewhere? Was it borrowed from someone else's work? Is it an appropriate topic for our newsletter? We've had to reject a few articles because they were more about rail fanning than they were about model railroading.

Then the text is carefully reviewed line by line by four different sets of eyes to check for typos, grammatical errors, wording or phrasing problems that have to rewritten to be more understandable. Punctuation has to be corrected. If there are photos in the text, they have to be removed. Photos frequently require editing to make them look brighter and more appealing. File names of the photos have to be changed to include the number of the photo.

After the proofreading is finished, the text has to be entered into the publishing program, paragraph by paragraph, sometimes line by line. The text often has to be resized to make it fit properly without looking inconsistent. When we come to a point where a photo has to be inserted, it has to be resized so that it fits in with the text and in the right order with the proper caption. If a photo is missed, the whole article may be have to be redone in order to get the photo in the right place.

It's just like putting a model together in many ways. You start with the raw materials or the parts that come in a kit. The materials and instructions for the kit are what the author provides. In this case, the various parts include the words that have to be put together properly. Then the paragraphs and the photos may have to be rearranged. Then you have to fit the pieces into the right places, so that they make sense and look appealing. There are many details that have to be added or corrected. Eventually, we glue them all together by converting them from Word into a pdf file.

## What Kinds of Articles Do We Like to See?

1. Anything about modeling, whether it be about just putting a kit together, kit bashing, scratchbuilding, or just adding details or weathering to a model.
2. Any type of "How to…" article, as long as it is about model railroading.
3. New tips or techniques, or even old ones used in a new way.
4. A tour of your layout or that of a friend, including its name, location, theme, era, scale, size, best features and biggest challenges.
5. Summary of a model railroad conference you visited.
6. Tell us about your workbench, or any special tools you use.
7. Tell us how you fixed a problem you encountered with your model or layout.
8. If you received an AP or MMR Certification, explain how you did it, what were the challenges. What would you recommend to others working on the same project.
9. New electrical techniques that you performed, new automations, how you set up signals, how you installed sound or flashing signs, billboards, or other details.
10. Scenery techniques, mountains, water, river rapids, trees, forests, ground cover.
11. Building a bridge or trestle.
12. Photographing your layout or model.
13. How to recruit more people into the hobby.
14. Your summary of a clinic you attended.
15. How we can help each other.

## Special Notes for Authors (MUST READ before submitting an article):

**Please only send us your own creative work or that for which you have written permission to use so we can give that source proper credit. We need to avoid any copyright infringement situations. If you have previously published your article or photo in any other magazine or newsletter, including a Division or Regional newsletter or your own website blog, it cannot be reproduced in The Local without written permission from the magazine publisher, editor, and author or photographer. Also, *Please read* the article written by Martin Brechbiel, MMR on "Preparing Your Manuscript for Publication in The Local." If this is your first submission to The Local, please fill out and return this Media Agreement Form to the Editor, which gives us permission to use your material and verifies that the work is yours, or that you have obtained written permission to use it. Once your article is approved for publication, and you have qualified for 42 or more points in the Author Category of the Achievement Program (AP), you may submit a Statement of Qualifications Form along with a Record and Validation Form to your Division AP Manager to receive your Author AP Certificate.**




***HO Covered Hopper from the Cincinnati Division***

Hello once again to NMRA, MER, Division Superintendent, Assistant Superintendents, Directors, News-Letter Editors, Web Masters, Facebook Managers and members in-general.
We previously reached out to you in the Fall of 2022 and in subsequent ads since then.

We are getting in touch with you once again with a request to publicize and promote Cincinnati Division 7's limited-edition, HO scale, N&W HC-46 ACF 2-Bay Covered Hopper cars that we have for sale. This car is unique in that it is a repaint scheme with patched-out data.

The following link provides details about it as well as pricing, shipping and ordering information.
**https://division7mid-centralregionnmra.godaddysites.com/car-projects**

It would be greatly appreciated if you would make your membership aware of this limited-edition freight car by publicizing it in your Region's and/or Division's web page, newsletter or email blast.

We thank you in advance for your support!

Paul Maciulewicz
NMRA; MCR; Cincinnati Division 7
Car Projects Chairman

**Back on Track…**

# What's in a Brand?

As you might expect from the organization that created standards for the hobby and industry of model railroading, the National Model Railroad Association (NMRA), has developed new graphic representations of our brand for 2026. As explained on the site, the brand is not a logo but rather a promise to our members that this organization was created for their benefit and works on their behalf to provide a structured, educational, standardized environment that allows them to learn and enjoy more about the hobby than what would have been possible otherwise. These new customizations are not the brand, per se, but just a new visual way of representing it.

The graphics for the Regions and Divisions must be displayed in a certain way. The new logo may not be distorted or manipulated. This is clearly demonstrated on the NMRA.org website.

The primary font to be used is a heavyweight OT Format Display. The secondary font is Nuckle, which is what you see on this page and what I gather is for everyday usage. It is not readily available as a standard font on Word or Pages, but you can download it for free from here, or here, and install it to either one or both of those word processing programs.

As Editor, I will try to incorporate these new graphics into The Local, particularly where the standard appears to be mandatory, although I hope we will be permitted the option of a certain degree of personal creativity with regard to when to use certain fonts and/or colors. I suspect there will be further suggestions and/or details forthcoming as we see more examples of how these graphics are used.

So, in the spirit of camaraderie, kindness, conformity and consistency, here is the new graphic that represents our region, the Mid-Eastern Region of the NMRA:


Thanks to all our authors, readers and editorial staff for being such great participants in the development of **The Local** during 2025.

And Best wishes to all for a wonderful New Year in 2026!