



The Local

Newsletter of the Mid-Eastern Region, NMRA
The Local, 77, Number 4, Jul-Aug 2022

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

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Vacation Ideas for Model Railroaders

By Greg Warth

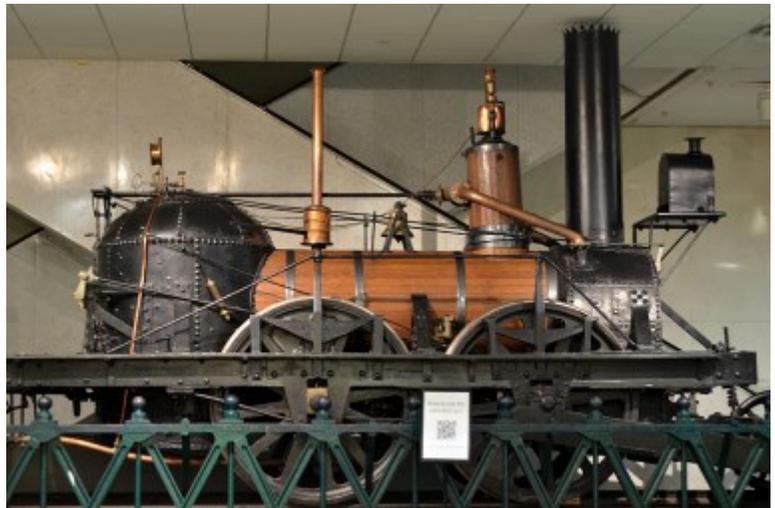
Yay! It's officially summer. Time to stop watching the news and reading Twitter. Get out and do something! Okay, I know, you are thinking about gas prices and COVID. Well, we can't stop living because of these things. We have to learn how to live with them.

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The John Bull on exhibit at the Smithsonian National Museum of American History, Behring Center (Photo by John Hoyt).

If you're like me and you are thinking about taking a vacation this summer, you will be trying to incorporate model railroading into it somehow. Even if you are just going somewhere to visit family, there has got to be a train show, hobby store, an NMRA member's layout, a local train station, a tourist train ride, a railroad museum or a railfanning opportunity near where they live that you could visit. Look up "train shows near _____" on your favorite search engine and coordinate the time of your visit to the area with the time of the train show.

There are train conventions to visit all over the country. The main one, of course is the [Gateway Convention](#) in St. Louis.

In the Mid-Eastern Region (MER) and surrounding area, we have places like [Strasburg](#), [Roanoke](#), [Spencer](#), [Staunton](#), [Cumberland](#),



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Mid-Eastern Region Board of Directors & Administrative Staff

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	<p>Chesapeake Division 14 Tom Casey (410) 426-8947 super@chesdiv-nmra.org Division web page: www.chesdiv-nmra.org</p>				

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[Cass](#), [Greenville](#), [Altoona](#), [Northlandz](#), and others to visit. In the Fall we have the annual 2022 [MER Convention](#) in Charlotte, NC. There is so much to learn and see and do at these places.

You may want to take the family on a train ride somewhere. Rates are very reasonable these days and you don't have to pay for gas. You could even do a "fly and ride" trip, where you fly to Moab or Vancouver and take a train trip across the western US or Canada on the [Rocky Mountaineer](#).

If you have the time, how about volunteering for a local train-related community project. Get your division or club to sponsor an exhibit at the public library or other community center.

It's wonderful that we have all these opportunities and resources available to us. We should support them as well as take advantage of them. If we do that, they will still be around for our children and grandchildren to enjoy for many years to come.







LOOK SOUTH IN 2022

2022 MID-EASTERN REGION CONVENTION

Election of Officers and Bylaws Changes

The candidates for officers (President, Vice President, Secretary, and Treasurer) of the Mid-Eastern Region of the NMRA are listed here along with their statements. Following the candidates are the proposed Bylaws changes. Please read all of these over carefully so you can decide how you will vote when the ballots are sent to you.

Candidates and Their Statements

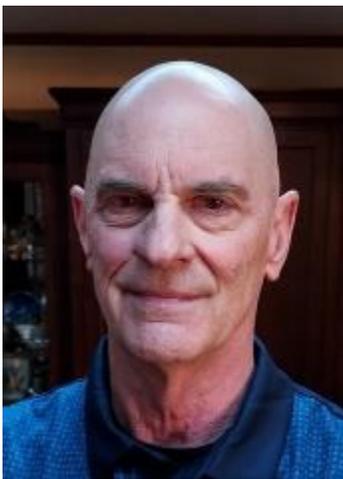
Candidate for President:



R. Scott Unger –

One of the most rewarding parts of model railroading is the endless opportunity to learn as well as to interact with others who share our interest of railroads. Over the last four years I have served as the Region Assistant Treasurer and the Vice President. Both of those positions were certainly learning experiences and provided me the opportunity to meet new people from well beyond my home Region. A specific learning experience centered around the challenges of reintroducing our Regional Convention in 2021 following the 2020 cancellation due to COVID. While technology has provided our hobby with the ability to narrow the sometimes large, physical distances between us, parts of our hobby like conventions, model contests and operating sessions are best experienced in person. Whether it is in person or virtual, I look forward to helping strengthen the connections between us as well as reaching those outside of the organization should I be elected to serve as the MER President.

Candidate for Vice President:



Gary Brown –

I have been a model railroader for over 50 years and am currently rebuilding my permanent layout. I am on the Board of the Tidewater Division where I have served as Director, Assistant Superintendent, and Superintendent, and am currently the Assistant Superintendent. I was the Chairman for the 2012 MER Convention. I have completed three Achievements towards my MMR and am half-way through four others. I am also with a group working to develop and open the "Model Railroad Museum of Hampton Roads", patterned after the San Diego railroad museum.

Outside model railroading, I serve as the Chairman of the Board for the SkillQuest Advisory Group for the City of Virginia Beach's Adult Day program for the disabled. I have served on the Board of my local Lions club as President, First Vice President, and was just re-elected President of the Virginia Beach Host Lions club. In addition, I am active with my local community Civic League. I was a Navy Pilot for twenty years, flying fighter aircraft. I have a wealth of experience working in and leading organizations and look forward to serving the MER as Vice President. I ask for your vote in the MER elections.

Candidate for Secretary:



Martin Brechbiel –

I am running for re-election to the office of Secretary. I am currently in the middle of my 2nd term and believe that I should run for a 3rd term. I continue to make contributions to the efficiency and operations of the MER by application of a highly refined organizational skill set. Re-electing me as Secretary provides value with a "corporate memory" having been associated with the Board for greater than a decade; Secretary (4 years), Director (4 years), and Contest Chair (10 years). I maintain the Executive Handbook and all active records with a productive relationship with the operations and governance of the MER. I continue to bring new ideas forward to improve our regional conventions in hopes of increasing attendance. I also look for ways to improve fundamental communications across the MER while bringing a unique perspective to add value to the MER. I am an active NMRA member promoting and supporting modeling through volunteering, writing articles for NMRA publications at all levels and serving as Superintendent of the Potomac Div. for 2 terms.

Candidate for Treasurer:**Brian Kampschroer -**

Over the past six years as your Treasurer on the MER Board of Directors, we have accomplished many of the objectives we set in 2016. Kirk Bateman is doing a superb job as Registrar, accounting for all convention receipts and deposits. The convention treasurer functions, budgeting and paying the convention bills, are now safely separated from the Registrar duties in the hands of our Assistant Treasurer, Bill Wurtzell. All convention monies now reside in a separate dedicated but linked MER bank account overseen by the MER Treasurer. We are conservatively investing between one third and two thirds of the MER funds to create safe income. MER accounts are balanced after many years of deficit budgets, and the budget committee is now codified to reflect the major areas of income and expense within the MER. Despite no change in NMRA support, we have increased our monetary support of the Divisions. And the work to improve the fiscal health of the Mid-Eastern Region continues. In the future we hope to further support our convention committees and to convert the MER accounts to a non-profit software, which will help support the biannual audit as well. As Treasurer, I continue to be an active member of the board with a long corporate history, open to fresh and creative ideas. I appreciate your continued support.

Proposed Changes to the MER Bylaws

No. 1 -- Change Article 8, Section 4, Part B

From:

Annually, the Budget Committee will be responsible for receiving operating budget requests and requests for special projects. They shall evaluate the requests and develop a sensible operating budget proposal for the fiscally responsible operation of the Mid-Eastern Region NMRA, Inc. in keeping with the stated purposes of the organization and present it to the Board of Directors at least **thirty (30)** days prior to the annual budget meeting.

To:

Annually, the Budget Committee will be responsible for receiving operating budget requests and requests for special projects. They shall evaluate the requests and develop a sensible operating budget proposal for the fiscally responsible operation of the Mid-Eastern Region NMRA, Inc. in keeping with the stated purposes of the organization and present it to the Board of Directors at least **seven (07)** days prior to the annual budget meeting.

No. 2 -- Change Article 5, Section 3

From:

There shall be at least two (2) meetings per year of the Board of Directors of the Mid-Eastern Region, NMRA, Inc., one of which shall be in conjunction with the Annual Meeting, and another shall be for consideration of the annual budget. These two (2) meetings shall be held at such time and place as directed by the President after consultation with the members of the Board of Directors and set at least two months in advance. The two (2) mandated meetings shall be in-person meetings of the Board of Directors; however, the Board of Directors by unanimous vote may waive this requirement for a specific meeting.

To:

There shall be at least two (2) meetings per year of the Board of Directors of the Mid-Eastern Region, NMRA, Inc., one of which shall be in conjunction with the Annual Meeting, and **the second of which shall be the Spring Board of Directors to be held in April.** These two (2) meetings shall be held at such time and place as directed by the President after consultation with the members of the Board of Directors and set at least two months in advance, **and in accordance with Policy. A Board of Directors Budget meeting shall be held in January to set the budget for that calendar year.** The two (2) mandated meetings shall be in-person meetings of the Board of Directors; however, the Board of Directors ~~by unanimous vote~~ may waive this requirement for ~~a~~ **any** specific meeting.

End of proposed changes

Featured Layout

Lehigh Valley Railroad – Wyoming Division in HO Scale

Built By Ralph S. DeBlasi, Text by Greg Warth, Editor

Every layout that I review is like a new adventure in model railroading. It’s like taking a vacation and going to a place that I have never seen before. It is fun, exciting, inspiring. This railroad is like that.

Ralph DeBlasi of the New Jersey Division has been a modeler of the Lehigh Valley Railroad for 57 years beginning at the age of eleven. His experience and modeling ability are readily evident in the pictures that follow.

Ralph’s current layout depicts the Wyoming Division in 1975 from Allentown, PA to Mountain Top, PA. Construction of benchwork began in the Summer of 1991 and since then, the railroad has grown into a 40’ x 24’ masterpiece controlled by [Digitrax DCC](#) complete with [C/MRI signals](#) and [CTC \(Centralized Traffic Control\)](#). Ralph was fortunate enough to be able to acquire the CTC machine ([Photo 2](#)) from the estate of the late Bill Gruber, a well-known Reading Railroad modeler.



Photo 1

The visible turnouts are all hand-laid code 83 and 70. Hidden staging tracks consist of flex-track and PECO turnouts. The scenery and bridges are all expertly accomplished and easily draw the visitors into the summer beauty of the Pennsylvania Allegheny Mountains during the mid-1970s.

The best features of the layout, Ralph says, are the prototype scenes that bring the viewers back in time. Operators enjoy every minute of running their trains through this landscape that brings back memories of growing up in the area.

The layout is available for tours, open houses, and operating sessions.

Your adventure awaits.

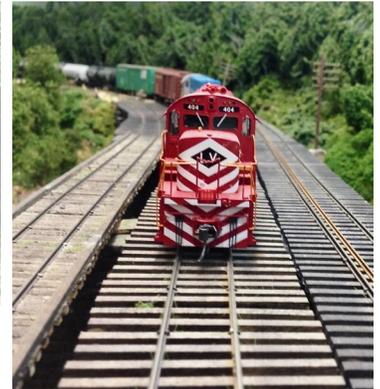


Photo 2



More LV photos on page 7

Lehigh Valley Railroad – Wyoming Division in HO Scale (continued)



MER Board of Directors Meeting Schedule

Board of Directors Meeting – 7 pm, Oct. 20, 2022, Hilton Charlotte University Place 8629 JM Keynes Dr., Charlotte, NC

MER Annual Meeting - ~8 pm, Oct. 22 (10 am, Oct. 23) Hilton Charlotte University Place 8629 JM Keynes Dr., Charlotte, NC

UPCOMING MER CONVENTIONS

2022 Convention – Carolina Southern Division — “Carolina Special Look South”, Oct. 20 - 23, 2022, Charlotte, NC

2023 Convention – “Round the Curve to Altoona 2023” - October 19-22, 2023, Altoona, PA

2024 Convention – Carolina Piedmont Division — “Piedmont Junction”, Sep 26 - 29, 2024, Durham, NC

2025 Convention – New Jersey Division— Dates and location tbd

Advertising in The Local:

Advertising rates have changed! For the better! If you have a model railroading business and would like to place an ad in *The Local*, please contact the [Editor](#). The new rates per year are as follows:

Division and Clubs	Free
Full Page – color	\$100.00
½ Page – color	60.00
¼ Page – color	35.00
Business Card	10.00
Text Only	7.00

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.

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*, 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 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 for publication are used in approximately the order they are received.

Publication Schedule Submission Deadline

Jan/Feb	Dec 1st of previous year
Mar/Apr.....	Feb 1st
May/Jun	Apr 1st
Jul/Aug	Jun 1 st
Sept/Oct	Aug 1 st
Nov/Dec	Oct 1 st

Please observe the following steps to submit your contribution. **1.** Compose and submit your text in one of the following formats: TXT, DOC, or DOCX. **2.** Consider what photos, illustrations, or other graphics can go with the text. These are essential. But, **DO NOT** include/insert them into your text. **Do** put notations in the text such as "Insert Photo #1 here." **Send the illustrations separately and numbered as you would want them in the text.** JPG, GIF, TIFF, or PNG formats are best for photos. **3.** If you have captions for your photos, etc., create a separate text file for the captions, each of which will be numbered to match a numbered photo or figure. A special note on photos or other exhibits; please only send us your 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.

Also, if you have previously published your article or photo in any other magazine or newsletter, including a division newsletter or your own website blog, it cannot be reproduced in *The Local* without written permission from the magazine publisher, editor and author / photographer.



President's Column

President Kurt Thompson, MMR
Volunteering Equals New Friends

Truth be told, I'm a shy and introverted person. Always have been, and probably will always have some trace of it. Now I'm sure a lot of you are shaking your heads in some disbelief, wondering how that can be true when many of you have seen me serve as the Chesapeake Division Superintendent, MER (Mid-Eastern Region) Vice-President, MER President and clinician.

The answer lies in where I'm stretching the bounds of my comfort zone. I do almost all of my volunteer service work here in the community of model railroaders. The reasons are two-fold. First, the NMRA, the MER, and our Divisions, are all volunteer organizations. They work because we work. Second, and often overlooked, is that as I volunteer, I meet like-minded people and expand my circle of friends and acquaintances.

So, if you're shy and not sure how to make friends, come out and volunteer to serve the MER. Not only will you meet people you may or may not know and with whom you'll develop a friendship, you will also earn Time Units (points) towards your AP (Achievement Program) Volunteer certificate. You already have a love of model trains in common. What a great basis for a friendship.

Just this past week, I sent out Volunteer Record and Validation forms to my staff members who often serve quietly in support of our Region. Each of them started out as someone I didn't know. But when I asked, they said, "Yes." They are each now friends and acquaintances whose service has enriched our Region and my hobby social life.

So please consider volunteering, especially to serve at the Regional level. The current election cycle for the MER Board of Directors is for the four positions of President, Vice-President, Secretary and Treasurer. The candidate statements for those who have already volunteered to run are in this issue. Remember you can always run a write-in campaign.

With my time-limited term as MER President coming to a close (term limited), don't worry about me fading completely into the woodwork. I will be moving into the non-elected position of MER Past President in November and will move back to serving the Chesapeake Division while making and renewing friendships in our hobby.



From the Editor's Desk

Greg Warth, Editor

The Long-Awaited National Convention



I am really looking forward to the Gateway NMRA Convention and National Train Show this year in St. Louis. This will be the first national convention since 2019 due to the pandemic. So, I am anxious to see what is new and exciting in the hobby.

I am especially interested in the newer technology like Arduino projects, automation, laser engraving and 3D printing. There will be clinics on all of these topics including CTC (Centralized Train Control), JMRI, diode lasers, and fiber optics for lighting. In addition, I want to learn about new tips and tricks on scratch-building and kit bashing, and how to use Hydrocal and cardstock for building structures. There are always new scenery tips to be learned.

The layout tour schedule is nothing less than fantastic and includes some of the best layouts in the country. They are all masterpieces in scenery and operations. The only problem is there won't be enough time to see all of them. The prototype tours also look very interesting, including trips to the Port Harbor Railroad, Micro Engineering, St. Louis Union Station, not to mention the hottest railfanning spots.

OpSIG (Operations Special Interest Group) has set up no less than 26 operating sessions on 20 different layouts with almost 200 operating spots. So, if you need to clock some time on your Chief Dispatcher's AP (Achievement Program) Certificate, here's your chance.

If layout design is your thing, or if you are planning a new layout, you won't want to miss the clinics and tours set up by the LDSIG (Layout Design Special Interest Group) They offer a free half-hour consultation service to all attendees.

For a more intensive experience in modeling education, sign up for the Modeling with the Master's classes taught by Master Model Railroaders. This year, the agenda includes topics such as how to build a plaster structure, building with cardstock and paper, assembling white metal kits, making a coaling facility, styrene structures and box car kits.

There is so much to see and learn at this convention, it is truly mind-boggling. I sincerely hope to see you there.

This issue of *The Local* is packed with news and information. We have great original articles on scratchbuilding a covered bridge by Martin Brechbiel, MMR, making a simple flashing signal crossing by Fred Miller, MMR, creating scenery for an AP certificate by Mark Nieting, and a new featured layout on Lehigh Valley by Ralph DeBlasi, to name a few. Check out the MER (Mid-Eastern Region) 2022 "Look South" update by Bob Halsey (another great convention that I am

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looking forward to in October).

Don't forget to look at the candidates' statements in preparation for the election of officers in October. There are also proposed Bylaws changes that you will need to review in that section.

Also see what's going on in the divisions. The yearly Division Reports have been submitted and are presented in this issue. Also see the "Branchlines" Column to see the best of the division newsletters.

Above all, thank you for your membership in the MER and NMRA. We truly appreciate your support and your faith in our organization as an informational and educational resource and as a method of communicating with other modelers. And thanks to all those on *The Local* team who provide endless help, input, and support in putting these issues together:

Editorial Staff, Publisher, and Proofreaders:

- Bob Morningstar, MER Director
- Martin Brechbiel, MMR, MER Secretary
- Alex Belida, MMR
- Jack Dziadul
- Rick Stoneking, Publisher



Greg Warth, Editor



NMRA Achievement Program Update

Dave Chance
MER AP Manager

Since the last report in *The Local*, the following Achievement Program (AP) certificates were earned and awarded:

Division 1 – New Jersey

- Ken Martin** – Golden Spike Award
- Rick Stoneking** – Chief Dispatcher

- Christopher Conaway** – Master Builder-Motive Power
- Jack Menaker** – Association Volunteer
- Thom Radice** – Master Builder-Structures
- Michael Prokop** - Model Railroad Engineer – Civil
- Michael Prokop** – Model Railroad Engineer – Electrical
- Michael Prokop** – Master Builder – Scenery

Division 2 – Potomac

- William Mosteller** – Model Railroad Author

Division 3 – Philly

- Eric Dervinis** – Chief Dispatcher

Division 4 – Tidewater

- Robert Cook** – Master Builder Cars
- Roger Bir** – Master Builder Scenery

Division 5 – James River

- Michael Bonner** – Chief Dispatcher

Division 10 - South Mountain

None this update period

Division 11 - Susquehanna

None this update period

Division 12 – Carolina Southern

None this update period

Division 13 - Carolina Piedmont

None this update period

Division 14 - Chesapeake

None this update period

At-Large MER

None this update period

MER's Newest MMR Robert Cook, MMR #710, of the Tidewater Division, is MER's newest MMR, so offer your Congratulations the next time you see Robert!

In a perfect world, this information will appear soon in the NMRA magazine. This should not deter you from giving recognition locally. Normally you will be able to recognize AP accomplishments long before the names appear in the NMRA magazine.

PROBLEM - PLEASE HELP ME. National does NOT accept R&V forms, except Volunteer and Author. I am getting too many of them, only to have to return to the sender and get the proper form. NO R&V FORMS.

Elections 2022

Deadlines and Schedules for 2022 Nominations and Balloting:

The deadline for self-nominations was on May 30. So, in August and September, you will be voting on the four unopposed officer candidates as follows:

Scott Unger for President
Gary Brown for Vice President
Brian Kampschroer for Treasurer
Martin Brechbiel for Secretary

Along with the two proposed Bylaws changes.
(See pages 4-5 of this issue for details.)

July 2, 2022 – Eligibility to vote: You must be a member in good standing (paid up NMRA dues) based on the membership report supplied to the MER Business Manager from NMRA National as of 07/02 (the 2nd of July) of every election year to be eligible to vote. If an individual is not a member, or if membership has expired as indicated by the record supplied to the MER, and MER officials have not been informed by NMRA National of a valid renewal of membership by 07/02 (the 2nd of July), that individual will not receive a ballot, nor be permitted to vote in that year's election.

August 1, 2022 – Deadline for mailing paper ballots to members and for commencing electronic voting; could be mailed earlier depending on other deadline requirements.

September 6, 2022 – Deadline for electronic voting, also last day as shown by postmark for mailing paper ballots.

September 10, 2022 – Deadline for receipt by Balloting Committee of paper ballots sent by mail.

September 17, 2022 – Deadline for Ballot Committee to transmit results to the President to communicate the election results to candidates. The Business Manager also notifies the MER Webmaster and the NMRA of the election results.

October 8, 2022 – Deadline for publishing election results on MER's website.

Our next election cycle for 2023 will be for Directors. If you wish to be considered as a candidate for service as a Director, please notify one of the members of the Nominating Committee:

Chair: Robert Charles, MMR rcharles@aol.com
Jack Dziadul jackdziadul@gmail.com
Kenneth Montero va661midlo@comcast.net
Kurt Thompson, MMR president@mer-nmra.com



2022 Potomac Division Clinic Schedule

The Potomac Division sponsors a number of clinics to which all MER members are invited when space is available. Most of the in-person clinics are held at Jerry Stanley's Hobby Barn in Hume, Virginia unless otherwise stated. If you are interested in attending any of these clinics, either in-person or virtually, please contact Jerry at 703-595-8081.

Saturday July 16th, 2022, Clinic 10 AM

In Person – John Swanson – Layout Problem solving
 6910 Birkenhead Pl., Gainesville, VA

Sunday July 17th, 2022, Virtual Clinic 3 PM

Ernie Little – Building a programming track

Saturday August 20st, 2022, Clinic 9 AM

In Person – Kurt Thompson, MMR AP Master Builder-Structures -Bridges Workshop, Knights of Columbus Hall, 3700 Old Lee Highway, Fairfax, Va.

Sunday August 21st, 2022, Virtual Clinic 3 PM

Bob Sprague – Deconstructing a Track Plan

Saturday Sept 17th, 2022, Make and Take Clinic 10 AM

In Person – Nicholas Kalis, Gary Eames – Turning Plastic into Wood in All Scales inexpensively, Jerry Stanleys Hobby Barn, Hume, Va.

Sunday, Sept. 18th, 2022, Virtual Clinic 3 PM

Ernie Little – Building a programming track

Saturday October 15th, 2022, Make and Take Clinic 10 AM

In Person – Kate Kalis – Painting a backdrop in a train room
 Jerry Stanleys Hobby Barn, Hume, Va.

Sunday October. 16th, 2022, Virtual Clinic 3 PM

Bob Sprague – The Ma & Pa in HO, design of my layout related to the prototype

November (5th or 19th), 2022, Joint MiniCon with James River and Tidewater Divisions; Battlefield Baptist, Warrenton, Va.

Sunday December. 4th, 2022, Virtual clinic 3 PM

George Gage – Adding working headlights to HO scale vehicles

Please read the document on "[Preparing Your Manuscript for Publication in *The Local*](#)" by Martin Brechbiel, MMR to be sure your article is prepared properly before sending it in.

Send all articles, photos, tips, comments, requests, and feedback to [The Local Editor](#)

Learn how to prepare an article for *The Local* [here](#).

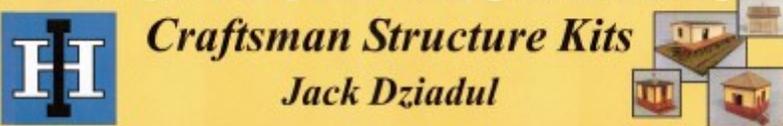
Get Your Layout in *The Local*

In *The Local*, we are enthusiastic about showing your modeling work to other members, not for judging or criticism, but for the art of sharing, inspiration, and education. If you are interested in featuring your layout or models in *The Local*, please send an [email to the editor](#) with answers to the following questions:

1. Name of your layout or model?
2. What scale is it?
3. Does your layout or model depict any specific era and/or location?
4. What are the dimensions of your layout?
5. How do you control your layout?
6. When did you start making your layout?
7. What type of track and switches did you use?
8. What are your model's or layout's best features?
9. Do you host open houses, layout tours or operating sessions?
10. Please include a short bio and picture of yourself.
11. Include your best high-resolution photos (1-5) of your model or layout.

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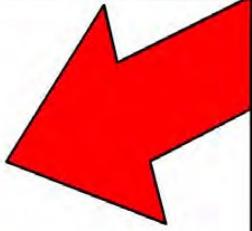
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NEW PRODUCT ANNOUNCEMENT

6/1/2022
 Jack Dziadul
 Ipswich Hobbies
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Ipswich Hobbies has released its latest craftsman kit in O scale. Union Freight House is based on the freight house that once served the Boston & Maine Railroad in Union, NH. The restored freight house is now part of the Heritage Park Railroad Museum. The kit has a footprint of 20" x 7" and features laser cut basswood, scribed interior floor, and loading dock details. Union Freight House was previously released in HO and N scales. The O scale kit is priced at \$120 and is available at www.IpswichHobbies.com.





MER Membership and Benefits Review

By Greg Warth, Editor



As of February of this year, the Mid-Eastern Region (MER) active membership stood at 1785, of which 50 are Master Model Railroaders. If you happen to know any model railroaders who are not members, and we know there are many of them out there, put on your recruiting hat and give them a few subtle hints about the many benefits of membership of which the following is only a brief summary:

- **Partnership Program** – Multiple model railroad manufacturers and retailers have agreed to provide significant **discounts** to NMRA members, including Micro-Mark, Rusty Stumps, and others. The savings you accumulate on this benefit alone could pay for the cost of membership.
- **Discounts** are available to members on special books from the [Kalmbach Memorial Library](#).
- The **Achievement Program** (AP) is a great incentive to help you learn more about the hobby. And if you complete the program, you will earn the highly regarded Master Model Railroader Certification.
- Get your layout in the [Model Railroad Directory](#). There are over 500 already listed. Ask other NMRA members for a layout tour. Wherever you might be in the world, chances are there is a model railroad near you that the owner would be happy to have you visit.
- NMRA online [Archives](#) (currently under revision) contain over 10,000 photos, drawings, plans, etc. These are available for download to members at discounted prices.
- If all your club members belong to the NMRA, you can get \$1 million [liability insurance](#) for a \$50 registration fee. You can also get \$1 million liability insurance for all NMRA-sponsored events. Group and/or individual [property insurance](#) is also available. This is a must if you have accumulated a significant collection of model railroad items.
- **National, Regional and Local conventions** are available to members throughout the year providing lots of educational clinics, layout tours and prototype tours to which you would not have access otherwise.
- **Modeling with the Masters** is an excellent intensive multi-day educational experience where members can receive one-on-one instruction from Master Model Railroaders.
- Members can receive the [NMRA Magazine](#), either digital or print versions, or both, for much less cost than any of the other mainstream model railroading publications. Plus, as a member of the MER, you will receive [The eLocal](#), the bi-monthly free digital publication of the MER containing multiple high-level and review articles about model railroading as well as general news and contacts for local and regional officers and directors. Contributions to these journals are welcome from all members.
- Two more digital publications are available to members: The bimonthly [NMRA eBulletin](#) with news about the organization, and the monthly [NMRA Turntable](#), containing notices about interesting model railroading websites, videos, blogs, and articles that will keep you updated in the hobby.*
- The Annual NMRA **Calendar** containing beautiful photographs of members' layouts is free and is sent to all members automatically.
- The [Beginners' Guide](#) is a fantastic resource on the NMRA website for those who are relatively new to the hobby, or even for more seasoned modelers who want to refresh their skills or learn about another aspect of the hobby that they haven't done yet.
- Multiple online [instructional videos](#) are available on the NMRA website.
- The [EduTrain Program](#) is another way in which the NMRA focuses on education of its members.
- [Regions and Local Divisions](#) offer hands-on instruction, fellowship, meetings, and layout tours. They provide the foundation and structure of the NMRA from the members on up. If you join the NMRA, you automatically become a member of your local division and region.
- Discover the [standards and conformance measures](#) set up by the NMRA, which allow us to run our individual HO, O, S, N, etc. scale locomotives on anyone else's layout.
- The [Company Store](#) on the [NMRA](#) website provides multiple items, like standards gauges, track templates, decals, and other products.

*If you are a member and are not receiving any of the publications mentioned above, please [contact the NMRA](#) and **make sure they have your correct email address**.

Model Railroad Technology

By Greg Warth

Cool stuff! That's what I think when I see a layout loaded with automated train movement, animation, signals, sounds, and signs. My dream layout would be one where I could walk in my train room, throw one switch and everything starts operating. Trains start and stop at stations. Signals change as trains approach and leave. Sounds of the city surround me when I walk past a metropolitan scene. A trolley car travels from one part of the city to the next and back again after a delay. Flashing crossing signals warn of approaching trains. Turnouts automatically switch to the appropriate positions as trains approach. Three separate trains on the mainline don't crash into each other because they slow down if they get too close to the one ahead of them. On the locomotives, cab-mounted video cameras record the activity.

Of course, I will want to turn some of that off when friends arrive for the operating session and that should be easy to do. The automated starting and stopping would have to be disabled, so engineers could have control in moving their trains from one yard to the next, while dropping off and picking up cars in all the proper places. I would want to have automated uncoupling without having to use a stick. Using transponders, location of cars and locomotives would be trackable on a computer screen for the dispatcher's office. Headsets worn by the operating crew would facilitate communication with the dispatcher and yardmasters. Train detectors, rail blocks and signals would prevent trains on the same track from crashing into each other. Animated scenes with campfires, arc welding, people talking, neon signs flashing on buildings, traffic lights changing, and theater marquis lights would bring the layout to life. The warm ambience of streetlights, lampposts, lighted billboards, lighted buildings, and a variety of train sounds would add to atmosphere.

There are many amazing layouts in the Mid-Eastern Region that already have this technology. I try to visit them on a tour or open house whenever I get the chance. Mine is not one of them (yet). I always like to see articles about animation and automation, like the one in this issue by Fred Miller, MMR (Carolina Southern Division) on how to make a "Simple Animated Railroad Crossing Signal", or the article in the previous issue by the same author, "Rail Welding Animation Project." These projects are not that difficult, especially since the author has provided links to his [GitHub site](#) that contains all the computer code you need to set them up with an Arduino circuit board. He will even provide you with a pre-programmed micro-controller chip if you request one. Here is a YouTube video of his HO steam and trolley layout, [The Fox Hill Traction Co. and Fox Hill & Metuchen RR](#), which appeared in [Model Railroader](#) in 2018, and in *Great Model Railroads* in 2019. Here is another one of his [animated HO building](#). You may want to consider visiting one of his layouts or clinics while attending the "Look South" MER Convention in Charlotte, NC this October.

New technology and our ability to adapt to it and create new uses for it is part of what keeps model railroading alive in the 21st century, and I suspect it will continue to do so in the future. If there is anything that will draw more young people into the hobby, it will be how we continue to use and improve upon innovations like fiber optics, touch control, voice activation, and advances in computerization.

Here are some great resources to help you see what's available in the new expanding world of model railroad technology.

Links to Modern Technology for Model Railroads:

Advanced signaling, lighting, animation, automation, detection sensors, and other effects:

<https://modeltraintechology.com/>

<http://www.azatrax.com/>

<https://www.dallee.com/>

<https://www.bakatronics.com/shop/item.aspx?itemid=447>

Computer control:

<https://www.freiwald.com/pages/traincontroller.htm>

<https://www.jmri.org/>

<https://www.cti-electronics.com/>

Advanced fiber optics, lighting without wiring:

<https://www.dwarvin.com/>

Sound effects:

<https://ittproducts.com/>

<https://www.fantasonics.com/>

<https://soundtraxx.com/>

Touch controls:

<https://www.berrethillshop.com/store/products/touch-controls/>

Continued on page 16

Dual DC and DCC operation:

<https://www.trains.com/mrr/news-reviews/news/ld101-dual-mode-command-station-from-ane-model/>

Powered railers and rerailers:

<https://www.walthers.com/powerd-railer>

Tiny Cab Cameras:

<https://www.choochoovision.com/store/p/cab-cam-model-railroad-video-camera>

Arduino layout control without writing code:

<https://www.arcomora.com/>

<https://www.youtube.com/watch?v=Yaw6TOkc7mE>

JMRI, Arduino, and Raspberry Pi:

<https://www.motorhomesites.org.uk/railway/railwayIndex.php>

Layout Command Control (LCC):

<https://www.nmra.org/introduction-layout-command-control-lcc>

<https://tcsdcc.com/lcc>

<http://rrcirkits.com/> (by Dick Bronson of the Carolina Southern Division)

WiFi Digital Control:

<https://www.wifimodelrailroad.com/>

Letter to the Editor...

In his 'Weighty Weights' article in the May-June issue of the MER 'Local' Bob Gamble covers several types of glue to hold lead weights to various car materials. Bob does not mention transfer or double-faced tapes. The Scotch brand transfer tapes, such as 926 and 976 https://www.3m.com/3M/en_US/p/d/b40065892/ can work very well adhering sheet lead weights to many types of car materials. Double sided tapes, either foam or transparent, come from many sources and can hold car weights in place very well. Generally, I find the tapes are less messy than glues. And the adhesives on tapes usually do not attack plastic. But with many tapes there is no working time - the weight must be put in place correctly on the first try. Dick Bradley MMR

Reply: Actually, the boxed section, called "Sticky Subject", which appears below Bob's article was added by the Editor, although, apologetically, it was not clearly designated as such. We appreciate Dick's addition of double-sided tape as another great method of attaching weights to railcars.

The NMRA Magazine Archives Are Now Digital!

Message from President Kurt Thompson, MMR

As many of you already know, on April 1st of this year, the *NMRA Magazine* went digital. As part of that process, the entire back issue collection of the magazine in all its varied titles is now available on the NMRA national website. The trick is you must register your membership to gain access as this is a "members only" benefit.

To do that you have to click on the link on the upper tool bar on the right side that says Member Info / Registration (<https://www.nmra.org/members>). You'll be able to set up your login using the email address you have on file with National. You only have to do this once and you are done. While you're setting up your login, please take 30 more seconds before you start wandering through the back issues to verify, and correct, if necessary, your contact information.

Thanks, and happy wandering through the archived issues.

My Scenery Story Leading to the AP Scenery Certificate

By Mark Nieting

Plywood Central! Do you want that term applied to YOUR model railroad? No model railroader wants a moniker like that! Back in the “train around the tree” days, we just added Plasticville structures with a Lionel accessory or two and we were in toy train heaven. But once we passed that stage, scenery became important for the simple reason that real trains traverse real scenery!

My transition from Lionel to HO began in 1960 (6th grade) when I boxed up my 1615 freight set and purchased a gold Athearn Hustler and a few cars from a friend. My “sacred sheet” soon had an oval of Atlas snap track with a few sidings where that little rubber-band driven locomotive made its deliveries. I called it the King Mountain Railway because my father came home one day with a 50-pound bag of powdered ASBESTOS to be used for molding a mountain! If you could pack it around pipe joints, you could make mountains, right? I worked through the itchy asbestos, built King Mountain along with the tunnel that went through it, and my journey of scenery building began.



My scenery-making techniques improved over the decades, as (Thank God) I moved beyond raw asbestos! Each new layout incorporated new skills learned from the pages of *Model Railroader*, *Railroad Model Craftsman*, and even *Boy's Life* magazines, new techniques that enabled me to do a better job of making my railroad look more like the real thing. Any learning involves trial and error, and scenery is no exception. There were some things I tried that just didn't work. Cat litter for ballast and coffee grounds for ground cover come to mind. I must have read about these somewhere, tried them, and very quickly realized I needed to head in different directions.

Crucial to anyone's understanding of creating scenery was simply observing what real railroads ran through. Family trips took us along the Union Pacific in Nebraska, the Great Northern in the mountains, the amazing complexity of railroads in Chicago, and of course the Milwaukee in my hometown of Elm Grove. Mountains, hills, farmland, and cities all provide scenes, some more spectacular than others. Even “flat” places like south Chicago and Jones Island in Milwaukee (which I model currently) have texture, subtle color changes, weeds and what-not along every foot of trackage. In a word, that's scenery.

If there is one part of model railroading that I enjoy the most, it is *operating* layouts in reasonably prototypical fashion. Doing that meant that the trains, whether they were mine or someone else's, had to run through scenery to do what God intends trains to do: move people and stuff from one place to another *through scenery*. Every pike that I ever built had scenery, always in a general, freelanced sort of way: a river here, a farm there, a steel mill, and a yard, and somehow, they all fit together into the operating scheme of the railroad. My current effort is the first one in which I have tried to simulate a real-life prototype: the port of Milwaukee, WI commonly known as Jones Island.

My layout, in a 19' x 14' “frog” (finished room over garage) was for all intents and purposes complete and hosting operating sessions before I decided to undertake the AP (Achievement Program) Master Builder -

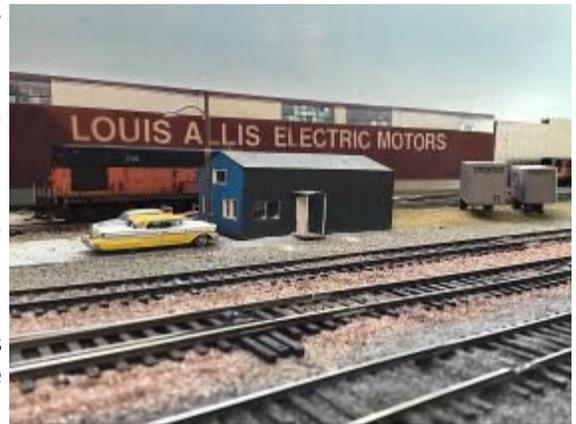


Scenery certification. I knew about the AP certificates and had previously earned Chief Dispatcher (CD), thanks to dozens of operating sessions that I had both hosted and attended in the Tidewater area. With the CD certificate under my belt, I read up on the Scenery certificate and here's what I learned in three bullet points:

One does not have to build intricate trestles, massive mountains or craftsman level kits to qualify. Buildings themselves are a separate AP category. The scene is judged just the way it sounds: as a whole.

A relatively small layout (mine is a shelf layout) is just fine. The required space (in HO) is 32 square feet; the sacred sheet or a 2' x 16' switching pike works just fine. If you are lucky enough to have a larger space, don't try to finish the whole thing before you apply for this AP. Just finish a portion and go for it!

The paperwork is not onerous. Just keep records. If you build something, make notes of what you used, where you got it, and how you did it. Take a few pictures along the way. You just might be able to use some of these pictures to do a clinic for your division or just a bunch of friends!



Realistic scenery, as wonderful and impressive as it can be, boils down to one simple question, no matter what or where your layout is set in space and time: where does the water go when it rains. Water falls, gathers into pools, creeks, swamps, marshes, rivers and finally into lakes and/or oceans. Railroad engineering hinges on three words: drainage, drainage and more drainage. That's what we have to think about when we design scenery: where does the water go? If we pay attention to that, we can copy it. If water and land meet, there will be culverts, ditches, bridges, trestles, rocky shores, and beaches. Some mechanical means of keeping the land, and hence the railroad, dry include rip-rap, pilings or bulkheads. I realized I had to provide almost 30 feet of bulkheads, as the entire center

of my room is the "mooring basin" for ships between Jones Island and the city itself. (I once saw the *Edmund Fitzgerald* in winter mooring there.) If water meeting land became a marshy area (Jones Island was a marsh into the late 1800s), I learned to model it.

In creating my Jones Island scenes, prototype photographs became crucial. I have taken photographs of almost every portion of the port, buildings and landforms both. These became helpful in flushing out the scenes. For instance, what KIND of bulkheads were used along the mooring basin. Most were the corrugated steel type. The Plastruct catalog (online) showed several types, so they were ordered, painted rusty red (spray paint from the big box store) and hot glued onto the fascia. Pilings (made of stir sticks) tied with metal cable (thick thread) and pooped on by hosts of gulls (white paint), along with tires fastened as bumpers, and bollards for fastening ships completed the scene.

Another challenge was ballast. Trackage to the port was provided by two railroads: the Milwaukee and the Chicago and Northwestern. Photos showed different ballast colors. Milwaukee used a medium gray (and not much of it because they were usually broke) while the CNW used its famous "pink lady" system-wide. Arizona Rock and Mineral offers a wide variety of colors and textures made from real rock, not crushed walnut shells, including pink lady. On the island it is whatever the local contractors hired by the port wish to provide, with some of the tracks literally sinking into the dirt. (I used Arizona Rock and Mineral "industrial dirt.") The tracks themselves were sprayed with rusty browns, with some of the ties highlighted in light colors to simulate bleaching over decades.

The AP Certificate requires backdrops appropriate to the setting you are creating. Here's one place I messed up! The layout is 30" wide, about my reach-in limit, and in a marvelous display of zero forethought, I had already added bulkheads and other scenery along the far side (the Lake Michigan side), not a brilliant move! While I could have "hand-painted," which is certainly allowed, on my next trip to see mom (in Milwaukee), I





took a large number of digital photos of the lake from Jones Island, including pictures of the oil barge unloading piers. I did my best to crop and adjust photos before having them printed on 24" x 36" photo paper (CVS Pharmacy photo services) and then installing them onto the wall with spray adhesive. Unfortunately, my photoshop skill set is weak: there are some obvious light-to-dark jumps between pictures, but once I blended the photos into the blue sky of the wall itself with a variety of white and gray craft paints, they became less objectionable. I can look out over the layout and see the breakwater in the distance and imagine the sound of waves on the bulkheads. Isn't that what scenery is supposed to do?

The most challenging portion of the entire project for me was my choice of season. I chose WINTER. I had never done anything other than summer but the more I thought about winter, the more I liked the idea, and the challenges involved. Growing up *enduring* Wisconsin winters is something of a rite of passage

and I wanted to celebrate that with this layout. I knew I did NOT want to just fling Woodland Scenics powdered snow everywhere and call it done; I wanted the long, lingering dirty snow piles and fresh dusting look that we Northerners are used to experiencing. Challenges included making plowed piles of snow along the roads and tracks and then achieving that "dirty snow" look. Along with that came winter trees, dead grass, ice on the marsh areas, and ubiquitous potholes filled with slush or frozen over. Mike Confalone's scenery videos (available through *Model Railroad Hobbyist*) were helpful, as were products made by a British company, Precision Ice and Snow. Winter trees were actually easier than summer.....that came as a big surprise. I made them from raw sagebrush picked out west (Scenic Express offers them in its kits), local weeds, and some "dead trees" from the scenery department of Hobby Lobby. Winter grass can be applied by static applicators just as easily as summer grass.

Crispy white Styrofoam was the raw material for snowbanks. I cut it into the approximate shapes I desired (leaving a flat bottom) and then literally squeezed it with my fingers to the shapes I needed, which were hot-glued to the layout. Thin washes of browns and grays yielded the dirty snow look I was after, with dustings of fine snow powder here and there in areas that would remain shaded and hence not melting. (I stayed away from the urge to model the famous "yellow snow" we all grew up avoiding!) If forced to choose a favorite part about this layout, it would be the winter setting. It's quite unusual, and gives me an incentive to keep the room COLD during Ops sessions!



Signs are crucial to any scene and the HO world has lots of options. Think to yourself, "What signs would I expect to see if I drove down this road?" and you know what to put where. Due to space constraints I had to make my roads a bit narrower than I would have liked, but given the linear nature of the layout, I'm not unhappy with my choice. Next was adding details like fire hydrants, bollards for tying up boats (they are *boats* on the Great Lakes, not ships), being sure all buildings have good foundations, power lines, street lights, and sea gulls until I finally said ENOUGH and decided to finish the paperwork. Yes, there IS paperwork (Where in life can we avoid that?), but I learned that to simply follow the steps prescribed and it fell into place. All the requirements and forms are available on the NMRA website. Print them out, fill them in, and as the Brits say, "Bob's your uncle." Once your forms are completed with some pictures to tell the story (Thanks Rod Stewart), your Division AP boss will get his crew and come over to do the evaluation.

Yes, there IS judging. I realize some guys get hinky about having people "judge" them, but all these guys want to do is give honest feedback. If it's good, they will say so; and if there are areas that need improvement, they will tell you, so you can FIX it and move on to bigger and better things in the future. My application got kicked back because I did not include a "supplies" list. I thought covering it in my descriptive text would be enough, but the requirement was an actual list. Twenty minutes later I had it done!

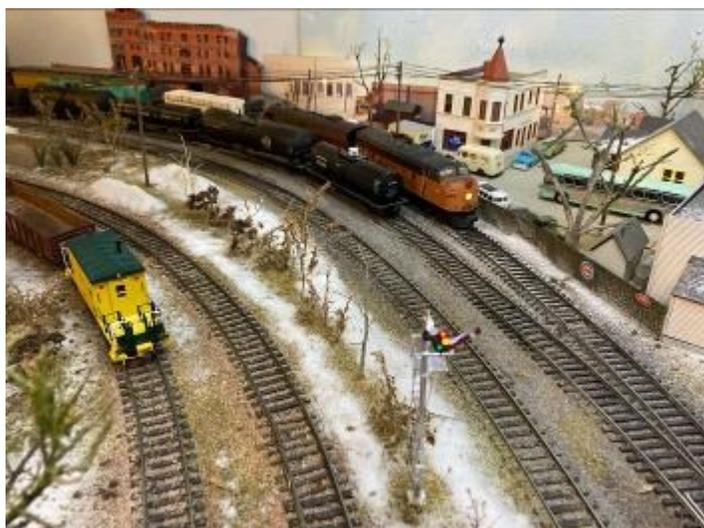
I have now completed two AP certificates. As such, I will say that the process is a) enjoyable, b) motivational, and c) when you reach the "grip and grin" moment of receiving the award, good for one's ego! We all need both intrinsic and extrinsic motivation to keep us on the right track, don't we?

What's next for me? I'm getting ready to tackle my third certificate, which will be the Model Railroad Engineer – Electrical. While I am electrically challenged, my layout already has everything this category requires except one: I'm going to have to build an extra

bit of layout (a separate piece of wood) on which to build a wye, because there is a requirement to include at least one way to turn a loco around and Jones Island has no wye, no turntable, and no reversing loop! Then with DCC or even straight DC, it will be a matter of a few little wires here to there and done!

Guys, if I can do it, so can you. Pick one, jump in and get started!

One final thought. Much of my modeling time over the past nine months has been occupied with the disposition of a friend's layout and collection. My best friend and I attended the Prototype Modelers Convo in St. Louis last summer. We had an absolute blast, and two weeks later he fell victim to COVID-19. We had an agreement that ALL model railroaders should have: someone to help our loved one(s) deal with all of our trains when we leave the station for the last run. Someday, God willing, I may just write an article about this.



NER CONVENTION

September 15-18, 2022
Windsor, CT



ner-conventions.org/connecticut-yankee



Branch Lines

From the Divisions...

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 some of the latest and greatest articles from those publications:

“[Think Gauge First](#)”, by Harvey Heyser, [South Mountain Division](#)

“[A Tour of Water Landscape Features](#)”, by various members of the Division, *The Potomac Flyer*, June-July 2022, p.17, and “[Modeling My Hometown](#)”, by Richard Steinmann, P.6, [Potomac Division](#)

“[Rags to Riches](#)”, by Mike Prokop, *Train Orders*, May 2022, p.8, [New Jersey Division](#)

“[What’s on Your Workbench](#)”, (Scratchbuilding a turntable) by Ben Kubelski, *Sidetracks*, March/April 2022, p.19, [Susquehanna Division](#)

“[On the Railroad with Kevin Feeney: Conventions, Shows, Travel](#)”, by Kevin Feeney, *The Dispatcher*, May 2022, p.21, [Philadelphia Division](#)

“[NS Adopts Radical Experiment](#)”, by Chuck Furst, *The Callboard*, March 2022, p.4, [Tidewater Division](#)

“[Southside Virginia Prototype Modeling](#)”, by Mike Bonner, *Crossties*, February 2022, p.19, [James River Division](#)

“[The Host’s Point of View](#)”, by Joe Skorch, *The Brass Pounder*, June 2022, p.5, [Carolina Southern Division](#)

“[Tom’s Collection of Train Tips](#)”, by Tom Shafer, *The Herald*, April 2022, p.14, [Carolina Piedmont Division](#)

“[Layout Tours](#)”, by David Arday, *The Relay*, May 2022, [Chesapeake Division](#)



Stairway Tunnel - Bob Charles' Railroad. Photo by Jack Dziadul



**Stream Memory - from Bob Charles' railroad.
Photo by Jack Dziadul.**

A Bridge to Somewhere

By Martin Brechbiel, MMR

I was at an NMRA event when I spotted this little bridge that I found attractive and thought to look it over more carefully. It was really a basic structure intended as a foot bridge and also something that would be a “local” production by those folks nearby needing to get across a small creek or hollow. A later inquiry and I had in my in box a copy of a paragraph long article from a Keystone Flyer (MCR Div. 2) newsletter for October 1992 that described in very general terms the building of this bridge. This might have been suitable as a starting point, but it hardly qualified as a complete set of directions. Yet, I decided to charge onwards, and just accept this as a rough guide forward.

The basic main beams measured out at 5/16” thick. I of course had nothing of that size about in the shop in basswood. While I might have indulged in other woods, I thought I should at least try to stay with basswood. Luckily, I did have some 5/32” stock handy. Embracing the spirit of the project, I doubled that up gluing the 5/32” stock up to make some 5/16” stock. After the glue was dry, I ripped out some 5/16” square beams and cut those to 40’ (O scale) long. Don’t have the right sized wood; no problem – make some!

I moved on to making the framing for the sides. The article suggested 8-9” square beams. Once again, I had nothing of that size in the shop. The solution resided in the 10” x 20” stock that I did have and it being ripped down the middle by the band saw. From those beams I made the uprights and angles. The uprights were cut to 8.75’, while the angle braces were all cut to fit individually. I’ve learned not to trust my own measurements on bits like these and to just do them all custom. Working from the ends to the center of the base beams to space the 9 uprights evenly, I cut and glued in the angles using the glass work surface on my bench to keep everything level and flat. Once the angle braces were put into place, these assemblies firmed up nicely and could be handled more easily ([Photo 1](#)).

Photo 1



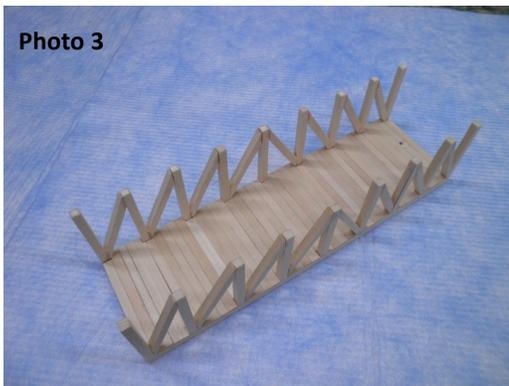
You’ll note that all of the side framing once attached to the base beam left a ledge on the top side of base beam. That’s not by accident and that ledge is part of what the flooring or decking will rest on when it gets installed ([Photo 2](#)).

Photo 2



So, the decking was installed next tying together the two sides. This was done with a mix of HO 4” x 20” and 4” x 22” individual boards cut to 12-foot lengths. These were mortised around the posts where needed to bring them all flush to the outside edge of the side framing ([Photo 3](#)).

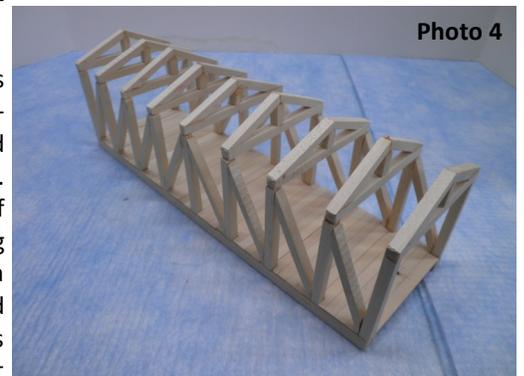
Photo 3



Each upright beam was tied to its parallel with a truss beam fabricated from the same ripped stock. These are roughly at a 20° incline. I made one to fit the span and angles, and just used it as a template for the other eight. These were glued in place using a bit of Goo on the end grain and CA on the other surface. I used carpenter’s glue everywhere else possible ([Photo 4](#)).

The partial sheathing on the sides was done by first applying horizontal rows of HO 3” x 10” basswood up from the top of the main beam. Once in place, the outer layer of vertical sheathing was applied using the same HO 3” x 10” basswood. Having a NWSL Chopper III in the shop makes this a lot less tedious exercise! I did not bother to align these bits perfectly; just “good enough” to emulate closing these sides in a bit from the weather. The interior was stained with Minwax Golden Pecan while I could still get into it easily to take that

Photo 4



glaring white basswood down to something looking a little more like aged wood (**Photo 5**). There was a bit of bleed through the sheathing but that just adds some character to the exterior.

Photo 5



There were several choices in roofing material possible, but I chose to use wooden shingles to fit in with the rustic theme. And, fortunately I just happened to have a few sheets of Builders in Scale Rustic Shingles (#704) stashed away for just such an occasion. Roof slats made from HO 3" x 12" basswood were applied spanning the roof trusses to provide a base for the shingles (**Photo 6**). These are peel & stick shingles and they actually go on very well. I left a few gaps



Photo 6

just to emphasize that rustic condition, yet then added a "tarpaper" cap over the top to show that someone has been doing a bit of maintenance to address those leaks in the middle of the roof (**Photo 7**). I added some fascia boards to each end using some HO 3" x 20" basswood (**Photo 8**). The "tarpaper" received a coat of Lark Dark Grey (Floquil).

Photo 7



I stained the exterior with 2 coats of Minwax pickling stain to get something close to a well-worn whitewash affect. The shingles were dry brushed with D&H Gray, Underside Grey, Dark Slate Green, French Forest Dark Green, and just Grey (Polly Scale) (**Photo 8**) to arrive at some worn, tired shingles that are beginning to show some healthy moss growing on top. I'll have to find a good shady location for this bridge.

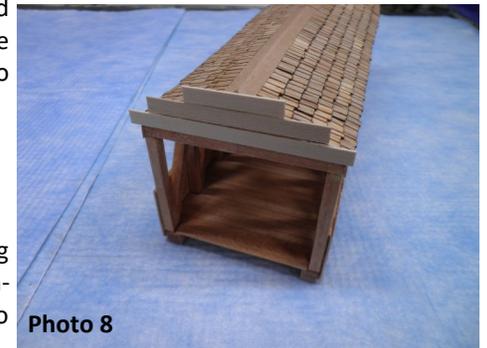


Photo 8

No two of these were alike with these being built to fill a specific need. So, to wrap this up I've built a bridge that has no real set-in-stone dimensions, can be totally modified to fit whatever space you have, and can also be a unique feature on your layout (**Photo 9**).



Photo 9

Electronics Corner

A Simple Animated Railroad Crossing Signal in N Scale

By Fred Miller, MMR

Blinking red lights on a crossing signal can add a lot to the animation effects of a model railroad. Adding crossing gong sounds further enhances the effect. Triggering the crossing signal can be very simple, or more complex, depending upon the track configuration and the desire for more prototypical action. This article describes a simplified approach to crossing signal activation and is based upon a double track arrangement with trains running in either direction on both tracks. A YouTube video of the project in action can be found at <https://youtu.be/CGqaToU98hk>.

Several commercial crossing signal and activating electronics products are available for the modeler but the prices can be significant. The project described in this article can be assembled for less than \$25.

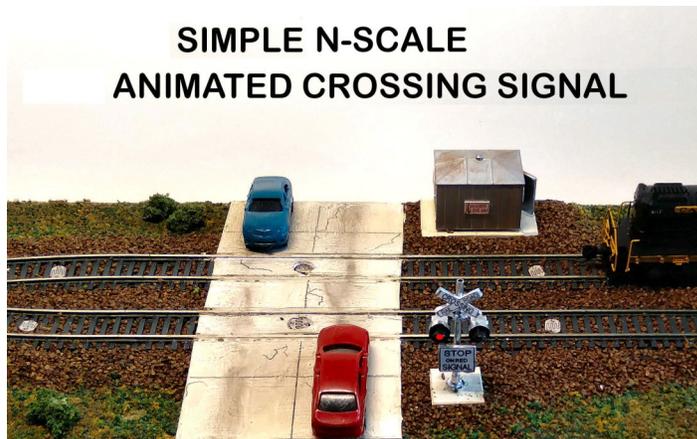


Photo 1

Overview

The electronic circuit was developed to monitor six photo-resistor detectors, matched to an N scale double track layout. Train locomotive and cars cause a 'shadow' on the detectors. The detectors are placed on either side of the crossing and spaced such that even the shortest train would cast a 'shadow' on one or more of the detectors (Figure 1). Note that if the train direction is limited to one way, the 'trailing' detector could be located closer to the crossing, thereby providing a more prototype behavior with the signal turning off as the train just passes the signal. The author's implementation used a detector in the middle of the crossing road with spacing to the adjacent detectors such that gaps between cars would not trigger a false detection (Figure 2).

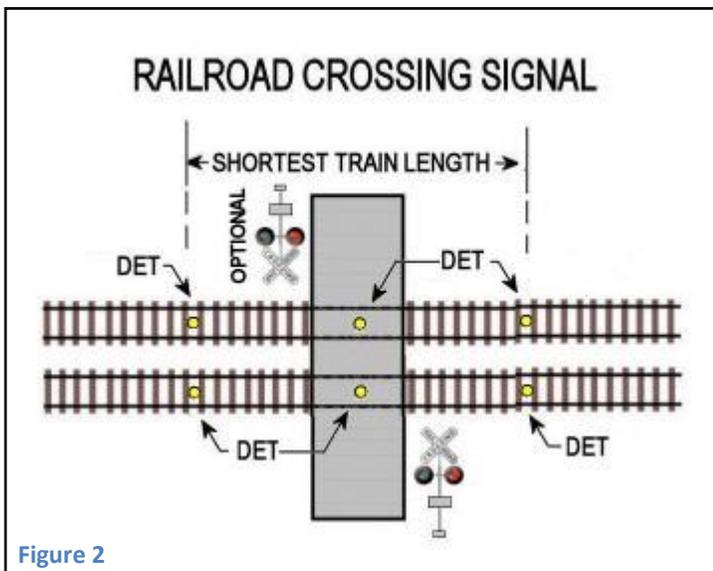


Figure 2

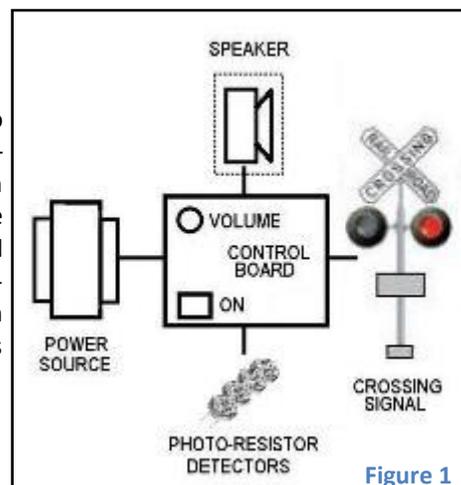


Figure 1

The assembly for the signal gongs consists of an 8Ω speaker mounted inside a structure which then is mounted somewhere near the crossing signal (Photo 2).



Photo 2

The crossing signal itself is an inexpensive two red LED device with common anode connections. The signal came with a flashing circuit, but it was not used in this project so that the gradual on/off fading of incandescent lamps could be simulated using the micro controller. Flashing red LEDs provide protection in the facing direction. Although



Photo 3

not shown in this article, two signals could be operated in parallel to protect the road in both directions (Photo 3)

An ATTINY84 micro-controller operates the control features of the electronic circuit. Approximate 12 V (AC or DC) power input is converted to the required 5VDC for the electronics by a DC buck converter. 16 V are the max allowed for the buck converter used by the author. A DFPlayer sound module with an inserted micro-SDHC card provides the

sounds. The SDHC card contains an MP3 file of the signal gong sounds (Figure 3).

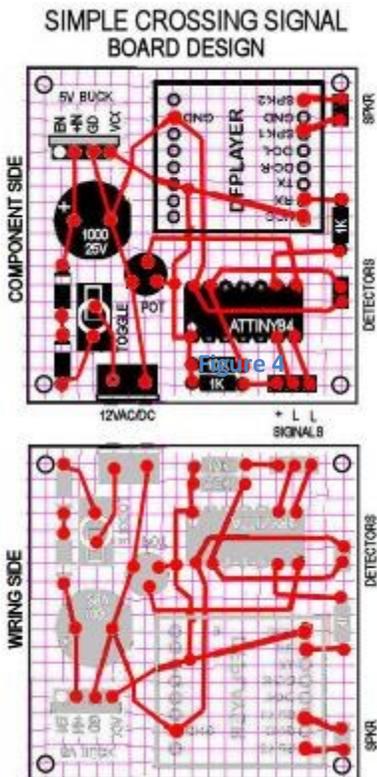


Figure 3

The ATTINY84 micro-controller is programmed using the standard Arduino development environment (IDE). The program (sketch in Arduino talk) was first developed on an Arduino UNO and breadboard, and then transferred to the ATTINY84 (Figure 4).

The photoresistors are mounted in a hole between the rails. As a caution against shorting the leads, a length of insulation is used on one of the leads (Photo 4).

The author mounted the small 8Ω speaker in an available Atlas N scale RR Signal Equipment Shed #ATL60000036, but a simple scratchbuilt railroad equipment cabinet could be substituted. The shed is located somewhere near the crossing signal along the tracks. The doors on the cabinet are mounted open to allow the bell sounds to be heard (Figure 5)

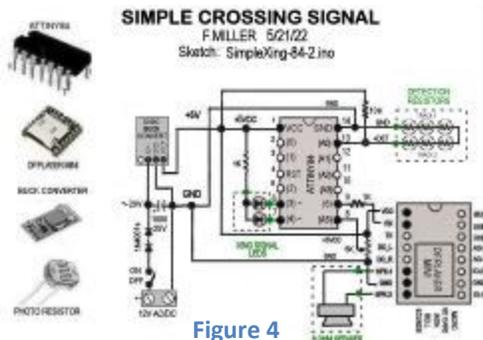


Figure 4



Photo 4

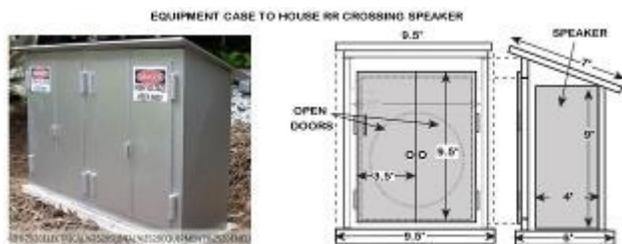


Figure 5

Operations

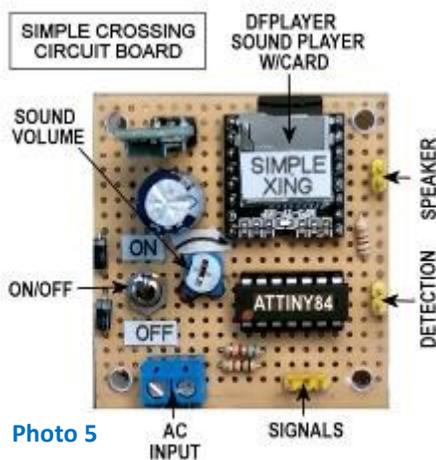


Photo 5

The circuit board includes an ON-OFF toggle switch which completely disables the circuit. However, the toggle can be left in the ON state and the board will be powered up when the supplied 12V AC/DC is turned on. The board also contains a sound volume control. Rotating the control clockwise increases the volume of the signal's gong sounds. The volume can be changed at any time (Photo 5).

Alternate Implementations

The controlling micro could just as well be another Arduino micro such as the Arduino UNO, Pro-Mini or Nano. The ATTINY84 was selected for this project for its low price and small 14-pin layout.

If a 12V AC or DC power source is not available, the board could also be powered with a plug-in 5 VDC power adapter, replacing the need for the DC buck converter board, diodes, and capacitor.

Photo-resistors could be used (minimum of two per track), but the spacing must ensure the train would always cover at least one. The circuit adjusts for the number of detectors AND the ambient lighting each time it is powered up. If the room lighting has changed, a power off/on cycle will adjust for the new condition.

Any structure could be used to house the 8Ω speaker, but it should be placed somewhere near the crossing for best effect.

SIMPLE RAILROAD CROSSING SIGNAL		
QTY	COMPONENT	APPROX \$
	5VDC BUCK CONVERTER	\$ 0.15
	1000uf 50 V ELECTROLYTIC CAP	\$ 0.25
	10 K MINI POT	\$ 0.25
3	VARIOUS 1/4 W RESISTORS	\$ 0.30
6	MINI PHOTORESISTORS	\$ 1.20
2	1N4004 DIODE	\$ 0.20
	3 POS DBLE ROW MALE HDR	\$ 0.10
3	2 & 3 POS MALE HDR	\$ 0.30
3	2 & 3 POS FEMALE HDR	\$ 0.30
	2 POS SCREW TERMINAL	\$ 0.25
	DFPLAYER	\$ 1.50
	MICRO SDHC CARD	\$ 2.00
	14-PIN IC SOCKET	\$ 0.10
	ATTINY84	\$ 2.50
	8 OHM MINI SPEAKER	\$ 2.50
	HO RR CROSSING SIGNAL W/LEDS	\$ 8.50
	N-SCALE SIGNAL SHED	SEE TEXT
	BARE PERF BOARD	\$ 0.80
	TOTAL	\$ 21.20
MOST PRICES REFLECT PURCHASE IN LARGER QTY		
FROM AMAZON OR EBAY.		

Notes

For those modelers who would like to build this project, but do not have access (or desire) to program micro-controllers, a pre-programmed ATTINY84 chip is available from the author.

A zip file containing the Arduino sketches (both ATTINY84 and UNO versions), an mp3 file containing 2-minutes of Crossing Signal Gongs and a copy of the ATTINY84 version wiring circuit, is available on the author's GitHub repository. It can be accessed from:

<https://github.com/tractionfan/ModelRailroadElectronics/blob/main/SimpleCrossingSignalFiles.zip>

Contact the author at:
tractionfan@aol.com.

Featured Clinic

Tuning Freight Cars for Reliable Operation: Part I

By Jim Fisher

Why should I invest the time and money to tune my freight cars?

One of the least enjoyable parts of model railroading is putting derailed trains back on the track. In addition to your own frustration, it can disrupt an operating session for everyone involved. In most cases, making a freight car truly reliable only costs about \$4 per car and usually takes about one hour. As an additional benefit, proper tuning also reduces rolling friction allowing your locomotives to pull more cars. While most of this article will focus on HO cars, the same principles can be applied to other scales. I am not an N scale modeler, but I will include some information for N scale cars when I can.

I strongly believe that derailments should and can be rare occurrences. Just like real railroads, we should strive to eliminate them.



Photo 1: Not a disaster, but a real problem in HO scale or full-size trains.

There are four major areas to work on in tuning cars: **Weight, Trucks, Wheels, and Couplers.**

WEIGHT

The first decision to be made in weighting cars is how heavy to make them. There are several standards for target weights. Additionally, individuals and clubs may have their own specific standards. Some modelers prefer light weights to make it easier to haul trains up steep grades. Other modelers prefer heavy weights to require helpers for steep grades. In my experience very light weights can cause problems, particularly when track work is not perfect.

I also believe that mixing light and heavy cars can cause problems, especially if the light cars are located in front of heavy cars. This is not only a problem on model railroads. Full size trains tend to experience derailments when a number of light cars are just behind the locomotives.

I have found the following weight standards from national and international model railroading organizations:

National Model Railroad Association (NMRA) RP-20.1.

Australian Model Railroad Association (AMRA) Carriage Mass Standard.

European Standards for Model Railroads (MOROP) NEM 302.

Comparing the weight recommended by the different standards can be a bit tricky. The NMRA RP-20.1 recommended practice specifies an optimum weight based the length of the actual car body, not including the couplers. RP-20.1 does not specify a minimum or maximum weight, just an optimum.

NMRA HO Scale Weight	1.0 oz + 0.5 oz per inch of body length
NMRA N Scale Weight	0.5 oz + 0.15 oz per inch of body length

NMRA O Scale Weight 5.0 oz + 1.0 oz per inch of body length

The Australian Carriage Mass Standard (AMRA) bases the recommended weight on the length over the coupling faces. That would be about ½” longer than the dimension used for the length of the same car by the NMRA. This standard specifies a weight tolerance of +/- 15% of its optimum weight. The Australian standard has two different sets of weights. One set is for freight cars, and a second and lighter set is for passenger cars. Metric units are converted here to US units.

AMRA HO Scale Freight Weight 0.493 oz per inch over coupler faces +/- 15%
 AMRA HO Scale Passenger Weight 0.358 oz per inch over coupler faces +/- 15%
 AMRA N Scale Freight Weight 0.269 oz per inch over coupler faces +/- 15%
 AMRA N Scale Passenger Weight 0.197 oz per inch over coupler faces +/- 15%
 AMRA O Scale Freight Weight 0.986 oz per inch over coupler faces +/- 15%
 AMRA O Scale Passenger Weight 0.717 oz per inch over coupler faces +/- 15%

The European standard, MOROP NEM 302, specifies a minimum weight based on the length over the buffers. Of course, US freight cars don't have buffers. But this standard is about ½” longer than the body length used by the NMRA. NEM 302 gives a minimum weight and specifies a maximum weight 30% higher than the minimum weight. Metric units are converted here to US units.

MOROP HO Scale Weight 0.358 oz per inch over buffers -0, +30%
 MOROP N Scale Weight 0.152 oz per inch over buffers -0, +30%
 MOROP O Scale Weight 0.896 oz per inch over buffers -0, +30%

Standards used by model railroad clubs may allow weight reduction based on how free rolling the car is or how far the car can tip without falling over.

I personally use the NMRA standard. I have found that it provides consistently reliable running. With well-prepared cars weighted to NMRA standards, I have found that I can reliably run 50 car trains on less than perfect (but not totally bad) level track given enough motive power.

COMPARISON OF WEIGHT CHARTS BY SCALE AND STANDARD

Table 1: HO Scale Weights

Prototype Car Length (ft)	HO Scale Body Length (in)	NMRA RP-20.1 Normal Weight (oz)	AMRA Freight Weight Minimum (oz)	AMRA Freight Weight Nominal (oz)	AMRA Freight Weight Maximum (oz)	AMRA Passenger Weight Minimum (oz)	AMRA Passenger Weight Nominal (oz)	AMRA Passenger Weight Maximum (oz)	MOROP NEM 302 Weight Minimum (oz)	MOROP NEM 302 Weight Maximum (oz)
30	4.1	3.1	1.9	2.3	2.6	1.4	1.7	1.9	1.7	2.2
35	4.8	3.4	2.2	2.6	3	1.6	1.9	2.2	1.9	2.5
40	5.5	3.8	2.5	3	3.4	1.8	2.2	2.5	2.2	2.8
45	6.2	4.1	2.8	3.3	3.8	2	2.4	2.8	2.4	3.1
50	6.9	4.4	3.1	3.6	4.2	2.3	2.6	3	2.6	3.4
55	7.6	4.8	3.4	4	4.6	2.5	2.9	3.3	2.9	3.8
60	8.3	5.1	3.7	4.3	5	2.7	3.1	3.6	3.1	4.1
65	9	5.5	4	4.7	5.4	2.9	3.4	3.9	3.4	4.4
70	9.6	5.8	4.2	5	5.7	3.1	3.6	4.2	3.6	4.7
75	10.3	6.2	4.5	5.3	6.1	3.3	3.9	4.5	3.9	5
80	11	6.5	4.8	5.7	6.5	3.5	4.1	4.7	4.1	5.4
85	11.7	6.9	5.1	6	6.9	3.7	4.4	5	4.4	5.7

Table 2: N Scale Weights

Prototype Car Length (ft)	N Scale Length (in)	NMRA RP-20.1 Normal Weight (oz)	AMRA Freight Weight Minimum (oz)	AMRA Freight Weight Nominal (oz)	AMRA Freight Weight Maximum (oz)	AMRA Passenger Weight Minimum (oz)	AMRA Passenger Weight Nominal (oz)	AMRA Passenger Weight Maximum (oz)	MOROP NEM 302 Weight Minimum (oz)	MOROP NEM 302 Weight Maximum (oz)
30	2.3	0.8	0.6	0.7	0.8	0.4	0.5	0.6	0.4	0.5
35	2.6	0.9	0.7	0.8	0.9	0.5	0.6	0.7	0.5	0.6
40	3	1	0.8	0.9	1	0.6	0.7	0.8	0.5	0.7
45	3.4	1	0.9	1	1.2	0.6	0.7	0.8	0.6	0.7
50	3.8	1.1	0.9	1.1	1.3	0.7	0.8	0.9	0.6	0.8
55	4.1	1.1	1	1.2	1.4	0.7	0.9	1	0.7	0.9
60	4.5	1.2	1.1	1.3	1.5	0.8	1	1.1	0.7	1
65	4.9	1.2	1.2	1.4	1.6	0.9	1	1.2	0.8	1
70	5.3	1.3	1.3	1.5	1.7	0.9	1.1	1.3	0.9	1.1
75	5.6	1.3	1.4	1.6	1.8	1	1.2	1.4	0.9	1.2
80	6	1.4	1.5	1.7	2	1.1	1.3	1.4	1	1.3
85	6.4	1.5	1.5	1.8	2.1	1.1	1.3	1.5	1	1.3

Table 3: O Scale Weights

Prototype Car Length (ft)	O Scale Length (in)	NMRA RP-20.1 Normal Weight (oz)	AMRA Freight Weight Minimum (oz)	AMRA Freight Weight Nominal (oz)	AMRA Freight Weight Maximum (oz)	AMRA Passenger Weight Minimum (oz)	AMRA Passenger Weight Nominal (oz)	AMRA Passenger Weight Maximum (oz)	MOROP NEM 302 Weight Minimum (oz)	MOROP NEM 302 Weight Maximum (oz)
30	7.5	12.5	6.9	8.1	9.4	5	5.9	6.8	7.4	9.6
35	8.8	13.8	8	9.4	10.8	5.8	6.8	7.8	8.5	11.1
40	10	15	9	10.6	12.2	6.5	7.7	8.9	9.6	12.5
45	11.3	16.3	10.1	11.8	13.6	7.3	8.6	9.9	10.8	14
50	12.5	17.5	11.1	13.1	15	8.1	9.5	10.9	11.9	15.4
55	13.8	18.8	12.1	14.3	16.4	8.8	10.4	12	13	16.9
60	15	20	13.2	15.5	17.9	9.6	11.3	13	14.1	18.3
65	16.3	21.3	14.2	16.8	19.3	10.4	12.2	14	15.2	19.8
70	17.5	22.5	15.3	18	20.7	11.1	13.1	15	16.4	21.3
75	18.8	23.8	16.3	19.2	22.1	11.9	14	16.1	17.5	22.7
80	20	25	17.4	20.4	23.5	12.6	14.9	17.1	18.6	24.2
85	21.3	26.3	18.4	21.7	24.9	13.4	15.8	18.1	19.7	25.6

Where should the weight be placed?

The weight should be placed as low as possible in the car. A low center of gravity reduces rocking forces on the car that can cause derailments. In enclosed cars such as boxcars and reefers it is easy to place the weight on the floor. In other types of cars this can be more difficult. In tank cars, try to fit the weight in the lowest part of the car body. In covered hoppers, put chunks of weight in the hopper bottoms. I have also seen weight for covered hoppers placed in the hidden spaces between the hopper bottoms.



Photo 2 :A gondola weighted by its load

Flat cars, gondolas, and open hopper cars can be challenging. These types of cars make it difficult to hide weight. If the cars have permanent loads it will often be possible to hide weight under the load or to make the load itself the weight. Making the load the weight may result in a high center of gravity.

For hoppers, try to put the weight in the bottom of each bay and use a piece of balsa or plastic foam at the top with a little coal or other load on top. Gondolas with granular loads may be done much like hoppers. A gondola with a load of pipe can have weight attached to the bottom of the pipe load (or inside the pipe). Flat cars are perhaps the greatest challenge to add weight. You can

try to sneak weight between the members of the frame, or you can put a thin sheet of lead or other metal under the deck or sandwiched between the decking. I once scratch-built a gondola where I used a piece of steel as the floor to provide both the strength and the weight for the car. Often though you may need to resort to a load for the weight and just accept the high center of gravity.

Be sure that the weight is evenly distributed so that both ends of the car have the same amount of weight. It makes no difference if all the weight is in the middle of the car or if it is evenly balanced with a weight on each end.

Types of weights:

There are many types of material available for weights. Prices depend on the type of weight and its source. I personally favor the scrap lead sheet for its ease of cutting to fit and to get the proper weight. Be certain to wash your hands after handling weights containing lead or cadmium and wear a filter mask if you doing something that will generate dust from lead or cadmium.

Weight Material	Price/oz	Comments
Commercial Hobby Weights	~\$2.00	Marked for weight.
Fishing Weights	\$0.25 to \$0.50	Smash with a hammer to flatten for gluing. Tend to be lighter than what the package says.
Sheet Lead Scrap	\$0.15 to \$0.20	Easy to cut to weight and bend to shape for odd spaces. Can buy on eBay. Usually need to buy about 10 lbs.
Auto Wheel Weights - New	\$0.30 to \$0.80	New wheel weights are self-stick. Marked for weight. New weights are steel and magnetic. Hard to trim or bend.
Auto Wheel Weights - Used	?	Various types available on eBay, lead, or steel. Usually sold in about 50 lb. lots.
Pennies	\$0.11	Cheap. Each penny is 0.09 oz. Not convenient to bend or trim.
Low Melting Point Metals	\$1.00 to \$4.00	Expensive. Some versions are toxic due to cadmium content.
Tungsten Powder	\$3.00 to \$5.00	Dense powder. Must be mixed with a binder.
Buck Shot/BB's	?	Must be mixed with a binder.
Sand	\$0.01	Low Density. Can be used as a load in open cars. Must be mixed with a binder.
Plaster	~\$0.10	Easily molded. Low Density.

Table 4



Photo 3: A variety of car weights. Left to right: Commercial weights, lead sheet, smashed fishing weight, sand, a steel weight from a kit, pennies, a steel washer, and a nut.

Steel weights:

Be cautious with using steel weights if you use magnetic uncouplers. The strong magnets used for uncoupling can actually move cars with steel weights and defeat the uncoupling. In some cases you may need to remove the steel weights that come with the cars if you are using magnetic uncouplers.

Attaching weights:

Most weights can be attached using either contact cement or double stick tape. Sand and other granules can be bonded with diluted white glue. Epoxy or plaster can be used to bond granules or powders that will be out of sight. If you are using sand or other granules to add weight in gondolas or hopper cars, you may need to put foam or balsa underneath as completely filling the car with the granular material may make it much heavier than needed.

WHEELS AND AXLES

There are three basic types of wheelsets:

Plastic wheels – These wheels collect dirt from track rapidly. Dirt can build up quickly to form a thick layer on the wheels that can cause poor rolling and derailments. Plastic wheels are soft enough that they can snag on irregularities such as switch points, resulting in derailments. They also cannot be used if you need the wheels for electrical pick up. In many cases wheelsets with plastic wheels are made to be cheap. This means that the axles are often carbon steel which is magnetic and subject to rusting. The axle points could also be rough and perhaps rusty. This results in high friction and will wear out the sockets in the side frames. You should replace all of these wheelsets with better quality metal wheels.

Sintered metal wheels – Sintered metal wheels are made by compressing and fusing a metal powder. These wheels are usually highly detailed, including such features as manufacturer's markings and ribs on the back of the wheels. Sintered wheels are only available with plastic axles. They are not quite as free rolling as machined metal wheels. They are also prone to rapid dirt pickup associated with electrical arcing.

Machined metal wheels – Machined metal wheels are free rolling with non-magnetic metal wheels and axles. They are normally insulated on one side, but some are available insulated on both sides. The metal used for the wheels is a non-magnetic alloy such as brass or nickel silver. The base metal is often plated for appearance or corrosion resistance. Machined metal wheels generally provide the lowest rolling friction and are the slowest to collect dirt.

Wheel Width, Diameter, and Axle Length.

HO wheels are commonly available in two widths. The NMRA standard width for HO wheels is 0.110" and often termed code 110. The NMRA also recognizes a "fine scale" standard wheel width of 0.088" referred to as code 88, and a rare "proto scale" standard wheel width of 0.064" referred to as code 64. Code 110 and code 88 are both wider than a perfect scaled down wheel which would

be 0.064" wide. The wheels are wider than an exact scale wheel to provide reliable operation on our less than perfect track. Code 110 wheels will run well on any track that is close to NMRA standards. Code 88 wheels will run well on very good track, but may have trouble on less than perfect track, especially on turnout frogs. Code 64 wheels require special track that is built to tighter standards than normal NMRA track.

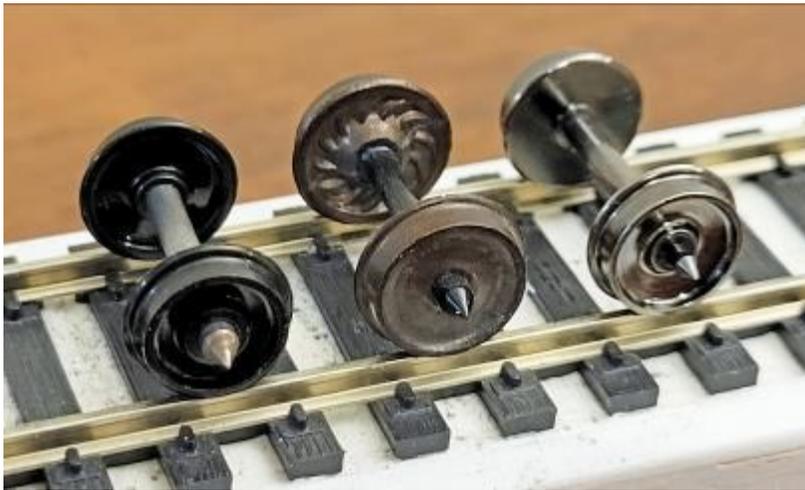


Photo 4:
Left: Plastic wheels from kit with rusted and rough cones on steel axle.
Center: Sintered wheels with plastic axle. Fins on back of wheel indicate that the prototype was made of iron.
Right: Machined wheels with non-magnetic axle.

The NMRA also recognizes wheel standards for scales from Z scale to 1"=1' scale. For many scales these include normal, proto, and fine scale standards. You can read NMRA recommended practices S-4.1 and S-4.2 for more details.

Wheels also come in several diameters corresponding to wheel diameters on full size cars. For many years almost all freight cars had 33" diameter wheels with 36" wheels standard on passenger cars. In recent times 36" wheels have begun to appear on high capacity freight cars to deal with the increased weight. A few cars even use 38", 40", or 42" wheels. In the other direction, 28" wheels have begun to appear on some freight cars with large dimensions, but light loads such as auto racks to improve their ability to run on tracks with limited clearances.

Axle lengths are a mess. To a great extent, the manufacturers often just do as they feel. NMRA RP-24.3 only recommends a "maximum" axle length of 1.035" for HO scale. The NMRA says nothing about most other

scales. European NEM 314 standard specifies a much shorter axle at 0.937" to 0.945" long for HO. Then Lionel HO came out with HO axles 0.983" long fitting neither US nor European sizes. Available US HO axles vary between 1.004" and 1.025" long. Available N axles vary between 0.526" and 0.576" long. These spreads mean that some wheelsets will not work in some trucks, and European HO cars will need different wheelsets than US cars. A few US HO cars use European axle lengths.

NMRA RP-24.3 again specifies only a maximum axle length of 0.562" for N scale. European standard NEM 314 specifies an axle length of 0.543" to 0.551". None of the lengths of replacement wheelsets that I could find meet the European standard. Almost all are too short. One is too long.

HO TRUCKS

Good trucks properly installed are essential for reliable operation.

Types of Trucks

Equalized Trucks

Wheelset Brand	Axle Length Inches	Comments
Kadee On30	?	Highly detailed sintered wheels, plastic axles, 24" Dia.
Intermountain O	1.792	33" Dia. wheels only.
Northwest Short Line O	NA	A variety of wheels in O scale and Proto 48.
USA Trains G	?	Highly polished.
Bachmann G	?	Narrow tread silver 1.28" actual diameter. Wide tread black 1.22" actual diameter.
Poki G	?	1.22" or 1.38" actual diameter.
LGB G	?	1.18" actual diameter. available solid, single spokes, or double spokes.
JB G	?	1.25" actual diameter.

Table 7: O & G Scale Wheelsets

Table 5: HO Scale Wheelsets

Wheelset Brand	Axle Length Inches	Comments
Intermountain HO	1.006	Very popular. Standard .110" width or fine scale .088" width. Available in bulk. 28", 33", 36", & 38" Dia. wheels.
Bachmann HO	1.01	Very free rolling. Can be hard to find. 33" & 36" Dia.
Bowser HO	1.025	Available in packs of 20. 33" or 36" Dia. Wheels. Some Bowser wheel sets have larger than normal axle diameter. Long axle may be good for some trucks but too long for others.
ExactRail HO	1.02	Available in bulk 28", 33", & 36" Dia. Standard .110" width or fine scale .088" width.
Kadee HO	1.015	Highly detailed sintered wheels, plastic axles, 28", 33", 36". Smooth & ribbed backs. 26" HOn3 available. Standard .110" width or fine scale .088" width.
JB HO	1.015 0.965	The specialty wheel company. Standard + special axles, resistor wheel sets, 40" & 42" dia. etc. .965" axles for European and a few US cars. Note: a bit long by European standards.
Walthers P2K HO Old	1.02	Plastic axle.
Walthers P2K HO New	1.01	Metal axle with a larger than normal diameter.
Tangent HO	1.004 or 1.009	33" & 36". Two axle lengths. Standard 0.110" width or fine scale 0.088" width.
Lionel HO	0.983	Strange axle length. 33" & 36" Dia. Too short for US. Too long for European.
Rapido HO	1.015	33" and 36" Standard 0.110" width or fine scale 0.088" width
Atlas HO	1.016	Unique design. Metal points are part of the wheels not the axle. Has a plastic axle between the wheels. Expensive.

Table 6: N Scale Wheelsets

Wheelset Brand	Axle Length Inches	Comments
Intermountain N	0.554	.554" axle in 33" & 36" Dia. wheels.
	0.537	.537" axle in 34.5" for Micro-Trains®.
ExactRail N	0.54	33" & 36" diameter. Available in bulk.
Tangent N	0.537	36" diameter. Available in bulk.
Rapido N	0.54	33" and 36" Dia.
Micro Trains N	0.53	33" Sintered wheels with plastic axles.
Kato N	?	Hollow axle.
Athearn N	0.5445	33" and 36" Dia.
Eastern Seaboard Models	0.54	33" and 36" Dia, Fine scale width.
Fox Valley	0.54	28", 33", and 36" Dia 4 axle lengths available.
	0.553	Standard wheel width and fine scale.
	0.563	Resistor wheels available.
	0.576	Available in bulk.

Equalization allows the two sides of the truck to move independently. This can be an advantage on poor track. Essentially there is a hinge on each side of the truck that allows it to twist. Most commonly this is accomplished with springs in the same manner as prototype railroad cars. For the modeler the problem is a truck that is less reliable. Springs can easily pop out. The springs also are not very authentic. To get the springs soft enough to function on a model or even compress to install them, the spring must be made from very small wire resulting in a less than authentic see-through appearance.

Most trucks of this type are older metal designs. This design was pretty common 50 years ago. Today we see equalization most often on Kadee trucks. However, there are a few plastic trucks with springs. Most notably the old Lindberg plastic trucks were pretty good.

Some Red Caboose kits came with trucks that snapped together from three pieces with a hinge on each side and no springs. It sounds like a good idea, but the execution was terrible. The sides flopped around and the wheelsets often fell out.

Today equalization is rarely seen except on Kadee's sprung HO trucks. Tichy does make an equalized truck with pivots, but I have never tried it. I have also never tried Kadee's springless equalized trucks.

Metal Trucks

Metal trucks are generally expensive and not as free rolling as most plastic trucks. They are usually very well detailed. They may be available to match unusual truck designs. This makes them desirable for that contest model you are building where you want the precisely correct truck design to gain a couple more points (Actually, trucks are exempt from judging, I am told – Ed.). Kadee trucks are of good quality and roll pretty well, though not as well as most plastic trucks. Some of the brass and older design metal trucks have poor rolling properties. You may want to save them for contest models or for on that car where you feel you just have to be authentic on the unusual prototype trucks.

Plastic Trucks

Most trucks that you will see today are rigid plastic. They are not equalized. They roll best when using metal wheels and axles. The quality varies from manufacturer to manufacturer. The design may also vary over time, or even different models from the same manufacturer at the same time. Athearn has been making plastic Bettendorf trucks for over half a century, and the newer, narrower trucks from Athearn may well perform better than the old ones.

HO Scale Replacement Trucks

Most of the time you will be able to use the trucks that came with your car, but you will occasionally find a need to replace the trucks. An old Walthers catalog that I looked at once listed over 100 HO trucks from various manufacturers. At a train show you may find even more if you search. Here are notes on a few common replacements:

Tichy

Tichy makes ten different truck designs. Sold without wheels, they are very free rolling and reasonably priced. They are available as pairs or as a set of ten trucks. They do have higher than NMRA standard bolsters, which can occasionally be a problem. I recommend the rigid trucks but not the equalized designs.

Accurail

Accurail sells Bettendorf, Roller Bearing, and Andrews trucks. In my experience, these are not quite as free rolling as Tichy, but still pretty good. They are available without wheels directly from Accurail as well as through dealers. The trucks without wheels are available in quantities of 24, 100, or 200 trucks for prices well under a dollar each. A single pair costs \$3 with plastic wheels that would need to be replaced. Accurail trucks are a great buy if you need a lot of trucks.

Tahoe

These are the Rolls Royce of replacement trucks. Tahoes are beautifully detailed in sixteen different designs. Tahoe trucks are specific as to ratings, details, and manufacturer of the full-size truck. For example, Tahoe does not have just a generic Bettendorf truck. They sell a 50-ton Dahlman 2 level truck with lateral motion. They also have several other Bettendorf types and more. These trucks are the freest rolling that I have found. They come with high quality code 110 or code 88 wheels for \$10 to \$12 per pair.

Kadee

Kadee trucks are metal trucks that are not the freest rolling and are equalized, but they are of good quality and very available. They are also nicely detailed and have wheelsets with details that others do not have. The wheelsets include cooling fins for iron wheels and manufacturing dates on the sides just like prototype trucks. Kadees are available in ten very specific designs. Kadees cost around \$8 per pair including wheels. Kadee has now come out with a plastic truck that I am not familiar with.

N Scale Replacement Trucks

As an HO modeler, I have too little knowledge about N scale trucks to include them here.

HO SCALE COUPLERS

Kadee Couplers

Kadee is “the” coupler company. They have a high-quality product available in designs to fit just about any application. Kadee also makes couplers for HO, N3, S, O, On3, No. 1, and G scales. Micro-Trains is a Kadee spinoff that is the top coupler manufacturer for N scale.

The Kadee No.5 coupler has been the standard coupler for HO. Most of the other Kadee couplers use the No. 5 head design with alternate shanks and draft gear to fit different applications. The No. 5 head has been around for over 50 years. Recently Kadee has introduced the No. 58 head which is smaller and closer to scale though still larger than an exact scale coupler would be. The No. 58 head is compatible with the No. 5 head. Kadee couplers are metal and quite strong, but Kadee is starting to introduce high quality plastic shanks on some couplers while retaining the metal knuckle. In total, Kadee has over 60 different compatible couplers for HO and an elaborate guide for which coupler to use with which car or locomotive.

Kadee also makes magnetic uncouplers, tools for working on their couplers, a coupler height gauge, and washers in 0.010” and 0.015” thicknesses for adjusting the height of the couplers.

As Kadee’s patents have expired, many other companies are now making couplers that are more or less compatible with the Kadee No. 5. These couplers are usually plastic, and some are not as strong as Kadee’s. In particular, some of these couplers use a small plastic tab as the spring for the coupler knuckle. After a while this tab takes a set and doesn’t close the knuckle as it should. The better competing couplers use a coil spring like the Kadee spring. The competing couplers also are not available in the varieties for different applications that Kadee offers.

The competing couplers are compatible with the Kadee No. 5 head, but some are not compatible with the No. 58 head. In some cases, two competing couplers that are both compatible with Kadee No. 5s are not compatible with each other.

In recent years, Kadee has begun to produce couplers with a plastic shank but retaining the metal knuckle. These are mostly couplers with offset shanks and the No. 5 knuckle and spring. I suspect that Kadee has carefully tested these for reliability. The couplers with whisker springs are still all metal.

Sergeant Couplers

Sergeant makes a coupler which is closer to scale than any of the Kadee



Photo 5 Couplers with #5 head left and #58 head right.



Photo 6 Coupler with plastic tab for spring.

products. It is also more difficult to use. Not many people use Sergent couplers and currently many of its products are shown as unavailable on Sergent's website.

NMRA X2F Coupler

In the 1950's it seemed that each HO manufacturer had its own coupler design. These designs were mostly incompatible with each other. The NMRA created the X2F design as an economical open source design coupler. This coupler was quite popular for a while due to its low cost and adoption by many major manufacturers. However, it was not at all realistic and coupling created quite a bit of side force resulting in occasional derailments especially when coupling. After Kadee's patents expired, the X2F pretty much disappeared from use. You may see these couplers on used cars or old kits that you purchase at train shows or online. You will want to upgrade to Kadees.



Photo 7 NMRA X2F Coupler.

European HO Couplers



Photo 8 European Hook and Loop Coupler.

There are several different European couplers for HO and OO trains. The only one that you are likely to see in the US is the hook and loop design that Bachmann uses on Thomas the Tank Engine® and Chuggington® trains. This coupler appears to be a plastic copy of a metal coupler that Varney used in the 1950s. It is a pain to uncouple without a special uncoupling ramp. Your skewer or screwdriver for uncoupling knuckle couplers will not work. Peco's SL-29 uncoupling ramp can be found on eBay, or you can make your own ramp. Peco does not seem to list this uncoupling ramp in the US.

N SCALE COUPLERS

Micro-Trains

Micro-Trains started out as an N scale division of Kadee. Pretty much everything I said about Kadee is true for Micro-Train couplers, but Micro-Trains couplers are plastic which are probably strong enough for the light weight of N scale cars.

OTHER N SCALE COUPLERS

Unlike HO, there is not as much standardization in couplers for N scale. Atlas, Accumate, Kato, Athearn McHenry, and Bachmann EZmate are all options. These couplers may or may not work together. I will leave it up to an N scale modeler to provide an article about the strengths and weaknesses of these.

What's Next?

In Part II of this article, which will appear in the next issue of *The Local*, we will show you how to put all of these parts together to create the most operational and reliable boxcar possible, using an Athearn HO "blue box" kit.

Let's Go to The Look South 2022 MER Convention!

By Bob Halsey, CSD

By now you know that one of the highlights of the upcoming October MER (Mid-Eastern Region) Convention will be a guided tour of the North Carolina Transportation Museum (NCTM), which is the former Southern Railway main maintenance facility, and one of the wonders of the railroad world! On a mid-May weekend, there was a model train show at NCTM, with many vendors and several large layouts set up, including the Metrolina club, the Concord Area group's modular layout of which two of their modules are outright works of art, and the S-Gaugers. There were also several individuals from the Carolina Southern Division giving demonstrations of various modeling skills. You wonder if all this activity could be contained in one building? Yes, it could, because the Southern Railway backshop was the largest industrial building in the state until just a few years ago. And it is only a few feet away from the 37-stall roundhouse (the largest in North America) with its 100' diameter turntable. About ten years ago, Norfolk Southern celebrated their Heritage Week by having an ES-44 Diesel on each of the 37 tracks. The engines were freshly painted in the colors and lettering reminiscent of the original predecessor roads that combined to become NS (Norfolk Southern). It was a very impressive display, especially to those of us fortunate to see it. They have continued operating those historically colored engines in regular revenue service ever since.

Of course, as usual, during the show, the museum was running the seven-car passenger train (four older heavyweights with triple-axle trucks and three of the later streamlined heavyweights, all pulled by one of the museum's diesels) on its 10-mile round-trip from the authentic passenger station on the grounds. The volunteers in the roundhouse are still restoring several steam locomotives, although my favorite engine is the old electric boxcab. You can see all of these on the tour!

While I was at the show, I talked to a group of vendors and attendees about coming to the MER Convention. One of them indicated that they already had a hotel room reservation even though the registration form wasn't yet on the website. So, they didn't need much convincing! By the time you read this, the Look South 2022 registration form will be there on the [website](#). We are lining up the last few clinics now. In fact, you can find the reservation form right here at the end of this article.

We will have a model contest room, a "general store" (formerly White Elephant room), and four complete layouts in the hotel ground floor. The hotel also has a swimming pool, so don't forget your bathing suit. You may also want to go for a raft ride at the National Whitewater Center, which is a short ride from the hotel. Our members' layouts available for visiting are pretty spectacular, and I have seen a number of them. We are also expecting to welcome quite a few attendees from our neighboring Southeastern Region, since many of them are closer to Charlotte than those of us in the northern part of the MER.

Don't hesitate to bring your non-railroad modeling family members, because as mentioned in our previous Convention-related articles, there are many interesting places to see and things to do in this area. Not only the NCTM tour, but the Newton Depot, the Narrow-Gauge Museum and all the layouts in the Model Railroad Center building will provide a ton of entertainment for the whole family. For lunch, the Depot Diner right across the street can provide a delicious meal. After refueling, you will be ready to spend the afternoon visiting some fantastic member layouts. On your registration form, don't forget to sign up for the Saturday evening banquet for a fun and interesting evening.

The Carolina Southern Division is making every effort to ensure that this will be one of the best conventions ever! Make sure you have Oct. 20-23 marked on your calendar. If you have any questions, go to <http://www.carolinasouthern.org/> and click on the convention link.



Photo-1 - Passenger train at NCTM station (Barber Junction)



Photo-2- NCTM has classic cars, trucks, wagons, airplanes, in addition to many railroad engines and railcars

MER 2022 Convention Registration Form



Mid-Eastern Region, NMRA 2022 Convention
CAROLINA SPECIAL



October 20th to 23rd, 2022

www.carolinasouthern.org/MER2022.html

Use Online Registration for Secure Payment and Most Up-To-Date Activity Availability

Please enter (print legibly) all names **as you wish them to appear on your registration badge(s)**. They will not be changed at the convention.

Primary Registrant: _____ MMR? Y / N, Title for Badge _____

Significant Other Attending (living at same address): _____

Children Attending (18 & under - list all + age): _____

Registrar's Use Only!	Address: _____
	City: _____ State: _____ Zip: _____
	Phone #: _____ E-mail: _____
	NMRA #: _____ Region: _____ Division: _____
	Favorite Scale: _____ Is this your first MER Convention? _____

Description	ID	Cost	Qty	Paying
Registration (___ \$50 thru Aug 31, ___ \$55 Sep 1 – Oct 6, ___ \$60 On-Site Oct 20 – 23)				
Spouse/Significant Other (Name)		\$0		No Fee
Children 18 and Under (Name & Age)		\$0		No Fee
Banquet – Saturday Night ___ Pulled Smoked Pork Shoulder ___ Grilled BBQ Chicken Breast ___ Roasted Veg Lasagna	401	\$55		
Call Boards / Ops – See Convention Web Site for Latest Information	-----	-----	---	-----
Extra Fare Clinics – Registration Required, Further Information on Web Site	-----	-----	---	-----
Build a Craftsman Kit Section House ___ N (\$20) ___ HO (\$25) or Crossing Shanty ___ N (\$15) ___ HO (\$20)	601			
Ready a Freight Car Kit for Your Layout	602	\$15		
Prototype Tours – Further Information on Web Site	-----	-----	---	-----
North Carolina Transportation Museum (Thu 12:30p – 5p)	201	\$15		
Unifour Special Tour (Fri 7a – 5:30p)	202	\$65		
Would You Like To Be A Contest Judge At The Convention – Circle - YES or NO	----	---	---	-----
Have You Been A Contest Judge In The Past – Circle - Yes or NO	----	---	---	-----
TOTAL			➔	

Online Registration – https://mer-nmra.com/mer_convention_2022/. Please refer to COVID-19 and cancellation policies online.
 Print registrations must be accompanied by check payable to MER Conventions. Send to: MER Conventions, PO Box 426, Sykesville, MD 21784-0426
 Any questions and/or additional information, e-mail to mer-registrar@mer-nmra.com or call 410-442-0446.
 Hotel – Hilton Charlotte University Place, 8629 JM Keynes Drive, Charlotte, NC 28262, 704-547-7444 Reference-MER NMRA 2022 Convention.
 Online Reservations <https://www.tinyurl.com/MER2022Hotel> Room Rate - \$115.00 night + tax.
 Further information at: www.carolinasouthern.org/MER2022.html.



Photo-3- Pullman's 200,000th railcar was delivered to Southern Railway



Photo-5- Turntable in operation (showing 1/3 of roundhouse)

Photo-4 -Boxcab, steam engines, and diesels in the round-



Photo-6 - Old steam locomotive

Modeler's Haven

By Greg Warth

[This section covers tips, tricks, suggestions, and new products submitted by our members and editorial staff that may be helpful to modelers of all scales. Text written by the Editor unless otherwise noted. -Ed.]

On Board Train Camera:

If you like to take videos from the cab of your locomotive (the engineer's perspective), you have probably been hindered by the size of the camera and the difficulty in mounting it to the top of your locomotive. In addition, you would not be able to see the video in real time. You would have to wait till the loco comes back to you after the video is recorded, remove the camera, remove the SD card, put it in your card reader and bring it up on your computer to see the video. If it is too dark or if the color is not right or if the video is tilted, you have to start over again.

What if there was a camera with such a tiny lens that you could fit it on to the cab window and it could project the image to your computer or even to your friend's computer on the other side of the country in real time? There actually is such a device, made by Tom Chalabi at choochoovision.com. He also has a stand-alone camera that you can place anywhere on your layout hidden in a building or in the scenery to catch the action, like in the yard, for example, where a switcher is working nonstop to move cars onto a consolidation track. You can even configure your camera to be wired to pick up power from your DCC track, so you never have to charge it. And you can project the video from your layout to anywhere in the world. Check out the web-site with the link mentioned above.



View from Cab Camera.

Camera body mounted on top with lens on front.



All photos used with permission from Choochoo Vision.



Camera hidden inside with lens installed on front.



Automatic control of two or three trains on the same mainline without crashes:

If you want to display your layout at a train show, for example, or even just to show it off to your friends and family, you may want to run two or three trains on the same loop. If you do this without operator control, eventually, the trains will catch up with each other and cause crashes. The addition of sensors and automatic circuitry can solve this problem for you, and you don't have to be an electronic genius to do it. Companies like [Azatrax](http://Azatrax.com) and [Dallee Electronics](http://DalleeElectronics.com) can show you how.

Modeler's Haven *(continued)*

Flex track tips:

Use full length sections for long runs whenever possible rather than connecting smaller pieces of sections that you just happen to have lying around.

When cutting it, err on the side of making the rails a little longer than you think you will need. You can always nip tiny pieces of the ends off if you need to as you are laying it down.

Avoid the temptation to use it to make curves less than 22" radius if possible.

Use a straight edge like a yardstick to lay flex-track in a straight line.

Fasten it temporarily with pins and test it before securing it permanently with glue or multiple track nails.

Don't solder every joint if you can avoid it. The track needs space to expand and contract slightly in different seasons.

Cut off a small plastic piece of the rail ties at the end of each section *before* you lay the track down so you can insert rail joiners. This is much more difficult to do afterwards. Save those pieces of rail ties so you can re-insert them under the rails at the joints so you won't be missing any ties.

If you are using flex-track to make S-curves, make sure the middle part of the S is perfectly *straight* for at least one full car length in between the two curves of the S.

Layout design:

Design your layout before you start laying track to help you avoid do-overs later.

You can use good old pencil and paper if you wish or you can use one of the many versions of track planning software that are available, some of which are free to download and some of which can be pricy depending on the features you desire. Here is a list of some of the more commonly used track planning software programs to consider:

[Atlas](#) – Easy to use, downloadable demo, 2D and 3D, can generate a shopping list with the exact number of pieces of track and turnouts you need after your plan is completed. PC only*.

[Anyrail](#) – Might be the most user friendly, limited version – downloadable for free, Multiple predefined libraries, Windows PC only.

[XTrkCAD](#) – Free, downloadable, can use on Windows, Mac or Linux. Predefined libraries, ability to test your design by running trains on it, extensive online instructions.

[Railmodeller](#) – Mac only, extensive pre-defined libraries, sharable community layouts, exportable to JMRI, generates shopping list.

[SCARM](#) (Simple Computer Aided Railway Modeler) – PC only, 2D and 3D, simulator available, downloadable, easy to use, free-ware (limited), buy license for more features. Has lots of pre-designed track plans.

[RR-Track](#) – PC only, 2D and 3D, train simulation, pre-designed libraries, multiple views, curve calculator, downloadable.

[Cadrail](#) – PC only, 3D views, photo backgrounds, steeper learning curve unless you already are familiar with CAD, downloadable free demo.

[3rd Plan-It](#) – Downloadable demo version, requires Windows PC, easy to use, sectional and flex-track, can create layout splines with laser cutters, curve calculator.

[TrainPlayer](#) – Downloadable free demo, PC only, great for adding scenery, can create a virtual layout on your PC, run trains, learn yard operations, can create modular layouts, nice artwork.

[Wintrack](#) – Free demo downloadable, great 3D views, catenary libraries, create your own tracks and turnouts, create your own 3D structures, PC only.

[Templot](#) – Generates infinite types of templates. Great for building your own tracks, turnouts, crossovers, slips or sections of track to fit between others in any gauge, any radius, any prototype, or any period. PC only.

Modeler's Haven *(continued)*

So, which is the best?

It depends on your personal preferences, how much you are willing to spend, and what you want to do with it. If you want a virtual desktop layout that has the best scenery and you would like to run operating simulations on it, you may want to choose TrainPlayer. This would be the next best thing if you are unable to build your own physical layout right now. I suspect the best overall program is 3rd Plan-It which is very popular and probably has the most features. If you want something simple and inexpensive, try Anyrail, Atlas, XTrkCAD, or SCARM. If you have a Mac, use Railmodeller or XTrkCAD. If you need templates to handlay track and turnouts, Templot would be the way to go.

**Most of the programs listed above require a Windows operating system on a PC. However, keep in mind that you can get around this by using Bootcamp, Parallels, VMWare Fusion, or Crossover on your Mac. These programs help you establish a virtual PC desktop on your Mac that will allow you to run any of these PC programs.*

Pro-Tech DC Signals:

These [Pro-Tech](#) True Scale photoetched bi-color (Green/Red) LED two-wire signals are designed to be used in pairs with a DC layout or DC power pack (2-16 volts) with a reverse (polarity) switch. You can wire signals to DC power (either track or transformer) to show either a green or red signal - green for trains traveling in the direction of facing signals, and red for trains approaching from the opposite direction. Whichever direction the train is running, the signal will automatically change to the appropriate color. It only works for DC power, not for AC or DCC. (Don't ask me how I know this.) These are also available in green/off configuration and in HO or N scale. <https://youtu.be/03U7x7o74hE>



True Scale "Bi-Color (Green/Red) LED" Searchlight Signal (HO Scale) (photoetched). Photo used with permission from Pro-Tech.

Lee Hall Depot: Part 1

A Diorama by the Tidewater Division

By Roger Bir

Any model railroader worth their railroader salt in the Hampton Roads area can tell you something about the [Lee Hall Depot](#) ([Photo 1](#)). For starters, it was built in 1881 by order of the Chesapeake and Ohio Railroad, recently renovated, and is located on the peninsula in Warwick County at 9 Elmhurst Street, Newport News, VA.

Back in April of 2021, the [Tidewater Division](#) received a request from Mary Kayaselcuk, the historic site coordinator of the [Lee Hall Depot](#).

In her letter, Mary asked the following, "As part of the Lee Hall Depot's interpretation, the room above the agent's bay will highlight the village of Lee Hall that developed as a result of train service to this portion of the county. This second-floor space with six windows has the same orientation as a century ago and offers an exceptional opportunity to compare/contrast then and now. The collection includes a sketch of the village and photos of significant structures from that time. The exhibit concept features a stationary HO diorama ([Photo 2](#)) of the village, c. 1920. The layout would be on a raised beadboard-covered base; the table portion would be approximately 4'-5' x 8' and include a dust cover. The city would build the case, which will have 360-degree access. However, the project needs a person/s skilled in model building to create replicas of structures for which we have images: the station, general store, and about two dozen houses. In addition, it should include tracks, a period C&O train, cars, wagons, and figures (to include RR employees, passengers, Ft. Eustis soldiers, and area civilians such as farmers, school children, etc.). Might this be something your club would possibly undertake?"

As Mary's luck would have it, the Tidewater Division's Board of Directors was scheduled to meet the very next day. After a brief discussion, the board accepted the gauntlet, and Roger Bir was named the project lead. Like any undertaking by someone in our beloved hobby, there were multiple challenges regarding the way forward. Luckily, the division has several members who belong to the [C&O Historical Society](#), and the project lead is good friends with its president, Tom Dixon Jr.

The project had several main concerns, some of which were quickly answered. The era was already established (circa the 1920s), and the diorama's size was determined as well (42" x 84"). The last point, would this diorama be operational? The area size and overall costs quickly ruled out any operational aspects.



Photo 2 – Lee Hall Depot, circa 1920

It was decided early on that the diorama would be a static display. The project lead met with Mary to discuss precisely what buildings would be part of the display. Two buildings, the Depot itself and the Boxwood Inn (the original Curtis House), are still standing, and several homes are located along York County Road. The H.M. Clements ([Photo 3](#)) general store (and two outbuildings), Watt's Chevrolet Dealership, and the town water tower have long since vanished. Due to space limitations, it was decided to build just eleven homes for the diorama.

An email was sent to Tidewater Division members requesting their input, assistance, and technical expertise for the project. Dale Ridgeway, MMR volunteered to build the Curtis Home ([Photo 4](#)), or as it is now known "The Boxwood Inn." Luckily, the structure still stands, so multiple pictures were taken, and the project started. There would be a couple of challenges as several buildings have long since been razed as mentioned above. With no visible structure for reference, the modelers relied upon pictures provided by the Lee Hall Depot Historical Society. Taking photographs in hand, George Downer set out to model the H.M. Clements store ([Photo 5](#)). The structure was completed and forwarded to the project manager in eight short weeks. Dale Ridgeway presented the Division Board with the completed Curtis Home in late December. Several of the homes ([Photo 6](#)) have been completed, and the



Photo 1– Lee Hall Depot – Under renovation

last to be started is the Depot itself.

In addition to those members who served as builders, a heartfelt thanks go out to those in the division who donated materials towards the overall construction of the diorama. Without their generosity, efforts towards the project timeline would have never been met.



Photo 3 – H. M. Clements General Store

The project lead then contacted the C&O Historical Society to get their perspective and input regarding what kind of operations would have been held at the Depot during the 1920s. Special thanks are given to COHS director Tom Dixon, Jr. and his support staff for providing multiple examples (pictures) of C&O Railroad operations during the specified time.

In May 2022, Lee Hall Depot celebrated [National Train Day](#) at its facility. As part of the celebration, those static buildings completed ([Photo 7](#)) were placed on the diorama platform to allow visitors to see the project's latest stage. Unfortunately, the project has endured a fair share of delays, as those who were volunteering had to take multiple personal emergencies. Luckily, perseverance has prevailed, and we are hoping to be able to complete the project by mid-Summer 2022. [This is a great example of how divisions can become involved in creating and building community projects from scratch. Watch for Part 2 in a subsequent issue of *The Local* to see the completed project. -Ed.]



Photo 4 – Curtis Home



Photo 5 H. M. Clements Store, Scratch-built



Photo 6 – Group Picture of Several Models Built for the Project. (There will be eleven altogether.)



Photo 7 – Preliminary Display Presented on National Train Day

Locomotive Maintenance

HO AHM New Haven F Unit

By David Strohmeier

This article is going to cover the maintenance of an HO AHM New Haven F unit.

Tools you will need:

- Small regular screw driver
- Tweezers
- Needle nose pliers
- Light and medium oils (plastic compatible)
- Gear oil or light grease (plastic compatible)
- DC transformer
- Electronics cleaner
- Armature cleaner or pencil eraser
- You may need a soldering iron
- Plastic glue

Let's get started.



Photo 1

First thing I do is take photographs of the engine (**Photo 1**). This way if something falls off, such as handrails, horns, truck sideframe details or other accessories I know where they go.

Second thing I do is test the engine to see if it runs and if the lights work. This is just a short test at low to medium voltage. Don't try to force the engine to run with a lot of power. If it's not running find out why, i.e., is there a broken wire, burnt out motor, etc.

Next, separate the cab from the frame.

On what would be the sides of the engine fuel tank, there are four square holes and if you look at these there are four (two on each side) square pegs that fit into them. The sides of the cab have to be pulled apart to dislodge these pegs from the square holes. While separating the sides of the cab gently shake the engine so the weight of the engine frame drops down. You have now separated it and you will be able to see the wires, motor, and headlight.



Photo 2

This is where I take more photos of this (**Photos 2, 3**) in case some wires break, and I need to know where they are soldered to later. You see a red and white wire. These go from the wheels to the headlight and then to the motor. Check to make sure none are broken or unsoldered. If they are, repair them.



Photo 3

Next, remove motor and trucks.

Front truck removal.

Rotate the front trucks 90 degrees and remove from groove. If you need to re-solder the headlight wires to the headlight bracket, I would suggest disconnecting the holder from the plastic so you don't melt the plastic. If your headlight didn't work during the initial test this is a great time to test the bulb to see if it works. If not, replace it. If it works but it didn't during the initial check, your wiring from the wheels to the light may be the problem. It may be with the pickup tangs that touch the inside of the wheels.

Clean the wheels and pickups at this point with denatured alcohol. Put a very small drop of light oil on the axles of the truck and replace.

Replace the bulb and bracket.

Removal of rear drive block and/or truck.

There is a very tiny pin near the rear of the frame that holds the truck in place. With a very fine screwdriver or punch, push that pin out to one side till the truck drops out. Take photos ([Photos 4, 5](#)) of the motor, especially the placement of the brushes, brush spring and insulator if you are going to take the motor apart to replace brushes. Take note of which side the wires attach to. If you forget, refer to your photographs. You do not want one of your engines running in one direction and another one going in the opposite, unless you need it to run that way.



Photo 4



Photo 5

Clean the armature and brushes with a cleaner that is plastic compatible. I use Nitro Force®. You can use an armature eraser or pencil eraser to clean the commutator where the brushes touch. This should be a nice shiny copper color. The wires on the armature should also be a nice shiny copper color. If they are black or blue colored, they are shorting or shorted out, and you need a new motor or armature.

Gear inspection.

Remove the two regular screws on the bottom of the truck and check for gear wear or broken gears. To lube this drive block just put a very small drop of light gear oil on the gears in a few spots and where the axels go thru the truck. Add a small amount of light oil at top of motor. Hint: when you run this engine and you hear constant click or a consistent lurching of the engine it maybe a broken plastic gear. Reassemble the truck and reinstall in the frame. Clean the wheels as you did with the front truck.

If you wish to clean the cab, use some soapy hot water and soft toothbrush. Do not rub too much on the decals as you might rub them off. Rinse and let dry.

If you have a windshield that has become loose, use a plastic weld glue to replace it.

Test your engine to see if it is running. If it is, replace the cab and you are set to go.



David Strohmeier

MER Division Reports

New Jersey Division

Yearly Division Report

June 2021 – May 2022

Meeting Times and Places:

Saturdays, September, November, January, March and May

9AM – Noon In person meet [or by Zoom during certain COVID pandemic periods]

1PM – 4 or 5PM individual local to the meet layout visits toured

For the present, we simulcast in-person meets on Zoom for members unvaccinated; who have health issues or vulnerable to transmission; distance to meet from home; or other reasons

Meets are located around our large geographic division of 10 counties in southern New Jersey. We try to locate meets in certain places depending on the number of members in a cluster of adjoining counties. The board constantly assesses membership by county and seeks venues depending on that data and past attendance records.

The division generally meets once per year with adjoining divisions. We meet with the Philadelphia Division once per year, alternating hosting in locations near the dividing Delaware River. The division also shares hosting with the Garden State Division of the Northeast Region of NMRA at the May meet, with locations alternating each year near the region's border. In many cases, members from each division frequently attend other meets in these divisions and the reciprocal associations benefit all with additional learning opportunities plus friendships.

Change in Officers:

Note: All officers are elected from the board of Directors. The directors elect the four officers: Superintendent, Assistant Superintendent, Paymaster and Clerk. Directors serve for two year terms with half running for office on alternating years each summer. The directors nominate and elect the officers at the division annual meet in September.

Superintendent:

William Grosse, Jr. to John V. Gallagher in June 2021

njdiv.super@gmail.com 856-261-2668

Assistant Superintendent:

John V. Gallagher to Michael Prokop

njwrr@aol.com 609-610-2687

Treasurer/Paymaster

Michael Prokop to Thomas Neukirchen

t.neukirchen@aol.com 609-273-7402

Secretary/Clerk

Joseph Zebrowski

trackjack@comcast.net 609-744-3236

Director – Membership

Geert Marien

geert@mindspring.com 732-834-9845Director – Technology

Rick Stoneking

stonekingr@comcast.net 856-296-9291Director – Editor of *Train Orders* [the New Jersey Division Newsletter]

Fritz Plenefisch

fplen3@verizon.net 609-585-7660Director – Contests

Jack Menaker

jackmenaker@yahoo.com 732-908-6517Achievement Program Coordinator

P.J. Mattson, MMR [not a director]

pjmattson@comcast.net 856-467-0421**Achievement Program Highlights:**

With the COVID pandemic, the division was challenged in the judging and reporting of the achievements of members in the Master Modeler Railroader program. While members used the confinement time to do focused modeling, the submissions for judgement declined. The following certificates were awarded during the period of this report:

Golden Spike – 2

Volunteer – 1

Author – 1

There are a number of applications in process at NMRA at this time, to be reported in next year's report. To improve the judging this next year, a group of members stepped forward to learn the role and processes of judging. Geographically, access to judging will improve for applicants.

Activities of the Past Year:

The COVID pandemic still affected the meet programs and venues during the year of this report. We did hold meets in person, reported below, but had to cancel the January in-person meet with a dramatic spike in COVID cases that month. Even with masking and distancing, our in-person meet attendance was about half our normal attendance, averaging about 38.

September 2021 – Lacy United Methodist Church; Forked River NJ

November 2021 – Switlik Park, Yardville NJ

January 2022 – Grace Episcopal Church, Merchantville NJ – Cancelled due to COVID – broadcast via Zoom

March 2022 – Switlik Park, Yardville NJ

May 2022 – Camp Evans, Wall Township NJ

Clinic Programs:

September – Live Steam principles and operations; Division Annual Meeting

November – Works in Progress simultaneous clinics – Improving commercial turnouts; Building and improving laser structure kits; Building structures using Cricut machines; Servo applications in model railroading; History and model railroading; Making your own keep alive circuits for DCC.

January – on Zoom – Tilt Up construction of structures, prototype and model; Hosting open-house layout procedures

March – Prototype procedures in model railroad operations; Garden railroad construction and operations

May – Joint meet with the Garden State Division [Northeast Region] with NJ Division as host – one clinic offered by each division: Blended Backdrops using Photo prints and acrylic paints; Planning a layout using CADRAIL.

Special Projects or Working with Other Organizations

We didn't join with the Philadelphia Division for a joint meet this year. As reported above, we hosted the Garden State Division at our May 2022 meet where they attended the morning program, provided a clinic, and visited layouts in the local area in the afternoon. Next year, the NJ Division members will travel into the Garden State Division for their hosting a joint meet. With these joint meets, we have developed friendships and frequently attend other meets in their respective divisions, furthering our hobby learning and enjoyment.

New Ideas

As described above, COVID forced us to use Zoom as an alternative for in-person meets. Since our membership is generally considered "elderly," members stayed away from group meets to protect themselves or to protect vulnerable family members by not exposing them. In cancelled meets, up to about 30+ members attended via Zoom. We decided to simulcast meet activities and clinics via Zoom during in-person meets for those still needing protection. We are still learning, improving audio, limiting background noise, and getting clinic presenters to attend to the problems of clearly showing a demonstrated activity on camera.

MER Support

Keep up the quarterly division superintendent's Zoom meet where we can share ideas and learn how other divisions serve their members. Let's get more divisions involved.,

John V. Gallagher

Superintendent, New Jersey Division

Potomac Division

Yearly Division Report

Reporting Period: 01-01-2021 --- 12-31-2021

Division: Potomac Division

Meeting Times and Places.

Our Annual Meeting was held this year by Zoom.

Annual Elections were handled by physically mailing ballots to every member of Our Division. Passage of the revised// re-issuance of Bylaws was approved at the Zoom annual meeting.

Board Meetings resumed by means of Zoom and were regularly held on a monthly schedule.

Change in Officers from last year (including AP Coordinator).

Contact information:

Name	Address	Contact Info	Position	NMRA Number
Martin Brechbiel, MMR	3404 Monarch Lane Annandale VA 22003-1155	703-309-3082 Superintendent @potomac-nmra.org	Superintendent	114353
Alex Belida, MMR	705 New Mark Esplanade Rockville MD 20850	301-424-8164 sr-asst-super @potomac-nmra.org	Senior Asst. Superintendent	167742
Ernest Little, MMR	10162 Woodbury Dr Manassas VA 20109-3724	571-383-7316 asst-super @potomac-nmra.org	Asst. Superintendent	129108
Nick Kalis	1420 Spring Hill Rd Ste 600 McLean VA 22102-3030	703-585-0100 Clerk @potomac-nmra.org	Clerk	092783
Jerry Stanley	11552 Hereford Ct Hume, VA 22639	Paymaster @potomac-nmra.org	Paymaster	142333
Mathew A. Thompson, MMR	13000 Triple Crown Loop Gainesville, VA 20155-3207	703-743-1895 achievement-program @potomac-nmra.org	AP Coordinator	081125

Division web site address

<http://potomac-nmra.org/PDnewsite/Main/Home.php>

Membership (Number of members including the change from the previous year. Membership recruitment activities conducted during the year.)

According to the roster extract provided to the Division from the MER:

November 2020 --- ~275

November 2021 --- ???

However, it is also clear that our membership Roster data that filters down to the Division through the MER is not at all accurate and varies significantly from month to month. Members that are listed one month, disappear, and return later. New members appear and then disappear. Members known to be correct are missing and Life members are missing. This information when detected has forwarded to the MER Business Manager without our knowledge of any further action taken by anyone anywhere.

We make every attempt to recruit new members at every open house and other events; membership forms, NMRA benefits, and a Divisional brochure are available at every event.

The Division will hold elections again in April 2022. These will be conducted by electronic voting by our members with ballots being sent those members that deign to provide the NMRA with an email address.

Per the new bylaws approved in 2021, the elections will be for two specific positions: Assistant Superintendent and Paymaster. An election committee has been formed to oversee nominations and the election.

Financial.

Dollar amount in bank at end of the last accounting period was \$5,679.95.

We do not charge for any event or service. However, to cover costs of venues in the future we will be accepting donations. Clinicians do charge to cover material costs at Jerry Stanley's hobby barn this year.

Our Division members along with members of the one operating round robin group stepped forward to generously provide direct financial support the acquisition of a Zoom license for the Division.

Achievement Program 2021 highlights:

Master Model Railroader – Alex Belida, MMR #685

Achievement Program Certificates:

Volunteer	-	Alex Belida, Jerry Stanley
Civil	-	Ron King , Rich Steinmann, Alex Belida
Electrical	-	Rich Steinmann, Bryan Kidd
Scenery	-	Rich Steinmann
Chief Dispatcher	-	Bryan Kidd

Activities from the past year.

After our meet in March of 2020, most in person activities ceased within the Division. Virtual Clinics were held throughout 2021. In person clinics took place in a very controlled limited attendance setting (4-6 persons) at our Paymaster's Hobby Barn. We held a Joint in-person Meet with the James River Division in November attended by some 50 members of the two Divisions. Masks were required.

Division Events 2021:

Sunday February 21st, 2021 Virtual Clinic 9, 3pm – John King – Track Arrangement & Operations

Saturday February 27th, 2021 Make & take 10am In person – Martin Brechbiel – Building a flat car; Scratch building Jerry Stanley's Hobby barn, Hume, Va.

Saturday March 13th , 2021 Make & take 10am In person - Cam Green – weathering, Jerry Stanley's Hobby barn

Sunday March 21st, 2021 Virtual clinic 10, 3pm – John Sethian – Art & Technique or lighting Building and streets

Saturday April 10th Make & Take 10am In person - Ken Wilson - Painting Back drops Jerry Stanley's Hobby barn, Hume Va.

Sunday April 18th, 2021 Virtual clinic 11 Tony Koester – Update on the Nickel Plate

Saturday May 8th Make & Take clinic 10am In person – Earnie Little – TBD – Scratch building a car in Styrene at Jerry Stanley's Hobby barn, Hume Va.

Sunday May 16th, 2021 Virtual clinic 12 Mat Thompson Layout tour

Saturday June 5th, 2021 Make & Take clinic 10am In person – Jerry Stanley – TBD – Carpentry techniques to build a module Jerry Stanley's Hobby barn, Hume Va.

Sunday June 20th, 2021 Virtual clinic 13 Paul Dolkos – Sooner rather than later

Saturday August 7th, 2021 Make and take clinic 10 am In person - Shannon Crabtree – weathering techniques using an airbrush Jerry Stanley's Hobby barn, Hume, Va.

Sunday August 22th, 2021 Virtual clinic 15 Bernie Kempinski Bernie Kempinski will discuss layout updates on his USMR Aquia-Falmonth Line.

Saturday Sept 18th, 2021 Make and Take clinic 10am In person – Nicholas Kalis – Design Secrets Jerry Stanley's Hobby Barn, Hume, Va.

Sunday Sept 19th, 2021 Virtual clinic 15 Jack Burgess "Going Beyond Prototype Freight Cars"

Saturday, Nov 6, 2021 Potomac/James River MiniCon, Warrenton, Va.

Sunday Dec 19th, 2021 Virtual clinic 18 Alex Belida – Getting the Prototype Models AP Certificate

~~*This event also functioned as a fund raiser for the Division's Zoom account~~

Attendance of virtual clinics has routinely exceeded 20 and some have reached >60.. All of our virtual events were recorded, uploaded to the Division web site, and to the Division YouTube channel.

Virtual clinics and **Build and Take Clinics at Jerry Stanley's Hobby Barn are currently scheduled through November 2022.**

Special Projects or working with other organizations

We intend to once again hold a Fall joint meet with the James River Division in Nov. of 2022 and to make this a regular annual event. The Tidewater Division has expressed interest in joining us in 2022, and we invite others to join us.

Any successful or new ideas that your Division has tried that might be helpful to other divisions.

The ongoing program of monthly clinics via Zoom has demonstrated significant attendance success and will be continued. Use of Zoom for other purposes will be instituted to address travel time of members to attend event in person. This will no doubt require the investment of a camera system suitable for remote capture of clinics and layouts to be recorded for placement on the Division web site and YouTube channel.

Charitable and Educational Activities.

The Joint Meet with James River resulted in a collection of some \$600 for the Church whose venue we used. The Division also received a donation of an expensive Woodland Scenics Layout Kit which will be presented to the same Church for its youth program to promote interest in model railroading and the NMRA.

NMRA and MER Convention Activity.

Several members of the Division presented clinics and held layout tours in connection with the 2021 Mt. Clare Junction MER 75th Anniversary Convention.

Ongoing & Future Directions.

The Board members remain committed to working to fulfill the requests and desires of our Division's membership. The

current response exemplified in the attendance at virtual and in-person Hobby Barn events as well as our Joint Meet with James River clearly reflect a significant level of success in this effort. This is also very clearly satisfying some of the socialization aspect of the hobby as we can gather as a group, see one another, and talk to one another.

The expanded publication of the Division newsletter *The Potomac Flyer* to six issues a year and the introduction of new features such as our Layout, Rolling Stock and Trackside Structures Challenges in 2021 showcasing member models has proven to be of great interest and will continue in 2022. The Editor has also launched "Potomac Division Newsbriefs" in November 2021 to go out in the months between release of *The Flyer*. The Challenge entries have also been featured on our Division website with rotating photo carousels with links to the descriptions published in *The Flyer*.

Given current conditions and unknowns projected into 2022, we will continue on as we have since July of 2020, until we are confident that we can do otherwise. Given the success of the virtual attendance, we are investigating the acquisition of a camera system that would permit direct broadcast via Zoom of in person events to address the challenges of travel and traffic within our Division.

Where in your opinion could the MER provide support to your division?

Having been informed that the MER will be forwarding 100% of the dues rebate has been enthusiastically celebrated. However, support of Divisions by Nat'l NMRA remains completely inadequate support vs. expectations given the constant assessment of the Divisions to be the most important level of the NMRA. The matching grant program currently on hold by the Region is really needed to support the acquisition of A/V equipment for the Division particularly given that the events that the Division will be promoting will be either virtual or looking forward these will be hybrid live in person and broadcast via Zoom. As such upgrades and expansion of existing equipment is anticipated as highly probable to be able to continue to deliver quality programming for our members.

Superintendent's Name and Signature.

Martin Brechbiel, MMR

Carolina Southern Division

Yearly Division Report

Reporting Period: 2021

Division: Carolina Southern Division 12, MER

Meeting Times and Places:

Regular member meeting third Saturday each month

January 9th Annual Business Meeting;

January 9th Board Organizational and Planning Meeting

Change in Officers from last year (including AP Coordinator):

Contact information:

Superintendent:		
Curtis Alan Hardee	908 S. 9 th St. Bessemer City, NC 28016	704-868-6976 superintendent@carolinasouthern.org
Asst Superintendent:		
Andrew Stitt	160 Woodland Drive New London, NC 28127	910-572-2321 assistsuper@carolinasouthern.org
Paymaster:		
Dave Thrams	209 Rainbow Drive Stanley, NC 28164	704-747-6823 paymaster@carolinasouthern.org
Clerk:		
Edward Gumphrey	911 Pleasant Drive Shelby, NC 28152	757-353-8355 Clerk@carolinasouthern.org
Director 2022:		
Ed Smith	142 Williams Cove Lane Taylorsville, NC 28681	828-495-7441 director2@carolinasouthern.org
Director 2023:		
Scott Perry	1926 Sapphire Meadow Drive Fort Mill, SC 29715	980-205-0526 director1@carolinasouthern.org
Director 2024		
Larry Paffrath	17815 Prescott Border Drive Cornelius, NC 28031	704-778-2745 assistsuper@carolinasouthern.org
AP Chairman		
Neal Anderson	172 Woodfield Dr Statesville, NC 28677	704-775-2830 apchair@carolinasouthern.org

Activities from the past year:

Relocate and restore Wade's Train Town layout from Brookford to the Newton Depot of the Southeastern Narrow Gauge and Shortline Museum.

"Brass Pounder" Division Newsletter; (12 editions)

Monthly activities

January, Annual Meeting. BOD Meeting 1/19/21

Last running of Wade's Train Town at Brookford. 67 visitors stopped by.

February, 2/20/21 started the inventory of Wade's Train Town.

March, 3/20/21 Continue packing up Wade's Train Town Items.

April, 4/17/21 Meeting at NC Transportation Museum, Spencer, NC

May, 5/15/21 Move Wade's Train Town layout to its new location at the Southeast Narrow Gauge & Shortline Museum at the Newton Depot, Newton NC. 100% NMRA Club Metrolina Model Railroaders used 2 cargo trailers to move the layout to its new home.

June, 6/19/21 Begin the re-assembly of Wade's Train Town Layout in the new location.

July, 7/17/21 Replaced all building lights with LEDs on the Wade's Train Town Layout.

August, 8/21/21 Finishing touches on the layout.

September, 9/25/21 Carolina Southern Division 12 Annual Picnic at the home and layout of MMR Jack Parker. Authentic Hardee's burger prepared by Supt. Alan Hardee.

October 10/2/21 had us at the Newton Depot for the ribbon cutting ceremony and dedication of the Wade's Train

Carolina Piedmont Division

Yearly Division Report

Division: CPD-13 Carolina Piedmont

Reporting Period: January 2021 to January 2022

Meeting Times and Places: From the start of January 2021, our member meetings were scheduled for the second Tuesday of each month at 7:00 PM. The Board of Directors Meeting were scheduled to be via ZOOM on the Monday evening before at 7:00 PM. The May 2021 BOD meeting was held with BOD members in-person and others via Zoom. The August 8, 2021, BOD meeting was held in-person and Zoom at Hangar 18, Cary, NC. In their gaming/clinic room. It proved to be too noisy, so no more BOD meetings were scheduled there. The September BOD meeting was held via Zoom. The BOD meetings for October through December took place in-person at the member meetings.

January 2021 to September 2021 all member meetings were held virtually via Zoom with increasing participation each month starting with 12 member and up to 27 members.

On October 12, 2021, CPD-13 had first in-person meeting on the second Tuesday of October at a new location: The Preserve at Jordan Lake Clubhouse, 720 The Preserve Trail, Chapel Hill NC 27517 (The Preserve). The BOD meeting was held that same day at that location an hour before. There were 20 members present. At the meeting it was determined that all future member meetings had the option of members joining via Zoom.

The November 9, 2021, member and BOD meeting took place at The Preserve. The member meeting was also held via Zoom. There were 18 members present and an undetermined number via Zoom.

The December 14, 2021, member meeting was the re-start of the yearly Christmas Party and Yankee Swap. There were 20 members present and 3 on Zoom.

Office Holders in 2021 (including AP Coordinator):

John Sokash as Superintendent (3rd and last 2-year term ending January 2022)

Charles Rausch, MMR as Assistant Superintendent (3rd and last 2-year term ending January 2022)

Gene Sing as Paymaster

Bill Hanley as Clerk

Tom Shafer continues as BoD member (term ending January 2023)

Kevin O'Conner continues as BoD member (term ending January 2022)

Robert Gamble continues as BoD member (term ending January 2023)

Vic Bitleris continues as AP Coordinator

Rob Rousseau continues as Webmaster and Virtual Meeting coordinator.

Achievement Program highlights from Vic Bitleris:

Jack Dziadul – Golden Spike February 2021

Bob Gamble – AP Award Engineering-Civil February 2021

Bob Gamble – AP Award Engineering-Electrical March 2021

Bob Gamble – Golden Spike March 2021

James Murphy – AP Award Engineering-Electrical February 2021

Jack Dziadul – AP Award Master Builder Structures September 2021

Jack Dziadul – AP Award Master Scenery October 2021

Danial Fisher – AP Award Association Volunteer September 2021

Activities from the past year: Model contest every month. Members are encouraged to send photos of their entries to the editor of the *Herald*, and voting by membership (i.e., email) held thereafter.

CPD-13 had several tables at the May Neuse River Valley Spring Train Show in Raleigh, providing information on the division to potential members in the NMRA and providing a table of white elephant items as a fund raiser. The November Neuse River Valley show was where our Raffle layout was displayed, operational and for which raffle tickets were sold. Along with the promotional division table, CPD-13 had a few white elephant tables where donated items were sold.

Special Projects or working with other organizations: Danial Fisher took on the task to build the Holiday Trainsets for Kids raffle layout in January of 2021. He and a team of volunteers built a wonderful 3 module layout which could set up as a standard four by eight or sectional switching layout in “L” shaped or full length 16 ft long and 2 feet wide. This layout was displayed and raffled off at the Raleigh train show in November 2021. The winning family was in attendance and happily received this wonderful layout. The funds raised permitted the purchase of brand-new Bachmann trainsets for 8 recipients chosen by various charities.

Charles Rausch, MMR and Mike Humble headed a project where an old donated 4 by 8 layout was refurbished for use for a member, Rich Kraus, who was gravely ill, for use with his grandchildren. The layout was delivered and setup to his family’s delight. Several items were donated by the Kraus family to CPD-13 including a pristine Lionel ZW transformer that was sold at the November show for \$125. At his passing, there was a \$150 bereavement donation made to CPD-13.

Any successful or new ideas your division has tried that might be helpful to other divisions: Regarding Monthly modeling contests—have expanded numbers of winners from just one to multiple depending upon total numbers of entries. This has encouraged many more participants to the contest. With member meetings returning to in-person, we have added the capability of members attending via Zoom. This helps those who live far away, can’t drive in the dark, indisposed, etc. Furthermore, expanding our model contests to in-person and virtual gives those not in physical attendance a chance to participate in the contests. The contest voting is with an internet ballot and the winners are announced in the monthly newsletter.

In your opinion, where could the MER provide support to your division? We have been contacted by a few NMRA members who do not geographically belong to any NMRA division in our region. They have attended a few Zoom meetings but the drive for an in-person meeting is too long. Can these NMRA’ers be adopted to CPD-13? Also, one former member is planning to return from a move to Arizona to Winston-Salem and he is excited to rejoin us. He was a very valuable member and would certainly be a positive addition to our division.

Superintendent’s Name and Signature (Electronic or typewritten signature OK):

Charles W Rausch, CPD-13 Superintendent



River City Textiles - from Bob Charles' freelanced railroad which will be featured in the next issue of The Local. Photo by Jack Dziadul.

Chesapeake Division

Chesapeake Division Yearly Report 2021

Meeting times and places: not fixed

Change in Officers from Last Year:

No change in officers

Achievement Program Highlights:

None

Activities from Last Year

February, Virtual AGM 2020 (Delayed from November 2020), Included meet and greet

June, Virtual Clinic – Open Loads

July, Virtual Clinic – Dave Hughes – Tour of his WM railroad

August, Open House - Dave Hughes

August/September – Work Sessions for Division layout to display at the Convention

October – Convention

November – Annual General Meeting

Special Projects:

Hosted MER Convention

Any Successful or new ideas:

We had a Zoom clinic by a member presenting his railroad followed several weeks later by an open house. I think the combination made the open house much more interesting as we got to see what he had been discussing.

Where could the MER provide support:

The new membership list seems to have addressed many of the incorrect addresses, etc. that we have been dealing with. Many thanks.

We had a clinic by an NMRA member in another state (one of the advantages of Zoom). I think a Region wide list of clinicians who might be available for a similar event would be very useful. I think we have discovered that virtual meetings on Friday nights can be very effective, although I wouldn't want to only have them.

Tom Casey, Superintendent

Carolina Piedmont Division

Yearly Division Report

Division: #11 Susquehanna Division

Reporting Period: 2021

Meeting Times and Places:

2022 Calendar Outline

February 19 – Allentown – Scott Unger

March 12 – Lancaster – Pat Mulrooney and Jeff Thompson

April 2 – Harrisburg – O Scale Narrow Gauge Convention

May 7 – Columbia Railroad Day – Bill Lesjack, Rich Wurst, Barry Schmitt

June 18 – New Oxford – Phil Peters and Howard Oakes

September – Blue Ridge Summit – Mainline Hobby Supply Open House Tour

Oct – LSOP – Wayne Betty

October 20 – 23, Charlotte, NC, MER Convention, Carolina Southern Division

Nov – Division wide Open House Tour

November 19 – Warrenton, VA – Joint Meet with Potamic Division

Change in Officer from last year (including AP Coordinator):

Ken Roth - Director

Achievement Program highlights:

With Covid activity has been down.

Activities from the past year:

2021 Calendar (These are the events that we did hold.)

July 10 – East Broad Top RR – Lee Rainey

September 18 – 19, Mainline Hobby Supply Open House Tour

October 21 – 24, Hunt Valley, MD, MER Convention, Chesapeake Division

Nov – Division wide Open House Tour

Special Projects or working with other organizations:

Building on that success this year in May we have partnered again with the Columbia Historic Preservation Society to co-sponsor Columbia Railroad Day. This has quickly grown to also include as sponsors the Lancaster Chapter of the National Railway Historic Society, and as word gets out other groups are wanting to join in.

Any successful or new ideas your division has tried that might be helpful to other divisions:

Working with other groups has brought in different ideas and people with different contacts. It also broadens the base of people you are reaching out to

In your opinion, where could the MER provide support to your division?

Superintendent's Name and Signature (Electronic or typewritten signature OK):

Timothy Himmelberger

Susquehanna Division



August 7 – 13, 2022

Back on Track...

Doodling

Doodling is a great way to relax while you are in the middle of a labor-intensive project and you need to take a break. That's what John Hoyt, our Assistant Business Manager was doing while he was working on correcting the MER (Mid-Eastern Region) membership files recently. His doodling resulted in a potential modernized 3D revision of the MER logo, which he sent to other Board members for their opinions.



Image 1



Image 2

Our Treasurer, Brian Kampschroer, thought they were great and wanted to get started with making patches and pins that we could sell.

Martin Brechbiel, MMR, our Secretary, said "Why stop at pins and patches? Set up a tattoo booth at the next convention!"

Randy Foulke, Director, thought we should change the date to 1946 when the MER was first chartered. Charlie Rausch, MMR wanted to change the wheel to a plain flanged style like the steam engines use. John wanted to improve the Janey coupler. Jeff Burch, our webmaster, said it could be 3D printed and wondered if there was an STL file for it.

John was considering having it embroidered on ball caps, but then went back to the tattoo idea and thought perhaps Brian might want one.

He then said that his son-in-law goes to New York City to get his tattoos done and wanted to know if Brian wanted him to make an appointment for him.

Everyone except Brian thought that was a good idea.

Anyway, John went back to working on the database and everyone forgot about it, till now. So, now I'm asking the membership: What do YOU think – not about the tattoo...I mean about the *logo*? If you have any suggestions or comments, send me a note at local-editor@mer-nmra.com.

