



# The Local

Newsletter of the Mid-Eastern Region, NMRA  
The Local, 76, Number 2, March-April, 2021

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

Opinions expressed here do not necessarily reflect those of MER elected officials. Commercial suppliers, supplies and materials addressed in **The Local** in no way constitute endorsement by the MER. Copyrighted material that appears in **The Local** is used for educational and historical benefit only and does not constitute infringement of a copyright holder.

## A Modest Line Side Freight Shed or How to Get Rid of Leftovers – Part 2

By Martin Brechbiel, MMR

I'm going to continue on with this theme of consuming leftovers to make something useful for the layout. I've got a smaller box of scribed siding and milled clapboard (actually several boxes, but let's not go there today...) and bundles of basswood stripwood most of which is left over from when I was developing some small kits back in a different life.

First pass through these leftovers yielded some useful clapboard siding that I promptly cut up into four walls for making this modest freight shed (**Photo 1**).

I'll pause here for a word about tools. While one can spend gobs of money on fancy tools, gadgets, and devices for use in the shop, I've found that keeping it simple works just fine almost all the time. My primary tools here are a small old square (acquired from my great-uncle), a fine graduated plastic ruler (inches and millimeters), a 0.5 mm mechanical pencil, a short metal ruler (HO and OO scales), and a standard utility knife (**Photo 2**). I'll sneak a few scalpels, the basic razor saw, and other basic tools into the mix here and there as required. (**cont'd p. 3**)

### Inside this Print Issue of The Local and the eLocal

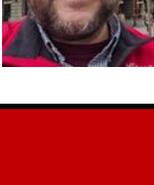
Line Side Freight Shed	Martin Brechbiel, MMR	1
MER Contacts		2
President's Column	Kurt Thompson, MMR	7
Editor's Column	Greg Warth	7
Achievement Program Update	Dave Chance	9
Elections 2021		9
75 <sup>th</sup> Anniversary Goals	Kurt Thompson, MMR	12
75 <sup>th</sup> Anniversary Shirt	Randy Foulke	13

### Inside this Issue of the eLocal

Achievement Program Article Series	Greg Warth	15
Mt. Clare Jct. Convention Update	Rick Uskert	16
Modeler's Corner	Greg Warth	20
Advertisement Central Station	Martin Brechbiel, MMR	22
Columbia Railroad Day	Richard Wurst	23
Get Signs Right	Nicholas Kalis	25
Motive Power (AP Series)	Dale Ridgeway, MMR	27
NMRA 2021 Convention	Greg Warth	32
Chesapeake Bay & Western	Roger Bir	33
Electronics Corner	Earl T. Hackett	39
Building an HO Scale Layout - 2	Fred Humphrey	42
The Last Stop	Greg Warth	46



## Mid-Eastern Region Board of Directors & Administrative Staff

	<b>President:</b> Kurt Thompson, MMR 350 Ternwing Drive Arnold, MD 21012 410-507-3671 <a href="mailto:president@mer-nmra.com">president@mer-nmra.com</a>		<b>Director-at-Large</b> Randy Foulke 919-649-8253 <a href="mailto:randy.railfan@gmail.com">randy.railfan@gmail.com</a>		<b>Achievement Program Manager:</b> Dave Chance 704-933-4200 <a href="mailto:loconut@carolina.rr.com">loconut@carolina.rr.com</a>
	<b>Vice President:</b> Scott Unger 610-462-0756 <a href="mailto:sunger@mer-nmra.com">sunger@mer-nmra.com</a>		<b>Director-at-Large and MER Photographer:</b> Jerry Lauchle, MMR 814-404-6955 <a href="mailto:jlauchle@mer-nmra.com">jlauchle@mer-nmra.com</a> <a href="mailto:photographer@mer-nmra.com">photographer@mer-nmra.com</a>		<b>Nominating Committee Chair:</b> Bob Charles, MMR 717-763-1848 <a href="mailto:rcharles@aol.com">rcharles@aol.com</a>
	<b>Secretary:</b> Martin Brechbiel, MMR (703) 309-3082 <a href="mailto:secretary@mer-nmra.com">secretary@mer-nmra.com</a>		<b>Director-at-Large:</b> Bob Morningstar 301-471-0132 <a href="mailto:bobmorningstar@protonmail.com">bobmorningstar@protonmail.com</a>		<b>Editor:</b> Greg Warth 757-816-8399 <a href="mailto:Local-editor@mer-nmra.com">Local-editor@mer-nmra.com</a>
	<b>Treasurer:</b> Brian Kampschroer 717-991-7560 <a href="mailto:treasurer16@mer-nmra.com">treasurer16@mer-nmra.com</a>		<b>Business Manager:</b> Howard Oakes 717-632-5990 301 Moulstown Rd Abbottstown PA 17301 <a href="mailto:business@mer-nmra.com">business@mer-nmra.com</a>		<b>Assistant Business Manager:</b> John Hoyt 410-340-1776 <a href="mailto:jhoyt@mer-nmra.com">jhoyt@mer-nmra.com</a>
	<b>Assistant Treasurer:</b> Scott Unger 610-462-0756 <a href="mailto:sunger@mer-nmra.com">sunger@mer-nmra.com</a>		<b>Executive Convention Chair:</b> Sam Rogers 443-610-8452 <a href="mailto:ecc@mer-nmra.com">ecc@mer-nmra.com</a>		<b>Contest Chair:</b> Alan Mende 717-469-1047 <a href="mailto:alanmende@yahoo.com">alanmende@yahoo.com</a>
	<b>Ballot Committee Chair:</b> Bob Minnis, MMR (434) 589-3011 <a href="mailto:kahlualab@aol.com">kahlualab@aol.com</a>				<b>Archivist:</b> Kevin O'Connor 919-593-2537 <a href="mailto:kjoconnor2@yahoo.com">kjoconnor2@yahoo.com</a>
	<b>Registrar:</b> Kirk Bateman 410-442-0446 <a href="mailto:MER-Registrar@verizon.net">MER-Registrar@verizon.net</a>		<b>Assist Registrar:</b> Jim Fisher 443-504-3919 <a href="mailto:jfisher@mer-nmra.com">jfisher@mer-nmra.com</a>		<b>Web Master:</b> Jeff Burch 443-574-6859 <a href="mailto:webmaster@mer-nmra.com">webmaster@mer-nmra.com</a>

### MER Board Meeting Schedule

1. MER Board of Directors Meeting – April 24, 2021 (Zoom) (Details tba)
2. MER Board of Directors Meeting – October 21, 2021 (Delta Hotels Baltimore, 245 Shawan Rd, Hunt Valley, MD 21031)

### Mid-Eastern Region Division Superintendents

	<p><b>New Jersey Division 1</b>                  Bill Grosse                  (609) 585-4616  <a href="mailto:wgrossejr@gmail.com">wgrossejr@gmail.com</a>                  Division web page:  <a href="http://njdivnmra.org">njdivnmra.org</a></p>		<p><b>Potomac Division 2</b>                  Martin Brechbiel, MMR  <a href="mailto:superintendent@potomac-nmra.org">superintendent@potomac-nmra.org</a>                  Division web page:  <a href="http://potomac-nmra.org/">potomac-nmra.org/</a></p>		<p><b>Philadelphia Division 3</b>                  Rob Hinkel                  (610) 279-2394  <a href="mailto:robhink@gmail.com">robhink@gmail.com</a>                  Division web page:  <a href="http://www.phillynmra.org">www.phillynmra.org</a></p>
	<p><b>Tidewater Division 4</b>                  Fred Humphrey                  757-482-9498  <a href="mailto:tidewater.mer.nmra@gmail.com">tidewater.mer.nmra@gmail.com</a>                  Division web page:  <a href="http://nmra-mer-tidewater.org">nmra-mer-tidewater.org</a></p>		<p><b>James River Division 5</b>                  Phillip R. Taylor                  (434) 589-6006  <a href="mailto:drphilster@gmail.com">drphilster@gmail.com</a>                  Division web page:  <a href="http://jrdnmra.blogspot.com/">jrdnmra.blogspot.com/</a></p>		<p><b>South Mountain Division 10</b>                  Jerry Skeim                  (240) 455-8677  <a href="mailto:jerryskeim@gmail.com">jerryskeim@gmail.com</a>                  Division web page:  <a href="http://www.smdnmra.org/">http://www.smdnmra.org/</a></p>
	<p><b>Susquehanna Division 11</b>                  Tim Himmelberger                  (717) 695-7958  <a href="mailto:tihm@susquehannanmra.org">tihm@susquehannanmra.org</a>                  Division web page:  <a href="http://www.susquehannanmra.org">www.susquehannanmra.org</a></p>		<p><b>Carolina Southern Division 12</b>                  Alan Hardee                  (704) 868-6976  <a href="mailto:superintendent@carolinasouthhern.org">superintendent@carolinasouthhern.org</a>                  Division web page:  <a href="http://www.carolinasouthern.org">www.carolinasouthern.org</a></p>		<p><b>Carolina Piedmont Division 13</b>                  John Sokash                  N/A  <a href="mailto:jasokash@bellsouth.net">jasokash@bellsouth.net</a>                  Division web page:  <a href="http://www.cpd13.org/">www.cpd13.org/</a></p>
	<p><b>Chesapeake Division 14</b>                  Mike Zitmann                  N/A  <a href="mailto:super@chesdiv-nmra.org">super@chesdiv-nmra.org</a>                  Division web page:  <a href="http://www.chesdiv-nmra.org">www.chesdiv-nmra.org</a></p>				

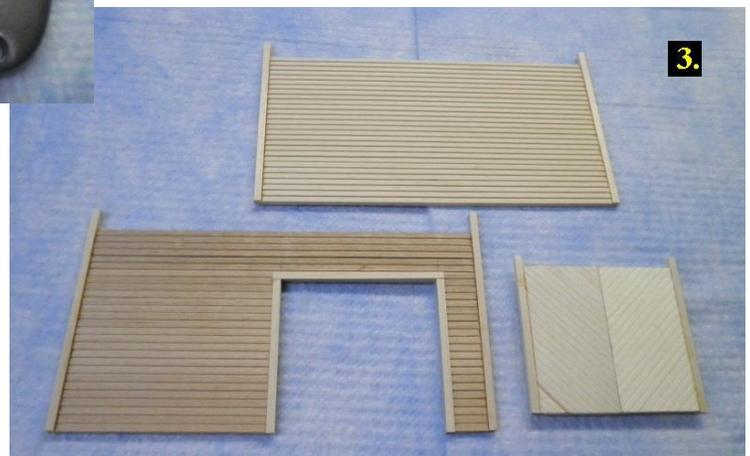
(cont'd from page 1)



2.

The ends of the front and back walls were capped off with some 3/32" square basswood. I made a door for the opening from some scrap scribed siding. I keep a plastic freezer tub that the lid to was lost on a shelf on work bench No. 1 and all scrap siding gets tossed in there. Taking a few minutes to rummage through there usually beats cutting a little piece off a full sheet of siding or clapboard. The siding on the door was made by cutting 2 pieces of clapboard

at a 45° angle. (Yes, one of the other tools happens to be a companion 45° square to the right-angle square.) The door also got 3/32" square basswood added to the edges. I glued these bits on and left them long intentionally. It's far easier to trim and sand to flush after the glue dries versus cutting everything exactly right the first time. Some 1" x 6" trim was added all about the perimeter of the door opening as well as to the front surface (Photo 3).



3.



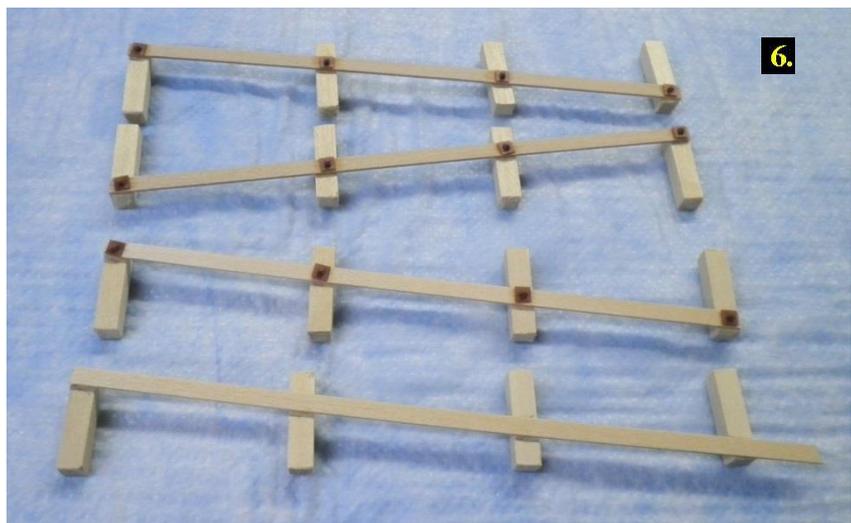
The front wall was finished out by gluing the door to the back of the wall. The  $\frac{3}{32}$ " basswood on the ends was added just for that purpose. The door was finished by trimming out with scaled  $1'' \times 8''$  and  $1'' \times 12''$ . A bit of  $0.028''$  brass wire from the leftover zip lock of that size wire provided a handle for the door (Photo 4).



Rather than have this just sit on the ground, I decided to build a small platform for it to sit on at a height suitable for trackside loading and unloading. A few bits of scrap scribed siding were edge-glued together to make enough flooring to the platform, and some  $\frac{1}{8}'' \times \frac{3}{16}''$  floor joists glued to the underside. At right angles to the joists,  $\frac{3}{16}'' \times \frac{3}{16}''$  support beams were glued into place (Photo 5). Legs ( $\frac{3}{16}'' \times \frac{3}{16}''$ ) were cut to make four bents for the platform to rest on. Cross supports were glued into place on the diagonal using the platform as the spacing template (Photo 6). After the glue was set, every connection was drilled to accept a large nut-bolt-washer (NBW) casting (Tichy No. 8143) (Photo 7). The bents were glued into place and cross supports were added

across the ends. These supports were again drilled and the same NBW castings were added (Photo 8).

We're coming in to the final stages now. The four walls were assembled with some extra bracing added to the inside corners and along the top. A sanding block (visualize a chunk of  $2'' \times 4''$  with 60 grit sandpaper stapled on to it), was used to put a bevel on the top of the front and back walls. A roof of  $\frac{1}{32}''$  sheet basswood glued up from scraps was glued on the top of the walls (Photos 9-10).





Finals steps for this were to add shingles, add some paint, and stain the platform. Oh, but then again, that's not really accurate. Along the way I realized that there was no way for anyone to get onto the platform except by rail. So, I added a set of steps at the one end using some leftover laser cut parts. Then I thought that it just might be too dark in there for anyone to find stuff even with the door open, so out came a baggie of window castings. Some careful measuring and application of a sharp scalpel provided a hole for the window casting. Painting started with some Polly Scale Grey under the roof. The walls were painted PRR Depot Buff

and the trim was set out using Light Green. A bit of Steam Black was applied to the door handle. Shingles were added last. I had a sheet plus of saw tooth paper shingles. I hung them up and sprayed them Hunter Green (Rustoleum). They were cut apart and applied row by row with Carpenter's glue from starter course through to the ridge cap (Photos 11-13).



And there you have another quick project that cleaned up yet more building supplies that have been cluttering up my shop for far too many



11.



years with no real defined purpose in mind. And, here is also a quick and pretty simple project that you can adapt and modify for whatever purpose you might imagine for your layout. Now I see another small building project that's calling out for attention. Maybe you'll see it in a future issue!

12.



13.





## Looking Towards 75 Years

President Kurt Thompson, MMR

As we head towards our [75th Anniversary convention](#), I wanted to bring up two things: the 75th Anniversary short-sleeved shirts and the President's Award contest car for this year.

As many know or didn't, Bob Minnis, MMR won the 75th Anniversary Logo contest. As winner, his submission will be used on our MER 75th Anniversary shirts. He also won a free registration to the 2021 Convention.

The 75th Anniversary short-sleeved shirts will be available with or without your name on it. Purchase price will be \$30.00 with shipping cost of \$5.00 for sizes small through XL. Your name on the shirt is included in the price. Sizes 2XL and 3XL will be available for sale at \$32.00 and \$5.00 shipping charge. Add \$2.00 to the cost for embroidered names. Sales will begin in March and end on September 10, 2021. More details are listed elsewhere in this issue and the next four issues through the Convention.

I am happy to announce the President's Award for the 2021 Convention. The President's Award will be given to the model of any freight car, passenger car, structure, or locomotive in operation on or before 1946 for a railroad that physically served the Baltimore area.

The list of railroads includes: any Baltimore city trolley company; Baltimore and Ohio; Pennsylvania RR; Western Maryland RR; Maryland and Pennsylvania RR (Ma & Pa); Baltimore and Annapolis (interurban); Washington, Baltimore, and Annapolis (also interurban); Patapsco and Back Rivers (the

Bethlehem Steel railroad); and the Canton RR and their subsidiaries at or before 1946.

Now for a couple "gotchas" since I'm dealing with model railroaders. First, cars that came through Baltimore via interchange, but not one of the listed railroads above, do not qualify for the President's Award. Second, if I missed a railroad that physically served Baltimore in the above list, please simply include that explanation in your submission and we'll review the model for inclusion in the contest.

I'm looking forward to celebrating our 75th Anniversary with the Region in October. Here's to early and plentiful vaccinations. So, roll up your sleeves so we can get back to face-to-face fun.



## From the Editor's Desk...

Greg Warth, Editor

While the world around us is creating history like we've never seen before, most of it being woefully disrupting, disheartening and sad, what can we do to create our own history and try to make this a better place?

I'm reminded of the song written by Jill Jackson-Miller and Sy Miller in 1955, called "Let There Be Peace on Earth". The second line of that song, "And let it begin with me", is the most powerful lyric in any song that I know, and the one that helps keep me on the right track.

So, what can model railroaders do to help the world? I would suggest that just being a member of a group of people who are all friends, even if we've never met, is one of the best things we can do. We all respect each other, whether we are beginners or experts. We may do things differently. Your method of making a rock may be different than mine, but it all goes to accomplish

the same purpose – the creation and assembly of something good. Our uniqueness makes it even better, because there will always be new ideas, new ways of doing things that we can batter around in a friendly discussion. Being part of any association, there are some things that we **MUST** do to maintain the integrity and the structure of the organization. But, in return, we have the benefit of being part of a wonderful society of friends and colleagues. The NMRA is a large group to be sure, but each of us plays a small part. And if each of the small parts tries hard to be the best they can be, the whole organization is better for it. The same goes for the rest of the world. (Not that you didn't know that already, but it makes me feel better to write it down.)

This issue of *The Local* contains some excellent tutorials, all the way from creating great structures out of scraps (Martin Brechbiel, MMR) to scratch-building and wiring interlocking signals (Earl Hackett). We also have a new take on motive power for our AP (Achievement Program) series (Dale Ridgeway, MMR).

Nick Kalis has given us some great ideas on how to better apply signs to our buildings. There are informative updates in our Featured Layouts section from Fred Humphrey (Part 2) and from the Chesapeake Bay and Western Model Railroad Club by Roger Bir. In addition, you will find many more great tips and tricks in our Modeler's Corner.

Be sure to read the updated Mount Clare Junction Convention News. This looks to be one of the best Mid-Eastern Region conventions ever. I'm really looking forward to it, especially since the last one had to be cancelled.

For all of you who receive the electronic version of *The Local* (eLocal), I hope you will notice the callout boxes at the ends of some of the articles, which provide references and links to related information and videos. We are fortunate to have so much information so readily available to us electronically, so why not use it?

Send us your photos.

I know there are more layouts and pictures out there that are just begging to be published in *The Local*. Please be good to your layout and let us feature it here. We are starving to see layouts. Especially since we've all been isolated for so long. Pleeeeeease!

For those who are working on earning more AP (Achievement Program) certificates, which ideally should be everybody who doesn't already have their MMR (Master Model Railroader), I would suggest going to your workbench right now and writing up a list of the ones for which you might already qualify, and a plan for which ones you want to achieve. Look at your plan every day and ask yourself what you are doing to make this happen. Go to the NMRA website and download the requirements and the forms you will need to complete your APs. Get an MMR to guide you in the process. They (MMRs) can give you lots of unwritten information that will make it much easier for you. Don't put it off. You need to do this NOW. Take lots of pictures while you are doing your projects and send us articles about what you are doing, so you can get your author AP while you're at it!

So, as this year unfolds, whether the tides are coming in or going out, keep the faith, keep going, one foot in front of the other, one day at a time. Create something good out of scraps. Pray for peace, health and good will, and "Let it begin with me".

**Advertising:**

If you have a business and find yourself wishing to place an ad on this page, please contact the Editor at [local-editor@mer-nmra.com](mailto:local-editor@mer-nmra.com). The current advertising rates (one year) as follows:

**Callboard ads (Division and Clubs Only)...Free**

Business Card size .....	\$60
Quarter Page ad.....	\$125
Half Page ad .....	\$225
Half Page ad per issue (Div. only) .....	\$25

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.

The Local welcomes 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/June	Apr 1st
Jul/Aug	Jun 1 <sup>st</sup>
Sept/Oct	Aug 1 <sup>st</sup>
Nov/Dec	Oct 1 <sup>st</sup>

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.

#### **Proofreaders:**

Alex Belida , Martin Brechbiel, Ken Montero



## Achievement Program Update

By Dave Chance, MER AP Manager

February 01, 2021

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

#### **Division 1 – New Jersey**

**Michael Sabia -- Golden Spike Award**

#### **Division 2 – Potomac**

**Bryan Kidd – Chief Dispatcher**

#### **Division 5 – James River**

**Shannon Crabtree -- Golden Spike Award**

#### **Division 13 - Carolina Piedmont**

**Jack Dziadul -- Golden Spike Award**

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 - The R&V form is for your personal use. Only use it with the Author Submission.

Please, NO R&V FORMS with other submissions.

## **Elections 2021 THE MER NEEDS YOU!**

Yes, you! If you are a member in good standing and want to support your region with good ideas and real involvement, we need you to volunteer to serve as one of the three Directors at Large for the Region. The MER Board of Directors generally meets 3 times per year; once at the MER

convention. The deadline for nomination is May 30, 2021. The term of office is two years, with a limit of two terms.

Any MER member in good standing can be nominated, either by him or herself or by another member with the candidate's permission. The process is very simple:

**Prepare:**

A 200 word (max) statement outlining the nominee's interest and qualifications for the position, **and** a photo of the candidate.

Send the nominations package – by **May 30, 2021** – to all of the following nominations process officials:

**Nominations Committee Chair:**

Robert Charles, MMR [rcharles@aol.com](mailto:rcharles@aol.com)

Jack Dziadul [jackdziadul@gmail.com](mailto:jackdziadul@gmail.com)

Kenneth Montero [vp@mer-nmra.com](mailto:vp@mer-nmra.com)

Kurt Thompson, MMR [president@mer-nmra.com](mailto:president@mer-nmra.com)

Option – also by May 30, candidates may supply a 500 word statement suitable for placement on the MER Web site.

You can make a difference by giving something back to the hobby you thoroughly enjoy. This is your chance. Successful completion of three years in office fulfills most of the requirement for the Achievement Program “Association Official” certificate. Please respond in one email to all three committee members plus President Thompson to insure receipt of your nomination! That is all there is to it!

**Deadlines and Schedules for 2021 Nominations and Balloting**

Our Bylaws require the publication of deadlines and schedules for nominations and balloting in the first issue of The Local of each year. The dates and schedule for nominations, ballot and election results are in Executive Handbook, Section 5, Policies, Article VI.

The dates for 2020 are:

**May 30, 2021** -- Deadline for receipt of self-nominations sent to the Nominations Committee. Date for Nominations Committee to notify Board of Directors of slate of nominees validated by the Business Manager.

**July 5, 2021** -- 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 07/05 (the 5th 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 07/05 (the 5th of July), that individual will not receive a ballot, nor be permitted to vote in that year's election.

**August 1, 2021** -- Deadline for mailing paper ballots to members and for commencing electronic voting; could be mailed earlier depending on other deadline requirements.

**September 7, 2021** -- Deadline for electronic voting, also last day as shown by postmark for mailing paper ballots.

**September 11, 2021** -- Deadline for receipt by Balloting Committee of paper ballots sent by mail.

**September 18, 2021** -- Deadline for Ballot Committee to transmit results to President, the Director overseeing this committee, and the Business Manager.

**September 25, 2021** -- Deadline for The President to communicate the election results to candidates. The Business Manager also notifies the MER Web Master and the NMRA of the election results.

**October 9, 2020** -- Deadline for publishing election results on MER's website.

---

## HELP WANTED: Publisher

**Newsletter Publisher:** *The Local* and *eLocal*

Appointed by:	President
Approved by:	Board of Directors
Reports to:	Editor of <i>The Local</i> and <i>eLocal</i>

### Position Summary

Responsible for assembling the official publication of the Mid-Eastern Region, *The Local*, working directly with the Editor. The newsletter Publisher is responsible for providing “typesetting”, article layout and arrangement, and pasting-up services for each issue, to produce a web-and-email-ready version of the full issue of *eLocal*, as well as a ready-to-print version of *The Local*. The Publisher shall also produce camera-ready-copy and ship the camera-ready-copy and related artwork to the printer in a timely fashion. Those efforts all rely upon the materials delivered from the Editor to the Publisher with direction as to which issue and where in that issue (sequence location) that content might be placed. The Publisher is to communicate objectives met on creation and insertion of content, sending frequent draft versions of the *eLocal* to keep the Editor fully informed of the status of issues as they are being assembled.

The content of the first twelve pages of the print version of *The Local* shall be equivalent to the first twelve pages of the *eLocal*. The in-house official articles and business-related information must be contained within those first twelve pages. This ensures that all members will have access to this information regardless of which version they receive.

*The Local* serves as our official in-house publication and will contain all relevant articles of the organization and information of general interest to the membership. *The Local* must be presented as an image-building device for gaining membership and

maintaining membership interest. The Publisher, working with the Editor, must exercise sound judgment and expertise for producing a uniform and pleasing tone to the publication.

### Specific Responsibilities of the Publisher:

1. Keeps the Editor informed at all times.
2. Provides quality production.
3. Assembles the articles, photos and content obtained from the Editor into a pleasing and interesting presentation.
4. Collaborates with the Editor, when necessary, on layout design, presentation of content and space considerations.
5. Produces uniform quality and tone of the publication.
6. Acknowledges in writing (by e-mail) to the Editor confirming receipt of article(s) for insertion into draft versions of *eLocal* and communicates with the Editor routinely by providing draft versions of *eLocal*.
7. Prepares the ballot for all elections held within the Mid-Eastern Region of the NMRA.
8. Provides electronic copies of *The Local* and the *eLocal* of each issue to the Editor for final review and distribution.

**If you are moving, changing your e-mail address, please notify NMRA Nat'l of these changes so that the MER and your local Division can continue to provide you with The Local, your Division newsletters, and continued information regarding conventions, clinics, and other events!**

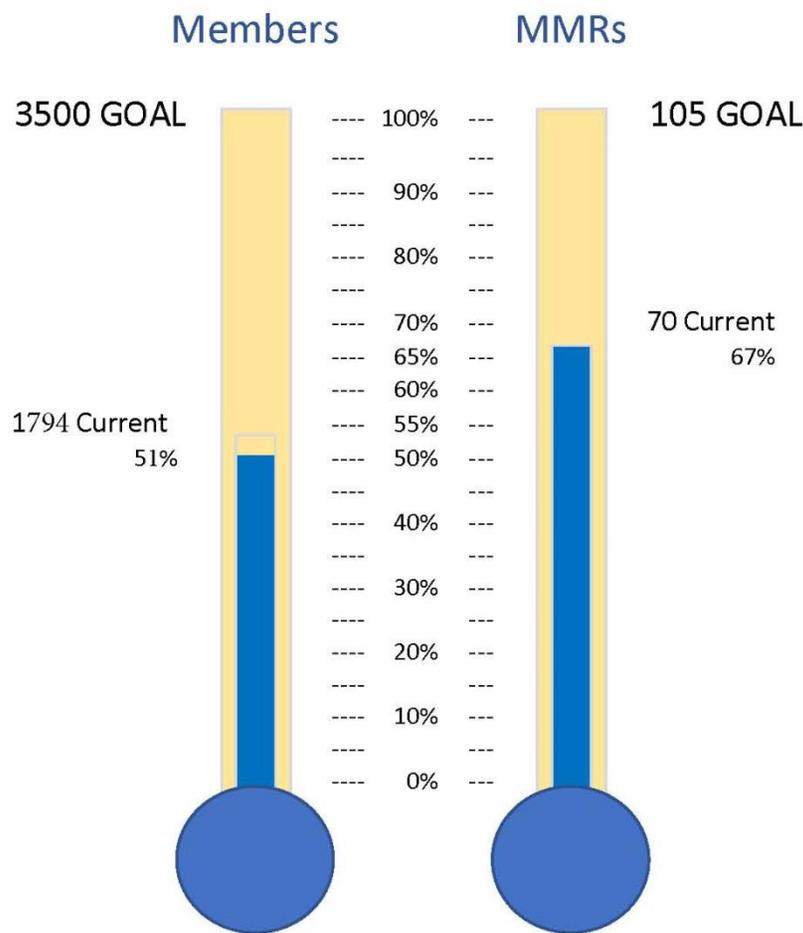
# MER 75<sup>th</sup> Anniversary Goals

By Kurt Thompson, MMR

As you know, the 75<sup>th</sup> anniversary of the Mid-Eastern Region (MER) is coming up in October later this year. We are truly looking forward to celebrating this commemorative event at the [2021 Mount Clare Junction Convention](#) in Baltimore. This will be a great time for not only celebration, but also for reflection and evaluation of the challenges ahead.

Our recent membership data collected by Howard Oakes, Business Manager, indicates a reduction in membership since the last issue of *The Local* by a net loss of 49 members (26 new and 75 retiring), bringing our total membership to 1794.

There have been no new Master Model Railroaders since the last report, so the total number of MMRs stands at 70 for now, although we know many are actively working on this. Our best wishes go out to [those members](#) who have chosen to advance their skills in the [Achievement/MMR Program](#). We look forward to their success.



## COMMEMORATIVE MER 75<sup>TH</sup> ANNIVERSARY SHIRT

By Randy Foulke, Director-at-Large

As part of the celebration of the 75<sup>th</sup> Anniversary of the MER (Mid-Eastern Region) in 2021, a special edition shirt is being issued for purchase by MER members and any other interested persons. The shirt will be a white, short-sleeve golf (or polo) type shirt with a pocket, made from 60% cotton/40% polyester. A special MER 75<sup>th</sup> Anniversary logo will be embroidered on the left side of shirt. The 75<sup>th</sup> Anniversary logo is shown below. Cost of shirt will be \$30.00 for sizes small through extra-large, plus \$5.00 for shipping direct to the member's residence. Sizes 2X and 3X will be \$32.00, plus \$5.00 for shipping.

Orders will be received through September 24, 2021. The shirt can be personalized with the member's name on the right side of the shirt at no additional cost, but only if the order is received by September 10, 2021. Purchase of the shirt can still be made after September 10 through September 24 for the same price; however, the embroidered name will not be available, and the shirt will need to be picked up at the Annual Convention. (There will be no shipping charge for shirts picked up at the Annual Convention.) Shirts will require approximately three weeks for delivery from receipt of order. The shirt supplier will be Mohawk-Design, a leading



supplier of apparel for the rail industry and rail enthusiasts.

Shirts can be ordered immediately by returning the order form shown below to the MER Business Manager, Howard Oakes, at 301 Moulstown Road, Abbottstown, PA 17301-8912 along with a check. Currently, the Business Manager cannot accept credit cards. The MER hopes to have a PAYPAL account available in the near future for a payment option. PAYPAL payment details will be available later.

I would like to thank Fundraising Committee members Ken Montero, Michele Chance, and Director-at-Large Bob Morningstar who assisted me in the development of this project.

**Print**

**75<sup>th</sup> Anniversary Golf Shirt Order Form**

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip Code \_\_\_\_\_  
 Email \_\_\_\_\_  
 Phone \_\_\_\_\_

SIZE	QUANTITY	UNIT PRICE	TOTAL PRICE
SMALL ___ MEDIUM ___ LARGE ___ XLARGE ___		\$30.00	
2XLARGE ___ 3XLARGE ___		\$32.00	
SHIPPING PER SHIRT (if ordered before Sept. 10 <sup>th</sup> )		\$5.00	
TOTAL OF ORDER			

Check for Embroidered Name on Shirt – Yes \_\_\_ No \_\_\_

Legibly Spell Name for Embroidery \_\_\_\_\_  
 Send form along with a check payable to The Mid-Eastern Region NMRA Inc. for the total of your order to:

Howard Oakes, Business Manager  
 MER, NMRA  
 301 Moulstown Road  
 Abbottstown, PA 17301-8912

Orders received after Sept 10, 2021 must be picked up at the convention.

Shipping to your home address is not available after Sept 10<sup>th</sup>.

## Achievement Program Article Series



This issue of The Local is proud to continue the series of Achievement Program articles to provide insights to our members on how best to obtain these certificates and ultimately to assist everyone to get to their goal of becoming a Master Model Railroader (MMR).

Dale Ridgeway, MMR 657, who has been honored with this designation recently, has written an inspiring article on Motive Power that appears on **Page 27**. As you read through the article, you can feel his dedication and perseverance as he worked through the challenges that he faced in completing this task, as well as the clear and gratifying sense of accomplishment that he experienced afterwards.

We remain thankful to all of the Master Model Railroaders, who have written articles for this series and wish to encourage other MMRs to submit more articles for us to continue to provide the inspiration and the information that our members need to keep moving forward and ultimately to accomplish their goals.





## Modeling The MA & PA Red Lion PA Depot In LEGO®.

When Cale Leiphart decided to model the Maryland and Pennsylvania Railroad's depot in Red Lion Pennsylvania he followed the basic procedures of the Master Builder – Prototype Models AP certificate: he thoroughly researched the prototype learning about the buildings, the arrangement, and the rolling stock at the site.

Cale scratchbuilt this sprawling L-Gauge station from plastic stock, though the form differs from the regular Evergreen sheet and Plastruct shapes – he built it from LEGO®. (**Photo 4**) The result is unique and striking. The buildings are thoroughly detailed, including their interiors, while the rolling stock operates and closely follows the prototype. Even the scenery is recreated with bricks.

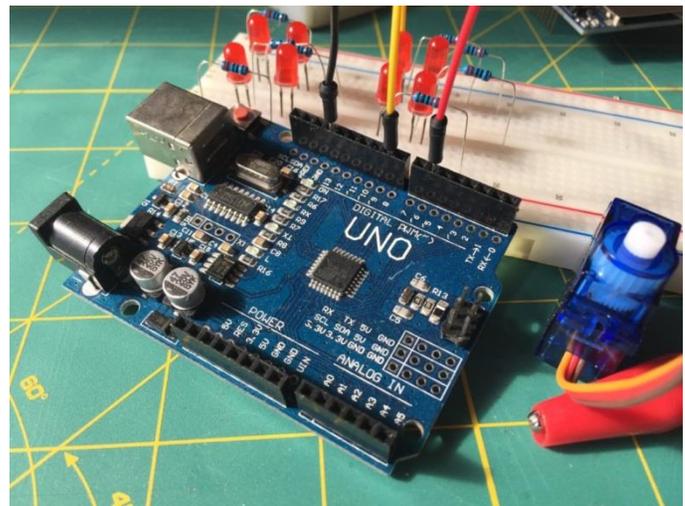
Check out Cale's clinic on the MA & PA Red Lion PA Depot to learn about the station, design details and the building process.

## Arduino Basics for Enhancing Your Railroad.

Arduinos are very small computers, essentially a chip on a small board with connection points, and this extra fare clinic will net you a board, jumper wires and a few other do-dads you will need to get started in applying this inexpensive device to your model railroad. Some of the functions they can be used for (but not limited to) are:

- Block Detection
- Turnout control
- Crossing flasher control
- Layout lighting control
- Fast Clock

In this extra fare clinic, Kurt Thompson, MMR, will show how to use an Arduino (**Photo 5**) to control crossing signals and a tortoise switch machine. Please plan to bring a laptop to participate during the course. Don't be afraid, jump in!



## Landscape Painting for Everyone.

Want to paint some happy trees like Bob Ross? A rolling grassland landscape? Distant mountains with fluffy clouds? Mary Silver, CRI®, can show you how.

The Bob Ross Wet-on-Wet Technique® leads you, step-by-step, into the wonderful world of painting. Find great and almost instant satisfaction through this expressive method with roots back to 15th Century Flanders using oil paints.



Whether you have a goal to paint the backgrounds for your model railroad, are an aspiring artist, or looking to just try your hand at painting, this is a great learning opportunity. This extra fare clinic includes supplies, and you take home the painting you've completed after just one class.

## Pete & Jane Clarke's [East Broad Top](#)

Friday, November 5th, 1926. It's late in the day. The freight train, under the practiced hand of Lee Rainey, is crossing Meadow Street and passing the Orbisonia station on its way to deliver coal to the cleaning plant in Mount Union. The general freight, being run by Herb Biegel, is picking up the stock car full of fresh mules to add to its consist as it heads up to the mines on the top of the Broad Top mountain.

Those small mules are just a tad bigger than a large dog as the coal seams of the Broad Top are not particularly thick. They pull the mine cars used to move coal from the working face in the mines to the tippie where it will be dropped into EBT hopper cars. In the background the furnace shifter waits on Meadow Street for the way to clear up so it can continue quite literally feeding the fires of the iron furnace (out of sight behind the guys). We'll find out at the end of the day if operator Ron Polimeni gets a fine for blocking the street! The miners train has finished for the day (we can see the empty hoppers, combine, and coach in the yard), so that operator is probably now running the afternoon run on the Booher branch.

We may be biased, but we think our EBT is the perfect model railroad for ops. For those new to timetable/train-order operations we have lots of information posted around the room, on the back of the timetable, built into the train instruction sheet. New operators often take the mail train (i.e., passenger train) because its high "class" makes life easy (is it the scheduled departure time? If yes, go. If not yet, wait.) For experienced operators, the mainline of the EBT is not some weed-grown, once-a-week, going-out-of-business narrow gauge. No, the EBT mainline is a very busy place. Each train has multiple meets through the day. Crews also enjoy the fact that each train completes its own switching. No crew simply arrives in a town and then walks away from their train.

We look forward to having you bring our EBT to life this fall. Please support the prototype EBT by visiting it and support Friends of the EBT by joining them at [www.febt.org](http://www.febt.org).



## Fritz Dahlin's' [B&O/Chessie System](#) [Broken Timber Subdivision](#)

Here is a photo (**PHOTO 8**) of one of my regular operators working the town of Remington, on a job known as the Halfway turnaround. How did I come up with the name Halfway turnaround? The job works out of Halfway yard, goes to Remington then back to Halfway. It is usually one of the quicker jobs, taking an hour or slightly less if all goes well. Just because it is quick does not mean it is simple.

There are 2 spurs and an interchange track to switch, usually about 4-6 cars. One spur is facing point, one is trailing so a runaround move must be made. The town is at the base of the helper grade, and although the helpers are no longer based here, they still have to be dodged. And the passenger station? It sees two commuter runs stop in the AM and PM, which must use the passing track, which diverges to the right at the signal. A third passenger run each way does not stop, so it can use either track.

And why is the signal showing approach instead of stop? Could be due to several reasons: first, the crew may not have called the signal ("Halfway turnaround east at Remington, approach signal") letting the dispatcher know he is passing the signal and he needs to flip it to red; second, the train crew is making a runaround and did not call the signal, or ask permission to move west past the opposing signal, then east again (the camera is facing east); or, third, it was late in the session and the dispatcher was out watching the one or two trains still out working!

The signal system is being upgraded so an indicator will light when a train passes a signal. It still won't help if the dispatcher is out railfanning!

## Jeff Mutter's [Erie Lackawanna Scranton Division \(1975\)](#)

Engineer Tom Pottast and helper engineer Paul Tupaczewski ease the Carrollton Coal train into Tobyhanna, after cresting the grade east of Scranton. The engineers look particularly attentive because the train has a four-unit set of engines on the head end, 28 hoppers loaded with live coal, and two units pushing behind the caboose. At Tobyhanna they will cut off the helpers and caboose, run around the caboose, and place it on the rear of the train. The coal train will then head east to the Metropolitan Edison power plant in Portland, PA, and the helpers will drift back downgrade to Scranton to help another train. The coal train originated on the Bloomsburg Branch, where it operated under timetable and train-order authority, entered yard limit territory at Taylor, then headed east on the mainline at Scranton, where it ran under signal indication.



We have a variety of operating environments on the Erie Lackawanna Scranton Division: the mainline is a double-track railroad operating on signal indications, the Bloomsburg Branch is timetable and train-order, and there are three yard operator positions (two in Taylor Yard and one in Scranton Yard). There are several locals and one town switcher for those who enjoy switching.

Taylor Yard is shown beneath the coal train in the photo above ([Photo 9](#)). One of the two yards on the railroad, Taylor, is the main classification yard, while the Scranton Yard primarily works through trains and handles the power and caboose assignments. Road crews get on their engines and caboose at the Scranton service area, run down the Bloomsburg Branch to Taylor Yard, where they pick up their trains. Trains then return to Scranton to depart on the mainline or head west down the Bloomsburg Branch.

All crews use the wireless ProtoThrottle (just visible in the engineers' hands in the photo) to operate their trains. These throttles provide a very prototypical feel to operating a train, using an eight-notch throttle lever, brake lever, horn lever, light switches, etc., to give the feel of mass and momentum, and encourage two-man crews to work together. All trains doing work along their run will have two-man crews, except through trains picking up and setting out at Scranton.

Please join us for our session during the 2021 MER Convention! All skill levels are welcome. We have intermodal through trains that make no stops and can give inexperienced operators an overview of the railroad. We have intense switching and yard jobs for those that like challenging jobs. Also, we have lots of jobs in between the two extremes. Two-man crews allow pairing of inexperienced operators with experienced crew members, providing a comfort level for those who would like additional help before venturing out on their own.

For more information about the railroad, visit our website at [elscrantondivision.railfan.net](http://elscrantondivision.railfan.net).

## Modeler's Corner

### Did you know...

~That if you sent a picture in to the Walthers Catalog company, and if they use your photo in their catalog, you get \$25 PLUS a free catalog, which usually sells for about \$18? First place award is \$250. The deadline for getting yours entered is July 31<sup>st</sup> this year. You can send in up to 10 photos. Further instructions can be found on their [website](#). (Sent in by Chuck Davis)

~That there is a paint shaker for model paints (**Photo 1**)? Nicholas Kalis writes in his blog...

“My Robart paint shaker was out of commission for a long time until I sat myself in front of my computer and purchased a lifetime's worth of replacement straps. These straps will break over time. I purchased my straps #27162A from Micro Mark 800 225-1066 - they seem a bit stronger than the originals that came with the shaker”.

If you don't have a paint shaker, you can get one from Micro Mark #27162 in the catalog. (From *Modeling Hints and Reviews for Large Scale Modelers and Others* by Nicholas Kalis)

~That you should trash up your layout? For the ultimate in realism, you need to be sure you have enough trash laying around on your layout. Just look around the streets where you live, the urban areas, the farms, the railroad yards, along highways, behind industrial buildings and construction sites. There's always trash laying around - sometimes in piles, but sometimes just scattered around.

After you finish building a model, there are usually a few plastic pieces, bits of styrene or wood, paper, dried glue and paint lying on your workspace. Scrape that debris up and save it for when you need to add litter or junk to a space on your layout - maybe even a pile of it behind the building you just finished. (From the BYMRR Newsletter, Dec. 2012) Ref: "Make Your Own Trash", by Tracy McKibben, *NMRA Magazine*, Dec. 2012, p32.

~That you could create a stone wall using cardboard? First cut out a piece of cardboard to the size and shape you want your wall to be. (You can do this for arched stone bridges as well.) Then glue small stones to the cardboard. Use fine Portland cement to fill in the areas between the stones to serve as mortar.

### [Modeling videos:](#)

[Ballasting and Weathering Track...](#)

[Last Chance Gas Station Diorama...](#)

[Realistic Vegetation...](#)



---

## Short Tips

~ Gondola Loads: Use wheel sets, scrap metal, railroad ties, pipes, lumber, wooden dowels, gravel, sand, coal, concrete blocks or rocks. Cut out a piece from a styrene sheet to cover the bottom part of the gondola and then glue the materials on top of the styrene sheet. You may want to paint the styrene brown or black first, then glue the load materials on top of this sheet and then place it in your gondola.

~ Create laundry lines in the backyards of your houses by using red or yellow thread, stretching it from a tree to a railing on a house and then drape small scraps of fabric along the line.

~ An excellent way to create a more realistic backdrop is to take digital photos of the actual landscape of the area that you are modeling and then size them and print them on your home computer and then blend them into the foreground scenery on the layout. This works very well for treed or forested landscapes, for hills and mountains, and even for some cityscapes. If you add your own trees, bushes and buildings in front of these photographs on the backdrop, this sort of hides the fact that they are photographs and makes the whole scene much more realistic.

~ If you're just starting to build the benchwork for your model railroad you may want to consider using pre-cut benchwork specifically designed for use on a model railroad. You can find this pre-cut benchwork made using high-quality cabinet-grade plywood and pocket hole screws so that assembly is actually very easy. You can go to the website at [www.modelrailroadbenchwork.com](http://www.modelrailroadbenchwork.com) to find everything that you need. You can choose from a large number of pre-determined sizes and you can even ask the manufacturer for a custom-built piece. The cost is reasonable, and assembly is easy and certainly less messy than getting out the table saw and spreading sawdust all over your train room. Another great option is to use the [Mod-U-Rail benchwork](#) made by Woodland Scenics. Again, all the wood is pre-cut with pre-drilled holes and all the hardware is included. Not being a carpenter, I really appreciated that I could assemble all my benchwork in a weekend myself.

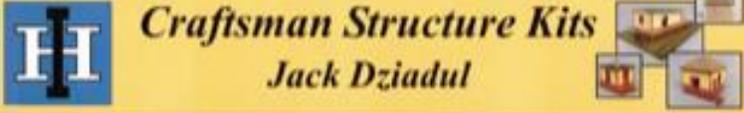
~ Many times, in prototypical railroads the main line is elevated higher than the surrounding scenery. You can model this by doubling up on the use of sub-roadbed. An article in the March-April 2013 issue of N-Scale called "Raising the Main" by Matthew Schroedle demonstrates that you can use HO cork for the bottom of the sub-roadbed and then put N-scale cork on top of the HO cork to create higher areas for your N-scale railroad. If you're modeling an HO layout, then you would just need to use a wider section of cork as your sub-roadbed and then add the regular width of HO cork on top of that in order to raise the main line.

*There are an infinite number of little things that modelers do that may or may not be written anywhere. If you have learned a new way of doing things or even improved on an old method, let us know so we can give you credit for it here. It doesn't have to be a long article. Short little blurbs or videos like the ones shown here would be great. So, send in YOUR tips and tricks so we can share your modeling wisdom with all our members.*

---

# Advertisement Central Station

**IPSWICH HOBBIES**  
*Craftsman Structure Kits*  
 Jack Dziadul  
 IpswichHobbies.com 919-721-8757



**Hobby Central Train Station**  
 Model Railroad Supplies 757-904-9390  
 Large Inventory of Quality Products at Great Prices  
 10% Off for MER Members- w/Code BYMRR10MER  
<https://trainstoreonline.net>



**Your advertisement could be on this page!**

BYMRR.com



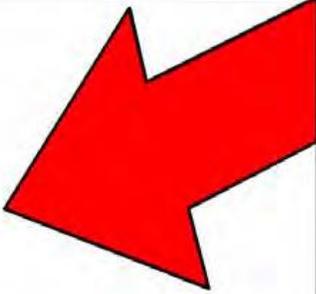
FREE No Membership Required

**Over 200 pages of How-To Articles**

Layout Design	Special Effects
Track Planning	Structures
Scenery	Scratchbuilding
Wiring	Software
Automation	Command Control
Books/DVDs	Operations

**Building Your Model Railroad**

**Custom Layout Building**



**Layout Design**

**By Lance Mindheim**

[www.shelflayouts.com](http://www.shelflayouts.com)  
 301-404-8164

# The Second Annual Columbia Railroad Day

By Richard Wurst

On Saturday, May 1, 2021, the second annual Columbia Railroad Day will take place in Columbia, Pennsylvania from 9 AM-5 PM. The first Columbia Railroad Day was such a success that organizers/sponsors have banded together for an even better program and expanded facilities!

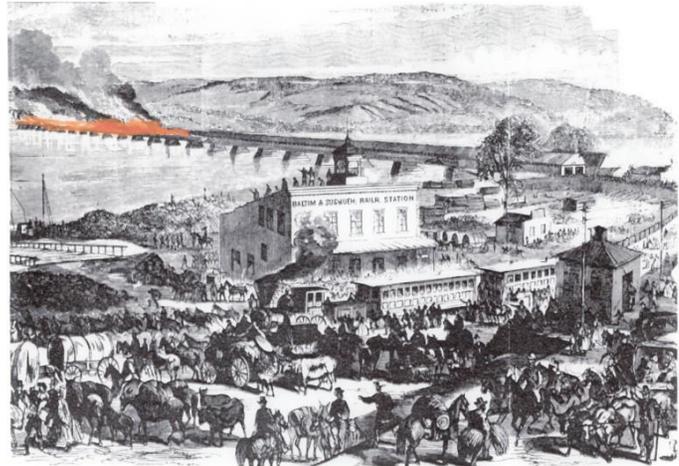
The event locations will include the Columbia Crossings River Trail Visitor’s Center (41 Walnut Street), Columbia Historical Preservation Society (21 North 2<sup>nd</sup> Street) and, hopefully, Rail Mechanical Services (380 South 4<sup>th</sup> Street). Since all three locations are located in various sections of Columbia, a shuttle trolley will be available for transportation (\$5 all day hop-on-hop-off) between sites. In addition, the trolley experience will include a narrated, sight-seeing tour of the city.

The [Columbia Crossings River Trail Center](#) will host fascinating lectures. The presentations will include:

Scott Mingus	“Civil War Railroad to Gettysburg”	10:00AM-10:45 AM
Doug Bosley	“Civil War Canals and Railroads”	11:15AM-12:00 PM
Bernard Kempinski	“Railroads During the Civil War”	12:30PM-1:15 PM
Bernard Kempinski	“Civil War Aquia Line Model Railroading”	1:45PM-2:30 PM
Chris Vera	“Rails to Freedom in Colombia”	3:15PM–4:00 PM

Adjacent to the Trail Center, the River Park will host the Lancaster Fencibles Civil War Encampment, the Invalid Corps Civil War Encampment, the 30<sup>th</sup> PA Civil War Encampment and the 45<sup>th</sup> PA Civil War Encampment. Food vendors will also be present including Rose’s Deli (home of the Columbia Shifter Sandwich), Bricker’s Fries, Auntie Ann’s Pretzels and others.

**Photo 1. Burning of the Columbia-Wrightsville Bridge. June 1863**



The [Columbia Historical Preservation Society](#) will host the Columbia & Susquehanna (HO gauge) Model Railroad Club that occupies the entire second floor with its especially noteworthy scratchbuilt town of Columbia depicting the sites and scenes during the PRR’s prominence in the early 1950’s. The first floor will showcase the large Lower Susquehanna (O gauge) Model Railroad modular layout and Model Railroad displays provided by several of our Susquehanna Division members.

The third location will be the [Rail Mechanical Services facility](#). Due to new owners, details for displays, vendors, exhibits and operating speeders are being finalized.

Mark your calendars for this very special event sponsored by the Columbia Historical Preservation Society, [The Susquehanna Division of the NMRA](#) and the Lancaster Chapter of the National Railroad Historical Society.



**Photo 2. Columbia Crossings River Trail Center and Park**



**Photo 3. Columbia Historical Preservation Society**



**Photo 4. Trolley**

**Photo 5. Columbia and Susquehanna Model Railroad Club**



# Lee Bishop Tells Us to Get Signs Right – I followed His Advice

By Nicholas Kalis



Take a cue from Lee Bishop of Rochester, Washington when he writes in his letter to the Editor of *Railroad Model Craftsman* in the May 2020 issue. On page 5, Lee explains many of the signs we place on our modeled buildings suffer from two errors. One, they are oversized. Businesses strove to save money on expensive hand-lettered signs, so they were kept at a minimum size. Two, model railroaders tend to use modern typefaces on their home-made signs that were not in use during the time period modeled.

Lee Bishop was dead-on correct with his insights into modeling signs on one's layout. I would go further and add that the location of billboards and other signs on model railroads are often poorly thought out. Often, modelers will place a billboard at a location that no paying advertiser would ever accept. For example, some modeled billboards face, at street level, a narrow street that by its size few people would travel. Again, how many cars or pedestrians will see a billboard located on a dead-end street? Roof-top billboards get around this to an extent, but a roof-top billboard blocked by an industrial building across the street does little good.

Making matters worse, many signs seen on model railroads seem designed to be viewed by the "giants"

walking in front of the modeled town. Of course, by "giants" I mean visitors to the layout. They face squarely to the layout aisle. And they are glaringly legible to the visitors.

Billboards and signs must be seen by the public. So, a billboard or sign facing a warehouse with few employees will do little good. Think about the size of your sidewalks. If you wish to suggest a street busy with pedestrians – the “eyeballs” as they say today – to view your signs, build your sidewalks wider (of course, follow prototype).

Also, go easy on signage. Many firms just did not put up large signs. They served no purpose and would otherwise be expensive. Why no purpose? Many manufacturers were not producing goods for the general public. Their products were sold to other businesses. Another reason for not investing in large signs was that often the thoroughfares on which these industries were located enjoyed little foot traffic. And the vehicular traffic those roads carried were not travelled by the sorts of executives who make the decisions to choose a manufacturer.

I believe I did violate Bishop's rule quite a bit on my O-scale Waipahu Liquor Store. Within days of reading his letter to the editor, I replaced this sign (on Photo 1) with a smaller one (Photo 2). I tried to keep the typeface quite a bit smaller than on my first few drafts - I also used 35% dark white on the typeface so it would appear a bit weathered. There actually was such a business in Waipahu (could still be in business today?). It had one of those wonderful hanging metal signs with some neon light on it, if I remember it correctly. The hanging sign was blue, so I am guessing it had a sign on the façade as well. So, that's why I depicted that on the building.

(Reprinted with revision and permission from Nicholas Kalis' blog, "[Modeling Hints and Reviews for Large Scale Modelers and Others](#)")

### Related Articles and Videos:

[Model Railroad Decals, by GJWarth, Building Your Model Railroad](#)

[How to Apply Paper Signs to Your Model Railroad Structures, by Wiley's Scale Modeling](#)  
[HO Scale Billboard – Model Railroad Scenery, by Luke Towan](#)

## UPCOMING MER CONVENTIONS

2021 Convention – Chesapeake Division – Oct. 21 - 24, 2021 - Delta by Marriott Hunt Valley Inn, 245 Shawan Road, Hunt Valley, MD

2022 Convention – Carolina Southern Division -- “Carolina Special Look South”, Charlotte, NC

2023 Convention –Susquehanna Division – Dates and location tbd

2024 Convention –Division, Dates and location tbd

2025 Convention –New Jersey Division, Dates and location tbd

*Achievement Program Series*

## Conquering the Motive Power Achievement Program Award

By Dale Ridgeway, MMR

My journey to become a Master Model Railroader is one that I surprisingly found to be enjoyable. Fortune was with me because I had a completed layout that helped fulfilled some of the achievement requirements already. After three years I was coming down the home stretch, but still had the model railroad equipment achievement category staring me in the face.

Should I do Motive Power or Cars? That question I pondered for quite some time until I started talking to fellow members of the Tidewater Division. It seemed that the majority of members thought that building Cars would be the easiest way to complete the requirement. I wanted something that I could use on my layout and would be more of a challenge to build. I decided Motive Power would be the way to go. Some members said that I would have my hands full when it came to the scratchbuilding, but I was up to the challenge.

I told our achievement coordinator, John Johnson, of my decision and he put it to me straight! He showed me a picture of a locomotive that someone had built for their Motive Power award and said, "If you build anything like this, you are wasting your time and I won't accept it." With those cautionary words it was confirmed that this achievement would take some time. In the end, it took two years to build the three locomotives.

I started with the scratchbuild first. I wanted a B&O prototype that would look good in my HO collection and I could occasionally run on my layout. With a little Internet research, I came up with B&O box cab, No. 50. The only problem was that I had trouble finding builder blueprints. A call to my fellow B&O modeler, Fran Giacoma, set up a connection with a gentleman who had all the information, pictures, and measurements that I needed to build. I spent several days breaking down the measurements to HO scale and putting together a material list of items that would be required.

I bought lots of styrene, window glazing, and some accessory parts such as lights, a bell, and some brass grates. I also bought a cheap Bachman Alco FA unit just for the trucks. I drew out the main frame that I would need and took it to a metal fabricator to construct it out of 1/4" steel. I then ground parts of the frame to accept the motor and trucks. After several days of retrofitting the drive train together, I built new drive shafts to connect to a new can motor. I removed the side frames of the trucks and kit bashed them to look like No. 50's trucks.

The body was next. I drew out the sides on styrene to exact measurements and cut them out with an X-Acto knife. Then I filed and sanded the body, so all edges fit perfectly. I created the rib body design by applying small strips of styrene and several coats of primer to blend them in. The top was carved and sanded out of wood with all roof details added. I made all of my hand grabs and stirrups out of swing line staples. This worked for all the locomotives that I built.

I have a good friend in Australia who programs all of my decoders and sends them to me. Then I do the wiring and installation. Before I finished the wiring, I disassembled the model, painted it, and applied the decals. Then the wiring was completed and tested. She ran smooth and the sound decoder gave it the perfect touch. Weathering was the final step.

I shot a video of it running on my layout and took it to one of our monthly meetings for a final judging along with all of my proper required paperwork. Unfortunately, my achievement officer, John Johnson, was not able to be there to judge the loco due to a medical issue, so Norm Gardner took over with Chuck Davis and passed it with a score of 97. I was happy with the score but to me it will always be a 125 (Photo 1)!



I decided to stay in the prototype range for my next two locomotives so I could achieve more points than going free-lance and then not acquiring any points in the prototype category. Since I live only a few miles from the Maryland and Delaware Railroad Selbyville branch line, I chose their CF7, No. 2628. I made a call to their main office in Federalsburg, Md. to find out when they would next be running on the line. That allowed me to shoot some pictures of 2628 when they brought her out of the loco shed in Selbyville. The secretary was more than kind and said someone would be back in touch with me within the week. Sure enough, locomotive engineer Brian Hammond called me a few days later and gave me their schedule and even promised me that they would hold it on the line so I could shoot all the pictures and take measurements that I needed. And they did not disappoint! Within an hour I had all the information and pictures needed to start my next build.

Since the CF7s were built from retired F units, I started with a prototype GP7 frame, motor, and trucks. I disassembled the locomotive and kept all the hand railing. Next was the acquisition of a decent shell to work with. After some Internet research, I found CF7 shells at Arrow Hobby in California. When the shell arrived, I made a list of all detail parts I would need from different manufactures and ordered most from the Walther's catalog.

With all my photos attached to the wall in front of me and my list of all the measurements, I started by scratch building certain items on the shell. It seemed that No. 2628 had been rebuilt quite a few times before coming to the Maryland and Delaware, so I wanted to get all the details correct. I started adding

all the bought commercial parts such as radiator fans, stack covers, hand railings, and head lights. When I had most of the shell completed and fitted onto the frame, I disassembled the model and took it to the spray booth set up in my garage for painting. I then applied all the decals that I found on Amazon. They were perfect and went on easily.

The wiring went well and with a new programmed sound decoder from my friend in Australia and his printed-out CV instructions, I was able to get No. 2628 back together and running. After several test runs pulling different cars, I removed her from the tracks and applied the weathering with several powdered chalks and acrylic paints. Before No. 2628 went to judging, I invited Maryland and Delaware engineer, Brian Hammond, over to see the final product and take her for a test run. He was totally astounded when he brought the model to life. He told me that I had built an exact replica of the No. 2628 that he has driven down the tracks. With those supportive compliments, I wrote up the required paperwork needed for judging and shot a short video of No. 2628 starting up and pulling a train on my layout. When the judging was complete, I walked away with a score of 95. I know that there is a Proto 2000 of the Maryland and Delaware CF7 No. 2628. If you ever have the chance to see the real one, you will see that there are differences between their model and the actual engine. Even though this locomotive is not prototypical for my layout, I still enjoy running it on the layout and pulling trains or switching with it ([Photo 2](#)).



For my final locomotive build, I wanted a locomotive that could be placed on my layout permanently and be put into my motive pool. This choice came by happenstance. I had a MTH GP35 that burnt up during an operating session, and I had put it back on the shelf and kind of ignored it. After examining it a little closer, I decided that the B&O's first GP35, No. 3500 would be a nice build using parts from the MTH model.

First, I totally disassembled the MTH model and decided I could reuse the frame, trucks, and speaker. The decoder, shell, and motor were trashed so I would start fresh. I went on MTH's web site and ordered a new motor for the locomotive. Glad I ordered when I did because soon after that, MTH announced that they were going out of business. I had obtained several pictures of 3500 from my B&O modeler friend which helped me in obtaining the detailed parts needed for the build. I made my usual list of detail parts

and went to the Walthers catalog and placed the order. I also got in touch with my Australian friend regarding the decoder and placed my order. Unfortunately, the country was in the middle of the COVID epidemic and the decoder never made it. It had been quarantined somewhere in the postal service, so I ordered one from Streamlined Backshop.

When all the parts arrived, it was time to start the build. First thing to do was to install the new motor and wiring. This was pretty straight forward since I was reusing the same motor and drive mechanism. I did build a new frame for the decoder and added new LED lighting, but the frame was able to be completed in one evening. The shell was next with the usual detail parts being added. I installed new brass radiator and dynamic braking fans, brass handrails, new exhaust stack, and other numerous details. There wasn't as much to scratch build on this model. I believe that affected the scoring, albeit there were scratch built parts. I assembled the whole model and tested it on the layout before painting. After several test runs, I was satisfied with the model and disassembled it for painting. When painting was completed, I added the appropriate decals and reassembled the model, and then weathered it.

Judging would be a little more difficult for this model because of COVID restrictions. The Tidewater Division is in eastern Virginia and I live in eastern Maryland which posed some state line problems. We were not having any more meetings for the foreseeable future which previously had offered the judging opportunity. I arranged for the judges to meet at a safe location in the Virginia Beach area. I drove my model down for judging. The location was at the home of Chuck Davis. With safety precautions in place, it allowed for the locomotive to be run on his layout for observation. Everything worked as planned, and the locomotive ran flawlessly on Chuck's layout. Though the score was not as high as the other locomotives that I built, I walked away with a score of 89. Just enough to pass! B&O No. 3500 now resides on my layout pulling freight and running locals. It is a smooth runner and sounds great. I have no regrets even though it did not earn a higher score (**Photo 3**).



After receiving my motive power achievement award, I look back on building the three locomotives and realize now that it wasn't as difficult as I had anticipated. Doing the research and copying the prototypes were challenging, but one I found this achievement to be the most rewarding after completing it. It took me two years to complete this project while working full time. I didn't rush through the requirements, so I could get it right the first time. My only regret is that John Johnson couldn't be there for any of the judging and to see the models I built. Hopefully in the near future, I can bring all three models to a meeting and he can view them up close ([Photo 4](#))!





## NMRA 2021 Convention Canceled!

[Rails by the Bay](#), NMRA's 2021 National Convention scheduled for July 4-11 in Santa Clara, California, has been canceled for the second year in a row due to the potential risk for spreading the coronavirus.



Although disappointing that we won't be able to visit our friends and colleagues in person, we will still be able to enjoy the conference *virtually*. Clinics, meetings, prototype and layout tours will go on as planned. You can watch them from the comfort of your own home, which is definitely an advantage for some who might not be able to get to the conference otherwise.

We are still hopeful that our Mid-Eastern Region Convention, the [Mount Clare Junction](#) in Hunt Valley, Maryland, sponsored by the Chesapeake Division, will remain viable for October 2021. If the vaccines do their thing, we should be in much better shape by that time for an actual, real-life convention. Fingers crossed!

# They Once Shared Space...With a Dance Studio

## Chesapeake Bay & Western, Virginia's Largest Fixed Model Railroad Layout

By Roger Bir

The club biography reads straightforwardly. The first layout was built in 1973 at the Grafton Hobby Center in Grafton Virginia. Two years later, club members disassembled the structure and moved to a country farmhouse. Eight years later, like most "expanding" clubs, the members had soon outgrown that location. Several sites were considered before settling on a building...with a co-occupant. Imagine a train club sharing space with a dance studio. That is precisely what happened...a movie writer could not have scripted it any better. The "dance-train" marriage lasted for 12 years (longer than a lot of Hollywood relationships) before "the hoofers" moved on. It was February 1995 when the current layout began taking shape. The club's flyer advertises the Chesapeake Bay & Western as the most extensive

and largest "fixed" layout in Virginia. Covering two stories and seven different levels with upwards access being granted via the club's two helix's (with a 1.5 - 2.0-degree ascent). These railroad-themed 'spiral staircases' were designed and built by NASA scientist club members; whose full-time job was part of our country's space program (**Photo 1**).



The initial membership in July 1973 was 28. Because they were just starting, each new member provided an initial investment of \$10, and monthly dues were a "staggering" \$6. In the first two years, committees were created (track, operations, scenery and open house), a set of by-laws was adopted, and a Board of Directors was elected. By December 1974, the club held its first Open House. The event was deemed a success as the visitor's "log" had over 190 signatures, with whole crowds estimated at 450. In March 1975, an overture was made to look for a new location. The most common reasoning would dictate, "we need more room". While no real reason was given for the move, in June 1975, the CB&W moved to the farmhouse in Grafton, and discussion centered on approving a new layout.

1980 saw membership dues go back to \$6 per month, a \$2 increase. In May of the same year, the farmhouse owners, Mr. & Mrs. Dawson, informed the membership that as long as they are both still living, the club can stay. In the Jun-Sep 1981 timeframe, we saw the application of two current CB&W club members. Wayne Coleman, now a retired captain on the York Fire Department, and Paul Mirick, a retired NASA engineer, were accepted as members. January of 1983 saw the club rapidly outgrowing its farmhouse location. Topics at business meetings centered on possible sites, and there were several from which to choose. Murray Wilson brought everyone's attention to a building on Dare Road in Grafton (**Photo 2**). It was large, the rental price was reasonable (\$135 per month), and the club would occupy half of the building...with a dance studio. June 1983 celebrated the club's 10th anniversary, and aptly enough, a new home was found. Moving from the farmhouse to the new location took six months, and by January 1984, the CB&W was in place at their current location.



The rest of the 1980s saw the dues increase to \$10, and the club looked at becoming a tax-exempt entity. The club ordered their first t-shirts, and a vote was taken and passed to raise the membership total to 30. By 1990, the treasurer happily reported that the savings account had increased twofold. These successes were due in part to the club hosting multiple open houses. An open house (**Photo 3**) has become a regular fixture for the club as the membership body decided on a minimum of four and possibly five such events per calendar year. As the coffers continue to rise, the Board of Directors proposed a club budget to handle the ever-increasing finances. One aspect presented and accepted was the incorporation of the Chesapeake Bay & Western. The final paperwork was completed, and the club was incorporated in June 1994. With this milestone accomplished, the secretary set out searching for all information to make the CB&W a 501(c)3 creating a tax-exempt status for the model railroad club.

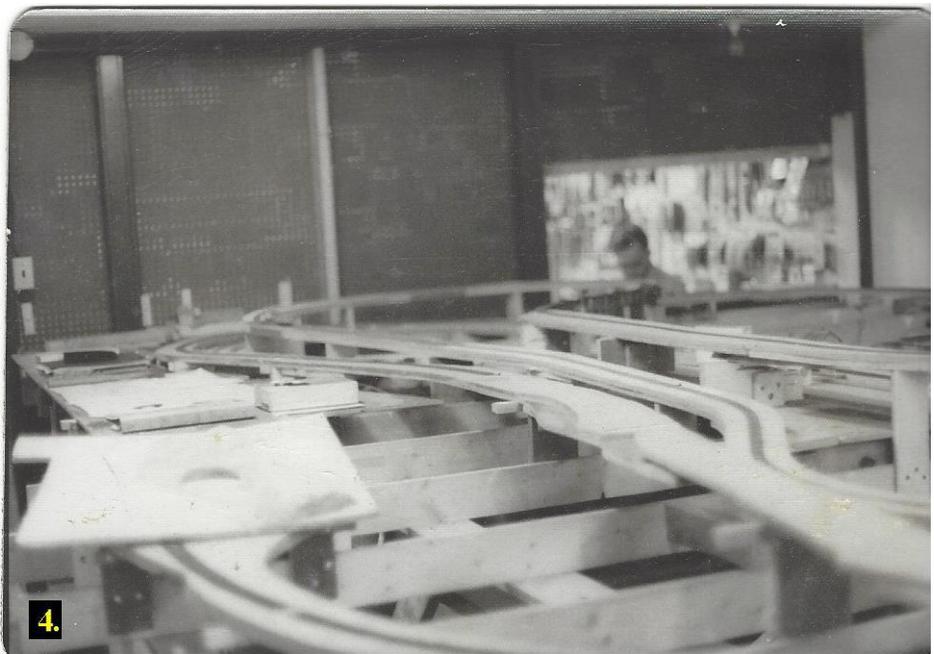


3.

Not to be considered an "uninspired decade," the 1990s were not satisfied to rest on their current laurels. In January 1995, the Board of Directors learned our co-tenants, the dance studio, were leaving to another facility. Over the next six months, extensive changes to the club by-laws were proposed and accepted. These include the definition of memberships, new member acceptance procedures, termination of a member, special elections, and suspension of by-laws. The Fall season started on a positive note when the members approved a lumber purchase for the new benchwork in October. With an influx of lumber (**Photo 4**), the new "expansion" was deemed ready for track to be laid, which began on the 2nd of November.

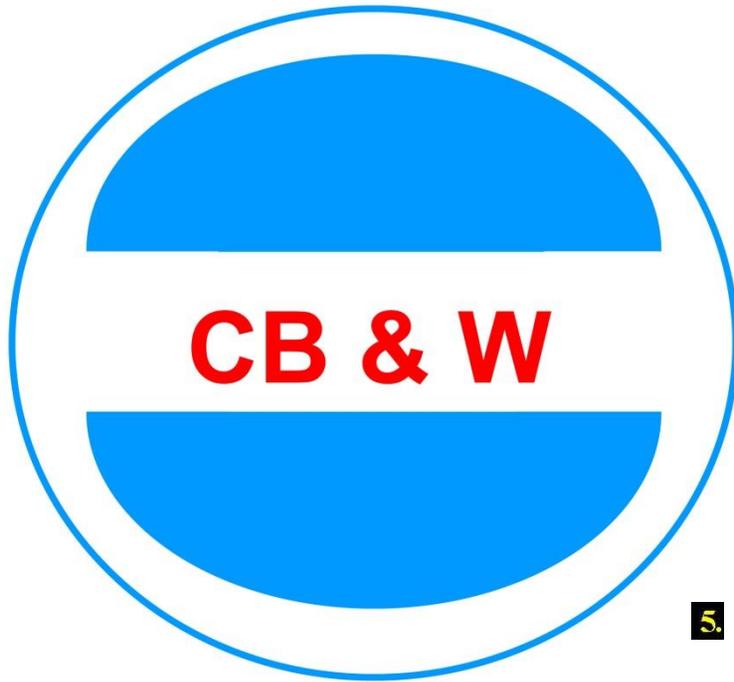
As the 20th century gave way to the 21st, improvements continued for the club. January 2000 marked the completion of the upstairs portion of the layout and an inaugural run was completed. The buzz over the new design was such that

members began suggesting an article be submitted to Model Railroader Magazine. The enthusiasm remained high, but it was felt more work was needed on the layout before being ready for a magazine spread. With the new by-law changes in effect and a newly adopted logo, (**Photo 5**) the club continued to meet with increased financial success. Treasurer reports in mid-2005 show combined club assets continuing to climb, much in part to the continued success of the regularly scheduled open houses. The increased



4.

financial success proved to be the catalyst as the club decided to pursue tax exempt status. After two-years of continued paperwork, the CB&W was awarded 501(c)3 on 30 November 2009.



As 2011 rolled in, so did an influx of member motivation towards the scenery. Columbia Furnace, **(Photo 6)** one of the original areas of the layout, underwent a complete revitalization. Some of the original buildings were kept, but the topography was changed entirely. Upstairs, the decision was made to upgrade all the structures in and around Union Station. With all the scenery changes and not to be outdone, the members put together a fundraising drive to earn money towards purchasing a centralized air conditioning and heating unit for the club. As luck would have it, the goal was reached in time to install the new unit and have it up and working by the first week in July 2011.

5.



6.

Whenever you read about an organization in *Model Railroader* magazine, there is always a central "theme" associated with its origins. Fictional railroads like "Silicon Valley Lines" or "New Baltimore & Fairhaven" come to mind, and the Chesapeake Bay & Western is no different. Creative writing from a member in 2015 resulted in the following "historical" perspective.

"The CB&W traces its heritage back to 1884 and the entrepreneurial skills of Col. Wendall J. Davis. Davis amassed his fortune in lumber around the sprawling mountains of Keezletown, West Virginia. It was a freak accident in 1886, which would change the course and wealth of both Col Davis and the CB&W. A loaded log train was heading down the notorious Nose Bleed Grade when the brakes failed, resulting in the locomotive and six cars jumping the tracks and digging a 4' deep furrow into the West Virginia mountainside. Realizing the critical value of the locomotive, CB&W maintainers began work to remove the embedded engine. The result however was a totaled engine and six cars, but not before the rescue workers discovered a large vein of coal. Coal was fueling the industrial revolution in the United States, and by 1890, Col Davis and his company became a primary supply source of coal for the region. The Davis company continued to prosper until the untimely death of its founder in 1898. According to legend, Col Davis had consumed too much of a local drink, Davis Mountain Moonshine or as the locals referred to it "coal miners punch." He stumbled from a local pier, fell into the water and drowned. Despite the tragedy, the company continued to prosper under the Davis family into the 20th century. By the 1940s, steam gave way to diesel (**Photo 7**) as passenger, and freight revenues continued to rise. Those prosperous times began to turn towards the negative as the demand for coal dropped. Not willing to step aside, the CB&W became heavily involved in intermodal traffic, which then carried the company into the 21st century."



While the upgrades in scenery continued, the club decided to add detail lights to all current structures/buildings on the layout. The effort started in February 2013, and as a result, all new facilities added to the layout must be configured (where applicable) with interior lighting. With ever continuing changes on the inside, the noteworthy success of the club was being acknowledged throughout the

Hampton Roads area. Tours were now being given, and several private donations brought the club's balance sheet in September 2015 to an all-time high in total assets.

When the club first opened in 1973, model railroad technology was archaic at best. Thanks to micro miniaturization and advances in electrical circuitry, locomotives went from just motion and lights to complete sound, just like their professional inspirations. The original control was called Direct Current (DC) and limited the number of trains operating at any one time to the number of throttles available for use. At this time, the club had just ten throttles, and all of those were prone to breaking as they aged and repairing them became more and more costly. Digital Command and Control (DCC) made its initial appearance to model railroading in 1984. The club was slow to address the issue. Still, as more and more locomotives were being bought, all with DCC as their operating systems, the reality was quick to set in with the CB&W. With the problems of aging DC throttles (unable to be repaired) and the steady influx of DCC, the lines amongst the club members were quickly being drawn. In August 2016, a vote was taken amongst the membership with technology on one side and traditionalist on the other. When the votes were counted, technology prevailed, but not without a hefty **(Photo 8)** price tag needed to

implement the new operational style change.

The apex in achievement and acknowledgment came to the CB&W in 2017. During a Fall Open House, a local TV reporter, Philip Townsend, had the opportunity to view a full-scale operation at the CB&W.

Impressed with what he saw, Townsend pitched



the idea of doing a news story highlighting the club. Given his producers' green light, Mr. Townsend contacted the club and made plans to interview and tape club operations. In November 2017, local viewers of the ABC affiliate, WVEC Channel-13 had the opportunity to view the CB&W as part of their evening news ([CB&W on ABC 13 News | CB&W Model Railroad Club - YouTube](#)).

In just over two years, the CB&W will celebrate a landmark event with 50 years as a model railroad club. For those 28 original members who joined together in 1973, the face of the club no longer resembles what they started. Now envision two stories and seven levels of combined expertise, which will not only tickle the fancy of an eight-year-old but continue to delight someone in their 70's as well. Please visit the club's web site at: [Chesapeake Bay & Western Model Railroaders | Virginia's Largest HO Scale Layout \(cbw-mrc.com\)](#)



## Electronics Corner...



### Signal Interlocking for Model Railroads - Introduction

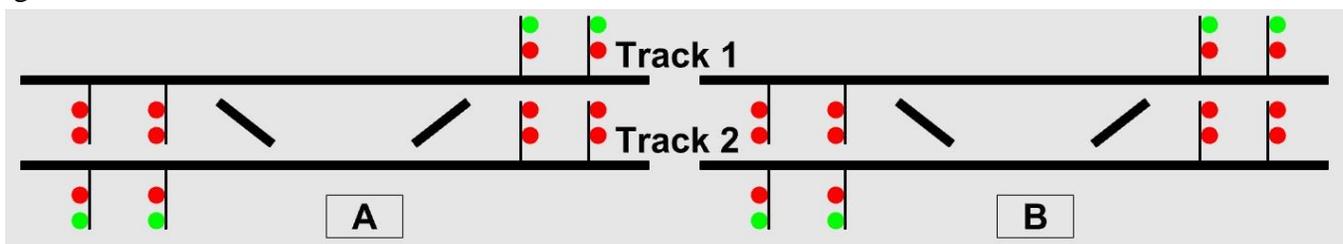
By Earl T. Hackett, Jr.

In subsequent articles, I will describe how I am building signals for my layout. Most modelers will not want to get involved with surface mount devices, but the novel way to create model masters and molds to make multiple parts should be of interest to many. Herein I begin a series that describe how I am implementing full switch and signal interlocking on my layout.

What is interlocking and why is it necessary? Because we know that the possibility of error on the part of the operator increases with the complexity of the plant. This requires a means of protection that would automatically prevent collisions or derailments due to operator error. Sounds simple enough, but the devil is in the details.

Much has been written about block signals, but my layout isn't that big, and I don't have any blocks. I just have one interlocking signal bumped up against the next. Interlockings are very different from block signals. To illustrate the logic in developing an interlocking system, I'll use a simple pair of interlockings.

Interlockings are a combination of the desires of the operator/dispatcher who interacts with the physical plant via levers (old school) or via mouse clicks and computer displays (modern); and what the lineside field equipment will allow to happen track side. The fail-safe nature of railroad signaling ensures that no matter what the operator/dispatcher wants to happen, the field equipment will not permit the track infrastructure (signals, derails, switch points, etc.) to setup in a situation that violates the integrity and safety of the system. For example, if the dispatcher attempted to throw a pneumatic or electrically powered switch while the block containing the switch was occupied, the field equipment would simply ignore the command.

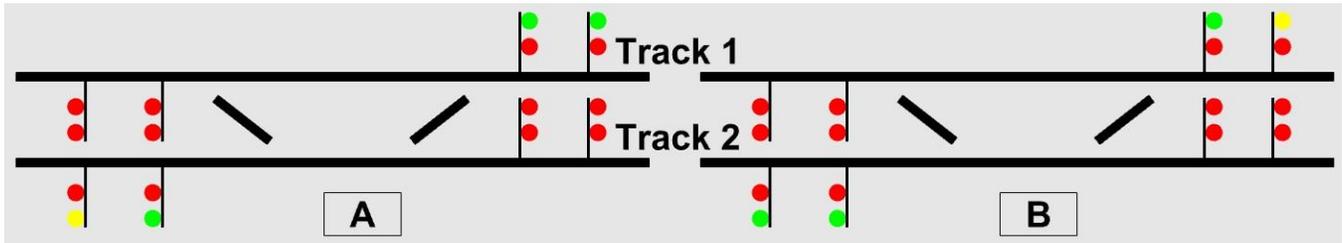


**Photo 1: Simple Interlocking.jpg**

In **Photo 1**, there is a pair of crossovers at each interlocking. Here the switch levers are in the normal position and the home signal levers are reversed. Under these conditions, the signals would function as normal block signals with one exception. A block signal, indicated by a number plate on the signal mast, displaying a stop aspect, would indicate stop and proceed at restricted speed. On an interlocking signal it means stop, do not proceed. When pipelines were used to control switches and signals, there would be a tower at each interlocking and the operators would have to communicate with each other to coordinate train movements. With the advent of electropneumatic switch motors and color light signals, a single tower could control both interlockings. The last pipeline interlocking in the US was dismantled only a few years ago.

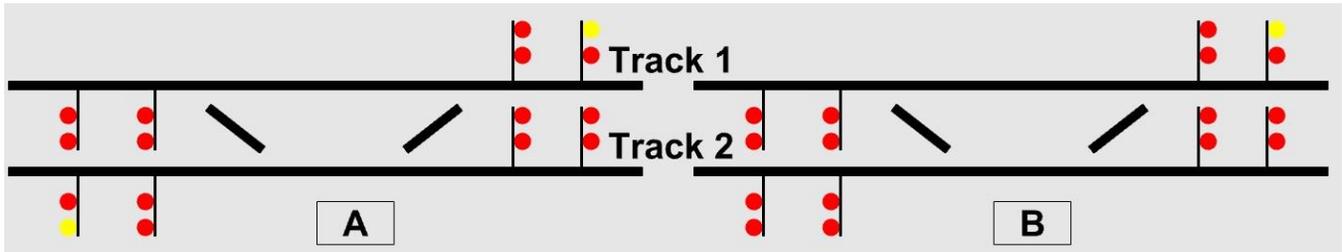
Assume that for some reason traffic on track 1 between towers A and B must be halted; so, track 2 must be used to get trains around the obstruction. To accomplish this the eastern crossover at B and the west crossover at A must be reversed. With the signals displaying Proceed, the switch levers are locked in their normal position. They can't be moved until the home signals all display Stop. However, the home signal levers are also locked.

To resolve this, on the prototype, there is a lever on the handle that releases the lever lock. It can be moved to an intermediate position that sends a request to the plant to unlock the lever. This does two things. It sets the distant signal to Approach and starts a timer that will maintain the lock until any train that has passed the distant signal has time to get through the interlocking. This is commonly referred to as "running time."



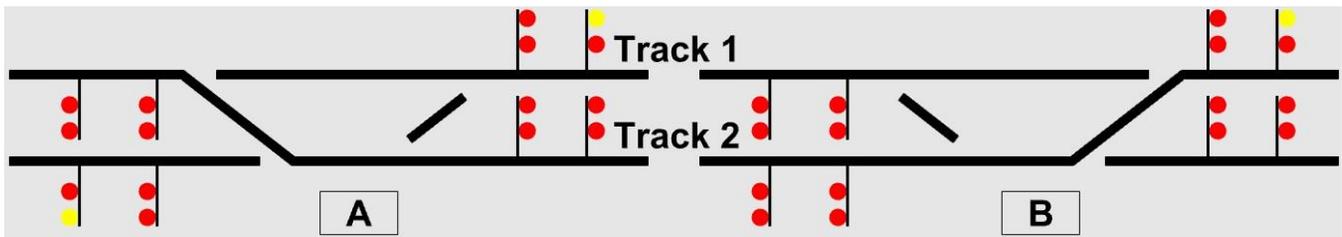
**Photo 2: Stop Request.jpg**

This also starts a timer for the eastbound approach signal at tower A. The time required for a train to get from A to B could be quite long. This time could be significantly shortened if block occupancy data could be used to detect any train on track 2 between A and B, but because traffic delays are usually not a problem, this is seldom done due to the added expense.



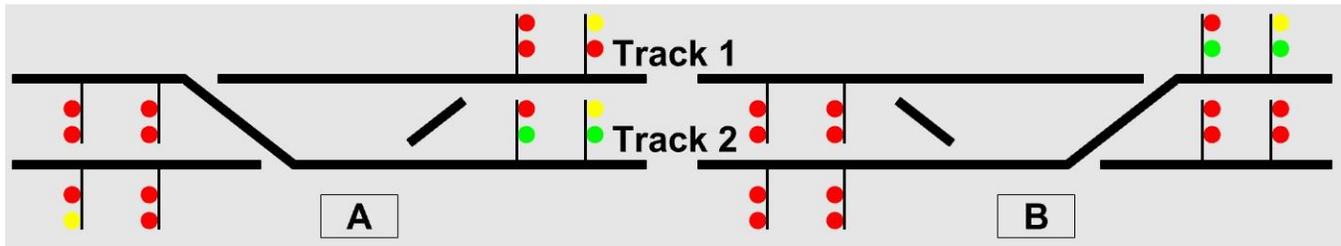
**Photo 3: Timed Out.jpg**

When the timers have run down, the home signal levers can be then be set to either normal or Stop. The distant signals could be set to either Approach or Stop depending on the rules of the particular railroad. I've shown both in this illustration. This unlocks the switch levers, and now they can be reversed.



**Photo 4: Switches Thrown.jpg**

With the switches reversed, the signals can be cleared.



**Photo 5: Signals Cleared.jpg**

Reversing the signal levers locks the switches and sets the signals to the appropriate aspects. The C&O had only six aspects. If these switches could handle medium speed the home signal would show Medium Clear while the distant signal would show Approach Medium as shown in the illustration. If they could not handle medium speed the home signal would display Restricting (red over yellow) and the distant signal would display Approach. The tower operator can only say stop or go. He has no control over the aspects that are displayed. To allow an eastbound train access to this section of track 2 the whole process would be reversed.

This is a very simple example. A large terminal the tower could have over a hundred levers. On Google Maps search for [Trackside Bar, Bolton Street, Bury, UK](#). This is the southern terminal of the East Lancashire Railway, a preservation line in the UK with which I am familiar. The station has three tracks, a branch line, and a few sidings. Throw in the derails and signals and you have over 70 levers in a mechanical interlocking plant located in the gray roofed building between the tracks just south of the highway overpass. Now think how many levers there would be in an interlocking like [Zoo Junction](#) at the northern end of Penn Station in Philadelphia.

Now that you have an idea of how the prototype interlocking signals work, in the next issue I'll show the hardware I am using to simulate this on my layout.

### **References:**

*[Ed. - For those who are unfamiliar with railroad signals and their terminology, you may wish to look at this glossary published in [Trains magazine in 2006.](#) ]*

[Installing Approach Signals for an Interlocking Plant: Part 1](#) – (with links to Part 2 & 3), by Model Railroad Academy.

[Signaling Your Layout, Portland Daylight Express](#), 2015, pdf by Dick Bronson (RR-CirKits, Inc.)

## Featured Layout...

# Building an HO Scale Layout - Part 2

By Fred Humphrey

In the previous article I explained who I was and how model railroading became my hobby. Due to serving within the Department of Navy for 50 years and having to move around often, I had just collected and ran model trains. After I retired, I began to explore model railroading in more depth. I decided I wanted to do something more than just run model trains on the floor or tabletop. The search began at the local hobby store where I came across an Atlas model railroad book titled “Seven Step-by-Step HO Railroads” in 1994, including track plans and a building guide. I selected the Granite Gorge and Northern layout HO-28 plan on page 26 of that book as my first project in building a layout that had purpose. Following the instructions give me insight into building a layout which sparked my interest to learn more. I had that layout for several years and made several modifications as I gained more knowledge about model railroading. I had a separate building built in the back yard and began construction of a new two- level layout. I soon realized I needed help in understanding what was available and where to search. That’s when I decided to join a local model railroad club and become a member of the NMRA. I wanted to pick the brains of other modelers to improve my new layout. I have been a model railroader for five years now and have learned much from the model railroad club and Tidewater Division members. This inspired me to share my experience with you.

After attending several Op (operating) Sessions, I decided it was time to invite fellow model railroaders over to examine my layout and discuss how best it could be improved for Op Sessions. They provided great suggestions and I began laying out a plan to make some of those improvements. I’ll discuss several of those suggestions here. They included adding staging yards, better switch operations, and separate classification yard leads from main line track.

Two staging yards with four tracks each were added on the opposite side of the wall from the layout in the workshop. Each staging yard is approximately 10’ and 12’ long, respectively, that support west bound traffic entering on the lower level while east bound enters on the upper level as shown in [Photo 1](#). I plan to add scenery, control panels, and signals to these yards in supporting my Achievement Program submission, later.

Providing separation between the main line traffic and yard classification work required changing yard access on both ends of the Decatur Yard. On the yard’s west end, I removed the exiting access switch and track and then realigned the track to support a longer lead in front of the crossover located along the west wall. I retained the switch accessing the yard beyond the crossover, which



permits east bound traffic from Main 1 and Main 2 access to the classification yard's east end.

**Photo 2** shows the new switch arrangements before and after the double crossover and clearly illustrates the classification lead track separation from Main 1 and Main 2. Major changes were required on the east end of the classification yard. Two switches on Main 1 and Main 2 giving access to the east end of classification yard had to be relocated closer to the helix. A second curved switch was



added as shown in the lower left corner of **Photo 3**.

Adding the longer lead also required that the access to the locomotive facility be flipped from west side to east side. This required an adjustment on where to place the fueling services within the locomotive facility. At this point it will be on one of the leads to the engine repair shop. These changes helped to facilitate yard classification work while eliminating main line blockage. Please note in **Photo 3** that a turntable was added to provide engine change of direction to travel on the main line.

**Photo 4** shows the engine repair shop with several engines awaiting service or in storage. The lower track below the two Norfolk & Western (NW) engines is the ready track when service has been completed. The photo shows Illinois Terminal Company (ITC) diesels during the time of the N&W merger with ITC in 1964. Note several diesels have been renamed and numbered to N&W while retaining ITC color scheme. To improve switch operation Circuitron Tortoise Slow Motion Machines were installed across the lower level. Manual switch throws and Atlas switch solenoids with Atlas control buttons were removed.





5.

The improvements began in the Illinois Central Yard by marking each switch before removal. I used Circuitron Tortoise Slow Motion Machines across the lower level as shown in [Photo 5](#). Please note two different connectors are depicted, one with solder points and the other with screw points. The screw point connector will be used in locations where the tortoise machine is mounted next to the wooden frame for easier wiring access and the solder connectors will be used in the more open areas. After installation of tortoise machines throughout the yard, I reinstalled the track, put some buildings back and installed

block signals (not yet wired) on the east side of the WABIC interlock. The big challenge ahead is to determine how to electrically connect eight block signals at the WABIC interlock so that they work properly, but that's another story. On the west side of the WABIC interlock, tortoise machines were installed, and sidings were added for two new industries. Additionally, ensured insulators were installed during track replacement around the WABID interlock to prevent short circuits. The West Bound Staging Yard is on the other side of the wall from the WABIC interlock in [Photo 6](#). The Lower Staging Yard (West Bound) is Shorting Block No. 1 while Illinois Central Yard is Shorting Block No. 2.



6.

I continued working from the south to west wall of the lower level with installation of several more tortoise machines before reaching the double crossover. Here's where I installed a switch before the double crossover and retained one after the double crossover. This change provided a longer classification track lead for the west end of Decatur Yard, but it required the Decatur Yard west lead track to be adjusted. Examine [Figure 1 \(next page\)](#) for the Decatur Yard West End Lead Track modifications.

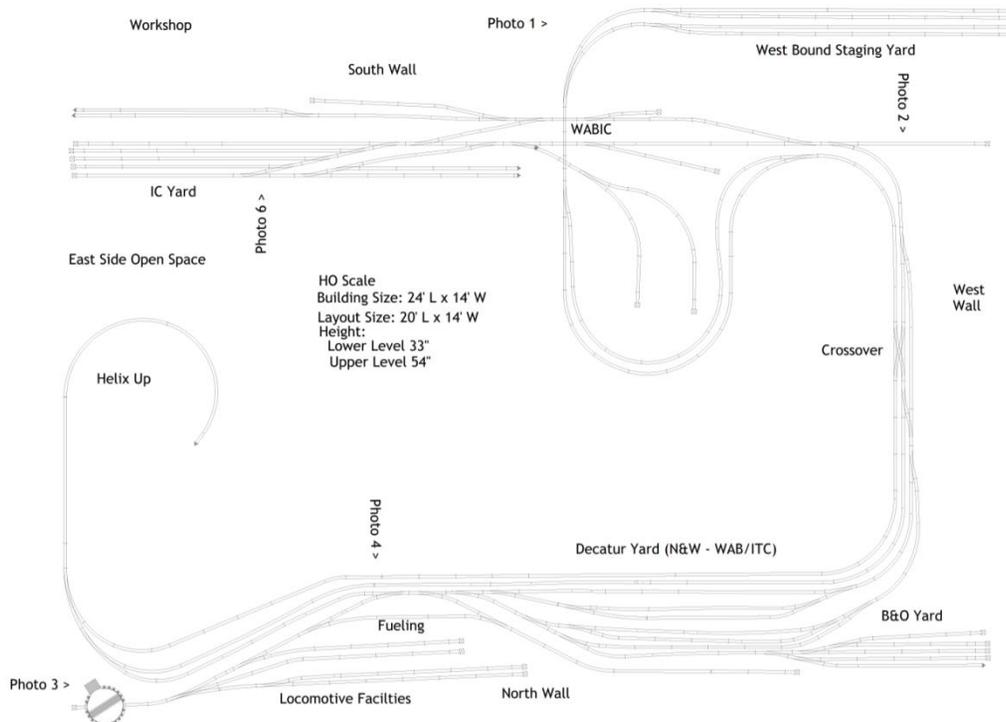
Within the Decatur Yard and the B&O Yard more tortoise machines were installed as I moved along the north wall to reach Decatur Yard East End and the yard itself. Because the yard is long, I felt it was necessary to create two short circuit blocks. Short Circuit Block #3 is Main 1 & 2 coming from Illinois Central Yard all the way the helix. Short Circuit Block No. 4 is Decatur Yard West End with Decatur Yard East End as Short Circuit Block No. 5. Creating the separation within the Decatur Yard required an insulator on each track to support Short Circuit Blocks No. 4 and No. 5. After several switches were removed, I began installation of Decatur Yard East End track lead. it became apparent that the entire locomotive facility had to be reversed. Having limited space for the locomotive facility forced reduction of the yard ladder so I decided to install a 3-way switch to maintain two tracks for locomotive repair work, two locomotive storage tracks and one track for a locomotive to be ready for manifest assignment. It's possibly the B&O Yard may

become the Decatur Car Repair Facility and Maintain of Way storage. More research of Wabash history is required to determine the proper location for the fueling and sanding services located in or near the locomotive facilities. In the meantime, the helix is Short Circuit Block No. 6.

To enhance Op Sessions, I have decided to include a wooden post at each switch, to be designated by a number as shown in **Photo 7**. This number system will appear on the control panel for easier identification. I have further installed magnets under the track at each industry to eliminate the need to uncouple cars by hand or using a wooden pointer. Once the scenery has been installed, these magnets will be hard to locate. Therefore, I've installed wooden pegs painted yellow for easier locating. The next step is to wire the main line track and connect associated control panels with indicator LEDs plus short circuit light bulbs.



Finally, **Figure 1** illustrates my lower-level layout track diagram. As I developed the diagram, I realized there's an error shown in one photo. I have one more modification to complete on the layout for the layout to match the diagram. Can anyone locate which photo contains the error verses what is illustrated in the diagram?



**Figure 1**

## The Last Stop...

Here is your inspiration for those who may ask, “Why am I doing all this model railroading stuff?” Here are some scenes and a video from the B&O Model Railroad, Ridgley Division, built by Dale Ridgeway, MMR.



### [Video Cab Ride](#)

**Caution: If you are not feeling inspired right now to get back to work on your railroad, please call your doctor!**