



# The Local

Newsletter of the Mid-Eastern Region, NMRA  
The Local, 77, Number 3, May-June 2022

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

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## Carolina Special Look South 2022 MER Convention

By Bob Halsey

Previously we covered some of the excellent tours we have scheduled, especially the [North Carolina Transportation Museum](#) (NCTM) which includes the largest roundhouse in North America, with stalls filled with historic steam and diesel engines, and railcars, some undergoing restoration. Another tour is to visit the restored combination depot, railcars, and engines at [Newton](#), including the N, O, and HO layouts in the Model Railroad Building. This tour will start with a visit to Neal Anderson's full basement double-deck HO layout, which you can get a preview of by going to [www.kkrailroad.com](http://www.kkrailroad.com) ([Photos 1-3](#)). After the Newton visit, there will be a stop at the N scale layout of Gil Brauch, MMR. Other visits you may want to make are to the large multi-deck HO full basement layout of Ed Smith's Erie Railroad ca. 1947 (including his 10-arch viaduct) near Hickory, NC, or to Andrew Stitt's On30 East Tennessee & Western North Carolina layout in New London, NC east of Charlotte ([Photos 4-6](#)). The [ET&WNC](#) was a real railroad; parts of it still exist, and you can get short rides on it.

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

2022 MER Convention News	Bob Halsey	1
MER Admin / Staff / Supers	Staff	2
Improving Car Construction	Jerry Stanley	4
President's Column	Kurt Thompson, MMR	6
Editor's Desk	Greg Warth	6
AP Update	Dave Chance	7
Branch Lines	Greg Warth	7
Elections 2022	Martin Brechbiel, MMR	8
Upcoming Meetings	Staff	9
Ad Central Station	Staff	10
Modeler's Haven	Nick Kalis / Greg Warth	11

### Inside this Issue of the eLocal

Learn CAD	Earl Hackett	13
Weighty Weights	Bob Gamble	14
Sticky Subject	Greg Warth	15
Welding Animation	Fred Miller, MMR	16
Oahu Sugar Company - 1944	Nicholas Kalis	20
Leiter & Kuhns Supply	Martin Brechbiel, MMR	23
New Tracks	Greg Warth/Jim Kellow, MMR	28
Back on Track	Greg Warth	29

We also mentioned many activities of interest to non-modelers (both younger and not so young) to encourage you to bring family members when you come down this way (see the Jan/Feb issue of *The Local*), and the many fine restaurants close to the University Hilton hotel. In addition to the multiple layout tours we have lined up (including two that were written up as cover articles in Model Railroader magazine), we will be presenting a variety of interesting clinics taught by experts from MER and other regions. Some of these include:

- Model railroad industries
- Construction electronics
- Layout sounds
- Tank cars
- Flatcar loads
- Airbrushing techniques
- Making a section house or crossing shanty (make & take)
- Junctions, interchanges, and diamonds for your layout
- Southern Railway Murphy Branch

and many more, too many to list here!

We are still looking to fill the last slots in the schedule. Of course, we will have a [contest](#) room, so work on your dioramas and detailed rolling stock, and plan to enter them! There will be a General Store (formerly called the White Elephant Room) – providing a great opportunity for you to donate or sell items you no longer want and would like a fellow modeler to use. There will also be a drawing for prizes.

*Continued on page 3*

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*Continued from page 1*

On Saturday evening 22 October, we will enjoy a banquet with top quality menu choices, from 6 to 9 PM. Our speaker will be Mr. Shane Wilson, owner and CEO of Scale Trains. And finally, as usual at these conventions, there will be the MER Annual Meeting on Sunday morning from 10AM to noon.

Check out the convention website at <http://www.carolinasouthern.org/MER2022.html>. You can see the Convention schedule, and by clicking on the hotel link you can make your room reservation – the convention discount rate is \$115/day. If you have any questions, send an email to Neal Anderson, MMR, at [2022chair@carolinasouthern.com](mailto:2022chair@carolinasouthern.com).



Photo 1: On30 ET&WNC train crossing the Doe River. This is one of the layouts available to visit.



Photo 2: ET&WNC train arrival at Blevins station



Photo 3: ET&WNC passenger train entering Cranberry yard



Photo 4: Engineer of the passenger train guides it past the Z building on the HO KKL Railroad. This view only shows about one quarter of the layout. Helix in far corner leads to lengthy lower level



Photo 5: Al's Wharf and the Z building on the KKL

Photo 6: Bridge trestle over a roadway on KKL



# Featured Clinic

## Tips for Improving Car Construction

A Clinic Presented by Ken Montero at The Hobby Barn\*

By Jerry Stanley

The Potomac Division has scheduled ten in-person clinics and twelve virtual clinics for 2022. On February 12<sup>th</sup> Ken Montero from the James River Division conducted a clinic on "Tips for Improving Car Construction." This was the first in our series of clinics to be held in 2022. The next three will be held in Fairfax, Virginia at the Knights of Columbus, 3700 Old Lee Highway, Fairfax, VA on May 14<sup>th</sup>, June 11<sup>th</sup>, and August 20<sup>th</sup>.

Ken's clinic on Feb.12<sup>th</sup> was outstanding. It was mixture of a tool-related discussion on techniques, combined with components of kit-bashing, and actual hands-on kit building. Ken chose a Tichy flat car kit (Tichy Train Group [tichytraingroup.com](http://tichytraingroup.com) HO Kit Series 1000 Commonwealth/GSC 53'6" Flatcar). The instructions that came with the kit were not very informative (**Photo 1**).

Fortunately, Ken had built several of these and was able to decipher the sparse instructions for us. In the first part of the clinic, we salivated over the tools. Yes, I am a tool junkie and have a three-bay garage full of tools to prove it. Ken introduced us to the tools and their many uses including how to use these tools in kit-bashing techniques. Ken brought examples of cars he had worked on, removing molded-on details, and adding separate details some of which he had made from scratch. They were beautiful pieces of rolling stock and better than what can be bought as ready-to-run pieces produced today.

KIT SERIES 1000  
Commonwealth/GSC 53'6" Flatcar

Assembly:

1. **Grabirons** - Remove from sprue with a sharp knife. Test fit in holes. If holes are too small, enlarge by rotating the tip of a #11 X-acto knife blade in the holes. Dip ends of grabirons into Plastruct Plastic Weld and insert.
2. **Stirrups** - Remove from sprue with a sharp knife. Dip flats in Plastic Weld and install.
3. **Brake Wheel** - Slide brak shaft into mounting block. Enlarge hole with knife tip to fit before removing from sprue. Depending on your preference you can install the brake wheel either flush with the deck or raised. Glue mounting block in hole on end of car.
4. **Final Assembly** - Install wheels into trucks. Place couplers into pockets and snap covers into place. Drop weight into place. Place underframe in place. Screw trucks in place.

TICHY TRAIN GROUP, PO BOX 220, ALAMANCE, NC 27201-0220  
WWW.TICHYTRAINGROUP.COM

WE NOW HAVE 1000 KIT DECALS AVAILABLE.

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PART # 10001, \$4 EJ&E SET FOR THIS CAR  
PART # 10001-6, \$20 6 SETS WITH UNIQUE NUMBERS  
PART # 10009, \$4 GN SET FOR THIS CAR  
PART # 10009-6, \$20 6 SETS WITH UNIQUE NUMBERS  
PART # 10169, \$4 ACL SET FOR THIS CAR  
PART # 10169-6, \$20 6 SETS WITH UNIQUE NUMBERS

**Photo 1: NMRA Potomac Division Hobby Barn Tichy kit**

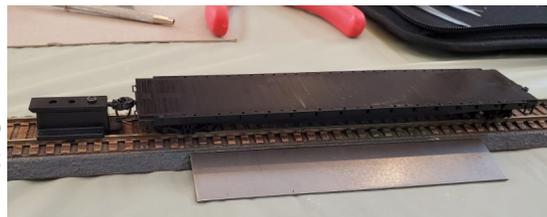


**Photo 2: Mike Powers installing grab irons**

After the morning instructional phase was completed, we moved on to assembling the Tichy flat car. First up, we installed grab irons (**Photo 2**) which required drilling out the holes a bit and using an X-ACTO #11 blade point to enlarge the holes.

Next, we installed the steps which also required the same procedure. Once the glue for securing these parts had dried, we installed the metal weight and the undercarriage that just snapped in place. Ken then had us install the Kadee couplers (supplied separately), and then the trucks.

Flipping the assembled flat car over, we checked the coupler height. We had a problem. The coupler was too high. To solve the problem, we took the weight out and reassembled the flat car (**Photo 3**).



**Photo 3: Coupler too high**

The height was just about right, but we did not have weight added to the car. Ken and I discussed ways to solve this dilemma such as leaving the manufacturer's supplied weight out and gluing in lead pellet weights; or we could leave weights out altogether. Optionally, we could leave the manufacturer's weight in place and cut off part of the spacer at the top of the truck and see if that would still turn freely. Ken cut the first two (**Photo 4**).

We mounted the modified trucks onto the flat car and then tested the reassembled flat car coupler height (**Photo 5**). Somewhat surprisingly, the trucks actually worked freely, and the couplers were the correct height! Finally, we installed the brake wheel (**Photo 6**).



**Photo 4: Ken Wilson sawing the truck**



Photo 5: Coupler height corrected



Photo 6: Finished flat car

What did I learn from this clinic? I learned about tools that I needed to have for this project (for example, a machinist square, miniature scroll saw, 400 grit sandpaper, 0000 steel wool, Northwest Shortline's True Sander, grab iron bending gauge, caliper, a Kadee coupler gauge and a 12" long piece of track) and it just so happened that a Micro-Mark catalog recently came in the mail! After all, a tool junkie can never have enough tools. It's like John D. Rockefeller once replied when asked when he would have enough, "When I get a little bit more." I also learned ways to scratchbuild such as using an X-Acto knife with a chisel blade, sandpaper, putty, and a lot of patience. Ken gave us names of manufacturers where one can purchase separate parts for adding details. I was also able to see other clinicians apply tools that I had only seen in catalogs but never thought I would need myself. And finally, I gained confidence that yes, even a ham fisted, not so delicate guy like myself can build rolling stock.

[Ken's 26-page handout](#) for the clinic describes everything you need to know about railcar construction, and then some.

I would like to invite the MER (Mid-Eastern Region) members to join the Potomac Division in our hands-on clinics and virtual clinics. All are welcome. The Zoom clinics are free to all NMRA members and at the in-person clinics we only charge the cost of expenses. So come on out and join us. Enjoy great fellowship while learning and I promise you will leave with a smile from ear to ear.

Potomac Division BOD, Jerry Stanley

For more information, or to pre-register for one of the clinics, please contact Jerry or sign up at the Potomac Division Website:

[Jerry Stanley](#)

cell – (703)-595-8081

[NMRA/MER Potomac Division](#)

*\*The Hobby Barn is an educational building located in Hume, Virginia designed and built by Jerry Stanley specifically for the purpose of presenting clinics for the [Potomac Division](#), and any other NMRA members who wish to attend. (Stanley, Jerry, "Hobby Barn", [The Local](#), Vol. 76, No. 6, Nov-Dec. 2021, pp21-24.) The clinic schedule for the rest of this year follows this article.*





## President's Column

President Kurt Thompson, MMR

### Benefits and Educational Opportunities of Model Railroading

Working on motive power projects recently has brought me back to a basic tenet of model railroading: I don't know what I don't know. However, I do have the opportunity to learn.

This project involving models of the [Ingersoll-Rand](#) engines built for the [Bush Terminal](#) has presented me with several educational moments. So far, I've learned about: (1) building a side-frame master so resin copies can be cast; (2) using 3D printing to build the motor mount plates; and (3) all the usual internet research to find information on these diminutive 300 hp switchers. This has all added to the enjoyment of the process.

Whether or not I end up putting them in a model contest depends on my own ability to work diligently. Nevertheless, I have learned something in the process. Our hobby is one of many facets most of which result in expanding my knowledge in some way. This project, among many others, is no different in that respect. I have learned some basic computer programming, photography, research techniques, woodworking, electronics, history, and basic railroad operations that support a brewery, to name a few.

The list of benefits and educational opportunities in model railroading is nearly limitless. Even when I do not feel quite up to par on all the new techy stuff, I still have learned far more about it than I would have in any other hobby.

Since we are on the subject of learning, and as a reminder, you can learn about the textile industry as you prepare your model for the President's Award for 2022. The models can be any rail car used by the textile industry such as boxcars (especially those with incoming loads of cotton), coal hoppers (to feed the steam-powered plants), gondolas (also used for coal), and tank cars (for more modern synthetic textile plants), all in either standard or narrow gauge. Photos showing the car type in actual use at a textile industry location will go a long way toward validating entries for this award.

Now it is time to get back to completing the powered truck assemblies for those Bush Terminal IR engines. Incidentally, if you had to look up Bush Terminal or Ingersoll-Rand engines to see what this is about, you are not the only one. Plus, you just learned something new!



## From the Editor's Desk...

Greg Warth, Editor

Creativity is perhaps one of the most important attributes of model railroading, and yet we don't really talk about it very much. Anyone who creates a new structure, or a new scene, or who develops something that no one has made before in the same way is a creative artist. Anyone who designs a track plan, builds a mountain, paints a backdrop, weathers a freight car, or even takes a photo of their layout is exhibiting their individuality, and their artistry, expressing themselves in a way that makes them unique.

Even though the NMRA creates many standards for us to follow, which are very important in maintaining connectivity within the industry, we still have plenty of room to interject our own ideas, opinions, thoughts and plans in creating our own unique models, dioramas, and layouts however we wish to develop them. The creativity also spills over into developing new ideas for the organization itself. New, fresh ways of doing things brings us into a new future - always changing, improving, adapting, trying to make things better, using new technology and establishing new relationships.

This is evident in many ways within the MER and the NMRA. John Hoyt is coming up with new ways to maintain the membership roster. Jeff Burch has re-organized and updated the MER website. Jerry Stanley has created a Hobby Barn in Hume, VA to provide a space for presentation of clinics, both physical and virtual. The Potomac Division is reaching out to the James River Division to start having mini-conferences together and is extending the invitation to the Tidewater Division members as well. More modelers are agreeing to allow their layouts to be toured by other members. More members are attending new clinics, learning new things.

New technology was presented at the last MER convention in Baltimore regarding using touch controls on glass to activate turnouts, fiber optics and miniature solar panels are now becoming mainstream techniques for lighting structures, street-lights, and vehicles. You can even model drive-in movie theaters playing John Wayne movies on your layout. Arduino products, and other electronic devices are being used to automate activity of trains, signals, and other accessories, limited only by one's imagination.

Even simple things like old household items and leftovers from old kits are being recycled into new creations. Popsicle sticks are used to make cabins. Roof shingles make excellent roads. Almost anything can be used to make a flatcar load. There seems to be no limit to the amount of creativity that goes into this hobby.

An acronym known as STEAM is becoming popular in model

*Continued on page 7*

Continued from page 6

railroading particularly how it relates to the broadening of our education and getting more young people involved. It is defined as the promotion of Science, Technology, Engineering, Arts and Mathematics. An education in model railroading is by nature a study of all of these disciplines. To take this one step further, we could say that our creativity and imagination are what brings them all together in the construction of realistic three-dimensional models, landscapes and operations. Implicit in all of this is the sharing of information and our individual ideas with each other. So, in addition to the STEAM concept, the more we realize the importance of Technique, Realism, Artistry, Creativity, Kinship, and Sharing (TRACKS) and the more we talk about it, the more appealing the hobby becomes to those who may have never thought about model railroading in those terms.

[www.nsta.org/resources/building-steam-model-railroads](http://www.nsta.org/resources/building-steam-model-railroads)

[www.sdmrm.org/steam-school-programs](http://www.sdmrm.org/steam-school-programs)

[https://youtu.be/DuEJcT0oY\\_8](https://youtu.be/DuEJcT0oY_8)

[artsintegration.com/what-is-steam-education-in-k-12-schools/](http://artsintegration.com/what-is-steam-education-in-k-12-schools/)



## NMRA Achievement Program Update

Dave Chance  
MER AP Manager

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

### Division 2 – Potomac

Richard Steinmann – Master Builder Structures

William Mosteller – Chief Dispatcher

### Division 3 – Philly

Nick Brownsberger – Chief Dispatcher

### Division 4 – Tidewater

Mark Nieting – Master Builder Scenery

### Division 5 – James River

Phillip R. Taylor – Association Official

### Division 11 – Susquehanna

Jerry Lauchle, MMR – Association Volunteer

### Division 13 - Carolina Piedmont

John Sokash – Association Official

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** mag.

**If you have a layout (or a module) and do not have a Golden Spike Award (GSA), talk to your Division AP Chair. The GSA can be earned any time before the MMR. Once the MMR is awarded, the GSA is no longer available, so get it before it is too late!**

**National does NOT accept R&V forms. NO R&V FORMS, PLEASE!!**

## Branch Lines

As *The Local* Editor, I have the distinct pleasure of receiving a copy of all the Division newsletters, which are all very informative and creative to say the least. Many of the articles that appear in the pages of these publications are worthy of wider distribution. Since we have the capability of linking to those newsletters, I thought it would be helpful to list some of those here that may be of interest to all of our MER (Mid-Eastern Region) readers. These are mentioned by Editor's choice alone and are in no particular order. Depending on what is available, I will plan to choose one from each Division. It is not a contest although I would always be willing to review suggestions. So, please consider browsing through some of the links below. You will not be disappointed.

“[Disguising Atlas Switch Machines](#)”, by John Pursell, [South Mountain Division](#)

“[The Great Landscape Challenge](#)”, by multiple authors, *The Potomac Flyer*, April-May 2022, p.9, [Potomac Division](#)

“[The Golden Spike](#)”, by Joe Zebrowski, *Train Orders*, March 2022, p.11, [New Jersey Division](#)

“[Happy 30<sup>th</sup> Anniversary](#)”, by Rich Wurst, *Sidetracks*, March 2022, p.7, [Susquehanna Division](#)

“[The Video Vigilante](#)”, by Bill Fagan, *The Dispatcher*, March 2022, p.15, [Philadelphia Division](#)

“[Question on Civil Engineering Certificate](#)”, by Roger Bir, *The Callboard*, March 2022, p.5, [Tidewater Division](#)

“[JRD Farmville Meet: Tour Layouts](#)”, by Rod Vance, *et al.*, *Crossties*, February 2022, p.14, [James River Division](#)

“[The Benefit of Building Mockups](#)”, by Scott Perry, *The Brass Pounder*, April 2022, p.9, [Carolina Southern Division](#)

“[Scratch Build?](#)”, by Charles Rausch, MMR, *The Herald*, April 2022, p.3, [Carolina Piedmont Division](#)

“[Division Layout – David Arday's Eagle Pass RR](#)”, by David Arday, *The Relay*, July 5, 2020, [Chesapeake Division](#)

**A Modeler's Life** is a podcast for model railroading. Each episode can be downloaded to your computer or cell-phone so you can listen to it at your leisure. The following is an interview with the new President of the NMRA that you might find interesting. But don't stop there. You will find a lot more audible treasures here.

[Interview with NMRA President Gordy Robinson](#) – A podcast with Lionel Strang and Gordy Robinson, December 2021, [A Modeler's Life](#).

## Elections 2022

### THE MER NEEDS YOU!

**Now accepting nominations for  
President, Vice President, Secretary, & Treasurer**

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 four Officers for the Mid-Eastern Region (MER): President, Vice President, Secretary, or Treasurer. The deadline for nomination entry is May 30, 2022. The term of office is two years, with a limit of two terms for President or Vice President, five terms for Treasurer or Secretary.

Any qualified 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, 2022** – to all of the following nominations process officials:

Chair: Robert Charles, MMR	<a href="mailto:rcharles@aol.com">rcharles@aol.com</a>
Jack Dziadul	<a href="mailto:jackdziadul@gmail.com">jackdziadul@gmail.com</a>
Kenneth Montero	<a href="mailto:va661midlo@comcast.net">va661midlo@comcast.net</a>
Kurt Thompson, MMR	<a href="mailto:president@mer-nmra.com">president@mer-nmra.com</a>

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 requirements 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 2022 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 2022 are:

**May 30, 2022** -- 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 2, 2022** -- You must be a member in good standing (paid up NMRA dues) based on the membership report supplied to the MER Business Manager from NMRA National as of 07/02 (the 2nd of July) of every election year to be eligible to vote. If an individual is not a member or if membership has expired as indicated by the record supplied to the MER, and MER officials have not been informed by NMRA National of a valid renewal of membership by 07/02 (the 2nd of July), that individual will not receive a ballot, nor be permitted to vote in that year's election.

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

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

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

**September 17, 2022** -- Deadline for Ballot Committee to transmit results to President, the Director overseeing this committee, and the Business Manager.

**September 24, 2022** -- 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 8, 2022** -- Deadline for publishing election results on MER's website.

**Don't wait! This is a great opportunity to get involved in a leadership role for the MER. Your ideas are vital to the life and growth of our organization. Send in your nomination right now.**

## MER Board of Directors Meeting Schedule

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

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

## How to Get your Layout or Model in The Local

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

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

## UPCOMING MER CONVENTIONS

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

2023 Convention – Susquehanna Division – Dates and location tbd

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

2025 Convention – New Jersey Division— Dates and location tbd

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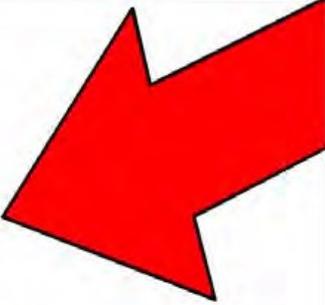
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# Modeler's Haven

## Tips, Hints, and Links\*

By Nicholas Kalis

["The Micro Model Railway Dispatch"](#) - A free, quarterly journal for those interested in building micro model railroad layouts. The Spring 2022 issue has just been released.



**Photo 1**  
[Replacing a plywood roof on the Fn3 \(1:20.3\) engine house for the Oahu Sugar Company.](#) A project with a goal of attaining an NMRA Achievement Certificate ([Photo 1](#))



**Photo 2**  
 Best [Micro Brushes for Modelers](#), made by Alpha Abrasives ([Photo 2](#))



**Photo 3**  
 Product Review – [Armand P. Bayardi Castings](#) – Great for Model Railroads. Realistic stump and log castings for your layout or diorama ([Photo 3](#))



**Photo 4**  
 Product Review – Neat Tool for Model Railroading – [Fiskars Original Craft Rotary Paper Trimmer](#) ([Photo 4](#)). Helpful for making decals and signs with neat, straight edges.



**Photo 5**  
[Flat Chisel No.2 Firm](#) with a silicone tip – useful for removing decals, unwanted paint spots, for gluing hard-to-reach areas, and for adding pigments to edges of models ([Photo 5](#))



**Photo 6**  
[Project - Illuminating an Fn3 Gate Access Irrigation Tunnel](#) – How to install a short strip of LED lights to enhance a dark scene on your layout, a tunnel in this case ([Photo 6](#))

["Book Review – The Art of the Diorama by Ray Anderson"](#).

\*These are articles, photos, and links to Nicholas Kalis' Blog entitled, [Modeling Hints and Reviews for Large Scale Modelers and Others](#). They are copyrighted and are shown here with his written permission. He is currently modeling the Oahu Sugar Company during World War II, which is highlighted as the featured layout in this issue of [The Local](#). You may also wish to see a nice article regarding his previous layout, ["Revisiting Nicholas Kalis' Lower Montauk"](#), which appeared in the NER/ NMRA Nutmeg Division newsletter, [The Cannon Ball](#), 51:4, Winter, 2021, pp.7-11. You can find this issue on the [Sunrise Trail Division](#) website.

## Other Tips and Tricks...

By Greg Warth

**\*\*Tall grass field:** Buy a swatch of brown, light green, or tan colored fake fur from a fabric store. This should have a fabric base on one side and fur on the other. Cut it to the appropriate size for your "field." Paint the layout surface a dark brown or dirt color. Once the paint dries, cover the area where you want your field with carpenter's glue. Place the fur *fur-side down* over the glue. Pat it down lightly. Let it dry overnight. Use a sharp hobby knife to cut the fabric base off the fur that has been glued onto the layout. Use a pet brush to tease the fur so that it stands upright. Dry brush the tops of the "grass" in some areas with a lighter color to add some variety.

**\*\*Fallen Leaves:** Collect a bucket of real, dried out fallen leaves during the Fall and put them through an old coffee grinder dedicated to making scenery (Do not use the one from your kitchen!). Spray the area where you want the leaves (under trees or at the edge of a forest) with diluted matte medium or white glue, and then sprinkle the leaves in the appropriate places where you have sprayed the glue. Let dry and then vacuum up the excess. You can also glue these leaves onto tree armatures that you have collected from your back yard to make realistic trees.

**\*\*Natural Tree Armatures:** Roots from real plants or trees make great tree armatures for your layout. After pulling them up, clean them off in a bowl of isopropyl alcohol mixed 1:1 with liquid glycerin. You could soak them in this mixture for a couple of days to improve their durability. Clip the armature to the desired shape. You can plant them on your layout bare to depict winter trees or dead trees, or you can add foliage purchased from the hobby store or use some of the leaves that you have ground up in your coffee grinder as mentioned above to sprinkle on the glue-covered branches.

**Variety in Scenery:** Build up your scenery in layers from the ground up. Use "ground goop" (a mixture of two parts Sculptamold by Amaco.com and one part Mold-A-Scene Sculpting Plaster by Woodland Scenics although other similar products could be used) to vary the landscape on hills and mountains, and even to add variety and texture to flat surfaces. You can then add paint your layout surface with a variety of brown, green, or dirt colors. Camouflage spray paint would be a consideration here. Spray with diluted matte medium and sprinkle on a layer of Earth Blend grass from Woodland Scenics or a similar natural-looking grass. Add patches of similar, but slightly different colored grasses. Add a variety of static grasses, some taller, some shorter in slightly different shades. Add clumps of ground foam, then larger bushes, then trees, all in a variety of shades, but matching the season.

**Frosted Glass for Factory Windows:** After adding clear plastic window glazing on the interior of your building, simply add a piece of frosted Scotch tape over the back of the window. When you view it from the front, it looks like a typical frosted factory window.

**Tips on Buildings:** Sometimes the corners of buildings that we construct are weak and the interior lighting that we add leaks through there. Shore up your corners with small strips of scale 4" x 4" wood or styrene and use a combination of Baking Soda covered with CA glue which creates a very strong bond, especially with styrene\*\*. Cover the inside of your buildings with black tape to prevent the interior light from leaking through. Of course, don't cover the windows. Cover the bottom edges of your buildings with landscaping materials, like grass, dirt, or ground foam. You should not be able to see the bottom edges of your buildings sitting on top of the layout. The structures should look like they have been planted there for years, and that the scenery grew up around them.

**Decals:** I attended a very informative clinic by Dave Ackman at our last Tidewater Division meeting that demystified the creation of your own decals. This video explains it all: <https://youtu.be/tZUO4R21nU0>.

**Make your own castings:** Making your own rubber molds and resin castings has never been easier with the materials and kits available today. Here are several videos to get you started: <https://www.smooth-on.com/howto/basics-mold-making/>

**Organize Your Workspace:** If you are unorganized as you are working on your layout, model, or diorama, it will take you probably about four times longer to do a project than it would have otherwise. Finding the tools and parts you need takes up most of the time. Troubleshooting your wiring is a nightmare if wires are not labeled or at least color coded. It's worth it to spend a whole weekend getting your work area organized and then a little time every day to keep it that way. Label everything!

**Keep A Notebook:** Keep this on your workbench to record what you have done and what you want to do next. List your locomotives and their decoder codes. Make an inventory of your equipment. Write up a summary of your layout including the theme, purpose, era, industries served, the history of the prototype and its operations. Make up your own history if it is freelanced.

**Use Reference Photos:** Take pictures of bridges, buildings, trains, railcars, railroad yards, forests, mountains, hills, scenery, roads, pathways, commercial and residential housing, and anything else of interest in areas you want to model. Keep these photos in front of you as you work on your layout and try to emulate them. Even if you are freelancing, you may at least want to display a sense of the locale and era you are trying to model.

**\*\*Reference:** Video by [Gerry Leone, MMR on Model Railroad Academy](#).

## How to learn CAD...

By Earl Hackett

With 3D printing becoming more common, many modelers have asked me what CAD program I would recommend. I have used many CAD packages over the years, and currently use Rhino. I started with v.4 many years ago and am currently using v.7. The interface fits my thinking, and it has some features that come in handy when working on complex models like signal bridges, as well as having a couple of features that are not so good. However, it costs \$1000 for a permanent license and \$400 to upgrade.

I have given some presentations on New Tracks Modeling that demonstrate what can be done with CAD and 3D printing. This has generated even more interest. 3D printing is easy, but CAD is difficult, especially for anyone who has no experience with it. So, shelling out a bunch of money for something you may not be able to use is a non-starter for most people.

So, starting July 13<sup>th</sup>, I'm beginning a series of instructional presentations aimed at modelers who have never touched a CAD program. The CAD packages I considered are all free for non-commercial use, including Fusion 360, OnShape, and FreeCAD. All three are parametric solid modeling programs. I have decided to use FreeCAD for these presentations. FreeCAD may not be as sophisticated as the other two, but it has some characteristics that for a raw beginner makes it easier to use.

I will be covering the use of the various CAD tools, just like the videos you see on YouTube, but more importantly, how to look at a structure and determine the best path forward to create the model. There is always more than one way to make a model, some of which will lead you down a rabbit hole that can make life very difficult. I will be creating a model of a through plate girder bridge that should demonstrate all the tools a modeler would need to get started. To wrap up the series, I will print a copy of the bridge.

So, if anyone would like to watch, join up at New Tracks Modeling ([newtracksmodeling.com](http://newtracksmodeling.com)) and you will get a link to a Zoom meeting where you can ask questions in real time, or you can just watch the videos on YouTube in a day or two after I finish editing them.

## The NMRA Magazine Archives Are Now Digital!

Message from President Kurt Thompson, MMR

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

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

Thanks, and happy wandering through the archived issues.

# Weighty Weights

*By Bob Gamble, (Photos by author)*

Lately I've been having weighty thoughts. Lead weights to be exact. Being somewhat frugal, what was the cheapest way to get some lead weights without having to melt down ingots?

I settled on buying 1/8" lead sheets from RotoMetals. (<https://www.rotometals.com/sheet-lead-1-8-8-lb-sq-ft-1-x-1/>) (photo 1)

Using tin snips, I cut this into a strip measured at a particular width. Then if I cut that strip later to a certain length, I can attain a specific weight. I created a table of weights corresponding to the dimensions in a spreadsheet (noted below).



By the way, it is a good idea to wear gloves during handling lead and to wash hands afterwards. Don't eat while doing this!

## Spreadsheet

In the April issue of the [CPD13] *The Herald*, I published an article on DIY weights for rolling stock. I referenced a spreadsheet I developed to determine the dimensions needed to cut out a specific weight to bring a car up to NMRA specifications. I see in the April *NMRA Magazine* that there is a similar article. Who woulda thunk?

Anyway, attached is my spreadsheet:

(<https://docs.google.com/spreadsheets/d/1aBRfyQDybn3msMg99kGMLWTF7QFezaMd185UzvTVRY/edit?usp=sharing>).

In it you will see a place where you can input the length of your car and how much it weighs and it will tell you how much to add.

**How to use the spreadsheet:** You can change the scale, the thickness of the lead sheet stock you are using, and the width of strip you have cut (I slice off a strip from the 12x12 stock sheet I buy, then nip off a length as needed).

First, choose the thickness of your lead sheet in the green cell at the upper left corner of the spreadsheet, and press "Enter."

Next, on the right side of the screen, choose the scale by clicking on the green cell marked "HO". A dropdown menu will appear allowing you to select a scale, or you can just type the scale you want in the cell to replace the "HO."

Below that, type in the length of your car and select the proper units. You will then see, in the white cell below that, the amount your car *should* weigh.

*Continued on page 15*

Continued from page 14

Next, enter the *current base weight* of your car and the *width* of the lead strip you have already cut from your lead sheet. You now can see the length of the lead strip that you have to cut and add to your car to bring it to the proper weight. Distribute the weight evenly over the surface of the flat car, either centered over the middle, or divided as shown in **Photo 3**, keeping the center of balance between the wheel sets. Glue the weights down so they cannot change position and distort the proper balance.

Enjoy...

[Reprinted with edits and permission from *The Herald*, April 2022, p.18. – Ed]



## Sticky Subject

### Gluing Metal to Plastic

So now we have to fasten this lead strip to a plastic car. Craft glue or wood glue won't work for this. The best option for bonding metal to plastic is epoxy, which is easier now since some of the current products on the market have a double-barrelled tube that applies the separated epoxy plus the hardener together so they mix at the application site. Polyurethane also works very well. Some types of superglue (cyanoacrylate) will work but some will not (check the label). Silicone sealant will work but deteriorates over time. Certain types of hot glue sticks may work (acrylic, polyamide, or ethylene-vinyl acetate).

### Gluing Metal to Wood

Okay scratchbuilders, what about gluing lead strips to wood? The best is reported to be Loctite Ultra Gel Control Super Glue. A close second is the Gorilla Two-Part Epoxy Syringe.

### Gluing Metal to Metal

Once again, the resin-based epoxies, like the Gorilla Two-Part Epoxy Syringe and J-B Weld Cold-Weld Steel Reinforced Epoxy, win the day. Gorilla Polyurethane Glue and Superglue Gel get honorable mentions. J-B Weld SteelStik Epoxy Putty deserves a spot here as well.

# The Electronics Corner

## Rail Welding Animation Project

By Fred Miller, MMR

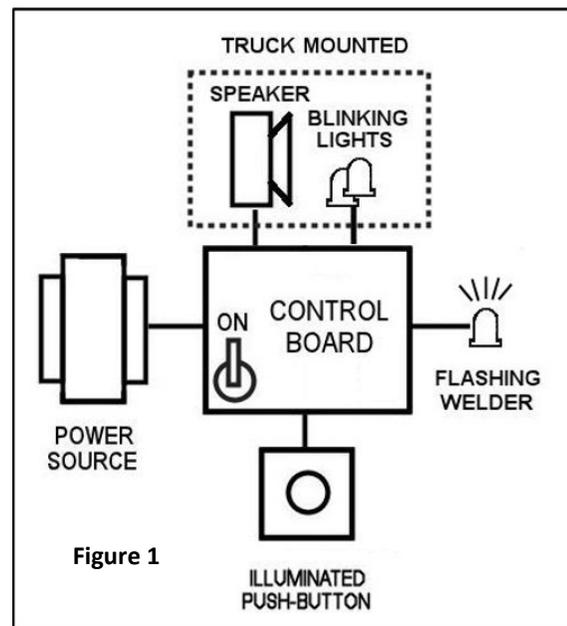
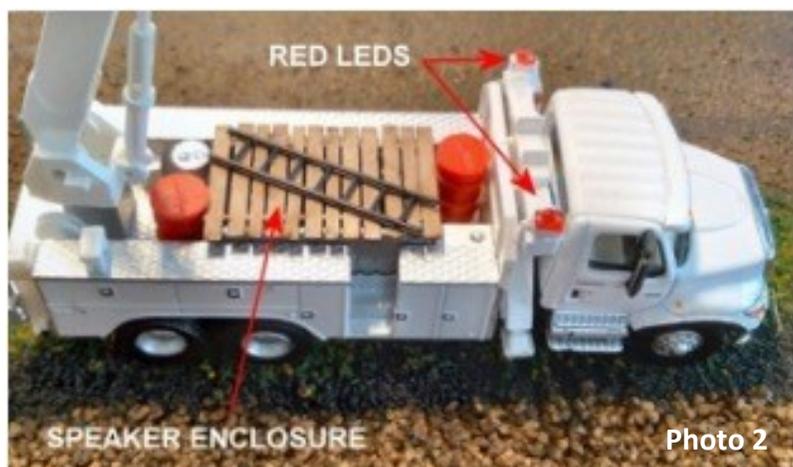
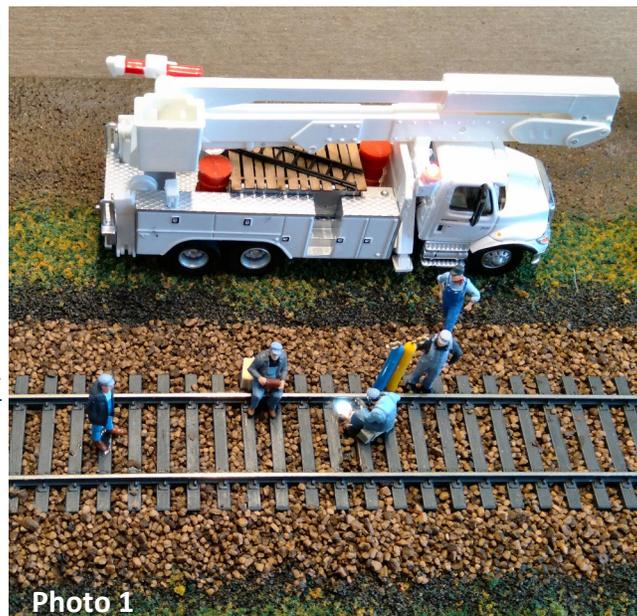
Light and sound animation always provides a fun addition to a model railroad layout. This article describes a simulated rail-welding scene complete with a flashing welding arc and accompanying welding sounds. A railroad work truck with flashing red lights provides additional viewing interest to the scene. The project was developed to allow viewer activation of the welding animation using a layout fascia edge pushbutton. The scene is active for 30 - 50 seconds; the actual length depending on the random times of the welding and intermittent pauses. The layout edge pushbutton remains illuminated while the action is underway.

You can see the animation on the author's YouTube channel: [https://youtu.be/Y9\\_bkwW\\_uEU](https://youtu.be/Y9_bkwW_uEU).

### PROJECT OVERVIEW

An Arduino micro-controller-based circuit was developed to operate the animation features which include the simulated welding arc light, accompanying sounds, blinking truck lights and an illuminated starting pushbutton.

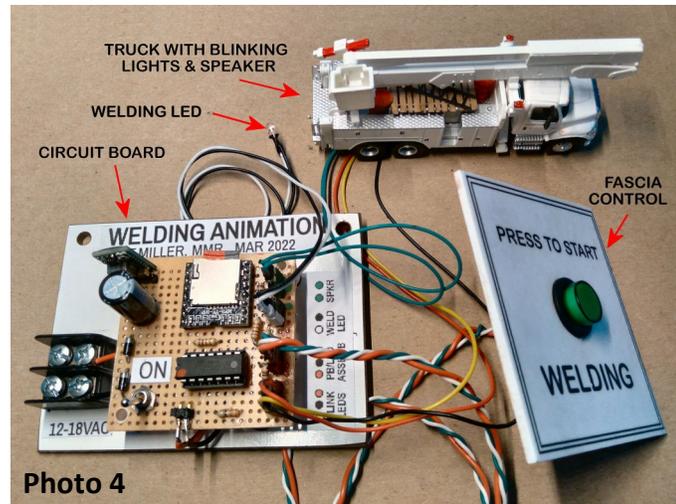
6-18V AC power is supplied to the Control Board along with connections to the animation features and the layout edge pushbutton.



Walthers SceneMaster HO Utility truck (Photo 2) is modified to include a 14x25 mm speaker and enclosure hidden under some planking. The speaker plays the welding sounds. The truck's molded on red signals are replaced with small red LEDs to provide the active alternate blinking.

To round out the view, a Preiser *Welding Crew* figure set (PSR1-535) populates the scene (**Photo 3**).

The illuminated push button is mounted on the layout edge fascia.



The electronic control circuit (**Photo 4**) makes use of an Arduino-compatible ATTINY84 microcontroller with a program (called a Sketch in Arduino talk) running the animation features.

The circuit includes a module called a *DFPlayer* which plays the applicable sound files resident on the inserted micro-SDHC card. Those welding sound files were captured from a free on-line source and modified slightly to selected lengths and stored in MP3 format on the cards for the project.

A DC Buck Converter board and some diodes are used to generate the necessary 5VDC for the *ATTINY84* and *DFPlayer* from the AC Input power.

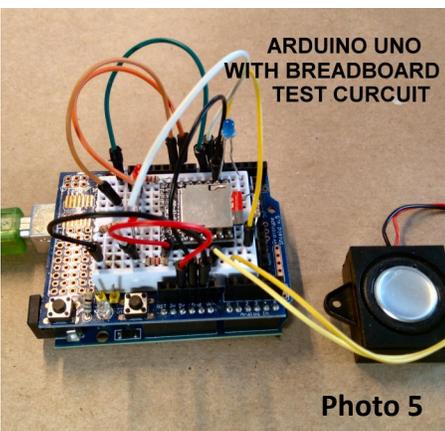
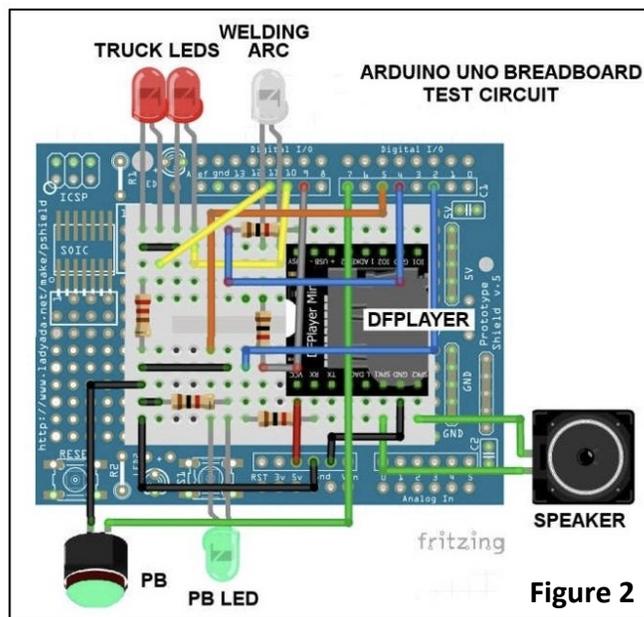
**CONSTRUCTION** (See AUTHOR'S NOTES below if you are not comfortable with electronics and microcontrollers.)

The software and controlling circuit was initially developed on an *Arduino UNO* with a breadboard shield (**Figure 2**). The circuit was laid out using the Fritzing Drawing tool and then wired up with jumpers on the actual breadboard shield. The free Arduino IDE (*Development Environment*) was used to develop and test the software. (**Photo 5**)

When the circuit and sketch were performing as desired, the software was downloaded to an *ATTINY84* microcontroller using readily available techniques\*. The *ATTINY84* is significantly smaller and cheaper than an *Arduino UNO*. (The sketch required minor corrections to account for different pin numbers on the smaller chip.)

After moving the software to the *ATTINY84*, it was further tested using the same components on another breadboard setup.

The resulting circuit is as shown in **Figure 3**.



A final board design was then developed, graphically laying out the components and connecting wires on a small perf-board. The design was drawn with the wiring (shown in red in **Photo 6**) on the top view of the board. It was then graphically flipped to show the bottom side wiring. This design was used to construct and wire the actual board as shown (**Photo 7**).

After all of the connections were soldered and cleaned, the board was tested first by checking the voltages in the *ATTINY84* socket (before plugging in the component) when input power is applied. When confirmed, the *ATTINY84* was plugged into its socket and the wires to the features were connected. When the operation of the circuit was confirmed, the bottom of the board was coated with 5-min Epoxy to affix and insulate the wiring.

The layout edge fascia push button was constructed using a push button assembly including an LED light mounted on a 3" square of 0.40" styrene. Labeling was printed, adhered, and sealed to the panel, and then the panel was ready to mount on the layout edge (Photo 7).

The parts used in the project are listed in the AUTHOR'S NOTES at the end of this article.

**INSTALLATION**

The completed circuit board (Photo 8) should be mounted under the layout within reasonable distance to both the truck and welding LED assemblies, and the layout-edge pushbutton.

The layout-edge pushbutton assembly is mounted on the layout edge fascia strip with a 3/4" hole bored through the fascia and layout support. The red-black-green lead from the pushbutton is plugged into the circuit board. In a similar manner the truck mounted speaker (green/green) is plugged into the board along with the yellow-black-red leads for the blinking truck lights (See Photo 5 again).

The bright white LED used for the welding arc is mounted near a rail such that only the top portion of the LED is visible. Drilling a 3/32" hole on an angle under one of the track rails seems to work nicely (Figure 4).

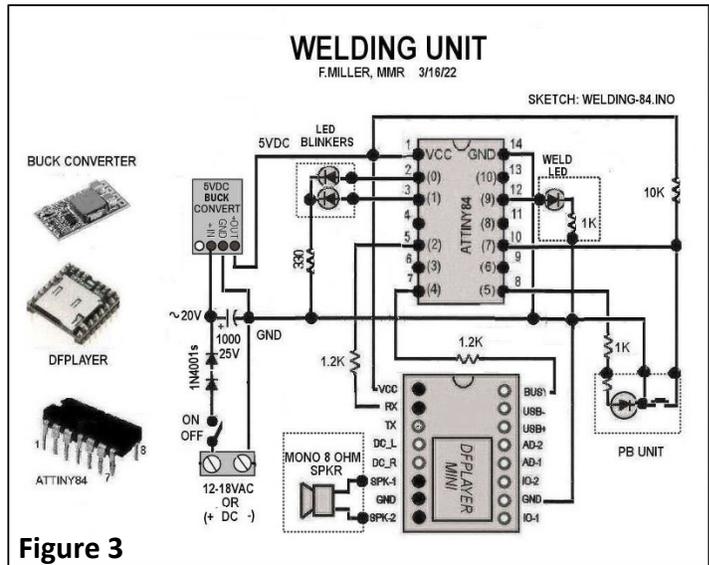


Figure 3

**WELDING ANIMATION CIRCUIT BOARD - DESIGN & ACTUAL**

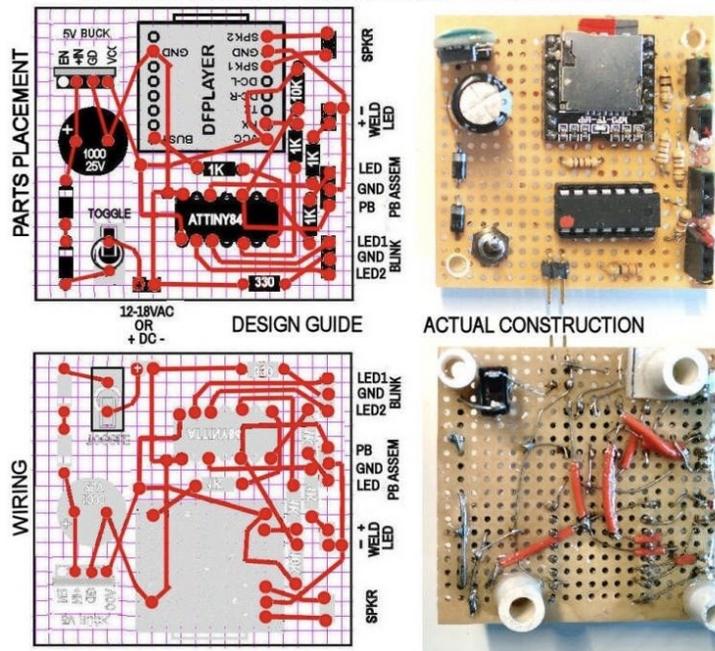


Photo 6

**OPERATIONS**

The circuit board includes an ON-OFF toggle switch which disables the circuit even if the Input Power Source is on. However, the toggle can be left in the ON state and the board will be powered up whenever the power source is turned on.

When the fascia pushbutton is pressed, the truck blinking red lights will alternately flash continuously until the animation ends. However, in about 5 seconds after activation, the welding simulation will start. It consists of 5 random length bursts of simulated arc lighting with accompanying sound, separated by random length pauses between each burst of lighting.

**COLOR-CODED WIRES PLUGS TO ACCESSORIES**



Photo 7



Photo 8

After the simulated arc welding completes its cycle, the truck lights will continue to blink for another 5 seconds, at which time the animation will stop and the pushbutton light will go out. The scene is then ready for another activation. Pressing the fascia pushbutton while the scene is active has no effect.

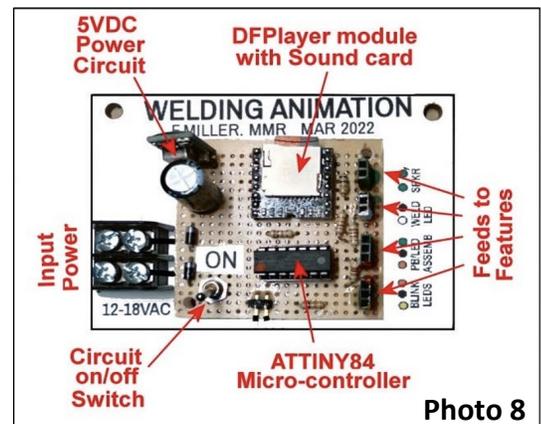
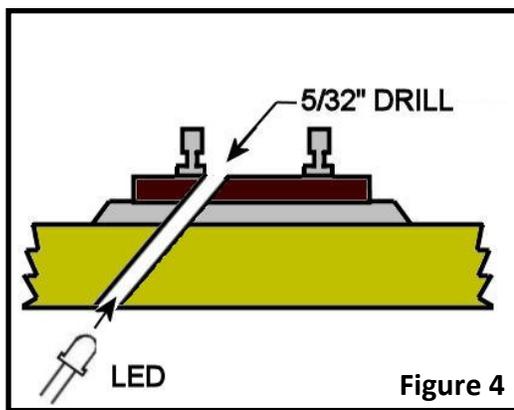


Photo 9



#### AUTHOR'S NOTES

A listing of the parts used in this project is shown in [Figure 5](#).

\*The ATTINY84 sketch (program) is available from the author.

Modelers interested in building this welding simulation project, but NOT interested in entering the Arduino world, should contact the author. Programmed *ATTINY84s* (and micro-SDHC cards with the welding sounds) could be made available.

Questions, further details, and comments can be sent to the author at: [tractionfan@aol.com](mailto:tractionfan@aol.com)

**Figure 5**

WELDING PROJECT PARTS LIST		
QTY	COMPONENT	APPROX \$
1	5VDC BUCK CONVERTER	\$ 1.00
1	1000uf 25 V ELECTROLYTIC CAP	\$ 0.25
6	VARIOUS 1/4 W RESISTORS	\$ 0.60
2	1N4004 DIODE	\$ 0.10
*	12 POS MALE HDR (CUT TO MAKE 4)	\$ 0.60
*	12 POS FEMALE HDR (CUT TO MAKE 4)	\$ 0.80
1	DFPLAYER	\$ 1.00
1	MICRO SDHC CARD	\$ 2.00
1	14-PIN IC SOCKET	\$ 0.10
1	ATTINY84	\$ 2.50
1	14x25 8 OHM SPEAKER	\$ 6.95
2	MINIATURE RED TOP HAT LEDS	\$ 0.40
*	WIRE AND MISC HARDWARE	-
1	ULTRA BRIGHT 3MM WHITE LED	\$ 0.20
*	BARE PERF BOARD	\$ 2.50
	TOTAL	\$ 19.00
	OPTIONAL:	
1	HO UTILITY TRUCK (94911753)	\$ 17.00
1	PREISER 10535 WELDING FIGURES	\$ 20.00
*	TERMINAL BARRIER STRIPS	\$ 1.50
*	ONLY A PORTION USED	

## Featured Layout

### Oahu Sugar Company – 1944

By Nicholas Kalis

Over the past eight years, I have modeled Hawaii's 3' narrow gauge Oahu Sugar Company (OSC), a plantation railroad, as it appeared and operated in 1944 under wartime conditions. This 1:20.3 scale (Fn2) battery powered layout demonstrates how techniques of European exhibition layouts can be applied to an American semi-permanent layout. Two themes will be evident – sugar cane operations and WWII as it affected the home front. My layout is a continuous oval developed by [Bryon Henderson](#) with some possibilities for realistic operation built in ([see drawing on page xx](#)).

Benjamin F. Dillingham founded the Oahu Sugar Company on 20 acres of land leased from James Campbell in the vicinity of Waipahu. In 1897, its first locomotive arrived, and in 1899 the first sugar cane was harvested. Additional locomotives then followed. The plantation grew to over 12,000 acres of leased land. By 1939, the railroad reached sixty miles of 3' gauge track plus an unspecified amount of portable track on which 939 plantation cars (860 four-ton cane cars, fifty flat cars, and 29 other cars) operated. During WWII, over 2,800 acres were commandeered from the OSC for a POW camp for German prisoners. Available photos of ammunition trains show the OSC towing bombs to be dispersed in sugar cane fields. After the attack on Pearl Harbor, the US Navy decided it prudent to separate bombs from planes and ships in the event of another attack. By late 1950 the railway system was eliminated from the plantation.

My layout consists of various Layout Design Elements (LDE) including the O scale (forced perspective) town of Waipahu and Waipahu engine terminal. The Waipahu Engine House is one of the best features on the layout. Another LDE is a trestle which I have scratch built ([Photo 2](#)). I scratchbuilt most of the major structures on my layout ([Photo 3](#)).



Photo 2: Scratchbuilt Trestle.



Photo 3: Scratchbuilt Structures.

Valances conceal LED and florescent lighting. Backdrops are curved styrene, concealed by wings. Minimal scenery with a low horizon was chosen. Layout skirts are made of white paneling. Valances and fascia paint match the room walls. Tracks and turnouts are from Llagas Creek ([Photo 4](#)).

My wife Kate\*, a professional artist, painted the backdrops ([Photo 5](#)) using acrylic paints on styrene. Most backdrops have two artfully disguised penetrations allowing trains to move from one scene to another.

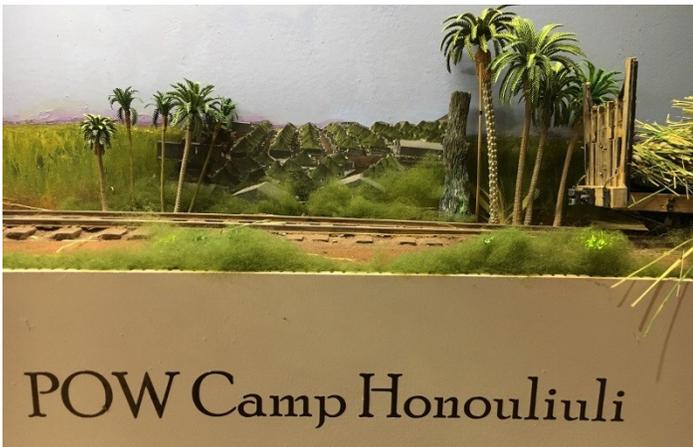
Modeling in Fn3, I have modified a Bachmann Porter to run on batteries as *Waikane* Number 9, and I have semi-scratchbuilt a tender for it. A second locomotive (0-6-0T) No.5 ([Photo 6](#)) by Piko has a battery installed by G Scale Graphics.

[Shapeways](#)-produced sugar cane cars are based on drawings by the late Jim Dunlop as they appeared in [Narrow Gauge and Shortline Gazette](#). I use Llagas Creek Railways code 215 track with no ballast (as verified by photographs of the prototype). The starting point for my Waipahu's water tank ([Photo 7](#)) was a used Piko Water Tower. The surrounding scenery is helpful in establishing the theme and realism of the layout ([Photos 8, 9](#)). The number of figures ([Photos 10, 11](#)) has been minimized since their stationary poses require too much suspension of belief. Many O scale vehicles are parked in Waipahu to demonstrate what a busy mercantile center it was. O scale photos were utilized to make a convincing scene quickly with false fronts.



Photo 4: Tracks and Turnouts by Llagas Creek code 215 with no ballast as per the prototype

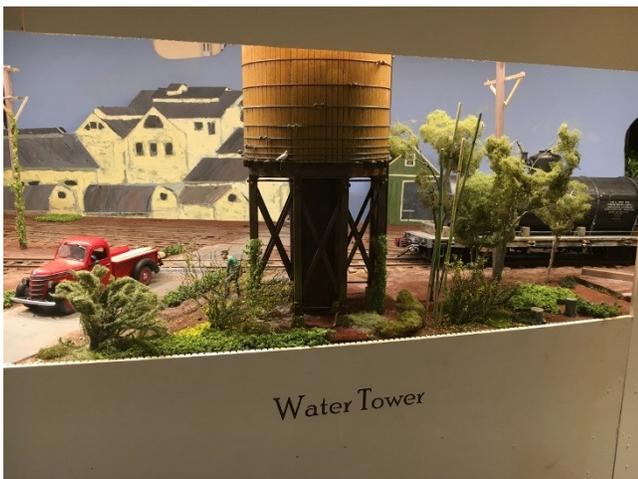
The OSC was featured as a [layout tour](#) in the 2021 Mid-Eastern Region Mt. Clare Junction Convention in Baltimore, MD and is currently available for open houses and layout tours. Operating sessions are planned for the future.



*Photo 5: One example of the artistic backdrop painted by my talented wife Kate.*



*Photo 6: Modified battery-powered Bachmann Porter.*



*Photo 7: A used Piko water tower converted to Wai-pahu's water tank.*



*Photo 8: Some of the local vegetation.*



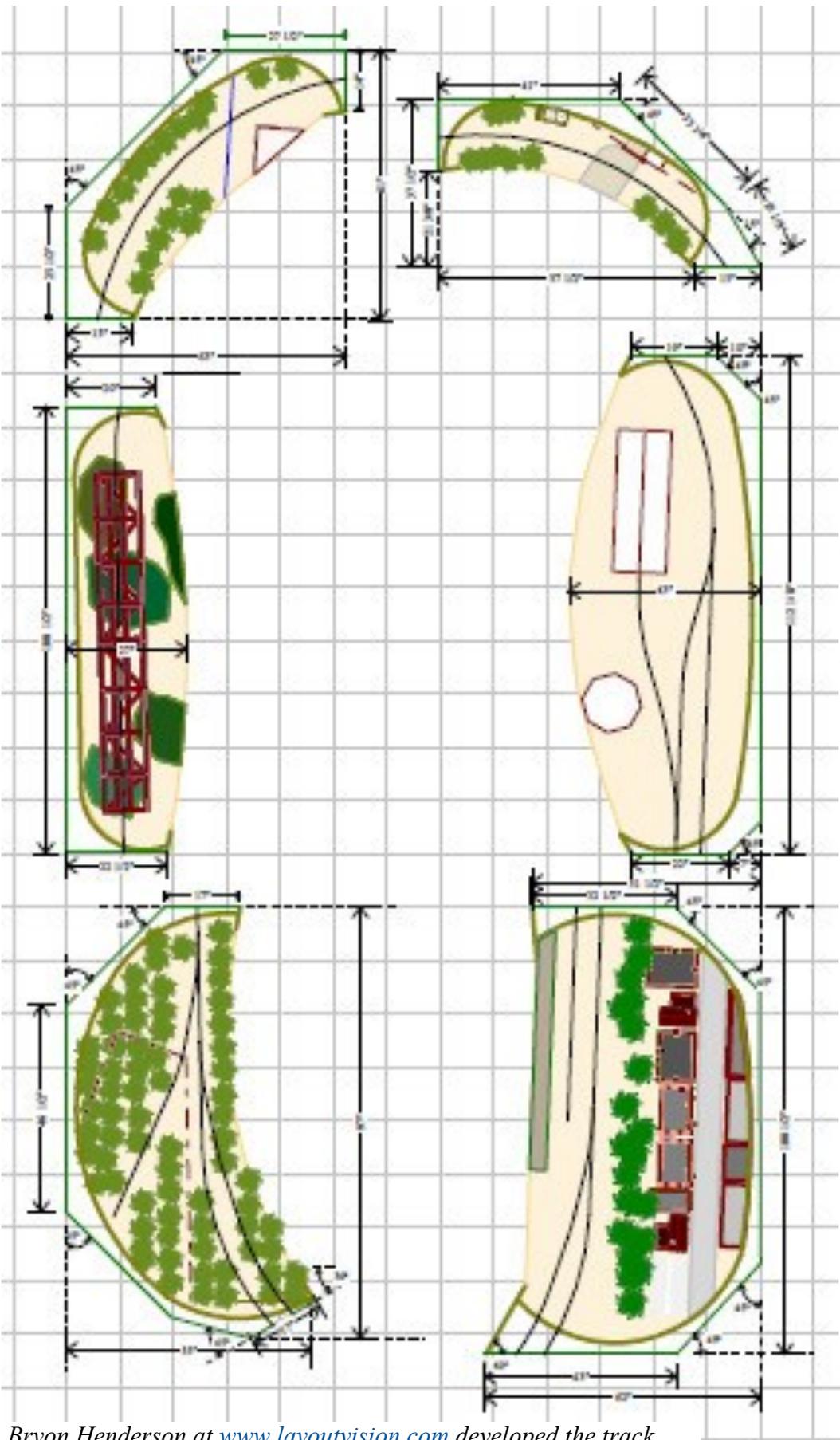
*Photo 9: Local scenery adds to the realism.*



*Photo 10: One of the company's workers taking a break.*



*Photo 11: High security required during wartime.*



Nick's LIRR Lower Montauk Branch was featured on the front cover of [Railroad Model Craftsman](#), Sept. 2007. His love of railroading probably got its start from the time in 1958 when he appeared in [New York Daily News](#) as a model to accompany a photograph of the last trolley to operate in Manhattan. That was followed by the Lionel set under the Christmas Tree when he was about nine years old. Nick's byline has appeared several times in the [Pennsylvania Railroad Technical and Historical Society's Keystone](#). Nick's current project, the Fn3 Oahu Sugar Company set in Waipahu appeared on the cover of the July 2018 [Narrow Gauge Downunder](#).

Nick is a father of three and stepdad to one. He is a member of the Potomac Division of the NMRA and resides in northern Virginia with his wife Kate.

\*[Katherine Sophia Kalis](#) graduated from Middle East Technical University with a Bachelor of Science degree. She is a trained painter who enjoys painting backdrops and figures. Her prior experience has been as a business analyst and banker. She owns a professional model railroad backdrop company. If you are considering having a professional do your backdrop, you may wish to contact her [here](#).

Bryon Henderson at [www.layoutvision.com](http://www.layoutvision.com) developed the track plan for the layout. (Reprinted here with his permission).

# Leiter & Kuhns Supply in O Scale

By Martin Brechbiel, MMR

I had wanted to build a hardware store / farm supply building for some time. I ran across pictures of a kit that I thought had the basic footprint for what I wanted to have in my structure. However, the choice of siding, windows, doors, and roofing in those same pictures were not what I wanted in my building. So, I decided to just build what I wanted working from that basic footprint and layout. That meant it was time once again to pull out the parts bins to root about for windows, doors, roofing and other bits, and to also grab the stack of siding off the shelf.



Photo 1

An interesting selection of doors and windows came out of the structure building parts bin. There were a few packs of 8/8 Durango Coal Chute Windows (Grandt Line No. W-7), a pack of Shed Doors, Diagonal Sheathed (Grandt Line No. 3610), a pack of D&RGW Sargent Station Baggage Doors (Grandt Line No. 3607), and a 30" Door with WDW/Frame (Grandt Line No. 3601). There was also a stray extra 4/4 window (Grandt Line, probably), a pack of Work Car Windows (Tichy No. 2056), and a pack of Standard Chimneys (Builders in Scale No. 7202). A few 24" lengths of clapboard (Midwest) were pulled off the high shelf. Now we have the basic parts to get started ([Photo 1](#)).

The first step in this build was to lay out the arrangement of doors and windows and to use this step to define the shape and size of the walls. I had a hazy, fuzzy design based on the kit, but I fully expected this to diverge to accommodate the chosen doors and windows. Starting with the front wall, I made this from gluing up sections of clapboard, cutting it to the size and shape needed after loosely laying the castings on it. I laid out where the doors and windows were going to create the business entrance using the 30" door at the far-left end with that stray 4/4 window nearly centered under the peak of that one end. The baggage doors were set to be centered in the right hand section of that wall. Those doors did not have any frame work with them to set them into the wall. I joined them to become a single unit using my stock methylene chloride. I made the framing from some 0.080" styrene angle (Evergreen No. 292). Up on the second floor, I installed two of the 8/8 windows centered in their respective areas. I used one of the work car windows to make an attic window. Openings for all of these were cut for every casting and confirmed to fit in to their respective places ([Photo 2](#)).

Photo 2



Working around the building counterclockwise, I laid out the right-hand wall. This was also built from glued up sections of clapboard with a height that matched the high point of the front wall. I decided to place the diagonally sheathed shed doors centered in the first floor of this wall. I paired up these doors as they came with hinges (more methylene chloride) with some reinforcement from some scrap styrene. No door framing came with these doors. I built up the framing using stripwood (HO 3" x 12") and added an overhang (HO 3" x 12") to deflect the weather a bit from these doors. Up on the second floor, I installed two of the 8/8 windows centered their respective areas. Once again, I used one of the work car windows to make an attic window. Openings for all of these were cut for every casting and they were confirmed as fitting neatly in place ([Photo 3](#)).

Photo 3



Moving around to the back, the shape of this wall is the mirror of the front wall but without the doors and the smaller 4/4 window. Instead, on the first floor there are two of the large 6/6 windows laid out in alignment with the second-floor windows along with the work car window as the attic window (**Photo 4**). More holes were cut for these windows with each being tested to fit cleanly.

The fourth and final left hand side wall matched the width of the right hand wall, but the height matched the ends of the front and back wall. I can see that this building is going to have a bit of an interesting roof. Four of those same 6/6 windows were laid out symmetrically in the wall. More holes were cut for the four windows which were also test fitted (**Photo 5**). This just about wore out my scalpel blade, so it was time for a new one. Scalpels are lovely implements being a bit sharper and finer than hobby knives, but cutting 1/16" thick clapboard does wear them down. I usually keep at least two No. 11 and two No. 10 scalpels handy on my bench, along with one No. 15 and a larger No. 23 for almost all possibilities.

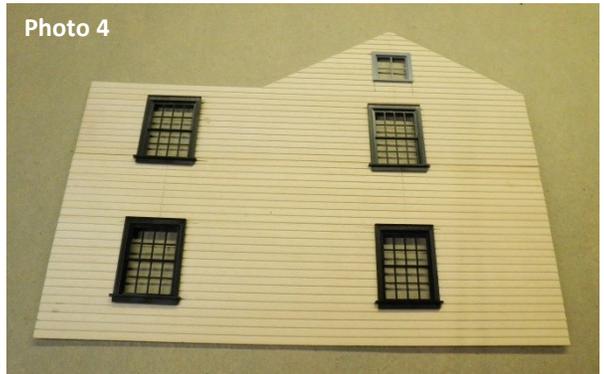


Photo 4



Photo 5

The sides of the front and back walls were appended with 3/32" square stock using Goo and CA together to make a strong bond to the end grain of the siding. Once the joint was dry and set, the sides were attached to the front and back walls using the same adhesive mixture. Now I had a good sized box assembled to work on to add the roof, base, and the front and side platforms. I used 3/16" square stock for framing up the roof perimeter and ridge poles, and other bracing wherever it seemed needed. The interior floor perimeter was framed out using O scale 10" x 16" stock (**Photos 6, 7**).

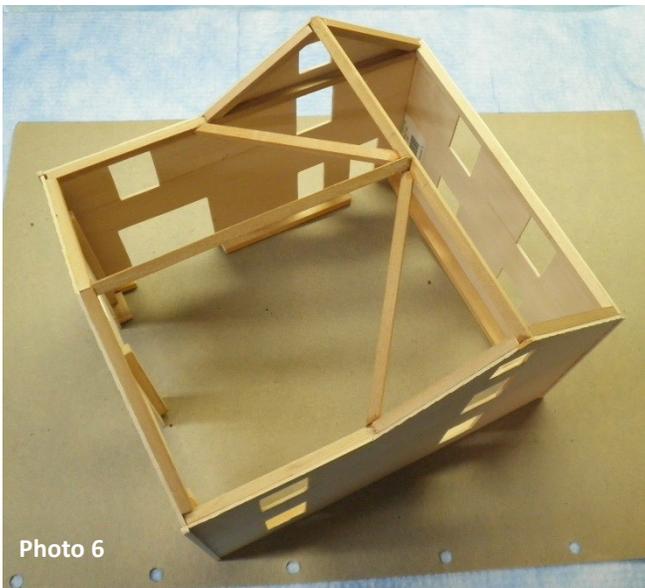


Photo 6

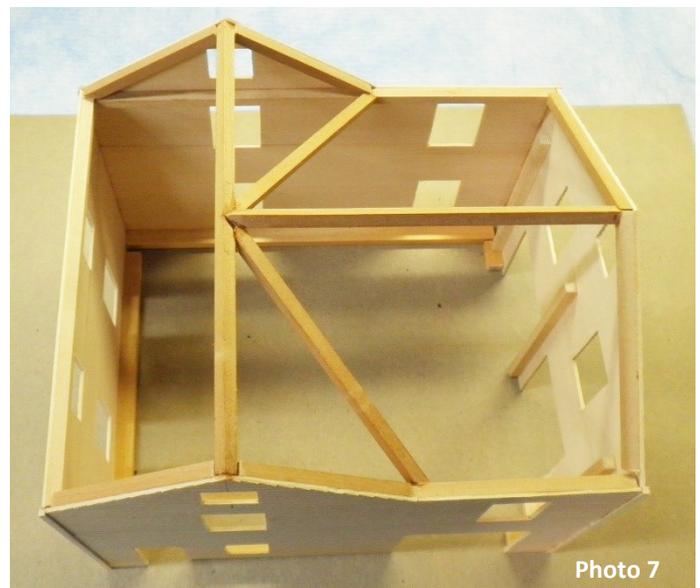


Photo 7

I left working on the roof for a bit to work out the front porch and platform. First I added a floor to the entire structure of glued up 1/16" flat stock. Below that floor, I added some 1/2" x 3/8" stock to just the front and right sides. The outward facing areas of these sections were skinned over with some 1/16" scribed siding prior to their being glued to the floor so that these would be flush with their respective exterior walls.

I glued up some scrap scribed siding to make the porch floor. Supports and joists were cut from 3/32" x 5/32" stock and HO 3" strip wood was used for the angled bracing. The height of this porch was set to meet the base of the front wall and the doors on that side. The porch roof braces were assembled from 1/8" x 1/8" square stock. The porch was attached to the front base (**Photo 8, 9**).



Photo 8



Photo 9

The loading platform on the right side was similarly built up and attached ([Photo 10, 11](#)).

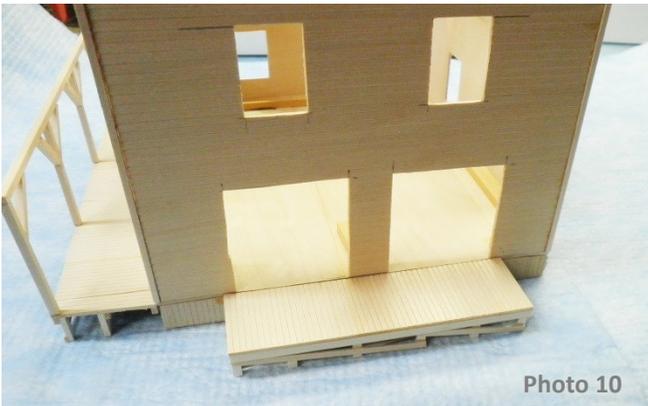


Photo 10



Photo 11



Photo 12

Instead of the  $\frac{1}{2}$ " x  $\frac{3}{8}$ " stock below the floor for back and left sides, I installed a stone foundation. This material is something that I had left over from projects years ago and I recall it being from England. It's a very hard, dense resin that I cut into  $\frac{1}{2}$ " strips using my band saw. This worked surprisingly well albeit generating a bit of noxious dust. This resin stonework is partially finished and I beveled the ends to make the corner and ends fit together neatly ([Photo 12](#)).

Going back to the roof, it was time to install the sheathing. I did this board by board using HO 4" x 20" fitting all those beveled ends together to make it a solid unit. I glued everything in place with car-

penyer's glue applied to the underside points and the edges to make this a solid unit. While working through placing the roof parts, I built up the porch roof which was framed out using  $\frac{3}{32}$ " x  $\frac{3}{16}$ " stripwood for the rafters and the rest of the roof structure. After getting this structure assembled in place, I used the smaller scraps of the HO 4" x 20" to sheath that roof ([Photos 13, 14](#)).



Photo 13



Photo 14

Next up is getting the roofs ready for shingles and tarpaper. Copper foil (0.005") was laid down for flashing and secured with Goo and CA. The two chimney castings (Builders In Scale No. 7202) were painted using several shades of red and some Steam Black (Polly Scale). Openings were cut in the roof sheathing slightly smaller than the castings. The castings were planted in the holes opened just enough for them to fit into and then be secured with Goo. More copper foil flashing was applied about both chimneys ([Photo 15](#)).

Rather than having to work around the roofing, the entire building was painted prior to installing the shingles and tarpaper. The walls and roof overhand underside were all painted L&N Gray (Polly Scale). When in a painting mode, one might as well get as much done as possible. All of the windows and doors were painted E/L Maroon (Polly Scale). When dry, the windows and doors were glazed using some clear acetate or styrene. Once done with that tedious exercise, the windows and doors were installed and secured with minimal Goo ([Photos 16-18](#)).



Looking at this now revealed that I needed to modify the porch roof flashing just a wee bit about their roof openings ([Photo 19](#)). Better to be dealing with this now than after I had the roofing in place! But I imagined that some water damage to those windows would take place in the future, and they will have to be replaced if the flashing is not installed correctly now.



I decided that the main roof would be done in wooden shingles (Evergreen Hill; No. 3001). I had a few packs of these handy in the shop that I thought would cover the area, so I got started right in on the job. These are peel and stick and take a bit of time to trim to the angle into the flashing, but after I got a few rows going all around the roof, it was not too tedious an exercise. Wrapping these around the chimneys was also a bit of challenge, but with perseverance I managed to get the job

done without running out of shingles. I turned my attention then to the porch roof and applied 3" wide strips of tarpaper (Builders In Scale) working from the bottom up. I cut the leftover strips down and used those as cap strips over the top of the main roof's shingles ([Photo 20](#)). I thought that the appearance of the shingles was just too bright and raw, so I toned that down a bit with two coats of Minwax Pickled Oak. After that had dried and set for a few days, I went over



the roof using Bragdon Grey powder from the Dust Bowl Set. I think this process got the shingles down to an aged look as well as adding weathering to some of the bright copper. I might have to go back to some strong vinegar and copper salts to get a little more effect on the copper.

I painted the loading dock and porch decking Maintenance of Way Gray (Polly Scale) and the under-framing supports of both structures Roof Brown (Polly Scale). I pulled a stack of shutters (Grandt Line Nos. 3543 and 3541) out of the parts bin and painted those parts Maintenance of Way Gray and mounted those about all the windows. The large doors off the front porch lacked hinges, so I scavenged some from a broken set of parts (Grandt Line No. C-10) and added a pair to each door.

The last detail to add was some signage. I made up a sign using PowerPoint, saving it as a jpg, and printed it out in a dark red with a slightly cream-colored background. I actually printed out two of these with the second one being slightly smaller. I took the larger version and glued it onto some 1/32" basswood. This was framed up using 3/32" angle pre-painted with E/L Maroon (Polly Scale) and then the same color was applied to the back of the sign. Some styrene angle was added across the top and support angles were added down to some scrap styrene channel on the porch roof. The styrene was painted Steam Black (Polly Scale) and the sign was added to the roof. (Photos 21, 22).



The second slightly smaller printed sign was applied directly to the exterior above the two doors at the loading dock. The back of the paper was painted with a film of carpenter's glue and carefully aligned into the clapboard at the top and then firmly pressed into the siding one row at a time (Photo 23).



Now this sort of structure with an open porch and loading dock just screams for piles of detail parts to be added, but that's a future exercise that I'll return to someday. I'm thinking some sort of small crane centered on the loading dock now, but those plans are all firmly engraved in smoke and sand.

# New Tracks

By Greg Warth, Editor

**Love Modeling?  
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**NEW TRACKS**  
with host Jim Kellow, MMR  
"Where Mentors help Modelers Build"

NEW TRACKS is an exciting, NEW, FREE, communication concept. Our shows are Live, and interactive on Zoom and YouTube every Wednesday at 7PM ET, and Saturday afternoon at 1PM ET.

- Find a mentor** - Meet and talk with talented modelers and manufacturers from around the world.
- Get discounts** - Buy kits used in our BUILD ALONG segments.
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**NEW TRACKS**

Here is an exciting new endeavor created by Jim Kellow, MMR for the purpose of exploring new ways of virtual communication with other model railroaders and focusing on the importance of individual interactive instruction in the learning process of building models.

## Mentoring

The program is called *New Tracks*, a free [website](#) and [YouTube](#) subscription offering one-on-one mentoring on how to build models either by scratchbuilding, kit-bashing, or even just kit building. The bi-weekly segments are live, interactive, and occur at times when even I can attend. There are also sessions where you can share the models you have already built.

According to Jim Kellow, founder of *New Tracks*, "I believe mentoring is best done one-on-one at a local level with a talented model builder who can guide a person in learning the skills, techniques, and gaining confidence in their modeling efforts." He says the mentoring sessions that he received "are some of the greatest memories I have."

Jim goes on to say, "A mentor does not have to be an MMR or a famous model railroader. He or she just needs to be able to build models you admire or have some skills you want to learn. Ultimately, a mentor wants to help you improve your modeling. Those were the people and friends I learned modeling from."

"Since all of my *New Tracks*' efforts are focused on mentoring, I have been trying to figure out how best to communicate with the *New Tracks* audience regarding the value of seeking local mentoring. This new segment is based on my personal experience with this and is my answer to how you can find a local mentor and meet some great people in the process. Join us in this special section of our show."

## Clubs and Divisions

Another new segment called "NMRA Local Clubs and Divisions," which began on April 27, 2022, focuses on interviews with local club and division members from all over the world to talk about what activities and mentoring activities they offer.

Jim further explains:

"I have asked Phil Edholm, an NMRA Division Superintendent of the NMRA PCR/Coast Division, which includes the San Francisco Bay Area down to Monterey in California, to moderate these sessions. We will kick off the series with Gordon Robinson, the President of the NMRA, to discuss the value of NMRA Clubs and Divisions in improving the modeling abilities of their members.

So, if your club or if any of the Mid-Eastern Region Divisions want to be involved, please contact [Phil](#).

Jim Kellow MMR

Life Member of the MER

Past MER VP, 2001-2002

Past MER AP Chairman, and Contest Chairman

APMM Model Railroading Ambassador

Member Hobby Manufacturers Association ([hmahobby.org](http://hmahobby.org))

Facebook Page: <https://www.facebook.com/Jim-Kellow-MMR-107123997469688/>

Member, [Modelmakers.org](http://Modelmakers.org).

## Back on Track...

# Enjoying the Journey

By Greg Warth

As new life springs up all around us, restoration is in the air. This mostly applies to our lives and personal fulfillment during this time of year. But, it also keenly applies to my layout which is in dire need of renewal.

I started my layout restoration project several months ago actually, with a new photographic backdrop which helped its appearance considerably. I am now in the process of replacing a few turnouts, adding signals, tuning up my rolling stock, and replenishing scenery. My goal is to get it all in shape before the end of the year. It all takes time and to do it properly takes more time, but I am committed to the process. Like many of us, I have limited time to devote to my layout, so I have to just do a little here and a little there to get the job done. However, I do enjoy working on it. It is so exciting when I get a malfunctioning turnout to work right or when I install a signal that amazingly functions as it is supposed to on my layout. It may take two weeks to get that done, but it is very satisfying when I succeed. Then I go on to the next project.

I have so many little projects like that to do. If I think too much about all that needs to be done, I admit I get a little overwhelmed by the whole of it. However, I have always been a believer in delayed gratification. So, I try to have fun with each one of the many little projects and know that if I continue to work diligently, it will be satisfying in the end. And even if it's never finished, I have certainly had fun with it along the way.



Thank you for reading this issue of *The Local* and thanks to all who helped put it together. Please consider sending in your articles, tips, projects, and photos. We are always looking for new material to display the great model railroading talent we have in the Mid-Eastern Region.

