



THOUSAND LAKES REGION

NATIONAL MODEL RAILROAD ASSOCIATION

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Creating a bit of history with your scenery



Behind the modern bridge and rail is the remnant of times past– the crumbling timbers of a narrow gauge water tower standing in the woods.

Tom Gasior
Photos by author

Real railroads exist within context and history. We can duplicate this on our own railroads in any number of ways. Through this we add fourth dimension to our modeling. This is how I accomplished this on my Split Rock Mining Company layout.

The Split Rock Logging Company, a subsidiary of the Merrill and Ring Lumber company, acquired logging rights along the Split Rock River on the shore of Lake Superior north of Duluth. The company in 1903 owned two 1900 Climax geared locomotives and employed over 350 lumberjacks. This operation lasted only until 1906 or so. The thinning of the white pine forests of Minnesota forced the logging companies to move west to Oregon and California.

In 1955, when the Split Rock Mining Company was carving their roadbed from the Vermillion Iron Range to the shore of Lake Superior at Agate

Bay, it crossed many of these former logging lines. I wanted to showcase the former Split Rock Logging company right of way, and provide some visual on my layout.

I do not know if the logging company was narrow gauge railroad or not, but I liked the idea and started to form a abandoned narrow gauge line in the woods that was crossed by the mining company's railroad.



This water tower inspired the narrow gauge line in the woods.

Knowing that if you see a straight line on a map or satellite photo, it is usually manmade. I laid out the logging railroads roadbed with cork in a straight line from the backdrop to the front of the scenery. I then added a small one by three inch section to the side of the roadbed, half way between the backdrop and the front of the scene. Using N scale cork, some narrow-gauge wood ties from a friend and code 40 rail was the next step. The rail was cut into thirty-nine foot lengths, then painted my best rust color. The ties were stained to a light grey

(cont. page 3)



View from the Cab ***President Jay Manning***

As fall draws to a close, winter is on the horizon, as is MEMBER RECRUITING SEASON. We all are aware that the hobby is moving into SHOW TIME. The question is,

“what is our Division doing to prep its members to participate in the upcoming shows as recruiters?” We all like to run trains, but, do any of us think about what we will say to an individual who wants to talk the hobby? Shows are an excellent forum to “meet and greet” prospective model railroad hobbyists. Sure we get questions about how a layout operates, how scenery was constructed, and how to fix problems with balky equipment at home. But, do we see these contacts with the public as an opportunity to recruit.

I raise this question because that is how I got started down the road to deep involvement in the model railroading hobby. I attended a model train exhibit at a shopping mall on a cold, wet Saturday afternoon. I was fascinated by the group’s ability to run 40 car N scale trains and run 4 trains at one time on a layout. I sat and watched and watched. After about an hour an individual came over and started a conversation about the layout and their organization with me. We talked for about half an hour when he invited me to the next group meeting. I went, met the group and we both found out we had similar interests and skills. The next thing I knew, I was involved in building a module for the club model railroad with lots of friendly advice and counsel. One casual conversation with a member who took an interest in me and I was on the road to today. The same thing happened to Marion and I in Sioux Falls, one member of the DSED took the time to “lead me to the groups” in Sioux Falls. We had found the hobby shops, but not the groups.

We recently had a visitor in Sioux Falls last week from upper Michigan who found us on the internet. He was just starting to consider building a model railroad in the basement of the house he had purchased. Together, we visited existing layouts, talked model railroading, including a deep conversation about controlling all aspects of a layout electronically with the DSED electronics “guru”---a conversation that I did not understand, but both the visitor and the host were on the same “plane.” I provided him information and contact information on train stores in the area where he lives and recommended that he look for NMRA clubs in his area. Again, taking the time to “sell the hobby” created the potential to generate a new member for the NMRA. As he left, I invited him to call whenever he was in Sioux Falls so we

could arrange operating opportunities for him on the at home model railroads.

The bottom line, you need to understand how your show model railroad is operating and along with that who is capable of handling technical questions about equipment and problems. Coupled with that is the opportunity to sell your organization, its interests and opportunities. Sell the hobby and your organization will grow. Show preparation involves not only the preparation of the exhibit, it also must include preparation of the Division members on “meeting and greeting” the public. **BOTTOM LINE:** The members must be willing to “step outside the layout bubble,” look for folks interested in hobby and take the time build a bridge to a potential member. You may be amazed by the talent you discover this way--a casual conversation can lead to a lasting relationship that benefits not only the individual you meet, but also your organization.

How to make Recruiting your Superpower!

1. Get out from inside your model railway and mingle.
Nothing is more deadening than having representatives sitting behind a desk/table waiting for attendees to come to them. Boredom oozes from every pore and potential folks rapidly move on.
2. Approach people who show any degree of interest.
3. Offer a genuine and welcoming handshake. Introduce yourself while getting the potential person’s first name at least - use it in the ensuing conversation.
4. Smile with your eyes, going quite beyond a pasted-on smile.
5. Listen to their explanation – really listen.
6. Build on their explanations.
7. Try to convince that person to attend your next gathering/event. Be clear about the date, time, and place.
8. Offer to pick up that person to get them to the gathering/event. If successful, be certain to follow up with a phone call.
9. Once at the gathering, mentor the potential new member during the gathering/event – chaperone them, introduce them to others, involve them in conversations.
10. Convince them to attend a second event.

(From page 1)

color and attached to the roadbed when dry. Next was adding very fine ballast sparingly to show neglect and lack of funds

It was tempting to put a rusting Climax or some logging cars in the weeds, but I quickly realized that was far too heavy handed. The logging company would have moved, sold or scrapped the locos and rolling stock and the likelihood of any laying in the weeds some 60 plus years later was implausible. Restraint was the rule as I tried to model what had once been but was no more. I did like the idea of adding the remains of some type of structure, but what?

Looking to create a structure led me to the idea of a water tank in the woods. Researching logging lines showed that their engines were thirsty beasts and they needed water about every four miles. Photos of narrow-gauge water towers on the web showed common construction methods. I only had to cre-

ate the base since the rest had been either dismantled or fallen into disrepair in the last fifty plus years.

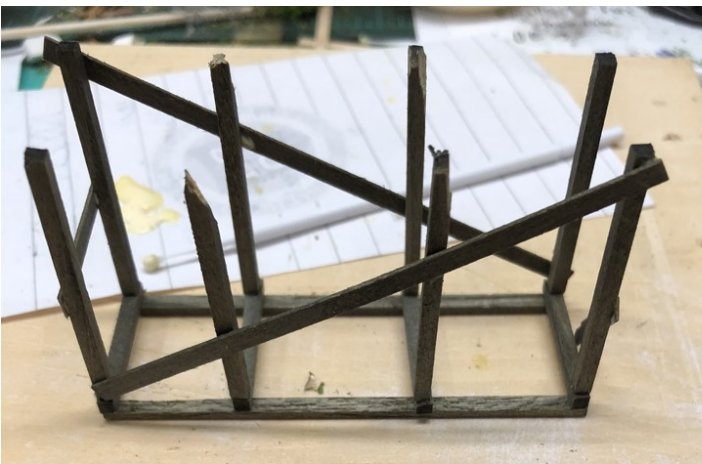
Scrap pieces of wood strips were used and a NWSL Chopper helped cut them into the lengths that fit my area. Simple scale 8x8 lumber and some 2x12 planks were the majority of what was needed. Staining them to make them look really weather beaten using the same Hunterline Weathering Mix Driftwood stain that was applied to the ties worked well. Excess



The "broken" timbers were chopped and gouged to simulate many years of weathering, and will lay in the weeds.



The cut pieces of wood were stained first and allowed to dry.



The only part needed was the remains of the base. The photo of the water tower provided the basic shape. Note the broken ends of the vertical posts.



The water tower was abandoned and overgrown, so no footings were used since they would be covered over.

(cont. page 4)

(from page 3)



The finished scene blends into the background but make you wonder what happened "back then".

pieces were furthered distressed with a hobby knife and some boards were created to scatter around the base of the water tank.

So far, so good, but next I needed to model some 50 years of nature reclaiming the area. Dirt was scattered to the wide spot next to the right of way, wetting it with isopropyl alcohol and applying scenic cement to hold it in place. When dry, I added the dilapidated base of the water tank. Some additional weathering with powders made a few boards look like they sustained fire damage at one time. The additional distressed boards were then placed around the base.

To simulate overgrowth, but also leave it visible for my operators to see if they looked hard enough was the task at hand. Adding grass, small shrubs, taller bushes and even a tree or two gave the effect of the Split Rock Logging Company right of way slowly being reclaimed.

The only railroading going on in 1969 is the parade of loaded and empty iron ore trains of the Split Rock Mining Company. But perhaps those with sharp eyes traversing to the northland may still catch a glimpse of the logging railroad that ran so long ago.

2019 Combined TLR/MWD Convention

Our joint convention with the MWR will be in Lacrosse, WI on May 17-19, 2019 at the Days Inn. Registration will start Thursday afternoon.

Thursday night will have layout tours and clinics. Thursday meals are on your own. The Freight House Restaurant in downtown Lacrosse has \$3 burgers. The restaurant is in the restored Milwaukee Road Freight House.

Friday we will start out with early clinics then will board the bus to tour The Stella Jones railroad tie treating facility in Rockland WI. We will also tour L.B. White, manufacturer of heating units for agriculture buildings, Dahl Auto Museum, and tour the Railroad display in Copeland Park. Lunch will be provided at the Cedar Creek Country Club in Onalaska. Dinner is on your own Friday night. Layout tours and clinics will be available in the evening.

Saturday we will have clinics running all day. Lunch will be provided at the hotel restaurant. The banquet and Chinese auctions will be in the evening.

At the time this article is being written we are working on operating sessions with the local layouts. The Modeling with the Masters clinics are also in planning stages.

Non-rail events for Saturday include tours of The Shrine of Our Lady of Guadalupe, St. Rose Convent Chapel, The Hixon House, and Riverside Museum. (There will be a small additional charge for these tours.) If time allows, we will also do some shopping at LaCrosse's beautiful downtown. We will return to the hotel for lunch (included in registration cost). These tours will be via car pool!



The Stella Jones Railroad Tie Treating facility.

Photo : Stella Jones



CB&Q 4-8-4 #4000 at Copeland Park.

Photo: LaCrosse Tribune

FIRST CLASS TICKET- REGISTRATION FORM

MWR-TLR CONVENTION

MAY 17-19 2019

DAYS INN LACROSSE WISCONSIN

101 Sky Harbour Dr LaCrosse, WI

(608)783-1000

Room Rate \$67

Note: You must be a member of the National Model Railroad Association to attend. **Membership will be checked.**

Spouses or significant others do not need to be NMRA members to attend the Friday tours, Saturday night banquet or Non-rail events.

A 9-month "rail-pass" membership is available to new members for \$20. **See below.**

If you have ever purchased a NMRA RailPass Membership , you cannot do that again. You must sign up for a full NMRA membership to attend this year.

Name _____

NMRA # (required) _____

Spouse/Guest Name _____

NMRA Expiration Date _____

Address _____

City _____ State/Province _____ Postal Code _____

Phone (____) _____ Email _____

☐

Check if this your first MWR or TLR convention.

Event	Price	Total
Member Registration (postmarked before April 6 th , 2019) Includes all clinics, rail tours (limited to the first 168), and Saturday lunch and Banquet	\$97	
Spouse or Guest Registration Includes all clinics, rail tours (limited to the first 168), and Saturday lunch and Banquet	\$97	
Registration postmarked after April 6 th , 2019	\$107	
Modeling with the Masters info on page 2	\$25	
9 Month NMRA RailPass for Non-NMRA members	\$20	
	Total	

Please indicate which events you will attend

Member Guest
Y N Y N

Member Guest
Y N Y N

Local Industry Tour					Non Rail Tours				
Operating sessions see page 2					Saturday Lunch				
					Saturday Banquet				

List any special dietary needs: _____

Send form and check to (checks payable to Thousand Lakes Region):

Gerry Miller

2019mwrtlrconvention@gmail.com

1040 Hawkeye Dr.

Dubuque, IA 52001

If you are signing up for the operating sessions or modeling with the masters this sheet needs to be filled out and returned with your registration form.

MODELING WITH THE MASTERS: Below are 3 clinic day/time choices. Select your 1st, 2nd, and 3rd preferences and circle your scale choice. There will be 25 modelers per session, limited to 75 modelers. There is an additional cost of \$25.00 to cover the cost of the model.

Tool list for the clinic is on the TLR web site please look over so what you will need to bring along to build your model.

___ Friday, May 17, 7:00 – 10:00 am Build a small, puddle jumper bridge with styrene and wood

HO N

___ Saturday, May 18, 7:15 – 11:30 am Build a DPM building HO N

___ Saturday, May 18, 1:00 – 5:00 Introduction to building a laser wood kit N HO S O

Operating sessions:

Please check the day or days you would like to operate. Layouts will be posted on the website when more information becomes available. If multiple layouts are available, you will be contacted pick which layout/layouts you would like to operate.

___ Thursday Night

___ Friday Night

___ Saturday

**If you have any questions, send them to:
2019mwrtlrconvention@gmail.com**

Modeling with the MastersClinic Descriptions La Crosse, WI 2019

MWTM - Scratch Building a Small Puddle Jumper Bridge

Title: Scratch Building a Small Puddle Jumper Bridge

Cost: \$25

Scale: N and HO

Date: Friday

Time: 7:00 am to 10:15 am

Lead Instructor: Clark Kooning, MMR; assisted by other MMRS as available

Clark and the MWTM team will provide you with the knowledge to build a small bridge with structural elements out of Styrene and wood. You will be shown how to paint, or stain wood used for the abutments. In addition, you will learn about applying small details which make this very small bridge come alive. This small bridge can be used in many layout situations.

****Be advised with the time limited for this clinic you may or may not complete the project but will leave with all the necessary information and materials to complete this project on your own****

MWTM - Introduction to Building DPM Structures

Title: Introduction to building DPM kits

Cost: \$25

Scale: N, HO

Date: Saturday

Time: 7:15 am to 11:30am

Lead Instructor: Clark Kooning, MMR; Assisted by other MMRs as available

Clark will take you thru the steps of building a DPM structure. Many people have built these fantastic little kits but don't quite build them correctly. In the clinic we will show you a few tricks and tips to build these gems. Whether you are a beginner or some what of an expert you will find some great tips in this clinic Our project will involve a two-story city building and you will be assisted by 3 MMRs during your hands-on experience.

****Be advised with the time limited for this clinic you may or may not complete the project but will leave with all the necessary information and materials to complete this project on your own****

MWTM - Introduction to Laser Kits

Title: Introduction to Laser Kits

Cost: \$25 (HO/N) \$30 (S/O)

Scale: N, HO, S, O

Date: Saturday

Time: 1:00 pm to 5:15 pm

Lead Instructor: Clark Kooning, MMR; Assisted by other MMRs as available

Clark will take you thru the steps of building a Laser Kit for the first time. Laser-cut wood is now used to create an array of precision -cut kits with parts ranging from walls with door and window openings cut ever-so-accurately to extremely fine window mullions. All parts fit perfectly (even in multiple layers) allowing the resulting structure to appear very similar to a scratch-build model. Our project will involve a bunkhouse that could also serve as a storage shed on your model railway. and you will be assisted by 3 MMRs during your hands-on experience.

****Be advised with the time limited for this clinic you may or may not complete the project but will leave with all the necessary information and materials to complete this project on your own****

Please welcome the following new members to the TLR

Twin City Division

Keith Pashina	Maple Grove MN
Bill Juring	Shoreview MN
Johanna Nelson	West St Paul MN
Christian Carlson	Minneapolis MN
Jamie Traxler	Shakopee MN
Bob Griffen	Cottage Grove MN

Prairie Lakes Division

Steve Barwick	Sioux City Ia
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Southeastern Division

William McDermott	Manchester Ia
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At Large

John Goroski	Detroit Lakes MN
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ProtoThrottle Review

By: Jared Seliger

Photos by author unless noted

Disclaimer: The author purchased the ProtoThrottle from Iowa Scaled Engineering with the first production run of the product. The information contained in this article is solely the opinion of the author and no compensation was provided by any parties.

In my opinion, the ProtoThrottle™ is one of the most innovative and revolutionary products to be introduced into the model railroading hobby in 2018. The product was developed by Iowa Scaled Engineering (ISE) as an open-source wireless throttle that works in tandem with a digital command control (DCC) system. The ProtoThrottle™ (PT) replicates a General Motors Electro Motive Division (EMD) throttle stand to operate model trains. The PT delivers a unique operating experience in that it allows the user to have the feel of being at the control stand of a real locomotive.

Before an in-depth analysis of the PT is conducted, it is important to note what the PT is not. The PT is *not* a stand-alone DCC system and cannot operate trains without interacting with a DCC system. The PT is *not* specific for one DCC manufacturer; therefore, connecting the PT to a specific DCC system requires a compatible receiver (sold separately by ISE) to achieve the connection. In my opinion, the PT is *not* recommended for modelers who are novices with DCC railroad operations. To achieve optimal locomotive performance, a thorough understanding of DCC setup, operations, terminology, configuration variables (CVs), and programming CVs are highly recommended.

Now let's discuss what the PT is. The PT is a device that adds a whole new realm of realism to model railroad operation. It is compatible with all major brands of DCC systems¹ and decoders. The PT is open-source software, meaning users have the ability to customize and make changes specific for their individual needs. The PT is meticulously designed and engineered to be suited for use in small, in-home layouts or large club-style layouts with multiple throttles and operators.

Design and Feel

The first impression of holding the PT (photo 1) is that it is a little larger and bulkier than a standard DCC cab (throttle). However, do not confuse the bulkiness as a design limitation; rather, its size allows for multiple buttons, levers, and switches to control the functions of a

DCC decoder. The size really does give you the feeling of being in control of a 2,000 hp (or more) locomotive. The faceplate is anodized aluminum with an 8-notch detented throttle handle, 3-position detented reverser handle, and spring-loaded horn handle. The PT also features twin switch knobs that control the front and rear lights and (if equipped on the locomotive) ditch lights, two latched function buttons, and two additional function buttons that can be assigned as either momentary or latched. The PT operates on two-AA batteries (either alkaline or rechargeable NiMH) and has a battery life of over 20 hours of continuous operation². The

design of the throttle shares many similarities with the prototype EMD throttle stand (photo 2)³.

Initially, the biggest learning curve is getting the PT setup for the locomotive functions that you utilize the most. The horn, bell, and lights all have predefined handles, switches, or buttons, leaving three open buttons for programming. The auxiliary button (top, left on the PT) can be configurable to any latched function on your decoder; however, based on the design of the throttle and the location, it is best served as the dynamic brakes, straight-to-eight (Tsunami 2 decoders), or drive hold (Loksound Full-Throttle). The two remaining buttons to the right of the LCD screen can be programmed to any function that you most commonly use. My preferences are to have one programmed for the coupler crash/release and the other programmed to mute the sound.

Setup

The setup of the PT consists of three steps: first, the PT must be setup to interact with your DCC system; second, your locomotive decoders need to be configured to take full advantage of the prototypical functions of the PT; third, the PT itself must be configured for your locomotive(s);

Configuring the PT to communicate with your DCC system can be accomplished in less than 15 minutes out-of-the box.

When the PT is purchased, be sure to also purchase the correct receiver for your DCC system. The setup will be dependent on your DCC system, and my experience has been with a Digitrax Super Chief 5 amp. Iowa Scaled Engineering has instruction manuals on their website to setup the PT with all of the compatible DCC systems. It is highly recommended to review these documents before purchasing.

Most DCC decoders will operate with the PT without any CV modifications from the factory default values. However,
(cont. page 9)



Photo 1: Iowa Scaled Engineering introduced the ProtoThrottle to give operators a more realistic operating experience.



Photo 2: The real "office" of an EMD GP38-2 locomotive, and you can see the similarities to the ProtoThrottle. (Joe Atkinson photo)

modifications from the factory default values. However,

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changing several of the decoder functions will help to optimize the PT operational experience. The most common changes involve changing CVs related to acceleration, deceleration (momentum), braking, and lighting functions. Increasing acceleration and momentum simulates a delay in locomotive movement when throttle is applied and simulates “coasting” when the throttle is moved to the idle position. The braking CV works in conjunction with the momentum CV and allows prototypical braking distances. Finally, the default light functions will automatically change direction of the head or tail light when forward or reverse is selected. This function needs to be disabled to work with the light knobs on the PT (photo 3). Specific details and instructions for configuring CVs is beyond the scope of this article and those instructions can be found on the PT webpage or the PT Groups.IO page⁴. It is worth noting that the PT cannot perform any programming of decoder; therefore, you must program your decoders with your DCC throttle or with LokProgrammer (for ESU decoders) or JMRI (highly recommended method).

Configuring the PT for each of your locomotives is relatively straight forward. The first step is to select the address of the locomotive you wish to operate. Once selected, the “CONFIG” menu allows you to program the decoder functions to the specific buttons, levers, and switches on the PT. Before setting up the PT, it is recommended to have a list of the functions and their addresses (e.g., head light = F1; bell = F2; etc.) available for easier setup. An excellent feature of the PT allows the user to save the locomotive address and the assigned functions for a quick recall for each locomotive. This feature also allows you to program specific functions for specific locomotives. For example, on my GP10s, I have the “drive hold F10” programmed to the auxiliary button and on my SD40-2 with dynamic brakes, I have the dynamic brakes programmed to that button. I can switch between the saved addresses and I do not have to reprogram the functions!



Photo 3: The ProtoThrottle has easy to use light controls along the bottom edge for implementing prototype light control.



Photo 4: The PT (in hand) can display the fast clock time (right), but you need to have the right components to allow a wireless connection to it.

Operation

Several pages can be written about how the PT has ele-

vated the model railroad experience to a whole new level of prototypical operation. However, in the interest of space, I want to focus on the braking feature of the PT. Mastering the braking function of the PT takes time and patience but it absolutely is a game changer for locomotive operation. The latest release of decoders like the Tsunami 2 and LokSound Full-Throttle decoders support train brake, independent braking, or dynamic braking. Using a standard DCC cab/throttle, you can toggle the brakes on/off using the appropriate function key (e.g., train brake is F11 on a Tsunami 2 decoder). This does not provide a prototypical braking experience, essentially toggling the brake on provides the maximum braking effect.

The PT braking handle simulates a “variable” braking that increases the braking effect the farther you move the handle to the right (analogous to the brake pedal in your vehicle, the farther you press the pedal down, the quicker your vehicle stops). The variable braking is adjustable in the setup on the PT itself and with the specific braking CVs for your decoder. You can customize the braking to have the locomotive stop in a short distance (preferred for switchers) or a longer distance (preferred for road locomotives that are pulling full loads of freight and take significant distance to stop). I will be very honest, other than the occasional usage of dynamic brakes, I never used the braking function of my decoders with my DCC throttle. After spending the time configuring the braking on my PT, I am significantly dissatisfied with my operating experience using my DCC throttle because of the on/off function of the brakes. The braking features of the PT really enhances my operational experiences.

The PT braking handle simulates a “variable” braking that increases the braking effect the farther you move the handle to the right (analogous to the brake pedal in your vehicle, the farther you press the pedal down, the quicker your vehicle stops). The variable braking is adjustable in the setup on the PT itself and with the specific braking CVs for your decoder. You can customize the braking to have the locomotive stop in a short distance (preferred for switchers) or a longer distance (preferred for road locomotives that are pulling full loads of freight and take significant distance to stop). I will be very honest, other than the occasional usage of dynamic brakes, I never used the braking function of my decoders with my DCC throttle. After spending the time configuring the braking on my PT, I am significantly dissatisfied with my operating experience using my DCC throttle because of the on/off function of the brakes. The braking features of the PT really enhances my operational experiences.

Miscellaneous features

The small details of the PT enhance the operation experience for the user. The PT

LCD information screen has a space to display the time from a fast clock (no worries, if you do not have a fast clock on your layout, it just displays some dashes). I have an ISE fast clock wireless master on my layout and it sends the time to the PT for display. This is particularly useful for larger layouts where you might not be close to a clock display, it is displayed on your PT (Photo 4).

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Another nice feature of the PT is the lanyard attachment (included with the PT). This is particularly useful if you have to deal with sudden emergencies like a derailment or a quick turn-out throw, which allows the PT to hang securely around one's neck.

Limitations

I hesitate to use the word limitation to describe the PT but there are a few functions that the PT cannot do that a DCC cab/throttle can perform. On my layout, I have all of my turnouts setup to be controlled with a "closed" or "thrown" command on my DCC system. When using my DT402, I can control the directions of the turnouts without having to set my throttle down. The PT does not support switch commands so I either have to use my DT402 or have my JMRI running to control my turnouts. Also, it was mentioned earlier that the PT also does not support any type of decoder programming.

A possible limitation for some modelers might be the price. The MSRP for the PT is \$482 and the receivers have an MSRP of \$99. The price is going to be similar to purchasing 2 to 3 sound-equipped locomotives. Certainly, everyone has their budget and priorities when it comes to how much to spend on the hobby, but rationalizing purchasing the PT vs. not purchasing 2 or 3 locomotives hopefully puts it into perspective.

In my opinion, these limitations certainly do not detract from the overall experience, they simply require some flexibility on the user's part to overcome them.

Conclusion

I was ecstatic when I first learned that the PT was being designed and produced for retail sale. My fleet of locomotives consists of EMD GP9s, 10s, 38-2's, 40's, and SD40-2's. The PT was designed for these types of locomotives; however, you certainly can use them with any locomotive with a compatible decoder. Using the PT has made me a better modeler because I

have learned more about configuring CVs in the last six months than I have in the previous six years of using DCC-enabled locomotives. I also feel like I am operating my trains in a more prototypical fashion than I was with my standard DCC throttle.

If you are a modeler who "needs to see it to believe it," I would recommend that you find a friend or a club where the PT is being utilized. You may also visit the ISE website for dates and locations of train shows where they will be providing hand's-on demonstrations. Also, if you are concerned about the setup and configuration of CVs to optimize your PT experience, I would encourage you to visit my YouTube page for step-by-step tutorials on basic and advanced setup of the PT. Please search for "ProtoThrottle video series" on YouTube and the videos will be available for you. You are also encouraged to join the PT Groups.IO page for a community of users who can help you with your needs.

With the holidays right around the corner, maybe Santa (or your wife) will deliver you a ProtoThrottle, only if you have been good!

Footnotes

1. Please visit <http://protothrottle.com> for a full list of compatible DCC systems.
2. I use Duracell rechargeable NiMH batteries and conservatively have gotten over 20 hours of operation out of one charge. Please note, your results may vary by battery type and usage.
3. The prototype image is from Iowa Interstate #706, an EMD GP38-2 (photographed on 8/12/2004). The image is copyright from Joe Atkinson and is reproduced with permission from the owner.
4. ProtoThrottle Groups.IO website: <https://groups.io/g/ProtoThrottle/topics>

Master Builder – Cars

By

John Hotvet, MMR

Master Builder – Cars is the second of two Achievement certificates that can be earned in the equipment category.

The Statement of Qualifications (SOQ) form, which can be found on the NMRA website, lists the various requirements that must be completed for the Master Builder – Cars certificate.

The modeler must complete at least eight pieces of operable rolling stock. At least four models must be scratch-built, and the other four must be super-detailed. At least four models must earn a Merit Award of at least 87.5 points. There must be at least four different types of rolling stock modeled, and at least one of them must operate in a passenger train or carry passengers, like a drover's caboose in a freight train.

Operable means that the car are able to roll down the track and go around curves. It does not mean that doors and windows actually operate, but those features would add extra points during the judging.

The NMRA website goes into detail about the different types of rolling stock. For example, a wood boxcar and a steel boxcar would constitute two different types of rolling stock because they require different skill sets to construct, but a forty foot steel boxcar and a fifty foot steel boxcar would not (unless there is a unique feature to one of the boxcars).

The models must be judged in an NMRA contest or by a panel appointed by the Region AP Chair in order to receive the Merit Awards.

Once the requirements have been met and the SOQ filled out with all the appropriate signatures, send the SOQ to me for review and further processing.

Minutes of the TLR Board of Directors Meeting Conducted by conference call on October 3, 2018

Call to order: Meeting was called to order by President Jay Manning at 7:21 p.m. Manning explained the snafu that led to the meeting starting late.

Introductions: Secretary Art Suel conducted a roll call of members present. Present was the following members; Jay Manning - President, Art Suel - Secretary and Membership Chair, Tom Gay - Treasurer, Kevin Dill - Public Relations Director and Fusee Editor, Kennedy Gauger - Contest Director, Canadian NMRA Director Fred Headon, MMR and Tom Gasior - Social Media Chair. Superintendents present were Southeastern Division Gerry Miller, No. 1 Northern Division Ian Plett, Minnesota River Valley Division Terry Davis and Prairie Lakes Division Jay Davis.

Approval of minutes:

BOD meeting 5/18/2018: The minutes of the meeting held at the convention in Sioux Falls that were published in the Summer 2018 issue of the Fusee. There were no corrections to the minutes presented. Miller moved to approve the minutes as printed. The motion was seconded by Dill. Motion passed unanimously.

Treasurer's Report: Treasurer Tom Gay presented his report. The only expenditures since May 2018 report was \$200.00 for first time Achievement Program recipients and a \$1000.00 donation to the NMRA Diamond Club. Gasior inquired as to what is the Diamond Club. Headon answered that the Diamond Club mission is to scan photos, articles and drawings that can be found in the Members' section of the NMRA website. If a member wishes to see the treasurer's report, please contact Tom Gay whose contact information can be found in the officer's section of the Thousand Lakes Region website. Gauger moved to accept the report with Dill seconding the motion. Motion passed without dissent.

Convention Director report: Jay Manning read director Scott Nesbit report.

Recap of 2018 Sioux Falls Convention: The 2018 convention was well received by convention attendees.

2019 Convention La Crosse Wi: Miller reported he will be working with a new person at the Days Inn in La Crosse. He will be going to La Crosse this coming weekend to meet with this person and go over convention details. Tentative plans are as follows. Thursday registration will open the convention. There will be two clinics and two model railroads to tour. Dinner will be on your own, though he suggested that the Freight house has \$3 burgers that night. Friday morning will have clinics in the morning with prototype tour in the afternoon. The convention will visit Stella Jones in Bangor Wisconsin where they treat railroad ties with creosote. Then the convention will tour L.B. White which manufactures heaters for agriculture buildings. Dinner will be on your own this night too. Friday evening will be model railroad tours plus the Thousand Lakes Board meeting. Saturday will be clinics and the banquet which will be held at the hotel. Awards and Chinese auction will follow the banquet. Sunday will be the Thousand Lakes Region Annual General Membership meeting. After the meeting, model railroads in the area will be open to tour. In response to a question regarding having a Modeling With the Masters session as an option for attendees, Miller will check with Clark Krooning. Headon stated that Krooning is winding down his involvement with MWTM and Jim Gore is taking on the responsibilities. Dill suggested that the region subsidize this cost with Mid West region assuming half of the cost. Miller asked the board which type of transportation

would they prefer for the prototype tours; school buses or motor coaches. Preferred method would be motor coaches since they are equipped with AC beside more comfortable seating. Miller stated it will be around \$700.00 per coach. Other information was that Reid Kahrs of the MWR is handling clinics and convention registration will be around \$100.00. Room registration is now open for the hotel. Board will also have to approve purchase of safety glasses for the prototype tours and Tom Gay has a source for this. Public Relations Director Dill told the board he will send out a 2-page mailing to all members with convention details contain within the mailing.

2020 Convention site: Manning has been in contact with an individual in the Twin City Division about hosting that year's convention. He will have more information at the January board meeting.

Public Relations Director: Kevin Dill has no report as he has been concentrating on the conversion of the Fusee from print to electronic format. He had a question as to what his duties are? Terry Davis, a past Public Relations Director to look in the Executive Handbook for the duties. He suggested that Dill send out press releases to the media in La Crosse with convention news.

Contest Director: Kennedy Gauger reported that there was a small number of entries for the model and photo contest at the last convention. His primary goal is to increase the number of entries. He further stated that the board needs to develop an understanding on why this is occurring and what steps needs to be taken to reverse this trend.

Separate contests by region in La Crosse? Gauger has spoken with his counterpart in the Mid West Region and the two of them believe it would be in the best interest to have a joint contest. The only separate part will be the awarding of regional specific awards (such as the Jock Oliphant Award of the TLR). There was one other difference between the two regions that need to be decided on. Currently the TLR awards plaques for 1st place thru 3rd place while the MWR awards a plaque for 1st place and certificates for the other places. He will converse with his Gary Children to determine what will be done at La Crosse. Contest entries will be accepted through Friday evening with judging to occur on Saturday morning by a joint judging panel. Terry Davis suggest that a category for digital images be started. Dill wondered how you would display digital photos? Gauger said that a slide show can be incorporated into the contest room.

Increasing contest entries at the convention: Gauger said he will be writing articles on how to fill out contest forms and what categories exist. Suggestions include describing contest-eligible categories for judging. Also it was recommended that Gauger review the NMRA guidelines for non-judged categories such as: "**People's Choice Awards**", a popular vote contest that includes models, photo and arts & craft and "**Model Showcase**", a non-competitive, display-only event for complete or in process models or other railroad oriented projects. It was also suggested that a judged category involving a "Special Event" be included. As an example, in the past this category has included Outhouses. This category may be of interest if it is of a light-hearted nature.

National Officer's reports

NMRA VP for Special Projects, Gerry Leone MMR: No report

NMRA Canada Director, Fred Headon, MMR: Headon stated that he sent his updated report to Secretary Suel who can send it out to board members: Headon spoke about item 4 which prohibits using NMRA social media platforms to campaign for office or on an

issue. He reminded the board that when you use the emails to send out messages to members, you must have a unsubscribe button on the email.

Vice President Caleb Van Der Brink: No report

Superintendents Reports

No. 1 Northern Division: Superintendent Ian Plett reported that the Fre-Mo group exhibited at the just completed Manitoba Mega train show in Winnipeg. Next event will be a social for divisional members.

Dakota Southeastern: Jay Manning read Superintendent Terry Anderson's written report. The DSED hosted another successful regional convention this past May. The division modular model railroad was exhibited at the Granite Threshing Bee this past July in Granite Iowa. September the division had a picnic for members at a park in Hills Minnesota. During the picnic, two BNSF trains passed by the park for some railfanning. In November and December, the modular model railroad will be displayed at Trains at Christmas and a couple of Polar Express events in Sioux Falls South Dakota. Finally, the division will have its annual Christmas social with their annual Chinese auction.

Twin City Division: Secretary Suel read to the board Superintendent Ron Olsen report. Most meetings will occur at the Jackson Street Roundhouse on Thursdays. The January and February meetings will be on a Saturday at a local church in Plymouth Minnesota. The annual Modeler's Retreat will happen on March 15th and 16th 2019. There will be clinics, slide shows and tables for modelers to display their models.

Prairie Lakes Division: Superintendent Jay Davis reported that the annual Fall Meet is scheduled for November 3rd in Algona Iowa. It will be held at the Motorsport and Agriculture Museum which has a huge Lionel model railroad within the museum. As always, there will be vendors, three clinics and door prizes.

5) South Red River Valley Division: Kevin Dill read Superintendent Don Radeck report. The division will soon have its first meeting of the year to resume working on their T-Trak modules. The 40th annual Spud Valley Hobby Show will occur October 21st at the Delta Hotel by Marriott in Fargo. There will be vendors and several modular model railroads at the Show. November 17th and 18th, the Red River Modular Club will be exhibiting at the Fargo Library.

6) Southeastern Division: Superintendent Gerry Miller said that the division plans to exhibit their modular model railroad at three shows in the future. The members will resume their round robin working sessions on their model railroads.

7) MN River Valley Division: Superintendent Terry Davis reported that the division has gained two new members since May 2018. Headon suggested that a mentor be assigned to each new member to get them involved in activities. Davis agreed and has contacted one member while another member has contacted the other new member.

Committee Chairs

AP Program: - no report submitted

Membership: Chair Suel reported he has sent out 21 Welcome to the TLR letters to new members since May. Region has gained a net of 5 members since May 2018. Membership stands at 457 members.

Historian: no report submitted

Social Media: Chair Tom Gasior reported that the twitter account now has 590 followers. He moved the setting for the Facebook page to a group setting. This will make it easier for individuals to post to the regional Facebook account.

Web Master: Suel read the report from Webmaster Van der Brink. The region's website has seen an increase in visits since the Fusee switched to a digital format. 897 new visitors since May 2018, an increase of 11.7%.

Fusee Update: Editor Dill reported the transition to a digital or electronic format for the Fusee was successful. The main issue was the size of the file, but he and Van der Brink are working on compressing the file for the next issue. He has new authors waiting in the wings and Membership Chair Suel is submitting an article listing the new members for each issue.

Old Business: no old business

New Business

legality of use of members email for Regional/division mailings:

Headon reminded the board each mailing to member's email accounts need to have a unsubscribe option plus no campaigning. A question was raised if a third party such as Manning or Suel should vet the mailing before it is sent out. Manning said he could do that.

Grant Program: Manning is seeking input from the Treasurer and divisional Superintendents on use of this program. This issue ties into next agenda item so board went to that item.

How to use TLR funds to support development of the divisions and the hobby:

President Manning is going to form a committee to study the issue and report back to the board. Manning asked that Superintendents bring up the issue at meetings to get feedback and suggestions from members. Terry Davis supported the idea of paying partial convention registrations for contest judges. He further suggested that the region look at awarding a monetary award beside the plaque to the Best of Show winner. Dill asked if a motion is appropriate at this moment? Manning answered he would rather gather information and suggestions at this time.

Bob Dew Sr Award nominations: Manning open the floor for nominations. One individual was nominated. Board members had questions regarding the list of individuals eligible for this award. After much discussion, it was decided to review the list and continue the nomination process to the January Board meeting. Manning and Miller will review the list and report back to the board.

Stafford Swain Memorial Lifetime Achievement Award nominations:

Manning open the floor for nominations. Two individuals were nominated, and the board will send their vote to Manning.

Announcements: Dill reminded the Superintendents to send their updates to him for inclusion in the next issue of the Fusee. This is an excellent tool to use to brag and promote their division activities past and future. The next board meeting will occur around January 15, 2019. Manning urge superintendents to encourage their modelers to enter the contest at the upcoming convention.

Adjournment: Dill moved to adjourned and the motion was seconded by Miller. Motion passed. Meeting adjourned at 9:07 p.m.

Respectfully submitted

Arthur C. Suel, TLR Secretary

The Tool Car - Dental Tools

Lester "Les" Breuer, MMR

I began this tool series showing various tools in my main tool drawer. If you look close at the photo, shown here again, in the lower left hand corner you see an old Model Diecasting box filled with dental tools or "picks". I use dental



The dental pick collection is extensive and located in the lower left of the photo.

tools to help build every model freight car I work on. I chose the use of dental tools for this column because when I use the tools they remind me of a my son who passed in October after his struggle with a heart condition for thirteen years. The memory that comes to mind each time is how the tools got into the box in the drawer and more in storage. And, I want to share that memory with you.

The first article I read about using dental tools suggested obtaining dental tools by asking for used ones from your dentist when visiting. I thought that was a great idea as the price was right - free. Next visit to my dentist I explained I was a model railroader and asked if he had any used dental tools he could spare. He brought out a box of used dental tools and told me to pick out a couple I could use. Of course, that evening at the dinner table I told my spouse Susan and son Michael about my new free modeling tools from the dentist. Little did I know at the time, the impression I made on Michael and the dental tool collection it would produce. The collection began with Michael's next visit to his dentist. When he came home, he presented me with not one, but an envelope containing maybe ten instruments. When I asked about the envelope, he told me he told the dentist his dad was a model railroader who could use some dental tools for modeling. The envelope he presented me was what he received. Wow! I was pleased and thanked him for efforts; however, it did not end there. Each time my son returned from a dental appointment I had an envelope containing at least ten instruments and sometimes more. Of course, this resulted in a fairly large collection I have. I added to this collection from time to time with a purchase at a train show of a dental tool with a neat tip I had not used before.

At first glance, the dental tools or "picks" look all alike; however, that is not the case. As you look close at various tools you can see dental tools made from top quality steel come in various handle sizes with various ends. I will share

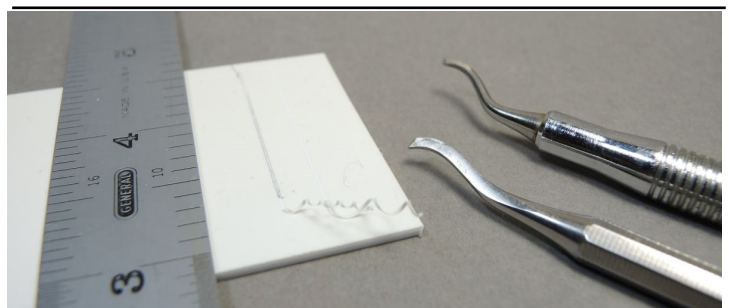


These are the "extras" that don't fit into the tool drawer.

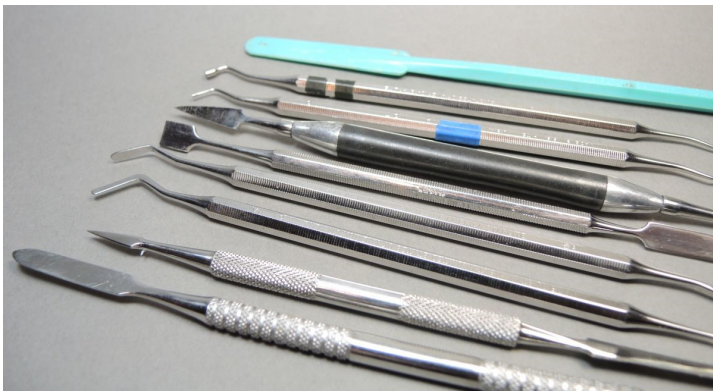
with you several of my favorites. I do not know the specific names a dentist uses to identify dental tool types. Therefore, I will identify them with names I use.



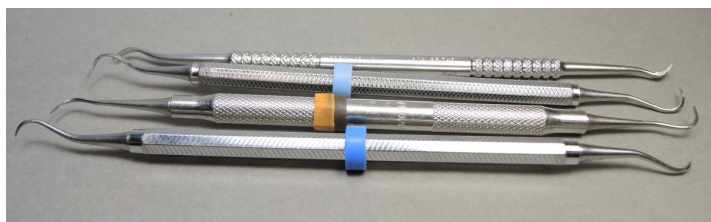
The first dental tool I want to show you is one with a simple straight tapered tip. I use this tool in a model session if I need to open a closed applicator tip on a CA glue bottle or cement tube. Since the dental pick is made of quality steel it is strong enough to quickly open a closed tip without bending or breaking. The original bent tip on the front pick I did attempt straighten with a plier.



When I scratch build a model or upgrade a plastic freight car I almost always use a scribe. On a plastic wood freight car I will use it to scribe grooves between boards in the area where I have removed molded on detail such as grab irons or ladder rungs. You can use a scribe to make the "scribed" sheathing used in wood freight cars. Here you see grooves I scribed using a dental tool. I made the scribe by using a dental tool on whose tip I ground angle of 60 degrees. The scribe cuts a fine curl as it should when pulled across material such as styrene.



Dental tools shown here have different tips I use to apply putty for fillings flaws that need filling. For example, on a resin freight car there are times a tiny gap may occur after gluing a car end to side or when roof is glued to the basic freight box of car side and ends. The dental tools shown here are excellent for the task.

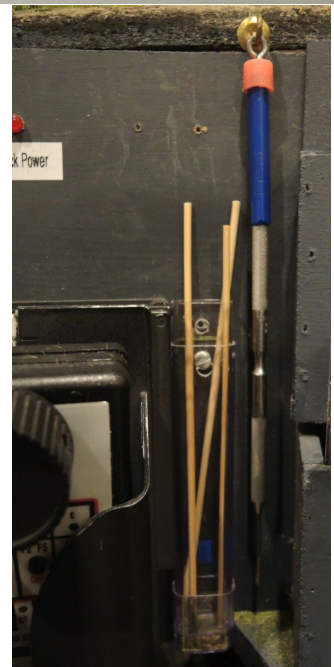


Finally, dental tools that have ends shaped like hooks. I like to use this type of dental tool with this tip to help grab wire to assist treading it on a model such as the train line through underframe members on a freight car.



Dental tools in this photo have different scraping tips. I use this type of scraper to clean off burrs in an area where I used a scribe. I use them to clean off glue. Another time I may use them is to help level putty that was applied to an area.

My first use of dental picks with hooks was to make uncoupling tools. I combined the dental pick with hook with a pen barrel and added a screw eye for hanging. The dental tool hook works very well to hook the trip pins on Ka-dee couplers to uncouple them. In addition, another great dental pick with hook use is to remove loads from freight cars like coal loads from hoppers. I have a tiny hole drilled in the corner on one end of each load through which the hook passes easily to slip under the load to pull out the load.



Dental tools with another type tip I use for scraping and shaping areas. I use a dental tool with this type to shape putty or MEK Goop (plastic melted in Methyl Ethyl Ketone) applied to model areas. Be aware, MEK which is available from most paint and hardware stores in pint or larger containers is more toxic than the commonly used model cements and ventilation is important.

I have shared with you some of my favorite dental tools or "picks" in my tool drawer. And, I have tried to provide a use I have for a particular tool with a particular end. I hope I have peaked your interest in dental tools to get you to obtain a few to use in your modeling.

To obtain dental picks you can ask your dentist as I did if he has dental picks he could give you. If not, you can purchase dental picks from tool vendors at train shows, dental supply houses and in a set from Micromark.

Until the next tool time, remember "Modeling is Fun" and I believe "Modeling is Fun at a higher level with the right tool".

Region Round-up

Minnesota River Valley Division

Terry Davis, Supt.

A small, core group of Minnesota River Valley Division members continue to construct an HO scale model railroad depicting the Milwaukee Road in Montevideo circa 1953 for the Milwaukee Road Heritage Center, a non-profit museum in that western Minnesota community. If you are an NMRA member living in Benton, Chippewa, Douglas, Grant, Kandiyohi, Lac Qui Parle, Lyon, McLeod, Meeker, Morrison, Otter Tail, Pope, Redwood, Renville, Sibley, Stearns, Stevens, Swift, Todd, Wadena or Yellow Medicine counties you are invited to join in the fun or tour the layout and museum grounds. Contact MRVD Supt. Terry Davis at ptdavis@hutchtel.net for more information.

The MRVD's annual business meeting and election of officers will take place a Saturday in late April or early May. Watch for a notice in the March TLR Fusee. Division members also host operating sessions on their model railroads. Again, contact Terry Davis for more information.

South Red River Valley Division

Don Radeck, Supt.

We have our first meeting of the season scheduled for November 26. We will make plans for the T-Trak module we are building and enjoy a relaxing evening of model railroad videos.

The Spud Valley Hobby Show was another success again this year. We filled all of the available vendor tables and had a good turnout of people through the gate. Some vendors left with very little remaining from their sales table. We had several layouts of different sizes, all the way from Z to O, including the Red River Railroad Modular Groups HO layout. The Valley RC Flyers also had their RC plane display featuring a flight simulator where you can pilot a plane. Next years show will be held on October 20, 2019 at the Delta Hotel by Marriott in Fargo.

The Spud Valley Model Railroad Club is winding down their season. December 1 will be Bonanzaville's Christmas on the Prairie. In addition to the Spud Layout in the former Kathryn, ND depot, We will have an N-scale and two Lionel layouts running in the museum. The Spud layout is one of the top two attractions at Bonanzaville with nearly a hundred thousand visitors every year.

The Red River Railroad Modular Group will wind down their season November 17 and 18 at the Fargo Downtown Library for their Catch a Train at the Library event with several railroad themed activities in honor of National Model Railroad Month.

SRRVD members will once again set up trains for KFGO Radio's Christmas party on December 7. Nearly a thousand people pass through the studios between 6am and 9am to hobnob with their favorite radio personalities and enjoy some coffee and treats. The trains have become a very popular feature of the party.



The business was brisk for sellers and buyers at the Annual Spud Valley Show!



I enjoy model railroading and want to share my experiences with you! You can see my build of kits, how-to's, painting information and much more on my internet blog. Check out <http://mnrailroadcab100.blogspot.com>.

Lester Breuer, MMR

Model Railroad-related events in and around the TLR

2019

Feb 9-10	Great Train Show	Mid-America Center, Council Bluffs, IA
Jan 5-6	Red Cedar Train Show	UW Stout Johnson Field House, Menomonie, WI
Jan 13	Great Midwest Train Show	DuPage County Fairgrounds, Wheaton, IL
Jan 19	Newport Model RR Show	Woodbury High School, Woodbury, MN
Jan 26	Great Tri-State Rail Sale	LaCrosse Center, LaCrosse, WI
Feb 2	Greater Upper Midwest Train Show	Century College West Campus, White Bear Lake, MN
Feb 10	Great Midwest Train Show	DuPage County Fairgrounds, Wheaton, IL
Feb 16-17	Mad City Train Show	Alliant Energy Center, Madison, WI
Mar 2	North Metro Model RR Club	VFW Coon Rapids, Coon Rapids, MN
Mar 10	Great Midwest Train Show	DuPage County Fairgrounds, Wheaton, IL
Mar 16-17	3 Rivers RR Club Train Show	The Omni Center, Onalaska, WI
Mar 15-16	Twin Cities Division Spring Modeler's Retreat	Mt. Olivet Lutheran Church of Plymouth. 12235 Old Rockford Rd, Plymouth, MN 55441
May 17-19	<u>TLR/Midwest Division Combined Convention, LaCrosse, WI</u>	
July 7-13	<u>NMRA National Convention, Salt Lake City, UT</u>	

Publishing Deadlines

<u>Publishing Date</u>	<u>Submission Deadline</u>
March 1 Edition	February 1
July 1 Edition	June 1
September 1 Edition	August 1
December 1 Edition	November 1

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**Bring a friend
To your next
Club meeting!**

Advertising should be mailed to THE FUSEE editor as camera-ready artwork or electronic files (jpeg, tiff, gif, or EPS with outlined fonts).

Enclose payment in U.S. funds, international money order, or by check drawn on U.S. banks. Checks should be made out to **TLR**. Contact the editor if you have questions.

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Commercial advertising from hobby shops, manufacturers, and businesses associated with model railroading interests are accepted. Railroad ads are for individual layouts, model railroad clubs, or other non-commercial groups. All ads can be run in a single issue at 35% of the annual rate.

<u>Ad size (HxW)</u>	<u>Annual commercial Rate</u>	<u>One time commercial rate</u>	<u>Annual Railroad ad rate</u>
Full pg 9 5/8 x 7 1/8"	\$145.00	\$50.75	\$90.00
1/2 pg 4 3/4 x 7 1/8"	90.00	31.50	45.00
1/4 pg 4 3/4 x 3 1/2"	45.00	15.75	25.00
1/6 pg 4 3/4 x 2 1/4"	35.00	12.25	18.50
1/8 pg 3 3/4 x 2 1/4"	25.00	8.75	15.00
1/12 pg 2 3/8 x 2 1/4"	18.50	6.48	10.00
1/16 pg 1 1/8 x 3 1/2"	15.00	5.25	7.50