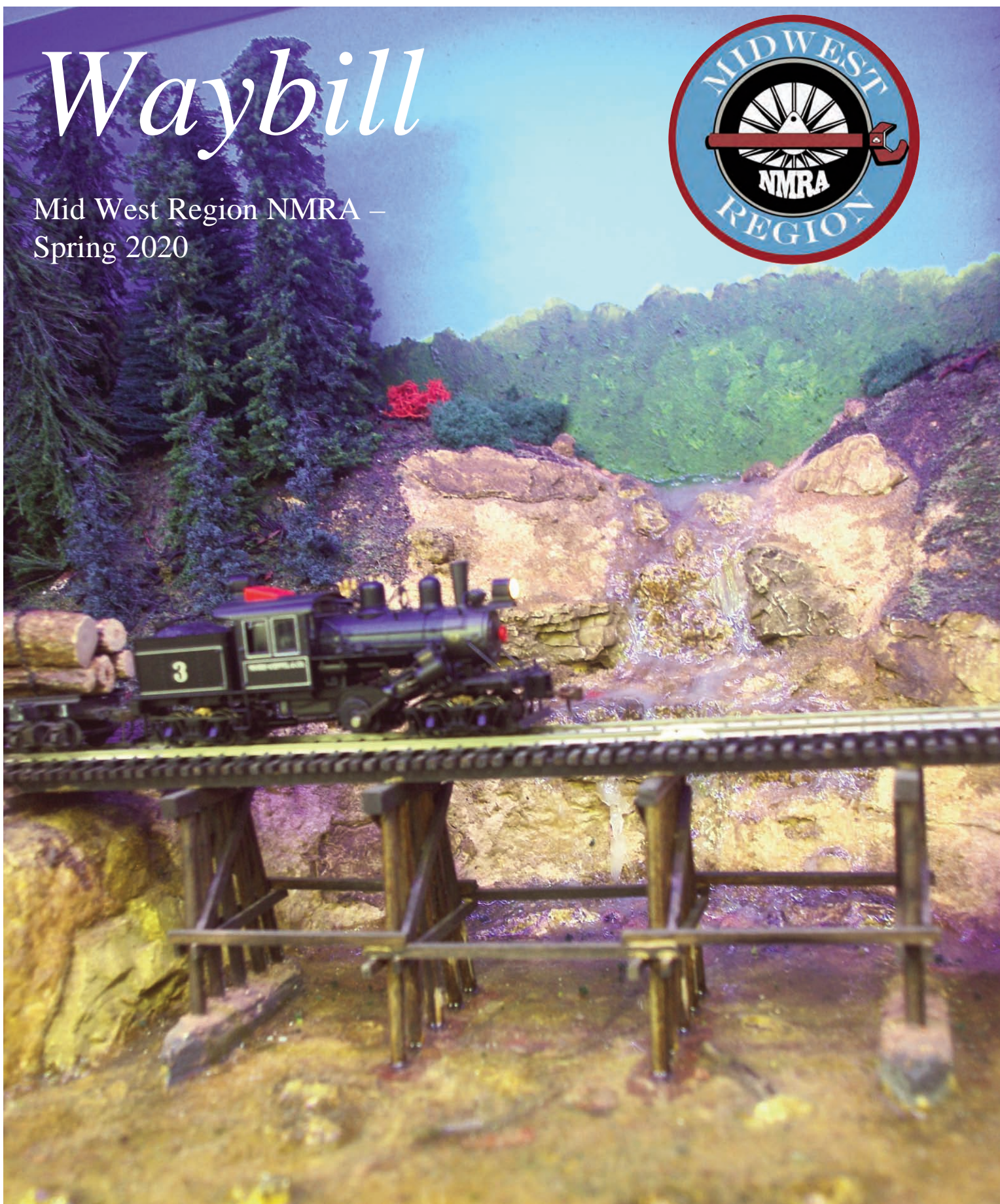


Waybill

Mid West Region NMRA –
Spring 2020



The WAYBILL

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The WAYBILL

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CONTRIBUTIONS

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ADVERTISING

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Editor's Column

Spring is just around the corner and with it the Midwest Region Convention. Are you making plans to attend?

A get-together that I am involved with is the 2nd Annual Day for the Archives. The premise is simple, when you sign up you indicate the historical societies that you are members of and they receive a share of the proceeds

Midwest Region NMRA Convention

Peoria Rocket 2020 May 14-17, 2020

Holiday Inn Hotel and Suites
101 Holiday Drive, East Peoria
1-309-698-3333

Updates at peoriarocket2020.org



**Experts in Model Railroading
Clinics
Layout Tours
Operating Sessions
Model Contests
Displays
Banquet
Quilting with the Linus Project**

Cover Photograph

This is one of the modules from the 65 Mode Railroading Layout. They had these modules at Mad City in Madison. More on page 9.

Photo by the author.

dependent on how many attend for that society.

A portion of the admission is also tax deductible.

The date is March 28 at the Riverview Banquet Hall 1117 N Washington St. in Batavia, IL.

The doors open at 9 AM and presentations begin at 10.

More Information is on page 10.

Waybill

Mid West Region NMRA –
Spring 2020

President's Report

Steve Studley President, MWR

Continuing Education

It is that time of year to not only get some modeling accomplished, but it is also a prime time to learn more about our hobby. Division meets/activities are currently being held, the region's convention will soon be here, train shows are in abundance and, due to the weather, it's often a good time to stay indoors and do some reading or watch instructional videos. All of the above listed activities can provide the railroad modeler ways to increase their knowledge of railroads and modeling.

How do you do that? If the event you are attending, or planning to attend, offers clinics – find a clinic with a subject that interests you and make sure you are in the audience. Listen and take notes or make sure you have a copy of the clinician's handout for later study. If you are anything like me, unless you take notes, you won't remember the important points. Train shows often include portable, modular layouts for viewing. Study what has been accomplished on those modules. Quite often you will see a model building, piece of rolling stock, or track arrangement that interests you. Ask a member of the layout group about it to learn the particulars. Don't be afraid to ask, but also remember to thank the modeler for bringing their layout to the show for all to see. Yesterday I helped staff the Central Indiana Division's booth at the Great Train Show in Indianapolis. A fair amount of the day was spent answering questions from the show attendees. If you have modeling questions, seek out your NMRA/Division's booth and talk to the modelers who are staffing the booth. If we can't immediately answer your question, we will ask others and get the information to you.

Why would you want to do that? The phrase "knowledge is power" is attributed to Francis Bacon.

So how does that help us? If we can increase our knowledge of a subject through education, we also increase our power to overcome the difficulties associated with that subject. Learning more about the subject allows us to more easily solve problems, thus increasing our enjoyment by decreasing our frustrations. Since model railroading is (supposed to be) fun, anything we can do to decrease frustrations must be good. Right? Right! Learning new techniques for kit building, kitbashing, or scratchbuilding will allow you to become a better modeler. Better modeler = better models. Learning more about electronics will allow you to keep from zapping LEDs or letting the magic smoke out of DCC decoders. Both are good things.

How can we help? The following is an excerpt from the Midwest Region Constitution: The purposes of the Region, as set forth in its Articles of Incorporation, are to promote, stimulate, foster, and encourage by all manner and means the art and craft of model railroading and the preservation of the history, science, and technology thereof. So education is a basic reason for our organization. One of the ideas the Region is currently developing is how can we help those who have questions about electricity and electronics. Education Coordinator Eric Peterson and I were discussing this yesterday and are in the process of formulating a pathway to increase modelers' knowledge of electronics. Those of you with questions can help us by sending those questions to us. That will allow us to understand what people want to learn about. Send them to me at: sastudley@comcast.net

The Midwest Regional Convention, Peoria Rocket 2020, will be held this year in – you guessed it – Peoria, IL. The convention will be hosted by the Illinois Valley and Illinois Terminal Divisions. Dates are May 14–17, 2020 and convention information and registration form may be found on the convention's website: www.peoriarocket2020.org Be sure to go to the website and check out what will be available at the convention. Make your choices, get your hotel reservation, and send in your registration so you won't miss the clinics, layouts, and friends at The Peoria Rocket 2020! See you there. In the meantime – back to the layout! Steve





Region News

Midwest Region Achievement Program Report by Jim Landwehr- MWR AP Manager

I am happy to report that there has been a lot of activity from our members. They continue to take part in the Achievement Program all over the Midwest Region. The following members received awards:

Michael Roderick	Greenwood, IN	Dispatch
Jeremy Dummler	Wauconda, IL	Volunteer
Jim Osborn	Mc Henry, IL	Structure
Eric Smith	Fishers, IN	Author
Connie Coy	Avon, IN	Author

As always, work with your division Achievement Program Manager first, and if there is trouble, feel free to contact me.
Thanks, Jim

Frugal Modeler by David Nelson

In his 2017 Model Railroad Planning article, "Modeling 8 Decades at Once," Neal Schorr observed, *"Too often layouts are built on a flat piece of plywood with just a few areas depressed below the track level for valleys or rivers. In reality, much of a railroad is built on fill."* To avoid grades and provide good drainage, track is generally elevated above the land around it, sometimes quite a bit. The roadbed on Schorr's own O scale layout is elevated a full 8 inches (that's 32 feet in 1/4" scale!) above the top of the benchwork joists, room to model those cuts and fills, as well as culverts and drainage, and road and rail underpasses with their own ditches and culverts, while maintaining a level right of way.



Sidings are lower than the main. Elmwood, IL on the Burlington Northern.

As can be seen from the prototype photo, sidings are lower than the main line, to prevent cars from rolling onto the main. Yards are often lower yet for similar reasons. Tony Koester's July 2019 "Trains of Thought" column in Model Railroader, about the need to elevate the mainline above yards or sidings, sug-



WSOR and CN on a steep slope downward from the right-of-way near Slinger Road in WI.

Culvert is several feet below the ties. CN at Duplainville, WI.





Spring runoff fills the drainage ditch below the culvert. Canadian Pacific at DeForest, WI.

gested one foot, but I think one foot is rather conservative.

Koester wrote about drainage ditches in the July 2013 Model Railroader. The Nickel Plate (his prototype) dictated no less than 24 inches from the bottom of a trackside ditch to the bottom of the lowest railroad tie, but that minimum assumes otherwise flat terrain, a rarity in railway engineering; most culverts are well below the ties. See the prototype photo. Water goes into ditches below the culverts, as another photo shows. The spring melt standing water in the photo is hazardous to railroad roadbed; ditches need to drain down into a pond or creek which drains into a river or lake, and so on.

If one track goes over another, or if the track goes over a road, we can plan for that, but below that lower track or that lower road are going to be still more culverts, still more drainage ditches, leading to where which is lower still? OK, we can't model it all, but what is the absolute lowest point we want our realistic scenery to go to? We tend to overlook the topography surrounding a railroad's right of way until it's too late to do much about it.

Right of way needs to be elevated considerably more than is provided by cork roadbed, even a double layer of cork roadbed. The standard "HO" cork roadbed of today measures out to just 1 foot, 4.5 inches in HO. Using the thicker cork roadbed meant for O scale comes out to 1 foot, 5.5 inches in HO. "N scale" cork roadbed measures out to about 1.5 feet thick in N scale. Yet the Pennsylvania Railroad's 1917 roadbed and track standards called for a one foot base of cinders, above which there was to be 2 feet 1 3/8 inches of stone ballast for single track and 2 feet

3.5 inches of stone ballast for double track.

And remember that with any embankment, railroad engineering dictates appropriate angles of slope (which depend on soil conditions) for stability and drainage. Cork roadbed's 45 degree angle edges are for manufacturing convenience, not prototype replication. So standard cork roadbed fails to replicate the height and the angle of slope of "pure" ballasted track even on flat, level ground, quite apart from any drainage needs.

Drainage ditches should be low enough and sloped enough to keep water away from roadbed and subroadbed. Prototype photos show typical culvert, ditch, and angle of slope situations. Can you model this on your layout?

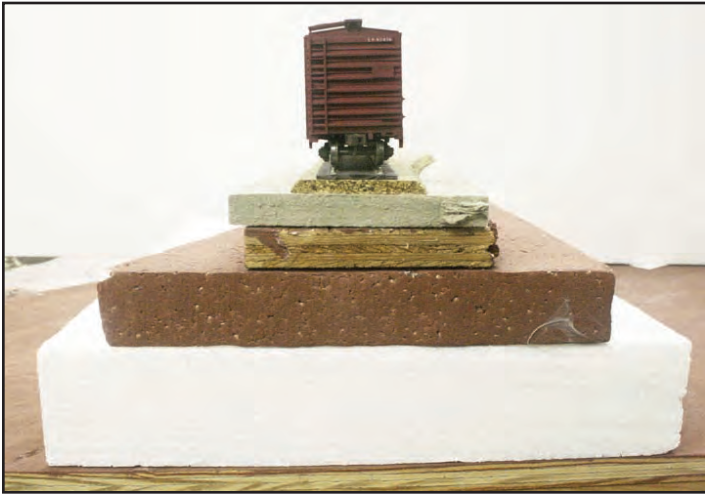
Those 1917 PRR standards dictated that there be no less than 3 feet, 7 3/4 inches from the bottom of a drainage ditch to the top of the ties for single track; 3 feet 9 3/8 inches from the bottom of a drainage ditch to the top of the ties for double track. The 1925 standards for the Chicago & North Western required that the top of any pipe (sewer, water, culvert) under a grade crossing be a minimum of 4 feet 6 inches below the tops of the ties, and 4 feet minimum from the bottom of any drainage ditches.

Highways and roads often approach rail grade crossings from lower than the right of way, and it goes without saying that road or railroad underpasses, river or stream beds and valleys, lakes, rock quarries, and the normal rise and fall of even bland midwestern landscape features will be much lower in level than the right of way itself.



A half inch of homasote and two layers of cork roadbed equal a scale 6'4"high.

True, for really deep features such as ports, large rivers, gravel pits, road or rail underpasses, and such it is more practical to cut into the table top, or lower the overall benchwork, as you can see in a bridge photo from my own layout. Regardless, modelers should try to think ahead about how many feet below the basic mainline track level they need to reserve for accurate, plausible modeling. The conclusion is clear; subroadbed on our layouts needs to be built-up higher than most modelers allow for.



Two layers of styrofoam, some 5/8" plywood, then 1/2" homasote and cork roadbed equals 32 scale feet.

I have included a photo of a plausible, practical amount of built-up roadbed for HO. A half inch thick piece of homasote, topped with "O" scale cork roadbed, then flex track laid on "HO" roadbed, measures out to a scale 6 feet 4 inches from the top of the base plywood to the bottom of the ties. That's still a tiny fraction of Neal Schorr's 32 scale feet, but it would permit side tracks and yards to be lower than the main, with culverts, then drainage ditches where shallow water could drain away without having to cut into the top of benchwork.



Lowering the benchwork to model a highway underpass.

But if you wanted to go lower still while maintaining a more or less level main line, down to gravel pits and lakes and underpasses, you have to come closer to Schorr's 32 scale feet (which would be 4 5/16 inches in HO, or about 2 7/16" in N scale). Another photo shows a mock-up of just what 32 feet of elevation would look like in HO.

Combinations of materials -- going beyond the usual cork roadbed and plywood or homasote subroadbed in other words -- are ways to achieve greater height for the main. Here are some HO measurements (note how differently things marked "half inch" measure out!) of ways to beef up the height of our tracks. Half inch homasote measures out to between 3 feet 4.5 inches, to (sealed with shellac) 3 feet 7.5 inches, while Woodland Scenics half inch thick curvable white foam risers measure 3 feet 8 inches. Half inch plywood measures 3 feet 7 inches. Plywood of 5/8" thickness is 4 feet 4 inches. Cork roadbed meant for O scale measures 1 foot 5.5 inches. HO roadbed is, again, 1 foot 4.5 inches, and N scale roadbed is 9.5 inches. Woodland Scenics black foam roadbed for HO is 1 foot 4 inches and their N scale foam roadbed is 9" in HO.

Here are some comparable numbers for N scale. N cork roadbed is 1.5 feet high, and 1/2" plywood is 3.5" high. Thus a 1/2" plywood subroadbed under N cork roadbed would give you a full 5 feet to the bottom of the ties. Using HO cork roadbed in N scale is 2.5 feet. HO cork used as a subroadbed topped with N cork roadbed gives you 4 feet total in N scale.

It is impractical for modelers to know and comply with all the engineering principles in such texts as William Raymond's "Elements of Railroad Engineering" (1937), C. Frank Allen's "Railroad Curves and Earthwork" (1931), or Charles Disney's and Robert Legget's "Modern Railroad Structures" (1949). We have to compromise, but we can think and plan about when and how much to compromise. The perfect time to be pondering all this is when you are staring at a blank slate of a track plan. What the layout planner should be considering early in the process is: "Where would the water go if this was real? Just what is the 'ground zero' for relative height of my modeled main line, side tracks, yards, culverts, drainage ditches, water features, and underpasses?" Find or imagine that point and plan upwards.

All photos by the author.

You Are Good Enough!

by Gary Children and Walt Herrick, MWR Contest Chairs

We know you are good enough! For what? Why to enter your model(s) or photos(s) or craft(s) in this year's MWR Convention Contests in Peoria! Many modelers and photographers sell themselves short, but don't you. We've seen lots of models, lots of photos, and lots of crafts over the years and we can tell you, you've probably got something good enough to be in a MWR contest (and maybe even win!). There are many different model, photo and craft categories, and three voting classes: Novice, Master and Popular Vote, so there's something in Peoria for everybody. If you've never entered before, we'll help you register your entry. Bottom line: we would love to see you and your model, photo or craft entry in Peoria May 14 - 17! Here are all the categories you can enter.

Model Contest Categories

Judged Categories (Novice and Master classes)

1. Steam Locomotives
2. Diesel and other Locomotives
3. Traction
4. Passenger Cars
5. Freight Cars
6. Caboose
7. Non-Revenue Cars
8. Structures—On line
9. Structures—Off line
10. Display—On line
11. Display—Off line
12. Module
13. Railroad Pass
14. Best of Show Model

Photo Contest Categories

Judged Categories (One class)

1. Model B&W Print
2. Model Color Print
3. Prototype B&W Print
4. Prototype Color Print

Midwest Region Special Model Awards

1. Moskal Award---Best judged Chicago North Western model or photograph
2. Goat Award---Best judged Great Northern Railway model or photograph
3. Ken Turner Traction Award---Best judged traction model or photograph

Entry forms and contest procedural information is available at:

<http://www.mwr-nmra.org/mwr2016/mwr.contestinfo.html>

Popular Vote Categories

1. Favorite Train
2. Locomotives
3. Rolling Stock
4. Caboose
5. Structures
6. Display or Module
7. 12 x12 inch Diorama
8. "Thumbs" Humorous Load

Popular Vote—Arts and Crafts

1. General
2. Needlework
3. Railroadiana

Popular Vote Categories--B&W and Color (combined)

1. Model Print
2. Prototype Print

Best of Show Photo Award: Ingrid Drozdak Photo Award

**Spring Board of Directors Meeting
Holiday Inn Hotel & Suites, East Peoria
101 Holiday Drive
East Peoria, Illinois
Sunday May 17, 2020; 10:30 am**

**Annual Meeting of Members
Holiday Inn Hotel & Suites, East Peoria
101 Holiday Drive
East Peoria, Illinois
Saturday May 16, 2020; 8PM**

Midwest Region NMRA 2020 Spring Convention

“IVD & ITD – Peoria Rocket” Registration Form

May 14–17, 2020

FARES

Full Fare (Includes Banquet)
Convention Only (No Banquet)

NMRA

Member / Spouse
\$60 / \$40
\$40 / \$30

Non-NMRA

Member / Spouse
\$80 / \$40
\$60 / \$30

*** Registrations received after May 1, 2020 or at the door will be \$10 extra ***

Activities Registration

Operating Sessions

Thursday May 14	1:00 pm – 3:00	<input type="checkbox"/> D&RGW (HOn3), Urbana IL
	1:00 pm – 4:00	<input type="checkbox"/> Winding Creek RR (HO), Monticello IL
	6:15 pm – 7:45	<input type="checkbox"/> McLean Depot RR (HOn3), McLean IL
	8:00 pm – 9:30	<input type="checkbox"/> McLean Depot RR (HOn3), McLean IL
Friday May 15	6:15 pm – 7:45	<input type="checkbox"/> McLean Depot RR (HOn3), McLean IL
	8:00 pm – 9:30	<input type="checkbox"/> McLean Depot RR (HOn3), McLean IL
	6:30 pm – 10:30	<input type="checkbox"/> Ohio & Eastern RR (HO), Dunlap IL
Sunday May 17	9:00 am – 1:00	<input type="checkbox"/> Ohio & Eastern RR (HO), Dunlap IL
	10:00 am – 1:00	<input type="checkbox"/> BN, Galesburg Sub (HO), Metamora IL
	10:00 am – 1:00	<input type="checkbox"/> Twin Cities & Western RR (HO), Normal IL
	1:30 pm – 4:30	<input type="checkbox"/> Winding Creek RR (HO), Monticello IL

Non-rail Activities

Friday Morning, May 15
Canvas Painting Event with Jody
at The Hive Mobile Art Studio
 Cost \$25

Saturday Morning, May 16
Cooking class and lunch with Chef
Amanda Pyle at The Cookery
 Cost: \$ 45

Enter Desired Meal Choice in the “Meal” column: **B = Buffet (3 meats), S = Special Diet**

Name
(PLEASE PRINT)

Circle One for each registrant ↓

NMRA Member: _____

Non-NMRA Member**:- _____

Spouse: _____

Convention w/ Banquet	Convention Only	Meal B/S
\$60	\$40	
\$80	\$60	
\$40	\$30	

Add \$10 each for late registration (After May 1, 2020): \$ _____ Total Enclosed: \$ _____

**Includes \$20 RailPass membership – must be eligible (either never have been a member before or haven't been a member for 2 years or more; can join at RailPass rates. If you have ever purchased a NMRA RailPass Membership, you cannot do that again. You must purchase a full NMRA membership to attend this event)

NMRA #: _____ Phone #: (____) _____

Street: _____ E-mail: _____

City: _____ State: _____ Zip: _____

NMRA Region _____

NMRA Division _____

Mail to: Illinois Valley Division of NMRA
P.O. Box 645
Chillicothe IL 61523

Office Use Only

Am't Rec'd: \$ _____

Check No.: _____

Op Session Status: _____

Make checks payable to: “IVD Convention Fund” (No cash, please)

Registration forms available for download at <https://www.peoriarocket2020.org/register>

65 MODE RAILROADING LAYOUT

YOU HAVE HEARD OF N TRACKER, HO TRACKER, AND FREE MODE LAYOUTS, BUT NEW TO THE HOBBY IS THE INVENTIVE AND EXCITING 65 MODE CONCEPT.

YOU CAN TAKE THIS LAYOUT TO A TRAIN SHOW, OR THE HOME OF A FRIEND OR RELATIVE, AND BE UP AND RUNNING IN AN HOUR! ALL OF THE MODULES ARE COMPLETE SCENES, WITH FIGURES, VEHICLES, LIGHTING, ETC., WITH NO LITTLE PARTS TO ADD TO THE SCENES, BECAUSE EVERYTHING IS ALREADY GLUED IN PLACE. EACH "SHADOW BOX" IS A COMPLETE DIORAMA, DESIGNED TO WHATEVER CONCEPT YOU DESIRE.

65 MODE IS ABOUT HAVING ACCESS TO THE HOBBY FOR LIFE, BECAUSE THE BOXES ARE SMALL AND EASILY PORTABLE. YOU CAN USE THEM IN YOUR HOUSE, APARTMENT, ASSISTED LIVING FACILITY OR EVEN FROM A NURSING HOME SETTING, TO YOUR ULTIMATE "CELEBRATION OF LIFE". THE SKY'S THE LIMIT! ENJOY!!!



I saw this modular display at the Mad City Train Show in Madison a few weeks ago. It is an interesting concept with a series of vignettes tied together with track. Each unit is light-weight and portable. There are strong magnets on the edges of each shadow box to keep them connected to each other.

Every module was the same size and could be arranged in any order. Each was painted blue inside and contained a small scene. It is the work of two gentlemen and this was their first year at Madison

There were chairs set up to sit and watch the trains go by. All photos by the author.

THREE GOOD REASONS TO JOIN THE NMRA NOW:

10% OFF **15% OFF** **20% OFF**

Those are the discounts National Model Railroad Association members are getting right now from manufacturers and hobby shops who've joined our Partnership Program. Partners like Micro-Mark®, Model Rectifier Corporation®, Monster Modelworks®, RR-CirKits®, Unreal Details®, And quite a few more. It's savings that can actually pay for your annual membership!

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www.nmra.org
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Saturday, March 28, 2020

Doors Open 9:00AM



Riverview Banquets
1117 N. Washington • Batavia, Illinois



2nd Annual A Day for the Archives

Affiliated Sponsors BRHS, CNWHS, GNRHS, LAKE STATES, MPHS, MRHA, NKPHTS, SHORE LINE, SLHTS

One Day to Benefit Multiple Archive Efforts

Collectively, all the participating groups archive efforts will benefit from this event, both financially and in collective knowledge.

Great presentations, networking and archive updates from participating organizations.

9:00 - 10:00 - Registration

Schedule of Presentations

10 am - Jeff Eggert/Craig Pfannkuche - CNWHS
"DSLR Digitizing" and "Genealogical Research"

11 am Sara Phalen - WCCM
"Junction - The Town Railroads Built"

11:30 am to 1 pm Open Lunch

1 pm - Alison Hinderliter - The Newberry Library
"Railroad Research at The Newberry"

2 pm - Naomi Petersen and Jim Murrie
"Goldfinger" Ft. Knox Gold Trains, NYC-Philadelphia to Ft. Knox (1937-41), 84 Special Trains
"2nd Best to the Northwest" Milw - GN - NP secondary Passenger Trains (1947-55)

3 pm to 4 pm - Open for society shorts/socializing/networking etc.

4 pm - Bob Hanmer - MRHS, GNRHS, NPHS
"Train Communications in the 1940's" Early use of radio in train service

5 pm - Walter Keevil - Shore Line
"Movies from the Keevil Archive Collection"

5:30 pm - Buffet Dinner

6:30 pm - "A Tribute to Jim Boyd" Mike Schafer and Craig Willett

7 pm - David Wilson
"Land of the Burlingtons"

7:30 pm - Matt Heeren - Digital Program
"Milwaukee Road in Southern Wisconsin", Lonnie Maves Photography

Full Fare Includes: Presentations, Buffet Dinner and After Dinner Programs - **\$100.00#**
#of which \$75 is tax deductible

Admission To Day Presentations Only - **\$65.00@**
@fully tax deductible

Evening Presentations and Dinner (after 5 pm) - \$50.00

Limited Archive/Society Company Stores will be on site during this event.

A room block has been arranged for those traveling from out of town at:

Comfort Inn & Suites

1555 E. Fabyan Parkway • Geneva, IL 60134 • 630-208-8811

\$94.99 Double Occupancy, use code ARCHIVES

