



The Yardmaster

Southwestern Michigan Division



May 2023

Website: www.ncr-div9.com



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Non-Train Related Special Events

May 1 - May Day

May 14th - Mother's Day

May 29th Memorial Day



Division 9 Officers

Superintendent	- Garry Johnson	elecsprk@gmail.com
Assistant Superintendent	- Joel Pyard	pyardj@comcast.net
Paymaster	- Bob Lawrence	robertlawrence44@msn.com
Scribe & Newsletter Editor	- Alan Bau	alanwbau@gmail.com
Trustee	- Doug Van Meter	vanmeterda@gmail.com
Trustee	- Casey Bartman	Casey@GR-MI.com

Note: Elections are coming up in September. The positions in red are up for election.

Editor's Comments

I would like to encourage all members to respond to the Question of the Month as this can be a good way for members to provide feedback and thoughts on a range of topics.

Additionally, I would like to encourage everyone to submit questions for the "Ask Dave" segment of our newsletter. Dave has a wealth of knowledge that he is willing to share.

Thanks for your support and encouragement in our efforts to communicate with our members.

Alan Bau
Yardmaster Newsletter Editor



Yardmaster Submissions: Please send articles, news items, inquiries, photos and comments to the Editor of **The Yardmaster, Alan Bau** alanwbau@gmail.com , **by the last of the month** for inclusion in the current month's edition.

Upcoming Division Nine Membership Meetings & Events:

Presenter	Date	Location	Presentation Subject
Casey Fisher & Dale & Deb Killarney	May 20 th	305 Hyde Circle Dr., Plainwell 34228 N. Brookwood Gobles	Layout Tours We may stop for lunch at the Club Car
Maynard Mitchell	June 17 th	4228 Fawn Ct, Battle Creek, MI	Layout Tour
Board Meeting	July 9 th	Kalamazoo Bridge Club	
No Membership Meeting Scheduled	July & August		Enjoy the summer
The agenda will be announced as more details become available.	September 16 th	TBD	Annual Business Meeting & Board Elections

July Board Meeting to be held on July 9th at the Kalamazoo Bridge Club located at 648 Maple Hill Drive in Kalamazoo. This is approximately one mile west of our normal meeting place, the Colonial Kitchen. This will be an in-person meeting, but for those unable to attend, a zoom link will be available.

Note: there are no steps required to gain access to the Bridge Club.

Division Nine

Board of Directors Meeting Minutes

April 2, 2023

Attendees: Garry Johnson, Bob Lawrence, Joel Pyard,
Rich Mahaney, Dave Vinci & Alan Bau
Zoom Meeting

The meeting was called to order by Superintendent Garry Johnson at 2:13 PM.

Officer Reports:

- **Superintendent** – Garry Johnson provided the board with an update on his train layout.
- **Assistant Superintendent** – Joel Pyard Nothing to report.
- **Paymaster** – Bob Lawrence reported there was no change to our treasury balance. Bob also submitted our annual IRS Reports.
- **Scribe** – Alan Bau – See old and new business items.

Old Business

- Schedule of upcoming events was updated to include May events.
- Discussed conducting business during layout tours. It was decided that in most cases this activity can be discontinued. In the case of an emergency a special meeting can be called.
- Upcoming Board Elections was discussed. All current office holders have agreed to be on the ballot. However, other members are encouraged to run for one of the offices up for election, which include Superintendent (Garry Johnson), Scribe (Alan Bau) and Trustee position currently held by Doug VanMeter.

Board Meeting Minutes Continued

New Business

- **NMRA Interchange Program** – It was decided that we want to participate in this new program and that all members are encouraged to register. It appears that this program has some real potential, but we need to understand the potential benefits and what specifically needs to be done to make this program worthwhile.
- **Membership & Membership Participation** – It was suggested that we focus attention on current members' participation as that will also hopefully grow membership. Some suggestions were discussed as part of our annual business meeting in September.
- **Annual Business Meeting** – September 16, 2023
 - In addition to Board Elections we discussed a variety of other programs that may want to try to promote increased participation from Division 9 Members.
 - Some of the programs are:
 - Sale table where members can bring items they no longer need and make them available for sale.
 - Door Prizes
 - 50/50 Raffle
 - Display Member Built Models, which could be judged or just for show.
 - Display of the last thing purchased for your layout.
 - These and other programs will be one of the main subjects of the July Board of Directors Meeting to be held on 9th.
- Board Meetings
 - We discussed the time and day of future board meetings. It was decided to stay with the 1st Sunday at 2:00PM with meetings in January, April, July & October.
 - The July Meeting is being pushed back one week to avoid any conflicts with the July 4th holiday.
 - July 9th to be held at the Kalamazoo Bridge Club located at 648 Maple Hill Drive in Kalamazoo.
 - We are also considering holding the September Meeting at the Kalamazoo Bridge Club.
 - Agenda items
 - September Business Meeting
 - Status of NMRA Interchange Program
 - Upcoming Fall Meetings

The meeting was adjourned at 3:20 PM

Respectfully Submitted

Alan Bau
Division 9 Scribe

Upcoming Train Shows

To encourage our members to support local area train shows the following shows are within reasonable driving distance from Kalamazoo.

Dates	Event Name	Location
May 6	Blue Water Train & Swap Show - 2 Days	Darrel's 5078 Lapeer Rd, Kimball, MI 48074 Geoffrey Hering 810-531-4975
May 21	Durand Union Station's 41 st Annual Model Train Show	Durand Middle School, 9550 East Lansing Rd., Durand, Mi.
June 11	47th Annual Kane County Railroadiana and Model Train Show	525 S Randall Rd, St. Charles, IL 60174
Aug. 26	Grand Rapids Model Railroad Historical Society Open House	4040 Leland Ave NW, Comstock Park, Mi. 49321
Oct. 14	Greater Grand Rapids Fall Train Show	Wyoming, Mi. HSB, Inc.
Oct. 19-21	2023 NCR Convention	Allen County War Memorial Coliseum, 4000 Parnell Ave. Fort Wayne, In. Fort Wayne Rails 2023 – 3 Rivers Division (ncrmra.org)
Oct. 21	Fort Wayne Model Railroad Show and Swap	Allen County War Memorial Coliseum, 4000 Parnell Ave. Fort Wayne, In.
Oct. 29 th	KMRHS Show and Sale	Kalamazoo County Fairgrounds/Expo Center
Nov. 5	Lansing Model Train Show & Sale	MSU Pavilion, 4301 Farm Lane, East Lansing, Mi.



Question of the Month – April Results

Have you registered for the NMRA Interchange?

Please send your response to alanwbau@gmail.com.

The overall results will be published in the next issue.

There were no responses to the above question.

Question of the Month for May

What is your favorite Model Railroad website?

Results will be published in the June Newsletter.

NMRA Interchange (This article also appeared in the April Yardmaster, but I think it bears repeating)

By now you have seen or heard about the announcement of the NMRA Interchange. The Interchange will provide an online space for our members to collaborate, learn, exchange ideas and information, and chat about all things model railroading. The NMRA Interchange will connect you with members from across the NMRA using voice and text chat. The "Hangout Rooms" are available for video conversations anytime without the need to pre-schedule. The NMRA Interchange uses the Discord platform, which is available through a web browser like Microsoft Edge or Google Chrome. You can also download the Discord desktop application or the Discord mobile app for your smartphone and/or tablet. The software works on iOS, MacOS, Windows, Linux, and Android. You can download the Discord application from here: <https://discord.com/download>. You can register for Discord and the NMRA Interchange at: <https://www.nmra.org/nmra-interchange>

If you need help logging on, or just want to learn more about the Interchange Program click on the link displayed below.

[Joining the NMRA Interchange - Cameron Lafleur - Bing video](#)

The Board is currently reviewing the benefits of using the NMRA Interchange and we will distribute more information as it becomes available. All Division 9 Members are encouraged to register for the NMRA Interchange. You can register by clicking on the link above. Note: you must be an NMRA Member to participate in this new application.



For Sale Items – Huge Private Sale – May 20 & 21. 31630 N. River Rd., Harrison Township, MI. Hours 10:00AM – 4:00PM both days. 2000+ rolling stock, 150+ Locomotives, layout items.

Do you have an excess inventory of cars, supplies, etc. which are just taking up space and most likely will never be used? You can list these items here and try to sell them, so you can buy more train stuff.



To list your for-sale items here, send your list of items along with a picture if one is available, a description of your item(s) along with your asking price and contact information. If you wish your item(s) to be listed in the upcoming newsletter, you need to submit them along with needed information no later than the 25th of the month.

Send your information to alanwbau@gmail.com.

NMRA NCR Division 9 Membership Meeting - Layout Tours Minutes

April 15, 2023

Attendance:

In-person Garry Johnson, Alan Bau, Rich Mahaney, Joel Pyard, Bob Lawrence, Casey Bartman, Jim Glenn plus two guests from the Kalamazoo Model Train Club.

Layout Tours

1. Thom Post
2. Skip Luyk
3. Ralph Moxley

There was no other official business conducted.

Alan Bau
Division 9 Scribe



Achievement Program Information – the Achievement Program Coordinator for Division 9 is Dorman Wilson. If you have any questions, feel free to contact Dorman for assistance.

You can also follow along as NMRA Magazine Editor Cinthia Priest continues along her journey to achieve MMR status. See pages 20-27 in the May 2023 edition.

April Layout Tours

Saturday April 15th was a jammed packed day as we had the privilege of viewing 3 really great layouts in the Grand Rapids area and then for some of us who wanted more, went to the Grand Rapids Train Show. Great day.

Starting out the day we met at the home of Thom Post at 9:00AM. Thom models the Chesapeake and Ohio and the Pere Marquette Railroads during the Transition Era.

Thom Post's – Layout



Casey Bartman, Thom Post & Rich Mahaney discussing Thom's layout during our first stop on our layout tour.

Here are a few pictures of Thom's Layout



Our next stop was at Skip Luyk's Logging Layout

The Arcadia & Betsey River Ry.

Logging in the Pacific Northwest
in HO scale circa 1957
By Skip Luyk



My Arcadia & Betsey River Ry. is a freelance design representing a new beginning for a Michigan logging railroad when it moves its operations to the Pacific Northwest to harvest timber holdings it owns there.

The M.W. Allen Lumber Co. operates a large double band mill in Arcadia that is situated on the shore of Bar Lake where logs are dumped and stored. They also own and operate Arcadia Sash and Door Company, M.W. Allen Millwork, and Allen Veneer Co. all located in Arcadia and served by the A&BR. These companies ship their goods to the outside world via The A&BR interchange with the Great Northern Ry. located in Arcadia and a connection to the Southern Pacific RR via a car ferry that docks at Eagle Harbor on the far end of the line.

The Railroad

The mainline extends from Arcadia to Harbor Junction where the line splits. The main continues to Eagle Harbor where the R.W. Brassington car ferry and the junction to the branch leading to Camp 3 (a one train staging track) are located. Also located in Eagle Harbor are the C.H. Max Equipment Co. and a landing where logs, "cut on a nearby island", are taken from the water and loaded onto rail cars for their journey to the mill.

The other line at Harbor Junction leads to Hill Camp, in the mountains above Eagle Harbor where there is a marshaling yard for logs coming from McKenney's Landing and Cat Landing near Camp 2. Also located near Camp 2 is the Bottom Line Mine (a future project) served by the A&BR via a short branch off the line to Cat Landing. Ore and other freight are shuttled between the mine and Arcadia.

Displayed to the right are dimensions and other information about Skip's Layout.



Skip is pictured above talking with our Division Superintendent Garry Johnson

The Layout at a Glance

Size: 14 Ft. X 28 Ft.

Layout Style: Double deck around the wall w/ peninsula

Length of mainline run: 74 Ft., Length of branch line run: 87 Ft.

Layout Height: Lower Deck: 35 In. Upper Deck: 54 In.

Benchwork: Various construction techniques

Track and Roadbed: Micro Engineering flex track with handmade turnouts, code 70 for the mainline, code 55 for yards, sidings and branch line. Roadbed is AMI or cork on 1 X 1 foam strips glued to foam or plywood w/ Homasote blocks for all turnouts and yards.

Minimum turnout: No. 5

Minimum radius: 22 in.

Maximum grade: 3.5%

Backdrop: Hand painted on 3/8 inch Drywall

Control system: NCE, DCC

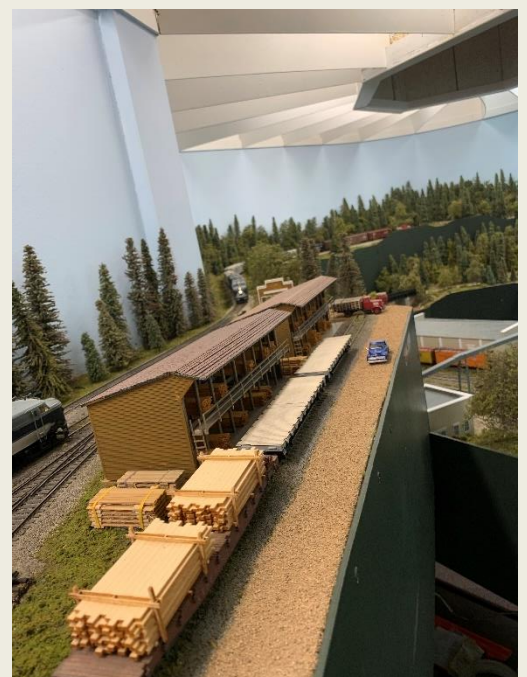
Here are a few pictures of Skip's Layout.



Our Final Layout Tour for the Day was at Ralph Moxley's



Ralph is discussing some of the finer points of Ralph's layout with Rich Mahaney





This model of a boat was on display at a museum while we toured Ralph's layout. Thanks to Rich Mahaney for finding these photos, that were taken when the model was actually part of Ralph's layout.



To sum up our tours of three tremendous model railroad layouts. Each layout is different, but their attention to detail and workmanship really is outstanding.

If you get a chance to visit any of these layouts, take advantage of the opportunity, you won't be disappointed.

I realize the few pictures that have been included in this edition of Yardmaster don't begin to show the scope and the effort put into all three layouts.

Thom, Skip & Ralph should be very proud of what they have accomplished.

Sturgis Historical Museum and model railroad

Speaking of Layouts – Garry Johnson and I had an opportunity recently to visit with Doug VanMeter and tour the Sturgis Model Railroad layout.

Here are a few more pictures for your enjoyment.



Train Operations by Jim Glenn

JMRI Operations Pro

Jim Glenn

Editor's Note: This article includes a several links to various websites offering more details.

When I first visited and operated on a layout using JMRI Operations Pro, I was impressed by the switch lists and train orders the program created. They were something like the switch lists in **Ship It**. It was easy to understand the route my train was to take, where I had switching to do, and the red and blue colors let me know which cars were to set out (red) or picked up (blue). I had a pencil, clipboard, and a controller. There were cup hooks at every location to hang the clipboards and that allowed one hand for switching and one hand on the controller. The pencil could be attached to the clip board or stuck behind my ear. **No more shuffling of cards. It did not schedule less and less cars each session, and It is free! I was sold!**

Operations Pro is designed to create car movements that make sense to you. There are many options and features that the program provides, and it can be a bit overwhelming. But there is help available from local modelers and the internet.

The JMRI Operations Pro program allows you to create computer generated train Manifests for your railroad. A train [Manifest](#) details the work that a crew will perform during an operations session. The Manifest provides a list of car pickups and set outs and shows where the cars are located and where they should be eventually positioned on the railroad. The program allows you to enter a roster of [cars](#) and [locomotives](#), define [locations](#) (stations) on the railroad, and define [routes](#) for [trains](#) to travel. The car roster includes information about the car, including road, number, type of car, color, length, weight, load, date built, and owner. Trains are assigned routes that define locations or stations where cars can be picked up or set out. Features include the ability to control what car types, roads, and car loads a location or industry can service, the available track space for a location, and the maximum length the train can be between any two locations in the train's route.

JMRI: Operations

Dan Boudreau

The program allows:

- Prototypical Use of Specific Car Type
- Cars in Dedicated Service,
- Specific Delivery Sequences,
- Custom Loads and Hazardous Materials,
- Interplant Car Routing,
- Car Blocking,
- Classification Tracks, (by train or destination)
- Interchanges
- Staging

The program decides which cars are pulled from the storage shelves and staging tracks for each train that originates or visits either end of the railroad. In addition, the program keeps track of how many times a car has moved in previous sessions and will try to pull cars with the fewest moves.

- “Return When Empty”,
- The program will keep track of up to four movements for every car,
- Off-layout load origin and destination,
- Switch out cars at stations,
- Set schedules for trains and individual cars,
 - The program will handle passenger operation,
 - Set train manifest.

I found that I also liked the fact that the computer decides where cars go, so each op session is a new experience for me as well as the guests.

Operations Pro is part of the **free** JMRI download from jmri.sourceforge.net. Like any operating system it takes time and thinking to set it up. I find that I enjoy the thinking and challenges about how my railroad should run as part of the fun of model railroading.

You start JMRI Operations Pro by first clicking on **Panel Pro** to open the program and clicking on **Operations** on the home page.

I am willing to do a sit-down on setting up JMRI with a small group. I am also willing to host an op session for new operators or operators interested in trying JMRI. Let me know if you are interested.

Next time- Hosting an op session

Questions- 269 290 2800 btrailroad@sbcglobal.net

Cryogenic tank cars by Rich Mahaney

Cryogenic tank cars by Rich Mahaney

Class DOT 113 and Class AAR 204 tank cars are vacuum-insulated tank cars having an inner tank within an outer tank, not a jacket. (DOT stands Department of Transportation, AAR stands for Association of American Railroads)

Cryogenic tank cars are designed to transport refrigerated liquefied gases having a boiling point colder than minus 130 degrees F. Common products are liquid hydrogen, oxygen, ethylene, nitrogen, methane/liquefied natural gas (LNG) and argon.

The insulation system between the two tanks and the vacuum placed in there controls the rate of heat in there for normal transportation time periods. If one of these tank cars containing flammable cryogenic liquid is not received at the location it is being transported within 20 days from the date it was shipped the Federal Railroad Administration must be notified to locate the tank car. There could be a concern that the pressure relief devices/vents could open as the product warms up after 20 days.

Specification DOT – 113A60W tank cars have a design service temperature of minus 423 degrees F, at a minimum burst pressure of 240psig, and a tank test pressure of 60psig.

Specification DOT – 113C120W tank cars have design service temperature of minus 260 degrees F, at a minimum burst pressure of 300psig, and a tank test pressure of 120psig.

On June 19, 2020, the DOT's Pipeline and Hazardous Materials Administration (PHMSA) issued a final rule which authorizes the transportation of liquified natural gas (LNG) in a new tank car specification of DOT – 113C120W9 with a thicker steel outer tank.

Specification AAR – 204W cryogenic tank cars must meet the specification requirements for the class – 113 tank cars, with some exceptions. Also, AAR – 204W tank cars are not authorized to transport Division 2.1 flammable gas materials.

Cryogenic tank cars have various pressure relief devices to protect the tank assembly and piping system that are directed away from workers and other equipment on the tank car. The inner tank must be equipped with at least one pressure relief vent and at least one safety vent. The car may also be equipped with a pressure control device and mixing device to control the routine release of vaporized product being transported during transportation. Tank cars in liquid hydrogen service are equipped with a device that will instantly ignite any hydrogen that is discharged through the pressure relief devices.

The loading and unloading valves and piping are located in a protective box (or housing) either on the sides or the ends of the tank car (see the photos). In the housing, you will find all of the control valves, gauges, piping diagram and nameplates.

In the specifications labeled on cryogenic tank cars in the third space or spot (known as the "delimiter letter") on the use of DOT 113 tank cars there can be one of the letters – A, C, or D. As examples: DOT – 113C120W or DOT – 113A60W. In the specifications line, an "A" means the car is authorized for minus 423 degrees F product loading. In the specifications line, a "C" means the car is authorized for minus 260 degrees F product loading. A "D" in the specifications line, means the car is authorized for minus 155 degrees F product loading.

There are only several hundred of these types of tank cars in North American railroad service. They are a "specialty" tank car in a "special transportation service" for their customers. Occasionally you will see them in a passing train, but otherwise you need to visit places specifically where the tank cars are loaded or unloaded. I can think of two places like that that I have visited, one is in Iowa and the other is in Oklahoma, where I have gotten photos of cryogenic tank cars.

You can purchase models of cryogenic tank cars to move on your model railroad, many of the models do not look like the cars we see today but are designs from other eras. The design and shapes of these model tank cars will stand out on your layout, in your trains and at the industries where they are loaded and unloaded. RRMods and Broadway Limited make model cryogenic tank cars. You may want to do research on cryogenic tank cars for the design, looks and construction based on the era you are modeling. Cryogenic tank cars do stand out, when you see them passing in a train or you find them sitting at an industry.

Note in the photos when you look at them, the shapes, and designs of the cars for structural strength, where the protective boxes are located with the valves and piping are to load and unload the tank car (sides and ends) and where the piping is for the safety devices are to vent the tank car. These tank cars may not be "humped" in yards during switching, and you will see that warning information on the tank car.

Three cryogenic tank cars at a facility in OK.



These tank cars have an inner tank and an outer tank. There is a "vacuum" in the space between them to help keep the product cold.



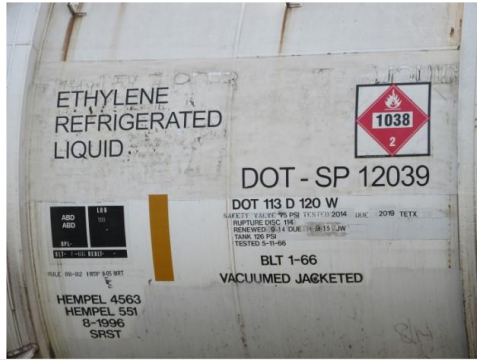
They have a pressure relief system to "self vent" the product when the pressure gets high on the outside of the car.



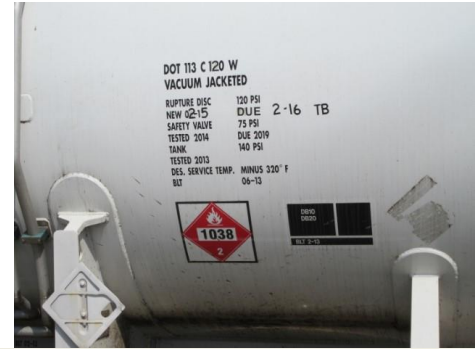
Load/Unload boxes are on ends or sides



Specifications- DOT 113 D 120W



Specification- DOT 113 C 120 W



They come in a variety of shapes and designs.



Cryogenic Liquid, DOT 113



Cryogenic Liquid, DOT 113



Cryogenic Liquid, DOT 113



Cryogenic Liquid, DOT 113



Cryogenic Liquid, DOT 113



Cryogenic Liquid, DOT 113



Cryogenic Liquid, AAR 204



Cryogenic Liquid, AAR 204

Older style cryogenic tank car transporting liquid hydrogen.



Older style cryogenic tank inside of a box car.



Liquid Natural Gas is a future product for these cryogenic tank cars to transport.



Model version of a cryogenic tank car



Broadway Limited cryogenic tank car model



Cryogenic Tank Cars bypassing the Hump Yard track in the Gary, In. area.

Broadway Limited cryogenic tank car model



Pictured here is the current status of Rich Mahaney's benchwork.



This about wraps up another edition of the Yardmaster Newsletter.

I hope you enjoy reading this newsletter. If you have any comments on anything, please let me know.

Until next month.

Enjoy the weather.

Alan Bau
Division 9 Scribe & Newsletter Editor