



THE



FLATWHEEL

APRIL 2020

VOLUME 55, NUMBER 4



In This Issue

APRIL 2020

VOLUME 55 NUMBER 4

FEATURES

16 WE'RE MOVING

18 SPRING LAYOUT

TOURS

**19 A LOOK AT THE
EFFORTS RESTORING
READING 2100**

**20 MIDWEST RAILWAY
PRESERVATION SOCIETY
HAS HISTORIC ITEMS
ON LOAN FOR VIEWING
AT THE BEREA DEPOT
BAR & RESTAURANT**

**23 DCC WIRING ON MY
EBT v3.2**

COLUMNS

- 3 North Coast Leadership
- 4 When and Where
- 5 An Editorial
- 7 From The Super
- 8 General Meeting Minutes
- 9 Module Group
- 11 Membership
- 11 Raffle
- 12 Company Store
- 13 Clinic
- 14 This & That
- 15 Contest Table
- A What's Going On?
- B Hobby Sources Listings

COVER PHOTO: This month's cover photo, and last page photo, are from this past Fall's Division 4 fan trip to the Oil City & Titusville RR. No pandemic stopping this group! And remember, pandemics shall also pass. More fun ahead.



NORTH COAST LEADERSHIP

ELECTED OFFICERS

Superintendent - Lee Sheffield lakeshorenyc@yahoo.com

Assistant Superintendent - Ron Morgan,
ronalco844@gmail.com

Secretary (& Flatwheel Staff Photographer) - Dave Williams
(440) 838-4996 dave_wms@sbcglobal.net

Treasurer - Greg Noeth (216) 789-2086
gjnoeth@yahoo.com

Director East - Fred Obreza (216) 587-4419
chevy5664@sbcglobal.net

Director Quad County - Fred Wagner,
boonedog0219@gmail.com, 419-908-8251

Director West - Gary Schaefer, trains.ohio@yahoo.com

Director at Large - Brian Haas, haasland@msn.com

Director at Large - Jeff Lauren, jflrn@sbcglobal.net,
21-798-1896

APPOINTED POSITIONS

Great Berea Train Show - David James c (440)-785-9907
david.j@brtcharter.com

Achievement - Bruce Brintnall MMR®,
brintnall@mindspring.com

Layout Tours - Ron Morgan, ronalco844@gmail.com

Contests - Joe Filipiak, graftonpotter@frontier.com

Historian/Archivist - Frank Bongiovanni

Raffle - Adam Woodie, woo3482@hotmail.com

Co. Store Manager - Scott Benson,
sbenson440@zoominternet.net

Clinics - Larry Madson, lmadson@roadrunner.com

Flatwheel Editor - Bruce Bowie, in2trains@gmail.com

Membership - George Keller, gkeller@woh.rr.com, (c)
419-217-0396

Modules - Adam Woodie, woo3482@hotmail.com

N.O.A.R.S. Representative - Bill Kovacs

Webmaster - Ben Lanza, blqt@nls.net

Refreshments - Don Glass

Training Day - Gary Schaefer, trains.ohio@yahoo.com

DIVISION 4

THE NORTH COAST DIVISION

JOIN US WHEN THE CURRENT SITUATION ALLOWS FOR OUR NEXT MEETING.

STAY TUNED! BE SMART! BE SAFE!!

WE OFFER GOOD FELLOWSHIP, FREE SOFT-DRINKS/COFFEE AND AN INFORMATIVE CLINIC ON SOME ASPECT OF OUR HOBBY.

WHEN & WHERE WE MEET

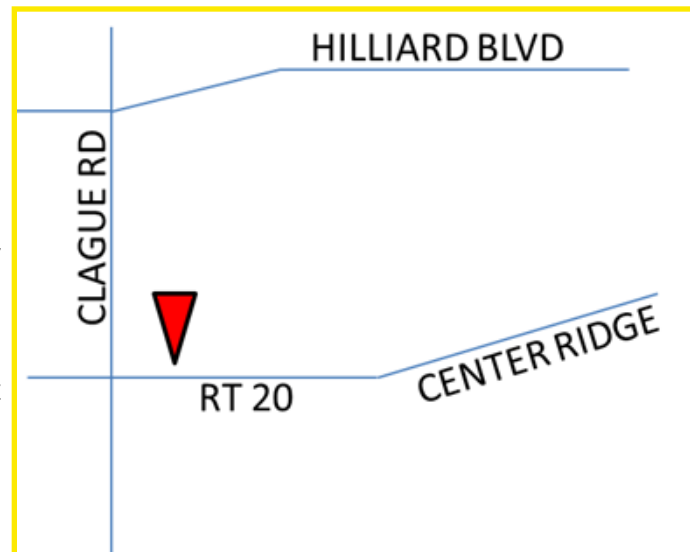
The North Coast Division holds 10 meetings a year (none in July and August). Meetings are on the 2nd Friday of each month. A social half hour starts at 7:00 p.m. followed by a short business meeting at 7:30. After a short break, a railroad themed raffle and clinic complete the typical agenda. Meetings are held at the Church of the Redemer, 23500 Center Ridge Rd, Cleveland, OH 44145. Visitors are welcome to attend any meeting.

The Division's newsletter, *The Flatwheel* is published monthly (except during July and August) by Division 4 of the Mid-Central Region (MCR) of the National Model Railroad Association (NMRA). All comments are welcome. Views expressed in *The Flatwheel* do not necessarily reflect the opinion of the NMRA, MCR, or Division 4.

The Flatwheel is typically electronically published no later than the Monday preceding the monthly meeting. Submissions are due no later than the 26th of the prior month, for example, August 26th for the September *Flatwheel*.

Uncredited photos courtesy of the editor or staff photographer Dave Williams.

Yahoo - The Division has a Yahoo group available for members. Send your request to join to dave_wms@sbcglobal.net. It's best to include "Division 4" in the subject line and include your name. The group is private and does not appear on the Yahoo directory.





made the difficult decision to cancel our Friday, March 13th monthly meeting (and now also April's meeting) due to the outbreak of the COVID-19, aka Coronavirus, pandemic. They did this as a preventive measure for OUR/YOUR benefit well before the Governor decided it would be to our mutual benefit to not meet.

From an article at VOX.com, By Eliza Barclay and Dylan Scott Mar 10, 2020, 9:50am EDT; "Yet the speed at which the outbreak plays out matters hugely for its consequences. What epidemiologists fear most is the health care system becoming overwhelmed by a sudden explosion of illness that requires more people to be hospitalized than it can handle. In that scenario, more people will die because there won't be enough hospital beds or ventilators to keep them alive.

A disastrous inundation of hospitals can likely be averted with protective measures we're now seeing more of — closing schools, canceling mass gatherings, working from home, self-quarantine, self-isolation, avoiding crowds — to keep the virus from spreading fast.

Flattening the curve



Epidemiologists call this strategy of preventing a huge spike in cases "flattening the curve," and it looks like this:

"Even if you don't reduce total cases, slowing down the rate of an epidemic can be critical," wrote Carl Bergstrom, a biologist at the University of Washington in a Twitter thread praising the graphic, which was first created by the CDC, adapted by consultant Drew Harris, and popularized by the Economist. "

Thank you BOD for your leadership in these tough times. See you again, when I see you.



BRUCE BOWIE
EDITOR

"In light of the current events surrounding the Coronavirus situation we have decided to cancel the March Division 4 meeting. Most of our group falls into the high risk area of contacting the virus so it is for the better that we cancel. I expected many of our members probably would have stayed home anyway this email makes it official. The agenda was pretty light, however I think everyone was looking forward to the clinic to be presented by Bruce and Frank. We will work to get it rescheduled at a later date." - Lee Sheffield, Superintendent

I started this month's editorial in late February shortly after publishing the March *Flatwheel*. The subject was a short explanation of how I have wired for DCC my currently under construction layout. But then the world turned upside down, or at least sideways, I totally changed the subject. (check out my article on DCC wiring farther back in this issue)

I want to use this editorial to give a huge **THANK YOU** to our Division's Board of Directors. Led by Lee, they

TOUGH TIMES ARE ALWAYS EASIER TO HANDLE WITH A
LITTLE HUMOR



SORRY DARLING,
someone coughed

WHILE I WAS IN
the hobby shop

AND I'M

quarantined

HERE FOR TWO WEEKS!



FROM THE SUPER

"Driving the train doesn't set its course. The real job is laying the track." *Ed Catmull*

Things are starting to look a lot like a Charlton Heston movie. Remember those sci-fi movies in the 60's and 70's. The main topic on everybody's mind is the Coronavirus. Most of our membership falls into that most susceptible range of infection. So, hunker down, keep your hands washed and work on model railroading projects to pass the time.

We canceled March's meeting when things were just starting to head south. By the time you read this you should have received notification that we are canceling April's meeting as well. The church has closed its doors to comply with the CDC guidelines. And even if the church was open I don't think many would show up for a meeting. Time will tell if we can resume in May or not.

With all the cancellations of sorts I wonder how some of our fellow divisions across the country are going to make ends meet. Shows all over the country followed suit and were canceled that same weekend. I was receiving email after email saying this or that show was canceled. Division 5's Kirtland show was canceled just two days before show time. I wonder how much of a financial hit it will cause. I would expect the tables were already paid for and delivered and the money spent on advertising is certainly out the window. Believe me I have already been questioned if we could survive a hit like this with our show. I agree with my predecessors that we need to keep enough in the bank to survive at least one show disaster if not two.

The new meeting venue is moving along well as we have secured a contract for the end of the year starting in September. We will be meeting at the Community Room at the Westlake City Recreation Center which is 3 miles west of our current location at the church on Center Ridge Road. The same road the church is on. It can be accessed from both Center Ridge and Hilliard roads. The community Room is on the north side of the rec center and has its own entrance and parking lot. We will not have to enter through the rec center.

The Mid-Central Regional Convention (Steel City Express) is approaching fast May 28th thru the 31st in Pittsburgh. It is being held at the Doubletree Hilton in Greentree, on the south end of Pittsburgh. For all us railfans, that's right across the road from Wheeling's Rook yard. Division 2 will have the usual assortment of convention activities to keep you busy. So fill out a registration form and send it in and join the fun.

Please continue to welcome any new members and visitors to our meetings. Try to answer their questions the best you can or refer them to another member who might have the answer. Remember, we were all green at some point. See everyone in May, June or who knows when !

As always, Model Railroading is Fun !!!

**LEE SHEFFIELD,
SUPERINTENDENT**



THE NORTH COAST DIVISION

GENERAL MEETING MINUTES

Dave Williams' response to my mid-month reminder to all columnists:

"I'll have the Minutes and pictures to you in record time, if Dropbox allows empty files."

**DAVE WILLIAMS,
SECRETARY**



MODULE GROUP

Greetings Fellow Model Railroaders!

Well, it's time for the bad news and the good news for the module groups activities.

Bad News

Both displays at Railfest scheduled for March 14th and March 15th as well as the Avon Lake Library scheduled for March 28th and March 29th have been cancelled.

Good News

The group's application was accepted by the National Train Show (NTS) committee for a 55' by 70' display. We reached out to module groups of the Mid-Central Region - Division One as well as the HUB Group from Boston, MA and asked if they would like to join us as in years past. This event is planned in conjunction with NMRA National Convention which is currently scheduled for July 12th through July 18th. The NTS is scheduled to begin on Friday, July 16th and end on Sunday, July 18th.

Blast from the Past

Recently, I have been on the hunt for photos of the original module layout that was once owned by the Division 4 members during the 1970's and into the early 1980's. So far I have been unsuccessful in obtaining these photos. If anyone happens to have any photos or may know someone with photos (or slides), please pass along my information and let them know of my little quest. In the mean time, Mr. Ron Morgan was kind enough to give me a copy of a Division 4 Module Group roster dated March 10, 1981.

Listed below are names of the members that participated in that group.

Thomas Black, George Boeckling, Bill Cramer, Ron Fiedler, Jim Foote, Bob Glaze, Brad Blaze, Al Gluck, Ron Kaye, Anthony Kosan, Tim Krogg, Richard Kus, Tim Krogg, Henry Kwaak, Bob Lavinski, Steve Lavinski, George Leonard, Kay Lenoard, Mark Linden, Tim Louis, Larry Madson, Al Mallory, Tom McInerney, Ron Morgan, Joe Polefko, Marie Schroeder, Mark Shogun, Pete Slugg, Bob Varga, Mel Wise, George Woodling Jr., and John Zimmerman.

MODULE GROUP

The officers during this time were:

Ray Doehring - Superintendent

Pat Lanese - Assistant Superintendent - East

Jim Leffard - Assistant Superintendent - West

Al Lee - Secretary

Joe Kurilec - Treasurer

Hopefully you enjoyed this little blast from the past. Until next time.



**Adam "Hot Box" Woodie
MODULE GROUP**

**A little more humor,
source unknown - *Editor***

MEMBERSHIP

Really I'm sitting here at my computer and I'm lost for words ? Me lost for words ? But I am because of an extended family called Division 4 NMRA. Just wondering how everyone is doing and hoping and praying that all is well with everyone. Taking away the monthly meetings of Division 4 may not and didn't seem like much until on that Friday night I was all dressed up with no place to go. I'm sort of glad that I didn't waist 15 bucks on another hair cut because now that I'm home bound I have 15 more bucks to spend om trains.

Well we can have meetings in mind for a few months and remember, Absence makes the heart grow fonder .

Missing you all,

GEORGE KELLER
MEMBERSHIP CHAIRMAN



"P.S.

**We have extra toilet paper.
Will trade for trains."**

MEMBERS: If your membership information needs to be updated, or for any questions about membership, please email George Keller, Membership, at gkeller4@woh.rr.com or call 419-217-0396 and leave a message.

RAFFLE

When again we meet, be sure to check out the items available at the monthly raffle. I try to have something that will appeal to everyone.

ADAM WOODIE,
THE RAFFLE DUDE



COMPANY STORE

The GlueLoopers were in hot demand when last we met. I hope to have some more when we next get together. I'll also have some of the glue pens we saw in the January clinic. More finger LED lights, Golden Spike stamps, HO gauges etc. for sale at upcoming meetings.

Davies Steel hopper cars are still available!



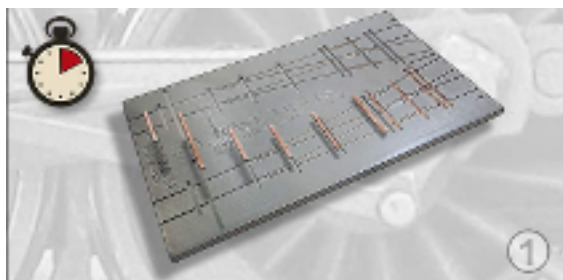
These are based on Dean Freytag's steel mill modeling. Dean's railroad was the South Ridge Lines and the steel mill was known as Davies Steel. We have designed a 70-ton three bay hopper car that in theory belonged to the South Ridge Lines and was leased to Davies Steel. There are four pre-lettered cars with application of pre-printed decals to expand a fleet of cars to 12 numbers. Price is REDUCED to \$17 each.

Division 4 shirts and hats are available through the Company Store. Order at the monthly meeting, or through the form on the Company Store page on our web site. Division 4 patches are also available at \$3 each.

We have a library of how-to DVD's for member use, available at our meetings. A \$10.00 deposit for each DVD rented. \$10.00 returned when DVD returned at next meeting.

Want to get something new done for your layout over the coming months? The Division maintains an inventory of Fast Tracks jigs, tools and supplies. Code 83 #4,

#5, #6, #8, #6 Gantlet and a #6 single/double crossover are available. Also - a number of our members have used them to complete the turnout construction requirements for the NMRA's Civil Achievement Program.

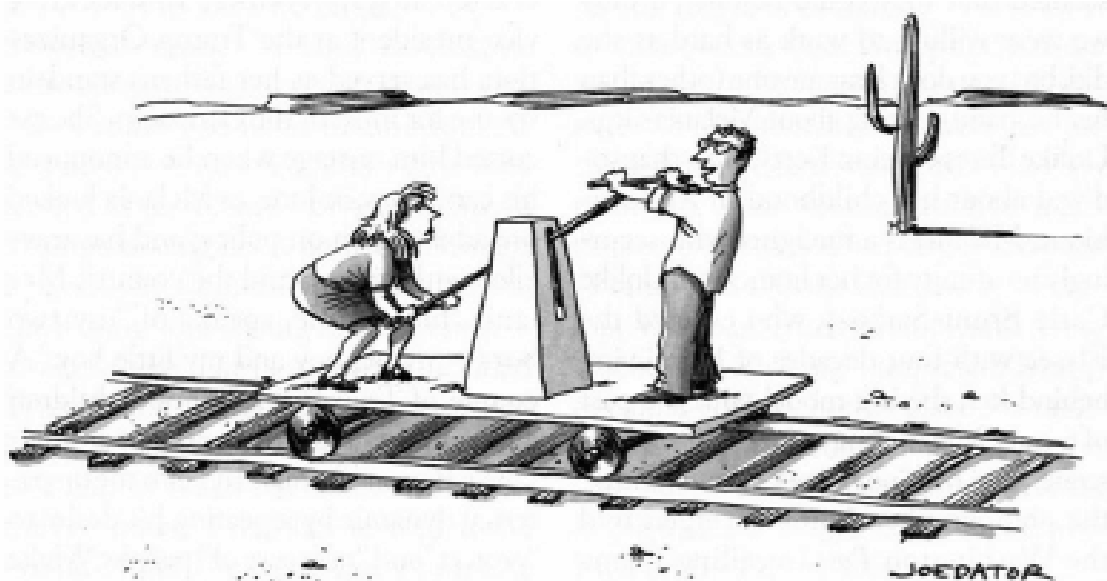


SCOTT BENSON

COMPANY STORE MANAGER

CLINIC

No meetings unfortunately means no clinics. Stay tuned to these pages to learn what the plan is once we again meet. Until then, be smart and be safe.



"Don't you love that new-handcar smell?"

CLINICS WANTED

Help!!!! I am looking for programs for January through June 2019. If any of you would like to share your modeling techniques, know of someone I could contact for a program, or have a suggestion for a program topic, please contact me. If you have contacted me previously about a program, please take time to remind me again.

Clinic Presentation Aids Division 4 has a digital projector available for use by Division members for presenting clinic programs in digital format. We now also have a carousel slide projector with carousels. The Division also has a video camera available for program enhancement. Anyone wishing to use the camera or the projectors for their program, contact Larry; lmadson@roadrunner.com

440-934-2643 or 440-864-2305.

LARRY MADSON
CLINIC CHAIRMAN



After many years being our Clinic Chairman, Larry has asked we find a replacement so he can "retire". For anyone wishing to be more active in the Division, this is an excellent opportunity. Contact Lee if interested.

THIS & THAT

WIRING CONNECTIONS - I have managed to get my layout, finally, to the laying track and wiring phase. I use #12 stranded wire for my bus wires and #22 solid for my track feeders. I have had only three failures with the several thousand connections I have done this way on past layouts. The failures have been when I nicked the #22 solid wire during the stripping process. This can lead to an eventual break at the nick point. I could eliminate this by using stranded wire in lieu of the solid wire but I find the solid easier to feed through the table and to bend/solder to the track. This is the third layout where I have stopped soldering feeder wires to the bus wires. It is truly a joy NOT to have smoke in my eyes and lungs and hot solder dripped on to my pant leg! I purchase connectors at Tiewraps.com. I use their ECONOMY T-TAP QUICK SPLICES, EC-TTT-Y, \$11.95/100 or \$105.95/1000, to connect with the #12 buss. The different colors shown in the photo are for different gauge wires. The T-Taps are at the top. They all match up with MALE SLIDERS NYLON INSULATED. I use their TMSN-R, \$9.95/100 or 89.95/1000, for my track feeders shown at the bottom. And yes, 1000 sounds like a lot, but it amazes me as to how many feeders I drop. Your mileage may vary. Tiewraps.com provides quick delivery and I highly recommend them and their products. - *EDITOR*



ESTATE SALE - I have been helping a woman in the Twinsburg area with her husbands HO collection. The attachment lists the equipment available, including locomotives, passenger cars, freight cars and other. Prices shown are NEGOTIABLE and based on the low end of recent eBay sales. She is anxious to have these gone, so I suspect she'll consider any reasonable offer.

His railroad was DC. Some of the locomotives have sound and may be DCC-ready. The locomotives are NOT tested, but based on the condition of the railroad (which was good), I suspect most of them run well. It is all used; some dust, but no significant damage/wear; no boxes or instructions.

If you are interested in purchasing any/all of the collection, contact Scott at sbenson440@zoominternet.net; he will put you in contact with the owner and you can work out a visit to check out what you're interested in.. - *Scott Benson*

KAPTON TAPE PRICE DEAL - Kapton tape is one of those material items that is used/needed for DCC Decoder installations. Usually starting at around \$30 and up for a roll. \$7.19 and FREE ZIP ZERO NADA SHIPPING, Walmart no less. This is more in line with a modeler's budget, at least mine anyways!

[https://www.walmart.com/ip/1-5CM-Width-30M-Length-Kapton-Tape-High-Temperature-Heat](https://www.walmart.com/ip/1-5CM-Width-30M-Length-Kapton-Tape-High-Temperature-Heat-Resistant-Polyimide/182705023)

-Resistant-Polyimide/182705023 - *John Janda*



1.5CM Width 30M Length Kapton
Tape High Temperature Heat
Resistant Polyimide

CONTEST TABLE

The Model Contest for March was to put an interesting or unique load on a flat car. Hopefully we will have a meeting in May so that is when you can bring your loaded flat car in to show. If the meeting is canceled, then the flat car load, the Pullman / sleeper car, and the rubber tired railroad vehicle contests will be the first three contest subjects starting in September.

I am currently questioning the wisdom of my choice to have a deep river gorge on my layout that requires a bridge and not one but two viaduct trestles to hold the tracks in the air from one side to the other. Thanks to Micro Engineering Co. tall steel viaduct kits, I have experienced the nearest thing to the old-time rail car kits. They were a box of sticks and if you were lucky, a drawing that gave you a rough idea what the car should look like. I am nearly done with this project and I hope the results are worth the effort.

The one thing that all layouts have in common is that they are built with a series of projects. When these projects are tied together they form a unique layout. Let's see what some of these projects are on your layout. Send up to three photos in j-peg format to Ben Lanza and he will put them on our web site. Well, that's it from the Contest Box, remember, glue is to hold your project, not your fingers, together.



JOE FILIPIAK

CONTEST CHAIRMAN

Hi Ben and all,

I'm sad of whats been happening and hope that everyone is well and stays that way. Missing out on the meetings and events are going to be a bummer but hope things will be better soon and we can do more than before.

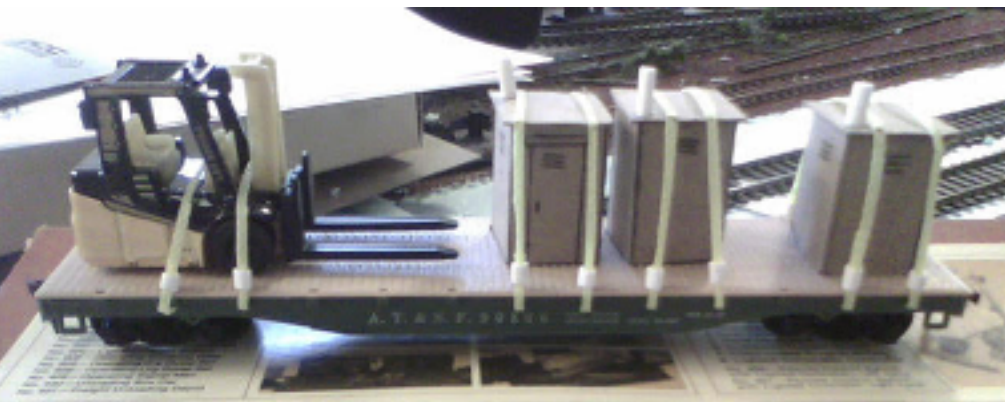
Since we didn't have our last meeting and I have made (before the meeting got canceled) an unusual flat car for the contest. Since we can't do it now I thought I would show it for fun.

It's an old Santa Fe (Tyco) flatcar, on it is a Matchbox forklift, 3 homemade odd houses made out of cardboard and the stacks are pieces of plastic phone hoses that protects the phone wires. The straps are from packing wrapping straps, stripped down to fit and the end connectors are the plastic phone hoses. So I wrap the straps through the holes on the flatcar and hold it with the phone hoses, so if I wanted to, I can remove them easily (no glue was used). Would of liked to show it on the website but I Hope ya like it.

See ya soon. stay well,

John F. Hughes

We like it! And members, follow John's lead and share your modeling especially online now when that is the only way.



WE'RE MOVING!

Many NMRA Divisions struggle with attendance. I have personally been attending the North Coast Division's meetings for 16 years. In that time our attendance has grown where we now have between 80 and 90 attendees at our gatherings. I believe this is all owed to our leadership and their efforts to bring us good meetings, meaning IMHO, succinct business meeting, time to socialize, good raffles, amazing contest entries and outstanding clinics.

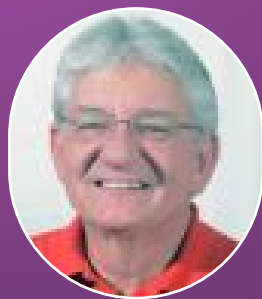
The Church of the Redeemer has been our gracious host for a number of years. The geographical location provides is pretty close to dead center of our four counties in an east/west direction such that no member has a drive much longer than other members at the outer edges of the Division. It is also near major roads, making access easy.

However, due to our great attendance, we struggle to provide adequate space for seating and other needs. Joe Filipiak found an alternate location and presented its pros and cons to our BOD. The BOD opted to approve we move our monthly meetings to the new location, the Westlake City Recreation Center, 28955 Hilliard Blvd, Westlake, OH 44145. The move will be effective with the September 11th, 2020.

We will continue to meet when the COVID-19 virus allows at the Church of the Redeemer through the June 12th meeting.

**The move will be effective with
the September 11th, 2020
meeting.**

**We will continue to meet at
the Church of the Redeemer
when the COVID-19 virus
allows through the June 12th
meeting.**



BY BRUCE BOWIE
EDITOR

Westlake City Recreation Center

28955 Hilliard Blvd

Westlake, OH 44145



SPRING LAYOUT TOURS

Due to the current COVID-19 pandemic, the layout tours planned for later this Spring have been canceled. Thank you to the layout owners who planned to share with the members. On the bright side, and there is always a bright side, now we all have time to work on our layouts in preparation for the Fall layout tours. Contact me to get yours on the list!



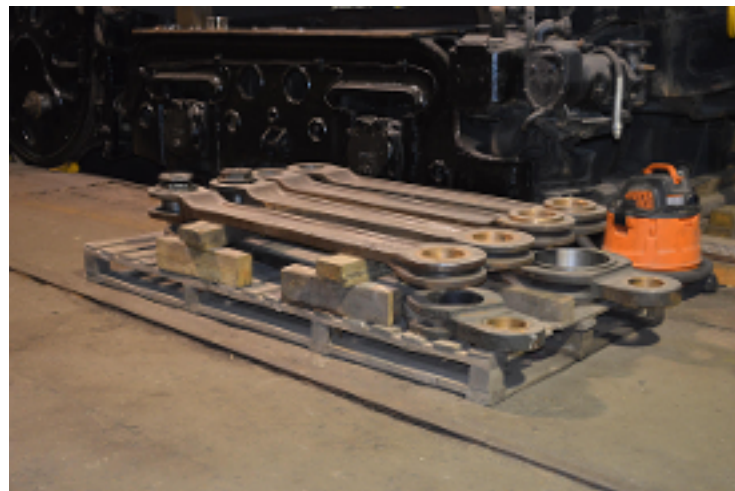
BY RON MORGAN

A LOOK AT THE EFFORTS RESTORING READING 2100

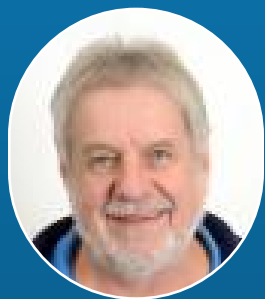
One of my favorite place to visit is the B&O Roundhouse at West 3rd. There is always something of interest going on!



Notice the NYC business car to the left. The front of the massive 4-8-4 Reading loco is really taking shape. The pilot has been removed for repainting the front of the loco. This engine seems to be a VERY good condition.



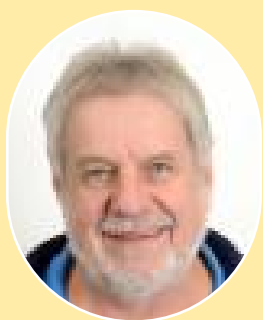
Here the side rods rest next to the rear trailing truck. The trailing truck and drivers to the left have be repainted. You just step back in time once in the roundhouse.



BY JOE KURILEC, MMR[®]

PHOTOS BY THE AUTHOR

MIDWEST RAILWAY PRESERVATION SOCIETY HAS HISTORIC ITEMS ON LOAN FOR VIEWING AT THE BEREA DEPOT BAR & RESTAURANT!



BY JOE KURILEC, MMR[®]
PHOTOS BY THE AUTHOR



I had noticed several new items on the Berea Depot property and wanted to get there to write this article. I was very pleased to see many historical items in and around the restaurant.

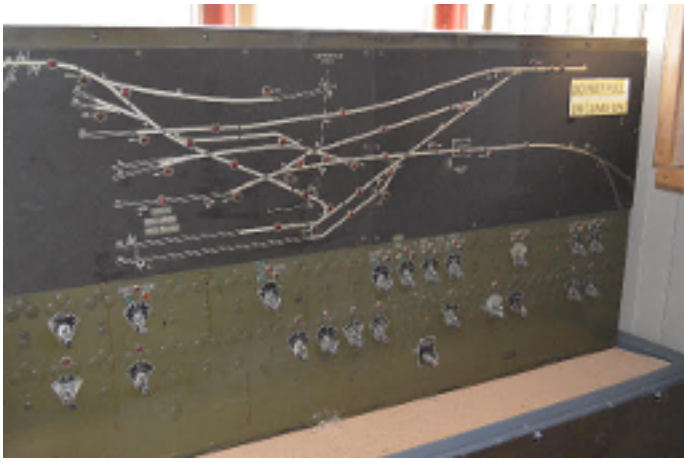
Division 4 members should take some time and visit the depot to see some very interesting items. Don't forget to have a beverage or a great dinner. Owners Lynn & Scott are very gracious hosts!



When you enter the front door of the Depot (Depot Street) you are greeted with a roller bearing wheel set.



As you enter the front door is a complete coupler system minus the draft box. I think Kadee makes this model!



Once inside there is a control board for the Independence Road area. This is in real good shape.



As you enter the lounge area you will see one of the original signs from the old Cleveland Union Terminal phone booth location.

Under this sign is a phone booth. Make sure you see Superman's cape inside of the booth.



Other original signs are in key places in the lounge and restaurant.



I found this sign interesting.



You'll find this track 15 and 16 name train board at the hostess station. It is really restored beautifully.



The last item is hanging in the lounge/restaurant area. It is ceramic artwork that once hung in the Terminal Tower. I have never seen this and CANNOT verify that this was true. Any reader have info?

DCC WIRING ON MY EBT V3.2



BY BRUCE BOWIE
PHOTOS BY THE AUTHOR

You want to build your railroad. You are going to model your favorite prototype railroad. You are going to focus on the area the railroad ran between A and B with a branch to C. Your era is ____ (fill in the blank, though 50% of us choose the transition years between steam and diesel).

You have built several layouts over the years and all used the long time traditional DC for control. However, like most wise (IMHO) hobbyists, you know the benefits of a DCC control system so this layout will be modernized and use DCC. But how the heck do you wire the dang thing?

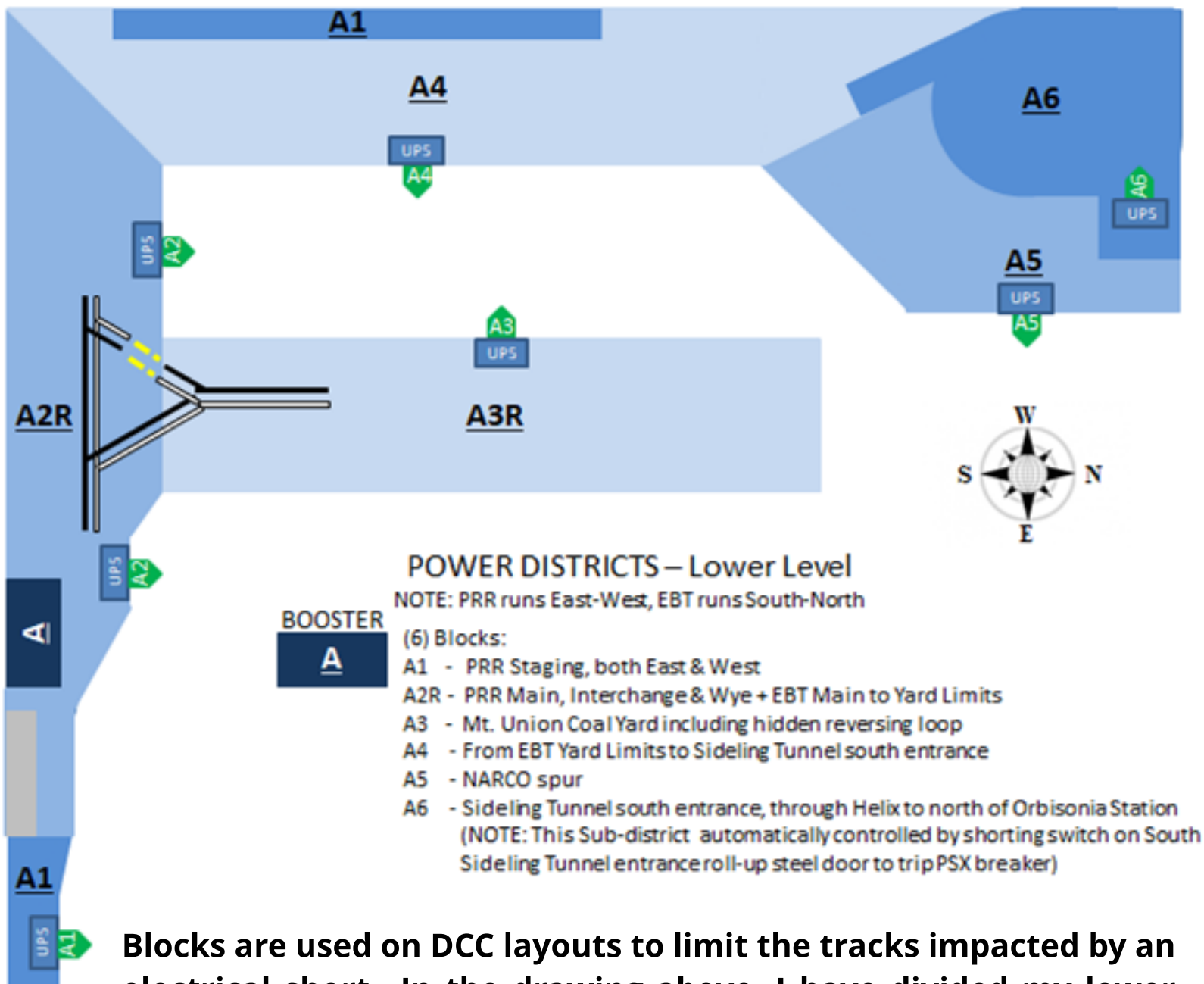
I am an early adopter when it comes to DCC. My first layout using DCC was built in the late 1990's. This has helped me learn about how to design a railroad control system using the various components. I hope this article will pass along some of my lessons learned and motivate you to make the switch. Trust me when I say you will not regret it.

Lesson One is NOT to mix DC and DCC on the same layout. While it is technically possible it adds a great deal of complexity to your wiring. The most often heard reason to not make the switch is "I have hundreds of DC locomotives and I will not be able to use them on the new railroad". Be honest, how many do you actually operate on your layout at any one time? My experience and that of my friends who have made the switch is the manufacturers are producing locomotives, both steam and diesel, to much higher standards than in the DC only era. The new locomotives are much better runners and have more and better detail. Buying a couple will generally not break the hobby bank and you will find you won't miss the old units as much as you thought.

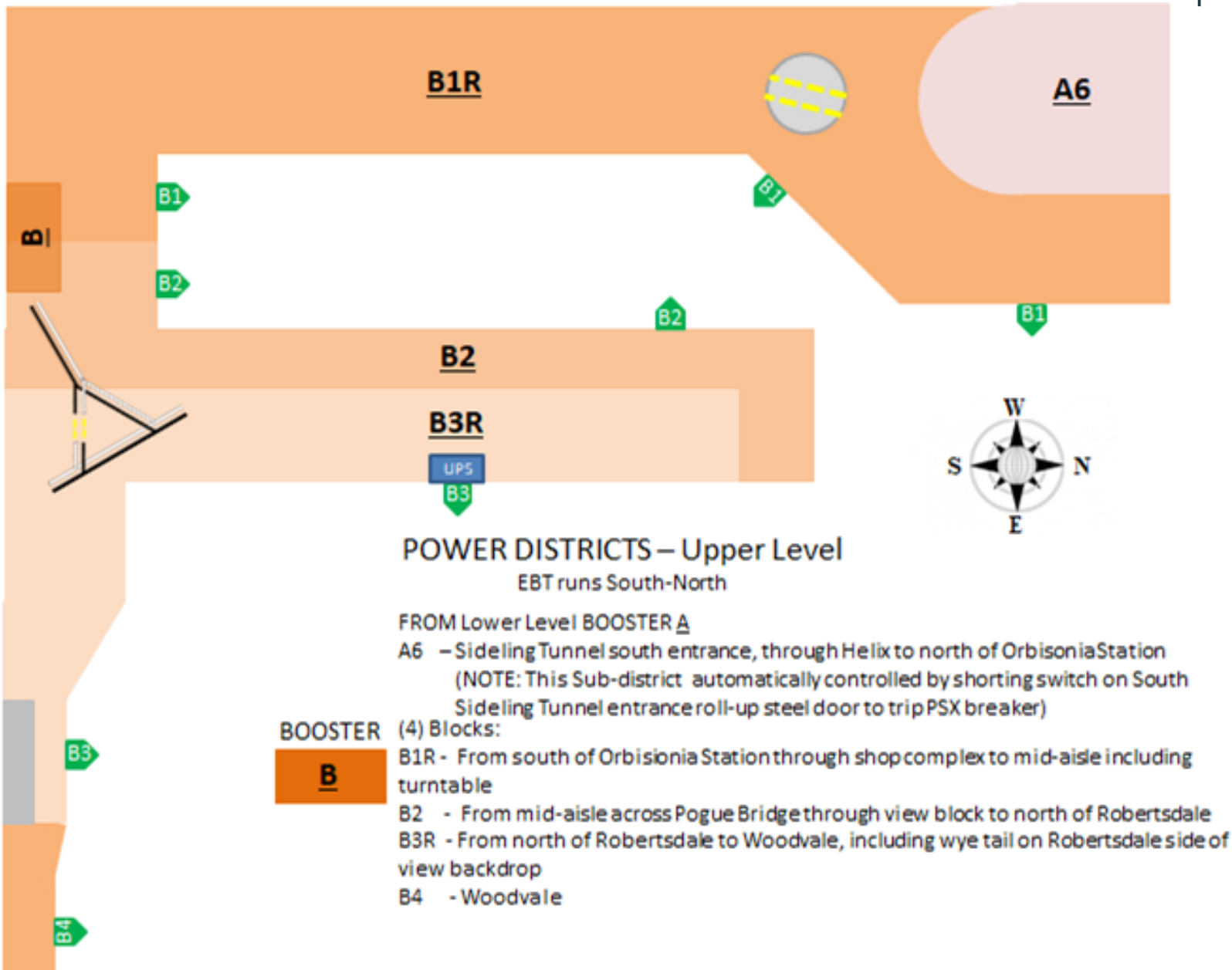
Lesson Two: One of the huge advantages of DCC is the generally speaking simplicity of the wiring. Although as you read on you will find it is more than just running two wires to your tracks!

My layout is not large by some standards. It is two levels connected with a helix. Each level is L-shaped with each leg roughly 20' long and with a peninsula that extends 13'. The following drawings and captions will give you a primer on how this railroad is wired as its construction moves along.

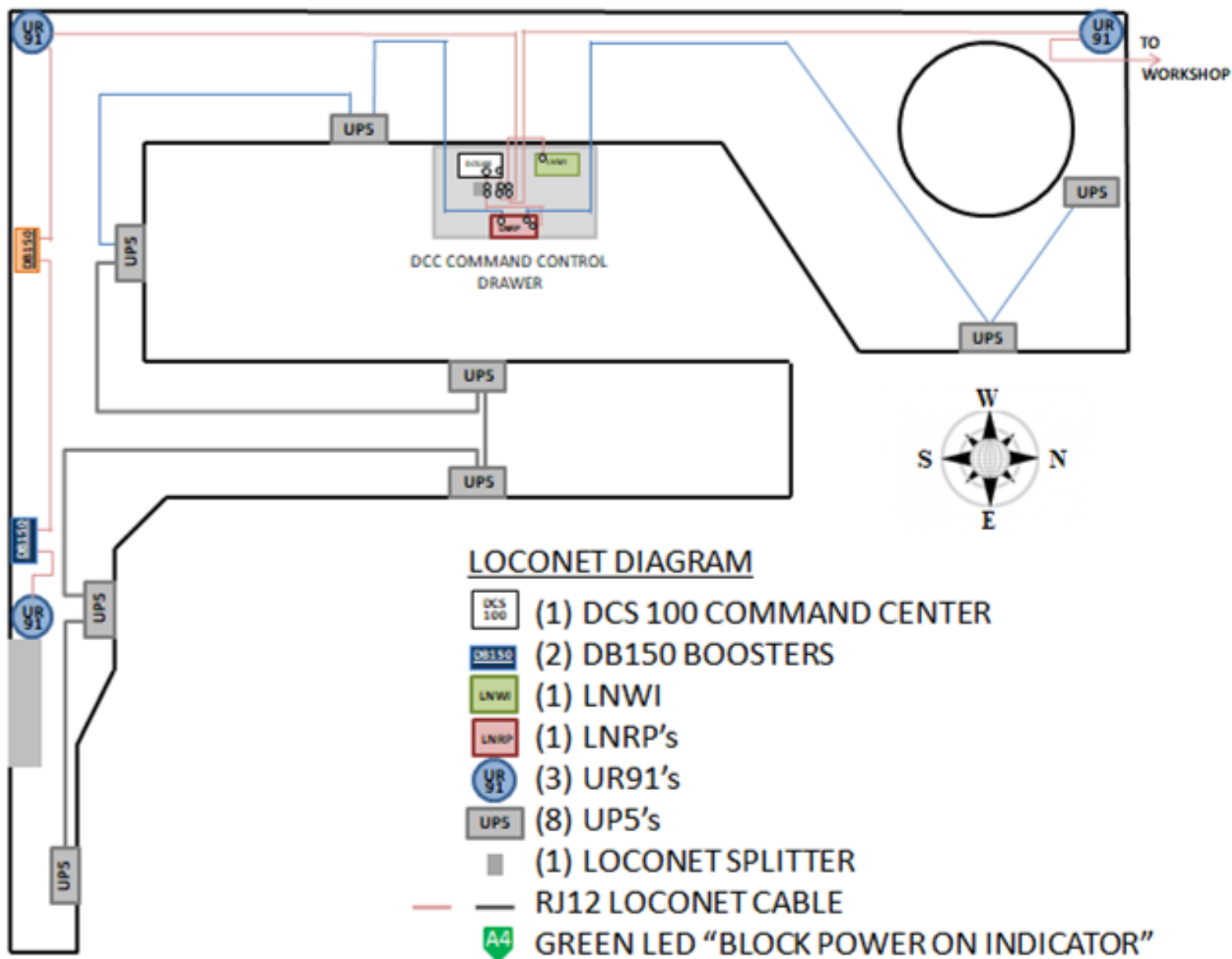
Questions? Email me at in2trains@gmail.com. I have a lot of time to answer!



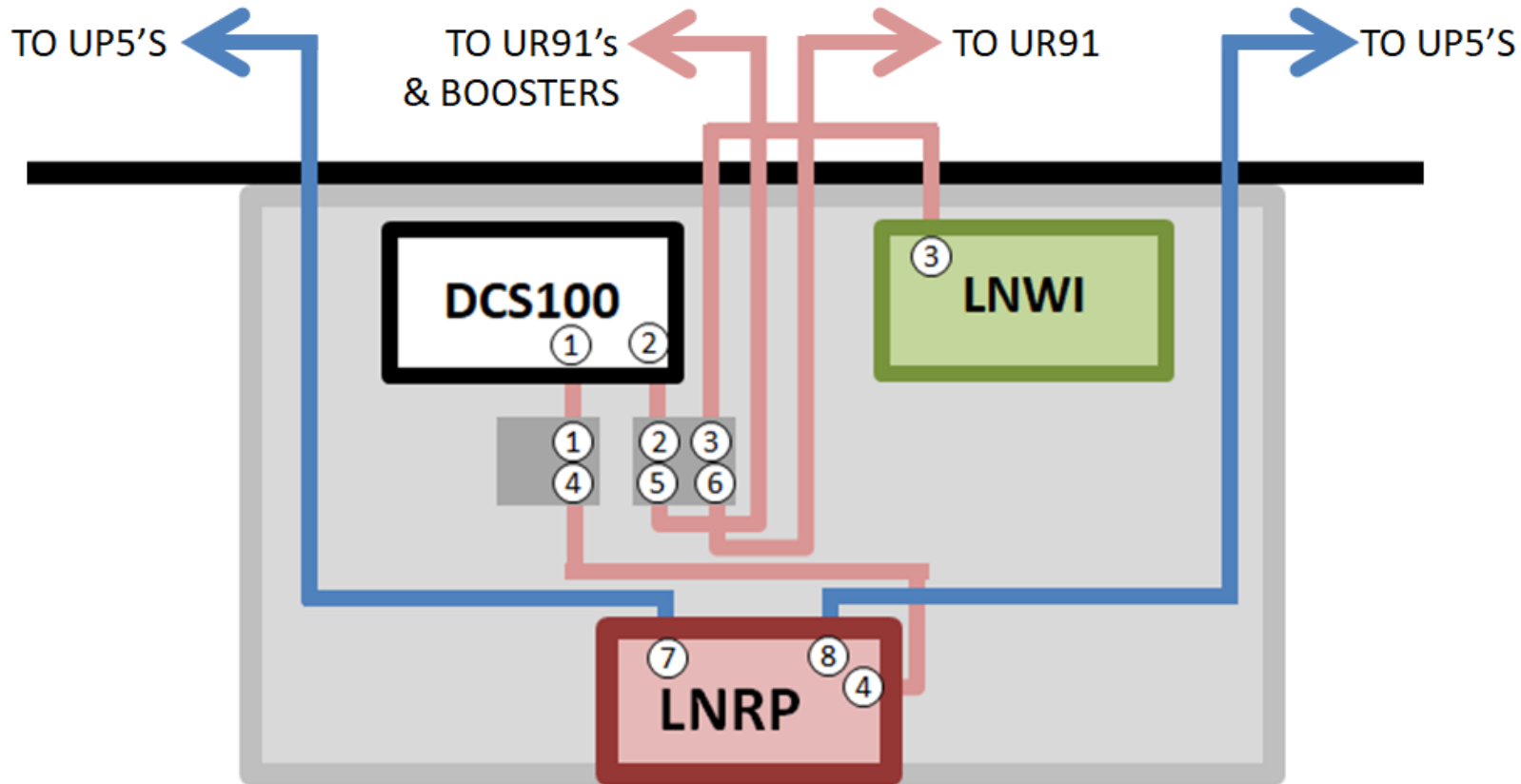
Blocks are used on DCC layouts to limit the tracks impacted by an electrical short. In the drawing above, I have divided my lower level tracks into 6 blocks. I divide my layout "geographically". This means if someone causes a short, for example by running a closed turnout, it will only trip the electronic breaker for the tracks in his area and your train in a different area of the layout will continue on its merry way. The blocks labeled with an "R" indicate an auto-reversing breaker. Such breakers can be wired to automatically change the wire connections in a section to match the adjacent section. Wyes, turntables and reversing loops can take advantage of this feature. I use and highly recommend DCC Specialties' PSX breakers.



Command centers are the "brains" of your DCC system. They can also provide power to the tracks. I opted to use my command center strictly for control. It does not power any track. I use two boosters to provide the power to the tracks with one for the lower level and one for the upper level. My boosters can power up to 5 amps of load. I use SPST switches on a small panel to isolate the individual staging tracks. I have a six stall roundhouse on the upper level that will similarly have a panel to isolate the individual leads. Modern locomotives use much less power than their old DC counterparts. Isolating tracks with locomotives stored on them and using newer locomotives reduces your total power requirements. For a better explanation of this design element go to Model Railroader's DCC Corner, September 2018 by Larry Puckett.



I purchased my first DCC system in 1996, shortly after DCC was introduced to the hobby. The above components are Digitrax names as that was and is my system of choice. However, whatever system you might choose will use similar components and wiring. A small layout may technically only need a command center but additional components will add functionality and reliability to your layout. I strongly recommend keeping a drawing of your system to refer to should need arise (and you will, ask me how I know!).

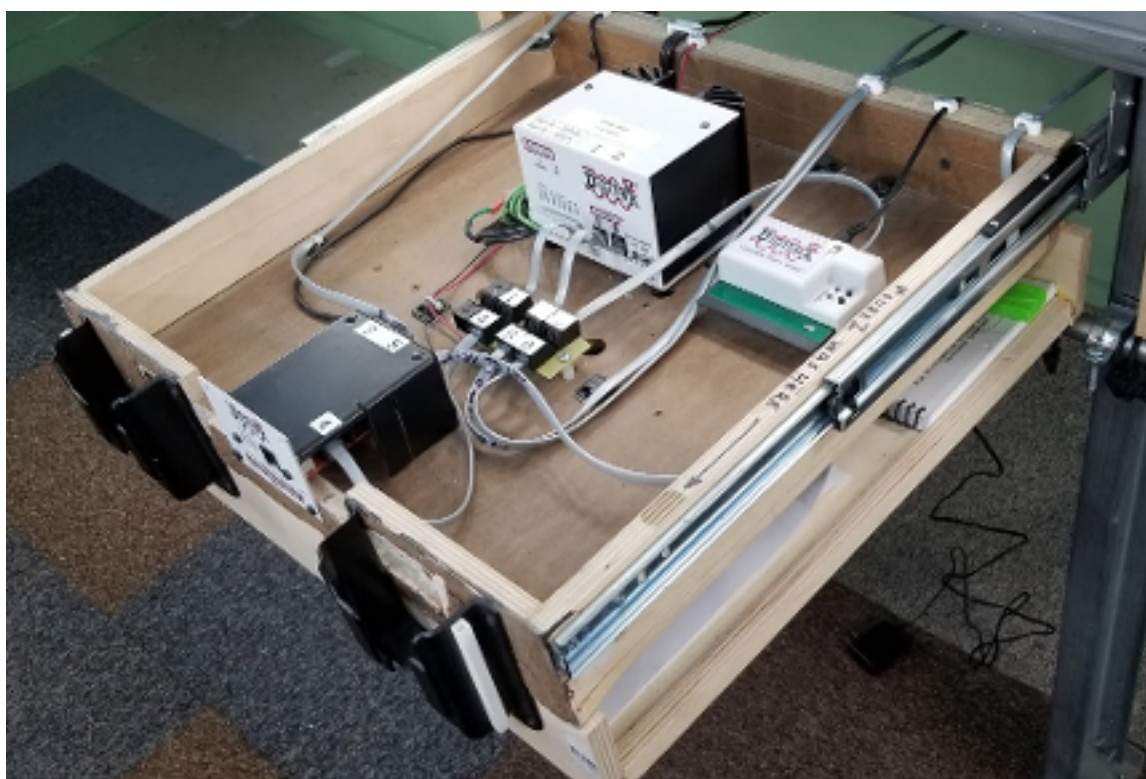


DCC COMMAND CONTROL DRAWER

I mounted my DCS Command Center, LNWI wifi interface and LNRP in my "Command Control drawer". The LNRP is a Digitrax device that separates the Loconet system into "protected" and "unprotected" sections. The Command Center, Boosters and UR91 receivers are all tied together on the unprotected section. The UP5's are on the protected side. The Loconet system is quite durable and has a low failure rate. However, because throttles are frequently plugged and unplugged from the fascia mounted UP5's potential for damage, including shorting, is higher. The LNRP ensures all the critical components continue to communicate even should a UP5 become shorted. This is a potential problem with any system, not just Digitrax, if they utilize components that on occasion plug in and out.



Shown above is the staging yard panel I built. The small SPST switches allow the individual tracks to be turned off when not in use. This reduces the load on the boosters and also reduces the amount of time the locomotives are powered and, in theory, increases their decoders' life span. The west staging tracks are hidden. I will eventually have a wireless camera looking at the west staging tracks. The green felt covered area will be used to place a small tablet connected to the camera's output. This will allow engineers the information they need to leave or arrive safely with their trains.



This photo shows my Command Control drawer. This makes these critical components readily available should the need arise. Neat and labeled wiring also helps diagnose problems.

WHAT'S GOING ON?

Given the issues we are all facing in light of the current COVID-19 pandemic, *The Flatwheel* will not be listing any shows that may still be open. See this month's editorial if you don't understand.

- Editor

HOBBY SOURCES IN OUR AREA

State Tool & Die



4780 Briar Road | Cleveland, OH 44135 | T: 216-267-6030



Shop our entire inventory of HO scale cars and accessories at www.statetoolanddie.com

Sounds Of Motion



DCC SALES AND TECHNICAL SUPPORT

6910 SOM Center Rd.
Solon, OH 44139
Phone 440-248-4599

FRANK FEKO
Proprietor
frankfeko@gmail.com

DEPOT TRAIN & HOBBY

"It's not just a Hobby . . . It's an Adventure."

Garden Railroad, Lionel, HO, & N
Trains, Track, and Accessories
Plastic Models, Rockets,
Wooden Ships, Hobby Tools, and Paint

4342 W. 130th Street
Cleveland, Ohio 44135
216-252-8880
www.depotland.com



EASTERN OHIO TRAINS

The Hobby Home of High Speed Service

2740 Fairmount Blvd.
Cleveland Heights, Ohio 44106
Phone: 216-215-7377
Fax: 216-371-0931
email: ehss@aol.com
www.easternohiotrains.com

Joe Andrews, Proprietor

JASON'S BRASS POLES

We specialize in trolley model products.

Railroad Trolley & Specialty & Model Railroad Dealer

Brian Weisman - Owner

bweisman@roadrunner.com (TROLLEYS & MODEL
RAILROAD DEALER)

<http://www.jasonsbrasspoles.com/>

These vendors are members of our very own NORTH COAST DIVISION! Give them a try when you need the supplies and services they offer!! - Editor

AL'S TRAINS & HOBBY LLC
 708 BROADWAY AVE.
 BEDFORD, OHIO 44146




DCC INSTALL
 FRAME MILLING
 TRAIN SETS & ACCESSORIES
 MODEL KITS-SLOT CAR SETS
 & ACCESSORIES

HOURS:
 M-W-F: 10-6
 THURS: 10-7
 SAT: 10-4
 SUN-MON: CLOSED

Phone: 440-232-0591 Fax: 440-232-0596
www.alstrains hobby.com email: al@alstrains hobby.com

Staufers Books & Prints



www.staufersbooksandprints.weebly.com

STAUFER BOOKS & PRINTS
 (330) 636-1672

**KEEP YOUR TARGET "ACQUIRED"
 AT THE**

**WARZONE
 MATRIX**



CHRIS WILSON
 (216) 433-1316
WARZONEMATRIX.COM

1704 ROCKY RIVER DRIVE
 CLEVELAND OHIO 44135
M2ONE@sbcglobal.net

MON-SAT 10-5
 SUN. NOON-5

www.ormandys.com

märklin

1 - HO - Z GAUGES AND PARTS

Ormandy's

TRAINS & TOYS FOR THE CONNOISSEUR
 SPECIALIZING IN EUROPEAN TRAINS
 BUY & SELL OLD TOYS

JOHN ORMANDY

330-722-1019
 330-722-2205 Fax

EXTENDED HOLIDAY HOURS

10 PUBLIC SQUARE
 MEDINA, OHIO 44256

Model Trains

Jan Dell Flowers Train Shop

Lionel - MTH - Märklin - Micro-Trains - Kato - LGB - Piko - Bway Ltd.

19350 Detroit Road Rocky River OH 44116

440/331-2392
 Jim Lewis



Uncle Ray's Trains

4282 Lake Rd. • Sheffield Lake, Ohio 44054



uncleraystrains@gmail.com
 Or call Uncle Ray at... (888) 933-2999 • (440) 933-0609

www.uncleraystrainsoh.com

Stewart's Hobbies & Collectors' Toys

Trains • Plastic Kits • Die-Cast Cars
 Slot Cars • Toy Soldiers

38033 Euclid Ave. • Willoughby, OH 44094

440/942-6632

STORE HOURS:
 M-F 12-6
 THURS. 12-8
 SAT. 10-6

ROB STEWART
SANDY STEWART

• Buy •
 Sell • Trade
 Old & New

Strongsville Hobby
of Elyria
440-366-0665



ELECTRIC & NITRO R/C CARS, BOATS, AIRPLANES, SLOT CARS, ROCKETS
HOBBY SUPPLIES & PINE CAR DERBY, TRAINS & PLASTIC MODELS

831 Chestnut Commons Dr. Elyria, Ohio 44035
Phone (440)366-0665
Fax (440)366-0666

R/C TRACK ON SITE
www.strongsvillehobby.com

Mon - Fri 11:00 - 8:00
Sat 11:00 - 6:00
Sun 12:00 - 5:00
JERRY IVANCIC

DANIELS HOBBIES *Premium Quality*
EST. 1978

34E Main Street, Norwalk, OH 44857
M-Sat 10AM-6PM, Closed Sundays
(419)588-2029 | danielshobbies.com

CORNER FIELD



MODEL RAILROAD & HOBBY
18720 Pioneer Road • Middlefield, Ohio 44062
Located in Huntsburg
Tom Elesh, Owner • 440-636-5162
Website: cornerfieldmodelrailroadhobby.com
Email: cornerfield@cornerfieldmodelrailroadhobby.com

BAD L's Hobby
Your One Stop Slot Car Shop!

13397 Smith Road
Middleburg Heights, OH 44130



440-941-BAD1 (2235)
info@badlhby.com
<http://badlhby.com>

Bob Lusch
The "B" in BAD

STOCKYARD EXPRESS LLC
O-Gauge MTH Electric Trains & Accessories
Where the ball stays in the bowl and the train rolls down the track

- MTH Authorized Service & Demo Center -


MTH - Lionel - Atlas
'O' Trains, track, accessories and more

49293 Plate Rd
Oberlin, OH 44074
(South of Beaman & SR 20)

Clyde & Diane Lewis
440.774.2131 / 440.774.7575 fax

www.stockyardexpressllc.com
email: stockyardexpress@aol.com

BEN FRANKLIN




Plastic, Wood & Metal Models
Trains • Rockets • Kites • Coin Books
Die Cast • Roadrace • Pine Car Derby
Puzzles • Radio Control • Dime Store

Large Selection
Great Prices
Howard Mowcomber

183 Park Ave.
Amherst, OH 44001
440-988-5462

THE MUSIC BOX

Grand Pacific Junction
8062 Columbia Road
Olmsted Falls, OH 44138
440-235-1625
440-946-5588
themusicbox@prodigy.net

HOBBYTOWN USA

7982 PLAZA BLVD.
MENTOR, OH 44060
HTUMENTOR@AOL.COM

440-974-2116
440-946-5588

MON-SAT
10am-8pm

DOLLS AND MINIS

8068 Columbia Road
Olmsted Falls, OH 44138
440-647-1519
www.dollsandminis.com
HOURS: Tuesday thru Saturday
10AM - 6PM

PLEASE SUPPORT THESE DEALERS!

DIVISION 4, MCR, NMRA

The North Coast Division

The North Coast Division holds 10 meetings a year (none in July and August). Meetings are on the 2nd Friday of each month. A social half hour starts at 7:00 p.m. followed by a short business meeting at 7:30. After a short break, a railroad themed raffle and clinic complete the typical agenda. Meetings are held at The Church of The Redeemer, 23500 Center Ridge Road, Westlake, OH 44145. Visitors are welcome to attend any meeting.

The Division's newsletter, *The Flatwheel* is published monthly (except during July and August) by Division Four of the Mid-Central Region (MCR) of the National

Model Railroad Association (NMRA). All comments are welcome. Views expressed in *The Flatwheel* do not necessarily reflect the opinion of the NMRA, MCR, or Division Four.

Uncredited photos courtesy of the editor or staff photographer Dave Williams.

The Flatwheel is typically electronically published no later than the Monday preceding the monthly meeting. Submissions are due no later than the 26th of the prior month, for example, August 26th for the September *Flatwheel*.

ABOUT US

We are Division 4 of the Mid-Central Region of the National Model Railroaders Association. With more than 200 members from Cuyahoga, Erie, Huron, Lorain and Medina counties in the state of Ohio. The North Coast Division meetings are normally held on the second Friday of the month to hear guest speakers, share skills, have railroad related clinics, and to share common problems and successes. Many of us get together informally in round-robin sessions to operate and work on each other's layouts, or just to talk railroads and modeling.

Last Fall the Division sponsored a fan trip on the Oil City & Titusville RR. This photo was taken at the end of the line where the locomotive ran around the train for the return trip. Great time with great people. Once the current COVID-19 problem is resolved, and it will be resolved, we will once again be positioned to have more of this kind of fun. - Editor

