Call Board

Volume 58 Issue 7 March 2019

Superintendent's Report for March,2019

February's meeting was another very successful auction. There was a lot of interesting bargains and deals available. I always hope to sell more than I buy, but that doesn't always happen. This time I broke just about dead even money-wise, but I feel I came out ahead on what I took home. Anyway, thanks to Will and everyone else who helped with the auction. It can be a little hectic , but I always look forward to the auction.

TRAINing Day is coming up at Carillon Park on March 23. Note that our meeting will be a week later then usual and at Carillon Park and not in Xenia. There is no admission and no charge to park for Training Day or our meeting the next day. Contact Will Davis if you are still interested in building a TTrak module.
There will be the engine competition and diorama contest on Sunday. The company store and Div. 3 contest (freight cars), and the raffle will be at the meeting on Sunday.

The April meeting will be on April 28, the 4th Sunday due to Easter. We will be back in Xenia. The Springfield Train Show is the same Sunday, so we can all kill two birds with one trip.

We are looking for someone to take over the AP program for Bob Fink. Bob feels it's time for someone else to assume that position and I want to thank Bob for the excellent work he has done for us in that role over the years.

Both our division and the Regional Convention in May are looking for people to present clinics. If you are interested, please contact me or any member of the BOG.

See you in March at the Carillon and don't forget the contest. I bet every one of us has at least a few freight cars.

Mark Stiver, Superintendent of Division 3,MCR, NMRA, Inc

March and April Meeting Dates and Locations

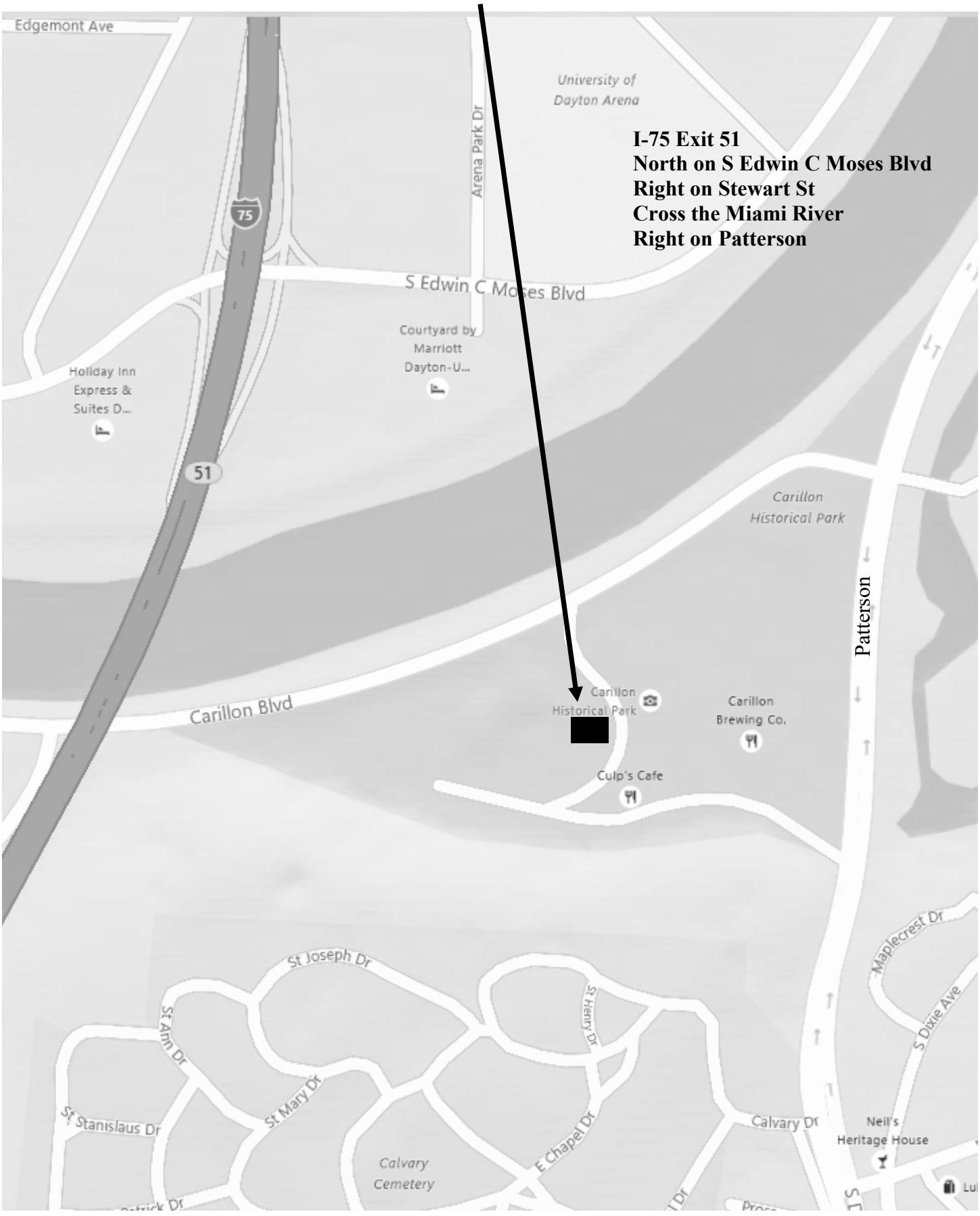
The March Meeting will be held at Carillon Park in the IAMS Meeting Room on Sunday 24 March. This is the day after TRAINing Day.

The April Meeting will ne held on 28 April. It is one week later due to Easter being on the 3rd Sunday. We will be back in Xenia at the Greene County Historical Society.

The May Meeting will be back on the 3rd Sunday, 19 May.

Division 3 Website: www.modelraildayton.com

TRAINing Day and 24 March Meeting



Contests

We have three categories each month. You can enter Scratch Built, Kit Bashed, or just plain Kit built. This allows anyone to enter anything they are proud of and at any skill level. Judging is by popular vote but if you wish to have your model judged by NMRA rules for the Achievement Program, we will make arrangements for you "on the spot"

The coming contest schedule …

March - Freight Cars

January - Open Loads
February - No Contest
March - Freight Cars
April - Passenger Cars
May - Diesel Locomotives
June - Steam Locomotives
July - Non-Revenue Cars
August - No Contest
September - Make it cheap (1-3-5 Dollar)
October - Caboose
November - Weathering
December - Structures

No Contest in February

Level One
First Place

Level Two
First Place

Level 3

PHOTO
First Place

Happenings at the Greene County Historical Society

In the next two or three months, the Greene County Historical Society has some great events taking place and are open to the public. The first is **"Dining by Rail"** dinner on April 13th at 6:30 PM. Reservations (tickets) required Ticket are available now at the GCHS office. The tickets are $25.00 per person. More info available by contacting the GCHS or Dick Strous.

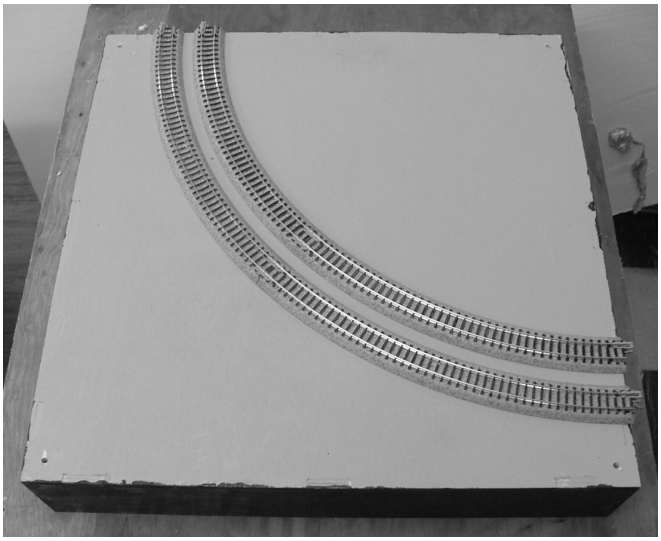
Next is a new class for the building of **"suit case"** train layouts starting on April 18th at 6:30 PM. The class is usually over by 8:30 or 9:00. The second class starts on May 2nd and continues on May 9,16, and 23. The class cost $10.00 for all five sessions . Applications and general info about the class will be e-mailed to you by contacting the GCHS office or Dick Strous. The actual cost to build a layout usually runs $65 to $70 for all the materials. The train you want to use is up to you. We suggest a short two axle engine and 40 or 50 foot cars. We do purchase any items need for you at a very good price. Which you will be able to the first session.

The last item I want to tell you about is that the Greene County Historical Society is celebrating their 90th anniversary this year. They will have limited edition Anniversary Rail Cars for sale for $25 each in both "N" and "HO" scale with the all cars numbered. The number one(1) in both "N" and "HO" will auctioned off in a "silent auction" with a minimum bid of $25.00. The winning bid will be announced on May 1, 2019. Bid forms are available at the GCHS office or by contacting Dick Strous. Proceeds will benefit the Historical Society and the Railroad Display Committee.

TRAINING DAY IS ON THE WAY!!!!

For those of you who have not yet heard, TRAINing Day should prove to be even more fun this year. We will be at Carillon Park in Dayton on March 23 at 9:30am-4pm. Our meeting will then be in the IAMS room at the Carillon Park on March 24 at 2pm. Although there is a fee to enter the park itself, we are in the entrance building and there is **NO FEE to come into our TRAINing Day event or to our meeting**. It will be free as usual.

We need people with mini-clinics to make this a great event. You would be at a table or area and people come to you. You tell them about your topic and answer questions, then they go to another table. Some examples include: Scenery, Weathering, Scratch Building, Circus Train, Electrical, Toolbox, and many more. It can be information, a demonstration or hands-on.



One of our new offerings this year is Wil Davis leading a hands-on how to build a T-TRAK (tabletop) module. **YOU MUST SIGN UP AHEAD OF TIME FOR THE MODULE BUILD**—the sooner the better since your materials must be ordered. To sign up, email us at **webmaster@modelraildayton.com** and be sure to include your contact information. There is a fee for materials. Wil will answer all your questions. And spread the word: invite a friend! Anyone can take this class. Division 3 has purchased 4 corner modules and has them available for finishing. If you are looking for something small to practice scenery building but don't want to get involved with the Diorama contest one of these would be a good project. (I hope I will be able to get some scenery on this corner by TRAINing day.)

We also need people to spend an hour (or more if you like) helping with the 'Building with the Experts' table. People can bring their own cars (no engines), can purchase a car at our cost, and children who win the 'Win-It, Build-It, Run-It' drawing can get help assembling the car or problem solving it. It's amazing to see a kid put together his/her own car. They take it home as a great memory for them and hopefully a member for us in later life. Other items include model railroading displays, the kids build, and 'build a paper house' (which was very popular at the Carillon Maker Faire). We need people for these events as well.

Please contact me about doing a clinic. We are late asking because we landed the venue so late, but it is a great venue. Now I need to know who can help us, so I can set up the floor plan and do the preparations. You can contact me at NMRA.Div.3@gmail.com or call at 937-301-0746. I'll be glad to send you a list of the things we need by email or discuss it over the phone. If I don't answer right away, please leave a message and I will get back to you as soon as possible.

Diorama Contest and Hill Climb

Reminder: The Diorama Contest and the Hill Climb will occur at the 24 March meeting. Dioramas must be turned in by 12:00 Noon, Saturday, 23 March, at MRR TRAINing Day. Contest rules are available on-line at the division web site. Let's put on a good show!"

Design and Construction of a Square Turntable Part 1

J. Hedge

I had arrived at the end of one of my staging yards and was trying to devise a method of reversing the trains. Most of the trains requiring turning would be passenger trains. The 0-5-0 method would work but would require picking up each car and locomotive. This was not very desirable. Another solution was a turntable. Unfortunately the staging yard ended in a corner and there was not enough room to swing the arrival and departure tracks far enough away from the wall to get a good alignment with a conventional turntable. This is shown in Figure 1. The distance from the end of track to the wall is approximately 2.5 feet.

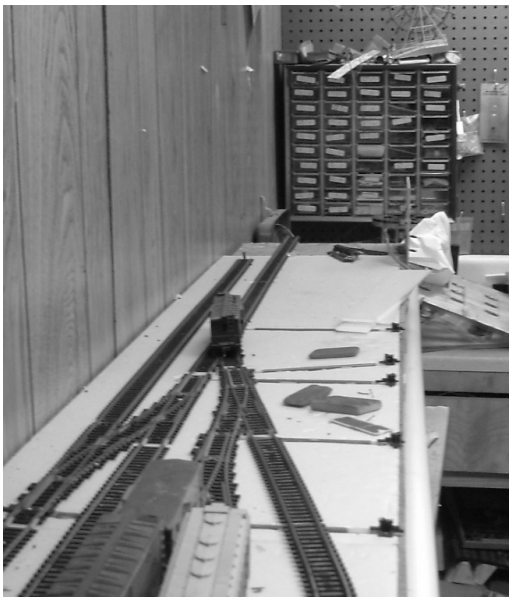


Figure 1

Earlier in the design stage when I had looked at making the yard double ended I had briefly considered using a sector plate instead of a yard ladder to make restaging of freight trains a little easier. A sector plate is similar to half of a long turntable. One end is fixed to a pivot; similar to the center bearing of a conventional turntable. The other end is free to swivel so that it can be aligned with other tracks. Sector plates are very popular for small layouts since they can replace a yard ladder in a smaller space.

In my situation a sector plate long enough to accommodate an entire train was not better than a conventional yard ladder. After I installed the yard ladder I looked at how to use a sector plate to turn the passenger cars. The original idea was to install a section of subroadbed, with roadbed and track attached, loosley held in place with locating pins. To turn the cars I would insert car stops at each end of the section and then pick it up, swing it end for end and set it back down.

The possibility for disaster was evident from the beginning. There would be too high of a likelihood that at one time or another, probably when I had my most expensive motive power on the board, I would drop the whole shebang. I already have enough shards of car remains on the floor and in junk boxes that I don't need any more.

The idea then hit me that if I made a flat surface big enough for the moving board I could put sliders on the bottom of the board and not have to pick it up. This appealed to my love of the KISS (keep it simple, stupid) engineering principle. The only problem was that this solution was too simple, so I started to fancy it up. Thus was created the Square Turntable.

The Square Turntable consists of two parts. The moving bridge section and a square flat plate with a guide groove. The groove constrains the motion of the bridge and helps align it with the yard trackage. The groove is basically the shape of a quarter pie. The bridge plate has a guide pin at each end that follows the groove. Operation is simply running the car(s) onto the bridge then moving the "A" end along the curved part of the guide groove until it has moved 90 degrees. The "B" end is then moved to the left on the straight groove while the "A" end follows the other straight grove. It would be possible to put another track at the 90 degree stop if more car storage was needed.

At this point I wandered of muttering to myself looking for scraps of wood to try out the design. While wandering through my scrapyard I remembered a mechanical device that my grandfather had built. He called it a “Scotch Yoke”. It was a method of converting rotary motion to linear motion. My design for the square

turntable could be constructed as half of his “Scotch Yoke” and would not require any curved slots. Further internet research did not turn up any “Scotch Yoke” designs that looked like what he built. So I decided to take off on my own.

I decided that the base plate would be a piece of 3/4” birch plywood. and the sliding track board would also be 3/4” birch plywood. I figured that a 2’x4’ piece would give me enough material. Instead of using slots and guide pins I produced a design that would use round blocks to support the track board and designed aluminum angle guide rails. Figure 2 is the raw materials and figure 3 shows the basic layout of the guide rails.

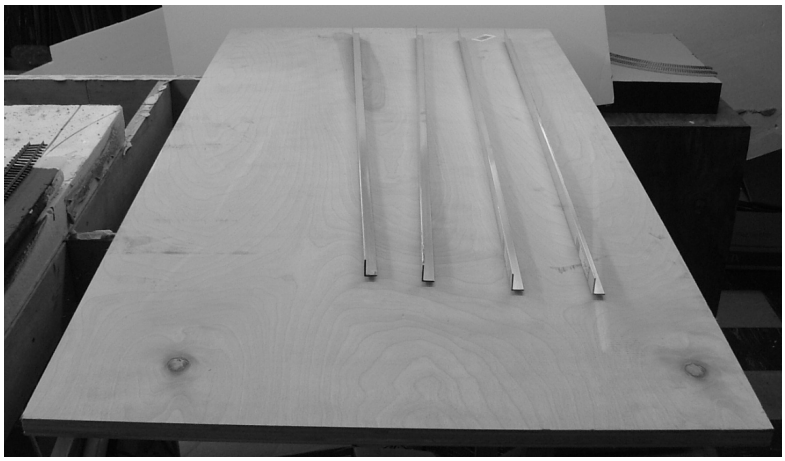


Figure 2

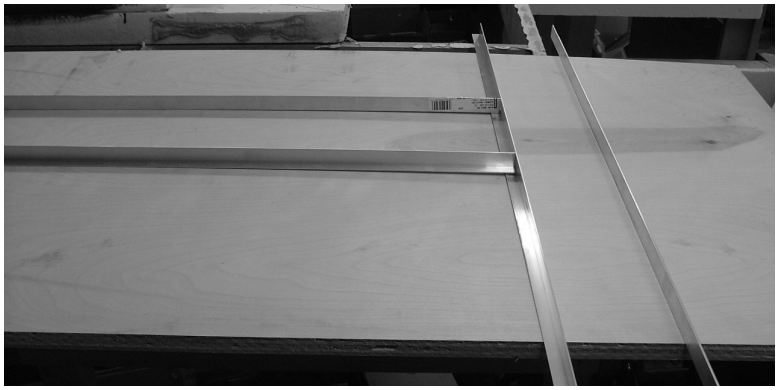
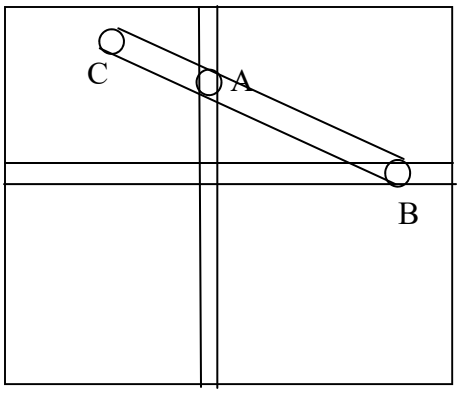


Figure 3

I actually started this project in 2011. As you can see I am moving very slowly. Hopefully I will have Part 2 and the turntable finished by the end of 2019. I have included a description of my grandfathers “Scotch Yoke”. I tried to keep it simple, but since I am an engineer it sort of ended up sounding like a paper for a mechanical engineering design project. Questions and comments are always accepted.



Emil Cassity’s “Scotch Yoke”

The basic model was machined from steel and was quite heavy. The base plate has 2 perpendicular “T” slots. A “T” bolt is placed in each slot. (Points A and B) A flat strap is placed over the bolts. A handle was fastened to the end of the strap at C. As the handle is moved in a circular motion around the plate, bolt A moves up and down and bolt B moves left and right. Thus circular motion is converted to linear motion.

To use this as the basis of a turntable the strap is replaced with roadbed, also the base plate is cut off below the horizontal slot. With the incoming track placed at the left end of the horizontal slot, as C is moved clockwise until B is at the left end of the horizontal slot and A is at the center the roadbed can be slid to the left until it mates with the incoming track. It is left up to the student to figure out how to reverse the motion and return C to its starting position. (I always hated when my professors used that phrase.)