

THE CROSSING GATE



Twin Cities Division ❖ Thousand Lakes Region ❖ National Model Railroad Association

Winter 2012

Vol. 31.4



*The
World's
Greatest
Hobby!*



Find us on
Facebook

The TCD is on Facebook!
Come visit us at

<http://www.facebook.com/TCDNMRA>

HENNEPIN OVERLAND GOOD FOR KIDS



The Hennepin Overland Railroad Museum (2501 East 38th St., Minneapolis 55406) is a gem of model railroading that is available to the general public in the Twin Cities but that is little known to folks who aren't in regular contact with the railroading hobby. The layout is open every Saturday and Sunday from 1 to 4 PM.

Especially around Christmas time, a sudden nostalgia-like longing develops deep in the breast of certain folks who may have had a toy train back in the day, or wish they had. If they have readily available a youngster or two, they

Text & Photos by Wayne Bjorlie

(Continued on page 5)

STAGING YARD ON THE PIONEER HIAWATHA

By Jim Buck

Just before 7AM on an August morning in south Minneapolis, the yard clerk is counting cars for the daily Milwaukee Road 7AM yard inventory. The yard's mission is to serve the south end elevators along Hiawatha Ave. and industries along the line north of Princess. Another small yard serves a freight house which handles LCL and package freight, fresh fruit, flowers and other cold items brought in by refrigerator cars. Due into the yard around 8 o'clock is the morning transfer of cars dropped overnight from the St. Paul side including a Seattle-Chicago Redball and an overnight mail/express out of Chicago.

This was typical of operations I wanted on my layout, and I needed a way to connect with the outside world, a place to manage equipment when it wasn't on the layout. Since space was short, the yard could be only holding tracks and no switches. I put a staging yard on plywood

(Continued on page 7)

Inside This Issue

- Staging Yard
- Hennepin Overland
- Intro to DCC
- TCD Contest Winners

Twin Cities Division

www.tcdnmra.org

Board of Directors

For all Division business or questions:

Superintendent

Ken Zieska

super@tcdnmra.org

To volunteer to give a clinic:

Asst Superintendent, actng

Ron Bodin

asuper@tcdnmra.org

To volunteer for a train show or

"Timetable" entries:

Chief Clerk, actng

Wayne Bjorlie

clerk@tcdnmra.org

For membership problems,

THE CROSSING GATE

subscription / address problems,

or website issues:

Paymaster

Eric Boone

tcdpaymaster@peremarquette.net

For article or photo submissions:

THE CROSSING GATE Editor

Wayne Bjorlie

editor@tcdnmra.org

For hobby shop or door prize questions:

Public Relations

Dave Hohle

pr@tcdnmra.org

Director at Large

Bill Dredge

assistant@tcdnmra.org

Chairpersons

For Golden Spike or

NMRA Certificate questions:

NMRA Achievement Program

Dave Hamilton

763-449-0058

ap@tcdnmra.org

To volunteer your layout for a tour,

or suggest one:

Layout Tour Chairperson

Arthur Hill

tours@tcdnmra.org

Education Chairperson

Open Position

ed@tcdnmra.org

Popular Vote Contest Chairperson

Steve Nitti

VOLUME 31, NUMBER 4, WINTER 2012

THE CROSSING GATE is published quarterly by the Twin Cities Division of the Thousand Lakes Region of the National Model Railroad Association. Material may be reprinted with permission.

Articles, photos, tips, or ideas are heartily encouraged and will be enthusiastically accepted! The preferred format would be in Rich Text Format (RTF), with photos as JPEGs, but we will accept any format (from a PC or Mac; MS Word, Simple Text, typed, or handwritten). Send it to your editor by regular mail to **THE CROSSING GATE**, 1922 Christensen Ave, W. St. Paul, MN 55118, or by email to editor@tcdnmra.org.

From the Superintendent

Welcome to the Winter issue of the Crossing Gate. We enjoyed another fun auction meeting in December. I brought a box full of things from my shelf that no longer fit my modeling needs and came away with a few new treasures that I hope I will be more useful.

Please bring examples of the projects you are working on to the Division meetings so we can all enjoy what your doing. Remember that the model contest in January is heavy duty flatcars and loads so apply some finishing touches to your favorite flat car and bring it along. At our February Twin Cities Division meeting, we will have model railroad photos and videos. Get your cameras shooting and bring us shots of your model work.

Keep the Thousand Lakes Region Convention in mind for this May. It will be a great time. If you have never attended a convention, this will be a great one for you to begin. I will be coordinating clinics and workshops, so if you are interested in assisting, let me know. Dave Hamilton is doing registration, I know he will need some assistance at the convention also. Later this Spring during our Division meetings, we will hold sign-up and training for work at the TLR convention.

I want to remind you that Dave Hamilton is hosting an operations session for Twin Cities Division members, particularly ones who want to learn about operations. Dave's layout is very straight forward and there will be helpers available while you learn. That will be Saturday January 19, 2013.

(Continued on page 5)

From the Editor

I got a little fellow hooked. He is 10 years old, his parents are immigrants, and he is a pretty smart kid. My domestic partner, Renee Pfenning, has long been a volunteer with Habitat for Humanity. One of her jobs is to orient new Habitat homeowners about the headaches of being homeowners. You know, the leaky faucets, etc. One family had this kid, 10 years old. Sam. He visited my layout, the Midland Continental. He mentioned that he sure would like to have a train. He already an important component of a model railroad—a basement.

Soon enough, a Lifelike set mysteriously appeared at his house. Along with it came enough plywood and 2x4s for a 4x8 tabletop on which to run his Lifelike, complete with Santa Fe power, hornhook couplers, and some additional rolling stock that had already been around another circuit more than a few times. That Lifelike even has operating crossing gates!

Sam has been to the Hennepin Overland and the Bandana Square. He asked as lot of questions. That's where I got the idea that Grandpas ought to take their youngsters out to these layouts. Not only will Grandpa get a chance to talk authoritatively about trains, but some kids might get started with a lifelong hobby.

Wayne Bjorlie, editor

A CLEAR, CONCISE, AND SIMPLE (WE HOPE) EXPLANATION OF DCC FOR THE (AS YET) UNINITIATED

By Walt Thompson & Wayne Bjorlie

Following our November TCD meeting where Walt made a presentation about Digital Command Control (DCC), word came to us that members wanted more. Thus, this article will be the first in a series about DCC that will appear in the Crossing Gate.

DCC in its current form resulted from efforts that the National Model Railroad Association began in the 1980s to establish standards for a more sophisticated electronic control system for locomotives beyond block wiring. According to the NMRA's internet homepage on DCC, the first important system that was a direct ancestor of today's DCC was developed by General Electric in 1964. By the 1980s, types of electronic control systems for model trains had proliferated so much that the need for standardization became evident.

Let's back up and consider the problem that modelers were trying to solve with more sophisticated electronic controls. In a block wiring system, which is, itself, a basic kind of electronic control system, an engine's speed and direction can be controlled by a throttle, but only a few engines, at most, can run on even a room-size layout. Each engine or lash-up needs its own block and its own throttle. Since the "messages" telling the engine what to do could come through the rails only as voltage and polarity, the options for realistic operation were limited.

Thus, the operator's throttle could control the speed and direction of the engine in the block to which the throttle was connected, and the operator could shift control among blocks through various off-layout electric switches, but that was it. The throttle was, in effect, tied to the particular engine that was in the particular block to which the throttle was connected. Fancy features such as turnout control and signal lighting were separate from running the engine and had their own clunky circuits. Modelers wanted to be able to run many engines at once, and in different directions, to simulate prototype operations better.

Now, how is DCC an improvement over block wiring? DCC allows the operator to direct many engines at once and to control many other features such as sound or lights. The limitations that were presented by the block system's reliance on only voltage and polarity, as regulated by the throttle operator, to control the train are eliminated in a DCC system. Instead, each engine has the capability to receive its own instructions from the operator. It is as if the little engineers in the various locomotives each understood a different language and would move only when they were instructed in their own language.

This control marvel is accomplished by, first, installing in each loco a decoder which is programmed to its own address and receives its own instructions. A separate unit called the Digital Command Station sends signals to specific engines by sending commands to the decoder's address that will be "understood" only by the decoder in each specific engine. The operator uses a throttle that tells DCS to communicate with an engine's decoder. Under the code for each engine, specific instructions such as maximum speed, direction, sounds, lights, etc. are set by the operator. Then, the DCS sends "signals" through the rails to that decoder's address telling that engine what to do.

DCC can also be used to run other features on your pike such as turnout switches, station lights, or crossing gates simply by your connecting the item to a decoder and then the DCS tells that decoder what to do.

The next article will discuss how to program decoders.



Thompson runs hand-held remote control throttle

TCD CONTEST WINNERS

Art Hill was the October maintenance-of-way contest winner with his “blacksmith car.” It started as an old Ambroid kit from the 1960s. Art added features such as the anvil, coal, fire, and smoke to make it look busy.



Art Hill photos by Wayne Bjorlie

Glyn Thomas was the November yard switcher contest winner with his Soo Line 0-6-0T. The original locomotive was an 0-6-0 tender locomotive and was rebuilt by the Soo Line at the Shoreham shops. The model uses a Bachmann 0-6-0 switcher chassis, heavily modified, and a scratch-built body. The cab is a homemade brass etching.



Photo by Glyn Thomas



PRE-MEETING DINNER GET-TOGETHERS

NEW LOCATION

BACKSTREET GRILL

195 South Robert Street St. Paul

TCD Members meet for dinner before every TCD meeting..

GATHER ABOUT 5:30 PM

EVERYONE IS WELCOME.

HENNEPIN OVERLAND RAILROAD MUSEUM

(Continued from page 1)

can relive the old railroading days or get a vicarious thrill by watching the eyes light up and the cheeks puff out when they take them to a place like Hennepin Overland. Heck! If you can't bring a youngster, come anyway!

Right now, the museum is featuring a special Night Train in which the regular house lights are dimmed, and the only light is from the buildings, street lights and locomotives on the layout. The Night Trains will run on December 21 and December 28 from 6 to 9 PM. They will also run every Saturday night in January and maybe after that, too.

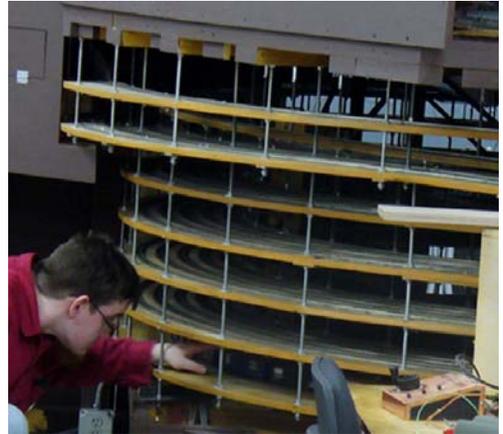


This model railroad has been well built by many experienced modelers. It shows many of the industries and other working scenes that are present around the Twin Cities. The scenes on the Hennepin Overland are highly informative and educational for kids who are curious about some of the large buildings they see along the railroad tracks in their everyday lives as the drive past on the way to school or to Grandma's house. Why are they there? What goes on inside? What's in those railroad cars?

There is a steel mill, a grain elevator, a mine, a saw mill, a factory, a huge trestle, and many other working scenes that offer great opportunities to make

Grandpa sound like he knows what he's talking about when the kids express curiosity and wonderment.

A helix is a spiral track that allows model trains to climb or descend to another level in a multi-level layout. This is a multi-level layout, and it features what members believe is the largest helix in the whole U.S.A.! At least, they say they have not heard of a larger one. The helix at Hennepin Overland has a diameter of about 9 feet and a height of about 6 feet. It contains 8 turns around the circle and stands in the layout room in full splendor for all to view.



(Continued from page 2)

I am working on plans to build a structure for the April clinic using the brick panels I showed in October. These are from Monster Model-works and quite nice. If you look at his website and see something you are interested in, mention you learned about him at the Twin Cities Division meeting so we get credit for a referral. Mentioning the Twin Cities Division at the local hobby shops is also a great thing. Let them know we appreciate their support.

Another reminder, we do need to enlist a Division Assistant Superintendent. Help us keep the Division going by spending a little time as a volunteer.

Happy New Year! I need to retreat to the basement and get working on some projects. I hope you are also.

Ken Zieska, Superintendent

HOBBY SHOWS & RAILFANNING EVENTS

| | |
|------------------------------|---|
| Sat, Jan 19 (also Apr 13) | Woodbury Flea Market at Woodbury Sr. High School, 2665 Woodlane Dr, Woodbury, MN 10am-3pm. Adm \$5, under 12 free. Info: 952-200-9729 |
| Sat, Jan 26 | Great Tri-State Rail Sale Civic Center 2nd & Pearl St. LaCrosse, WI 54601 9am-3pm Adm: \$5, under 12 free Info: 608-780-2543 or email: 4000foundation@gmail.com |
| Sat, Feb 8 (also Apr 6) | Greater Upper Midwest Train Show, Century College, White Bear Lake, MN 9am-2pm. Adm \$5, under 12 free. Info: Tom Jefferson 651-429-2885 |
| Sat Mar 9 & Sun Mar 10 | LaCrosse & 3 Rivers 32nd Ann. Show. LaCrosse Center, 2nd & Pearl St. Sat 10am-6pm; Sun 10am-4pm. Adm: \$6, <11 free. Info: 507-894-8077 |
| Sat Apr 13 | Granite City Train Show. National Guard Armory, 1710 Veterans' Drive St Cloud, MN 10am-4pm. Adm. \$5, under 12 free. Info: 320-255-0033 or email edwardolson@cloudnet.com. See granitecitytrainshow.com |
| Sat Apr 20 & Sun Apr 21 | Randolph, MN RR Days. Swap meet, Layouts, RR Collectables, Museum. Adm \$5, 12 & under free. Chicago Great Western equipment. New, improved, expanded. Two days this year! |
| Sat May 11 | Twin Cities Model Railroad Museum Train Show Minnesota State Fairgrounds Education Building. 9am-3pm Adm: \$6 |
| Fri –Sun May 17-19 | TLR Convention Best Western Mall of America Minneapolis TWIN RAILS 2013 Check TLR website for more information. |

Jim Buck's staging yard module rolls left or right, rotates 180 degrees to turn trains, and rolls away to completely disappear from the layout, as needed for realism.



TCD TIMETABLE

Meetings at the Jackson Street Roundhouse 2013

| Month | First Topic | Second Topic | Help Topic | Contest |
|----------------|---------------------------------------|---------------------------------------|--------------------------|--------------------------------|
| Jan 10 Clinics | Scenic Water | LEDs for lighting and signals | Make Some Water | Heavy duty flat cars and loads |
| Feb 14 Clinics | Making latex molds | Casting with latex molds | Entering an NMRA Contest | Model RR Photos and videos |
| Mar 14 Clinics | Tool Tips for Modeling | Tool Tips for Modeling | Hands on with Tools | Hopper cars with loads |
| Apr 11 Clinics | Volunteer Training for TLR Convention | Volunteer Training for TLR Convention | Hands on with Tools | Dioramas |
| May 9 Meeting | TCD Annual Business Meeting | TCD Election of Officers | None | No Contest |

(Continued from page 1)

about 2x4 feet. With tracks 2 inches apart, there is room for 11 tracks that are 4 feet long. In HO, that's about 70 cars.

The yard is a plywood top on four 1" x 3" by 1"x 4" legs. Each leg has a caster. The legs are in the shape of a L girder. The top of the module is an open box with a center brace, built of pine 1 x 4s. Each leg has an angle brace to the top, and the legs are held by the top and an H brace about half way down. The height is the same as the rest of the layout, about 44 inches. The joints are glued and screwed.

The yard module moves on the casters so that staging tracks can align with the two tracks on the layout that service the module. There is no turntable on the layout, so the casters permit entire trains to be turned 180 degrees while they're on the module. Or, the whole thing can be rolled away out of sight. Electrically the service tracks connect to the module tracks with black and red Anderson Power Pole connectors soldered to 16 gauge speaker wire. There is a reversing switch for forward and reverse connecting, needed for either DC or DCC. The staging tracks are numbered 1 through 11 in the forward mode and 11 through 1 in reverse, with the Anderson connectors are numbered correspondingly. The idea is the same as a wye or reversing loop. Foam and Masonite skirts above the edges keep items from falling off.

The module has the amount of track of a small layout. Alignment can be fussy, so I use T pins and a 4 foot rule or a metal bar to keep things straight. I glued the track right to the foam. When it wasn't right, I could cut it off fairly easily and redo the glue. I tested it out as I worked. Photos by Jim Buck

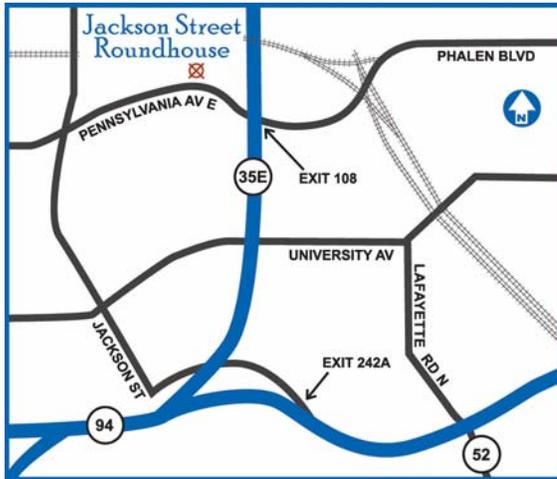


THE CROSSING GATE

Twin Cities Division, TLR, NMRA
4476 Mason Ave NE
St. Michael, MN 55376

Next 3 Meetings:

Jan 10, Feb 14, Mar 14 7:00 PM
Jackson Street Roundhouse
193 Pennsylvania Ave E
St. Paul, MN 55130
651.291.7588



PEACHTREE EXPRESS
NMRA NATIONAL CONVENTION

nmra2013.org

JULY 14-20, 2013

**Subscribe or Renew
Now**

THE CROSSING GATE!

Send \$10 per year (two year max)
for printed black & white version by mail to:
Twin Cities Division
4476 Mason Ave NE, St. Michael, MN 55376
FULL COLOR EMAIL VERSION FREE!!

Enclosed is \$ _____ for _____ year(s).

New Subscriber Renewing Subscriber

I want my **CROSSING GATE** delivered by:

US Mail (paper, black/white)

Electronic mailing (email, color)

Name: _____

Address: _____

City: _____

State/Zip: _____

Email: _____

@ _____

Phone: _____

Preferred Modeling Gauge(s): _____

WE GRATEFULLY ACKNOWLEDGE CONTRIBUTORS TO THIS ISSUE:

Jim Buck Walt Thompson Art Hill Glyn Thomas Cal Swenson

LOCAL TWIN CITIES HOBBY SHOP SPONSORS

These listings are sponsors of the Twin Cities Division. Please show them your support!

Becker's Model Railroad Supply

2166 Silver Lake Road
New Brighton, MN 55112
651.635.9480
<http://members.aol.com/wcbecker>

Choo Choo Bob's

2050 Marshall Avenue
Saint Paul, MN 55104
651.646.5252

Historic Rail

121 5th Ave NW
New Brighton, MN 55112
651.635.0100
<http://www.historicrail.com>

Hobbytown USA

Bergen Plaza Shopping Center
7065 10th St. North
Oakdale, MN 55128
651 - 702 - 0355
www.hobbytown.com/mnoak

Hub Hobby Center

82 Minnesota Ave.
Little Canada, MN 55117
651.490.1675
<http://hubhobbycenter.com>

Hub Hobby Center

6416 Penn Avenue S
Richfield, MN 55423
612.866.9575
<http://hubhobby.com>

KDC Model Trains

915 Hopkins Ctr.
Hopkins, MN 55343
952.938.5456
<http://www.KDC-Trains.com>

Osceola & St. Croix Valley Railway

P.O. Box 176
114 Depot RD
Osceola, WI 54020
715.755.3570
<http://www.trainride.org>

Osseo Train World

340 Central Avenue
Osseo, MN 55369
763.425.7171

Scale Model Supplies

458 Lexington Parkway
Saint Paul, MN 55104
651.646.7781
<http://www.scalemodelsupplies.com>

Support your Local Businesses!