



# Ties and Rails

Official newsletter of the Crossville Model Railroad Club  
and Div. 16, Southeast Region, NMRA

June 2020

(931)210-5050

[www.crossvilletrains.org](http://www.crossvilletrains.org)

## ***The Prez. Sez:***

What I find most difficult with the responsibility of being President is trying to make all sixty members happy with the direction and operation of the Club. At times, just like the health crisis the world is enduring, trying to find that “middle ground” where all members can hopefully appreciate that every decision is based on what the majority feels is the right thing to do for the Club.

To that end, every member needs to make a concerted effort to attend our June 8<sup>th</sup> monthly meeting as the Club is and will be facing some significant challenges in the months ahead. If you generally do not come to our meetings, you really do not want to miss this one. Please make every effort to come. Governor Lee’s latest Executive Order allows gatherings of up to fifty individuals. **We will be practicing self-distancing and strongly suggest wearing a mask if you have one available.**

The Board met on May 19<sup>th</sup> and reviewed the current state of the virus here in Tennessee and Cumberland County. We covered many pertinent topics such as when to reopen to the public, what days to open, what level of staffing we need, along with how to protect our members and the visiting public. We also discussed how we need to sanitize common surfaces. While discussing these topics, there was, of course, opinions on how to proceed. That is why your voice and opinions are needed to make sure whichever direction we take, all members can be comfortable with the decision.

No member should consider working shifts with visitors present until you are personally confident it is safe for you to do so. With limited days being open to the public, we will have adequate manpower to cover all shifts. Your health and that of your family comes first and we will all need to apply common sense and adequate levels of personal protection during this pandemic.

We also need to remain vigilant with monitoring the status of the disease. *Cont. on page 2*

If you have something you wish to put in the newsletter, contact Tom Shallcross at [chipmonk4@comcast.net](mailto:chipmonk4@comcast.net)

## For Your Information

A recent Model Railroader e-mail had the following information.

“Seeking information about the status of several of [Testors long-standing paint lines](#), we have received the following from Vince Pierri, Senior Manager, PR & Corporate Communications for Rust-Oleum:

“With a long history of producing quality hobby kits and supplies, we are evolving our strategy to focus more keenly on Testors, our flagship brand. To that end, we are discontinuing our PACTRA, AZTEK. And Model Master brands as demand for these products continues to decline. We will continue to support the hobby market with a robust line of aerosols, brush paints, tools and accessories - always looking for opportunities to innovate in these categories.””

### Marketing Committee

**Art Landrigan**

The Marketing Committee did not hold a regular meeting in May due to the CMRC closure.

Just a short note to notify CMRC members that we are not currently scheduling a June Marketing meeting until after the scheduled CMRC BOD and regular membership meetings on June 8, 2020. Once we have some more definitive plans for Club operations, we will likely initiate a meeting (whether in person, or remotely) depending on the views of the Committee’s members. I will send out a notification to all Committee members once we know more. Stay tuned!

The next Marketing Committee meeting is scheduled for: TBD.

If anyone has any questions, please E-mail Art at: [arcy22tn@gmail.com](mailto:arcy22tn@gmail.com).

*The Prez says: cont. from Page 1* With predictions from infectious disease specialists for it to return in the fall, we need to remain fluid and be prepared to react to the ever-changing situation.

The wooden train table, candy, stickers, the push cart, and all counter sale items will be removed to help limit physical contact with visitors.

The suite continues to be open to members only anytime you want to run trains or work on scale projects. Once we reopen to the public, the suite will be available for members use when the public is not present. To minimize exposure, if you are not assigned to the current shift, please limit visiting to non-open hours.

**What is happening?  
Humans are all wearing muzzles.**





## The DCC Shed @ CMRC

Paul Falk

Art Landrigan

Welcome, come on in. Last month we mentioned command stations, mobile decoders, stationary decoders and loconet as frequently used terms when talking about DCC at the Club. Let's start with the one thing all the devices mentioned have in common. They are all connected via a system known as Loconet. Loconet is Digitrax's trademarked method of communication between loconet compatible devices on a model railroad layout. By definition loconet is a "Peer to Peer" (aka P2P) asynchronous distributed network through which all attached devices can monitor and contribute to the data flow.

*A real life example... think about the old telegraph system on the western railroads, just a pair of wires following the track. Each town was hooked on the wires and heard all the messages but only cared about the ones sent to them.*

Sounds complicated, but just the opposite. This type of networking is easily scaled up, devices are hot swap-able and can be used with new device types without need to reconfigure the entire network. The asynchronous nature means there is no background server, timing, or clock to maintain. Devices "listen" for messages meant for them and "speak" their messages when they have something to "say". More about speaking in future articles about specific devices. Any device that sends or receives messages on the network is only required to have a unique address. For example that address allows one to close just turnout 401 or speed up an individual loco. Devices monitor the loconet bus to decide when (network is idle) it is safe to transmit a message as only one device can transmit at a time. All devices share the same loconet segment, so all messages are seen by all devices and are acted on if intended for that particular device. Remember. If you send a message to a missing device, no error message is returned.

Here's an example of speed commands issued to a loco. Shown here with a time stamp, the hexadecimal raw command and the man readable translation. These were issued by the command station to change a loco's speed and would be acted on by the decoder in the loco.

14:56:42.419: [A0 03 0B 57] Set speed of loco in slot 3 to 25.

14:56:42.935: [A0 03 0C 50] Set speed of loco in slot 3 to 12.

14:56:44.721: [A0 03 09 55] Set speed of loco in slot 3 to 9.

14:56:44.975: [A0 03 00 5C] Set speed of loco in slot 3 to 0.

In addition to the track carrying the loconet messages for the locomotives, there is cabling under the layout to connect the stationary devices like turnouts. These cables can be extended to over *Cont. on page 6*

## Running a Railroad Can Be Tricky

GP9s, top of the line power, high expectations, usually met. This one, 6007, ugh. First trip out of the monthly inspection at Collinwood, ground relay action en route, isolated the loco in the consist.

Checked the loco at Elkhart, it was OK. Dispatched west and the same problem occurred. Checked loco again at Elkhart and it was OK.

Dispatched the loco east and the same problem occurred. Checked the loco at Collinwood and everything was OK.

Hey, wait a minute, what gives here. The Shop Superintendent was notified and he orders a thorough examination by experts. No exceptions taken.

Dispatched east an ground relay action occurred. You've heard it before. Infamous 6007 back to Collinwood.

Shop Superintendent, thoroughly agitated, orders a 'rider' aboard. En route, the rider notes the ground relay trips on left-hand curves. After it was reset, it was OK until the next left-hand curve.

Message? The rider checks the electrical cabinet and discovers an errant flashlight rolling free. Roll to the right, no problem. Roll to the left, causes short circuit. Square flashlights, anyone?

Moral of this story - Whenever you have a problem that recurs without any obvious cause, don't be afraid to explore other possibilities as there is always a cause for the problem. It may not be obvious at first glance.

When writing up a loco because something is wrong, give as much info to the repair person as possible as the repair person wasn't present when you had the problem and doesn't know what you saw.

## HO Scale News - Paul Falk

We have completed the upgrading of the street lights on the first pier near the parade. During the test run with Jim, it was discovered that one set of lights were not working so VEC, as of this writing, was on the scene and working to fix the lights.



We are in the process of upgrading the power managers (PM42) through the layout. We have completed the first one (#140) which operates the N & W trackage. During the conversion, it was discovered that a 'short' existed between Zone 1 and Zone 2. The short was located and repaired.

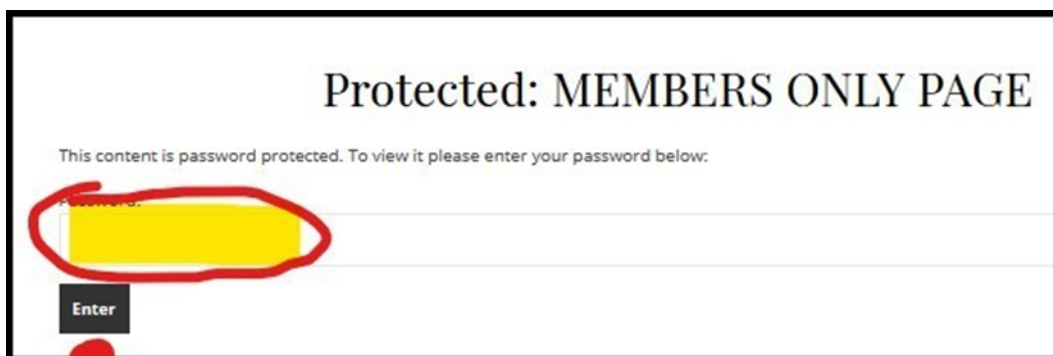
Work has started on the second one (#110) which powers half of the L & N. Work will continue as time permits during June.

## Website - Members Only Access

Recently there have been some inquiries regarding the schedules and other documents regarding the operation of the Club. These are posted on the Club website in the 'Members Only Page'. For access to this information, please follow the instructions below:

Accessing Password Protected Members Only Area of CMRC Website

Website Address is *Crossvilletrains.org*



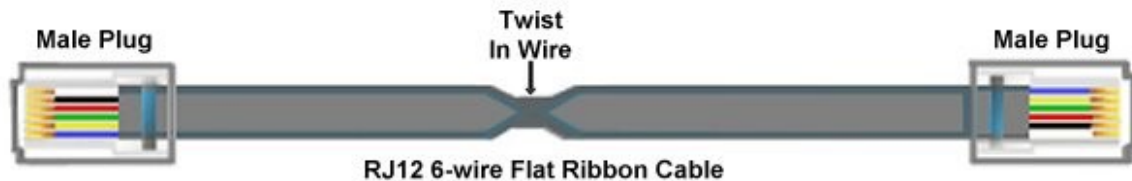
*ENTER PASSWORD IN SPACE PROVIDED & CLICK ON THE WORD ENTER*

To obtain the password, please contact one of the following members:

Paul Falk, Tom Shallcross or Art Landrigan

Please do not share password with non-members

Cont. from page 3 2000 feet total length. The cables can be typically arranged in a daisy chain style, but should not loop back on itself. Each connected device has at least two ports to connect the cables from the adjacent devices. The cable can be made from various six conductor wire types. The Club has elected to use flat ribbon wire similar to telephone wire and has the tools to fabricate any required cables.



Digitrax has a tester called LT1 that can quickly test a loconet cable. As cables are assembled, they are checked for proper function and examined to assure the correct polarity of the wires.

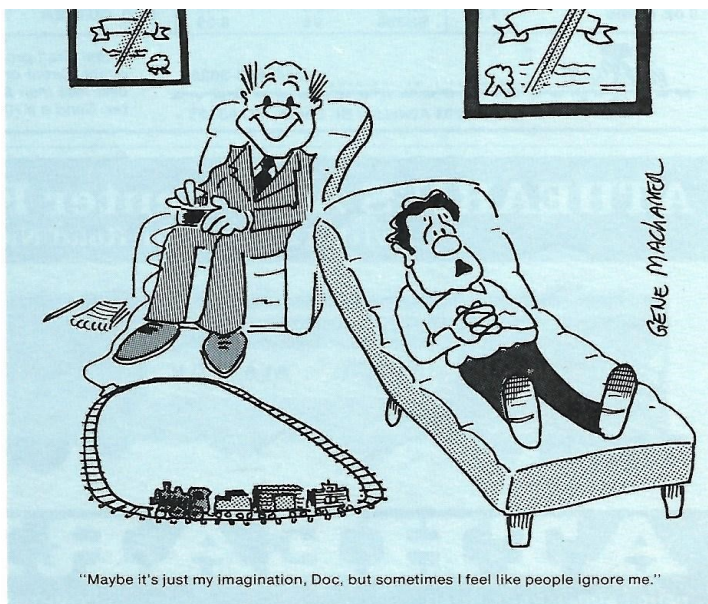
The daisy chain technique is used to assist in trouble shooting communication issues. The LT1 can be placed at the last device and will confirm that all connections are correct on the string of connected devices. Think Christmas lights. As handy as the LT1 is for cable testing, it should not be left connected when trying to operate the layout.

As our discussion grows over the months, we will build on how the loconet is instrumental in enabling us to operate in DCC.

For the full technical loconet specification, please see the 15 page specification at:  
<https://www.digitrax.com/static/apps/cms/media/documents/loconet/loconetpersonaledition.pdf>.

Stay well!

Remember, one-on-one DCC training is always available, so let us know. We are here to help. We welcome your interest and comments. Feel free to contact either Paul Falk (pfalk1@gmail.com) or Art Landrigan (arcy22tn@gmail.com with questions, comments, or ideas.



## Important Dates in Railroad History

*From NMRA calendar*

- 6/1/1982 - Norfolk & Western and Southern Railway consolidated as Norfolk Southern Corporation
- 6/13/1919 - Canadian National Railways incorporated
- 6/26/1964 - Bay Area Rapid Transit (BART) begins construction
- 6/30/1977 - Last regular RPO service in the U.S. ends

# Ties and Rails Calendar

Tennessee Central Railway Museum, 220 Willow Street, Nashville, TN has numerous excursions throughout the year as listed in the calendar. Contact them at 615-241-0436 for specific information regarding any trip.

<b>June 2020</b>	<b>Clean Up</b>	<b>Club</b>	<b>HO/N/Z Scales</b>
5/31-6/8/20	G Gauge Conv.	Gaylord Opryland Resort, Nashville, TN	<b>Rescheduled for 5/30/21 to 6/5/21</b>
6/1/20	Ops Session	Club	4:00 PM
6/4/20	Marketing Mtg.	Club	<b>CANCELLED</b>
6/8/20	BOD Meeting	Club	4:30 PM
6/8/20	Member Mtg.	Suite 112, Crossville Outlet Center	6:00 PM
6/19,20/20	NMRA Conv.	Cartersville, GA	<b>CANCELLED</b>
6/20/20	Train Trip	220 Willow St., Nashville, TN	Baxter—DelMonaco Winery Excursion
<b>July 2020</b>	<b>Clean Up</b>	<b>Club</b>	<b>O/G Scales</b>
7/6/20	HO Meeting	Suite 112, Crossville Outlet Center	10:00 AM
7/9/20	Marketing Mtg.	Club	4:00 PM
7/11/20	Train Trip	220 Willow St., Nashville, TN	Murder Mystery to Watertown
7/13/20	BOD Meeting	Club	4:30 PM
7/13/20	Member Mtg.	Suite 112. Crossville Outlet Center	6:00 PM
<b>August 2020</b>	<b>Clean Up</b>	<b>Club</b>	<b>HO/N/Z Scales</b>
8/3/20	Ops Session	Club	4:00 PM
8/6/20	Marketing Mtg.	Club	4:00 PM
8/10/20	Club Picnic	tba	Tba
8/15/20	Train Trip	220 Willow St., Nashville, TN	DelMonaco Winery Trip to Baxter
8/24-29/20	County Fair	Fairgrounds	Varies