



THE SIGNAL BRIDGE

NEWSLETTER OF THE MOUNTAIN EMPIRE MODEL RAILROADERS CLUB

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LOCATION

ETSU Campus
George L. Carter
Railroad Museum

HOURS

Business Meetings are held the 3rd Tuesday of each month. Meetings start at 6:30 PM in:

Brown Hall
Room 312

ETSU Campus,
Johnson City, TN.

Open House for viewing every Saturday from 10:00 am until 3:00 pm.

Work Nights are held each Thursday from 4:00 pm until ??

PORTER # 1

GEORGIA STATE RAILROAD MUSEUM, SAVANNAH, GA.

Photos courtesy of Ted Bleck-Doran





Georgia State Railroad Museum No. 10 – A Davenport Locomotive product

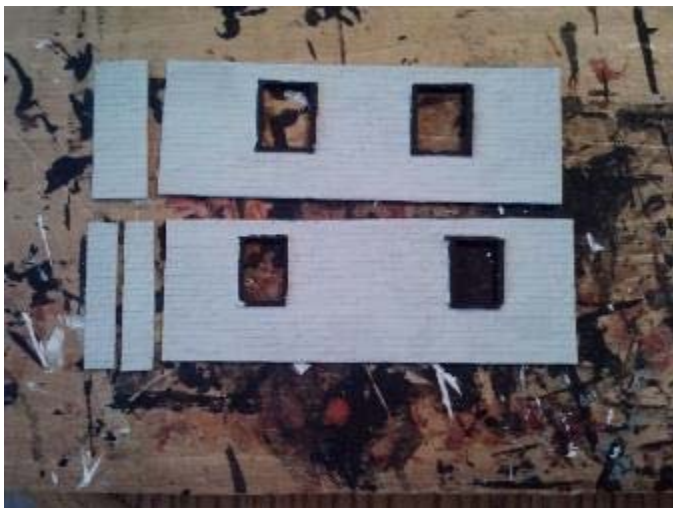


Central of Georgia Railway locomotive no. 223 in front of the roundhouse at the Georgia State Railroad Museum (Roundhouse Railroad Museum), Savannah, Georgia, USA. The roundhouse is part of the CG Savannah Shops Complex, built in 1853. The locomotive is a Baldwin C-3 class 2-8-0, built 1907, retired from service in 1952.

MODELING A PURE GAS STATION
PART 4: FINISHING TOUCHES
 ADDING DOORS, INTERIOR, AND DETAILS
 By Ted Bleck-Doran



This month we pick up the Pure Gas Station construction project where we left off in the March issue of *THE SIGNAL BRIDGE*. To recap, **Part 1** described the research and fabrication of the basic shell for the service station; **Part 2** looked at making the roof sections adding interior walls, and painting the structure; **Part 3** recounted the steps in preparing the details for the interior and exterior portions of the station. **Part 4** will complete the step by step descriptions needed to complete the model: adding the interior walls, fabricating the doors for the service bays, and positioning the details, **Part 5** will focus on adding interior lighting,



STEP 21:
 In order to keep interior lighting to “bleed” through the thin styrene sheeting I measure and cut out wall sections for the

interior. Since the interior would be visible these sections would not only block the lights from shining through the walls but also give a more finished appearance to the interior.



Sections needed included:

- Full back and side walls for the service bay
- Partial side wall extension for the common wall in the service bay
- 3 sections to fit between the service bay doors
- Front, rear, and common wall for the office wing
- 2 sections for the chimney wall in the office.

NOTE:
Windows were given a finished look by applying “L” shaped styrene shaped molding for framing. Doors were installed double-sided.



STEP 22:
 Once the wall sections were cut and test fitted to their respective positions. I painted the sections and applies

some advertising posters to create some “eye-candy” creating visual points of interest.



Period posters were selected from several JL Innovative Design poster collections I had in stock. Advertising for batteries, spark plugs, and tires seemed appropriate for a service station. I shied away from oil and gas product advertising since there were no Pure Oil posters available in the sets of posters I had available.

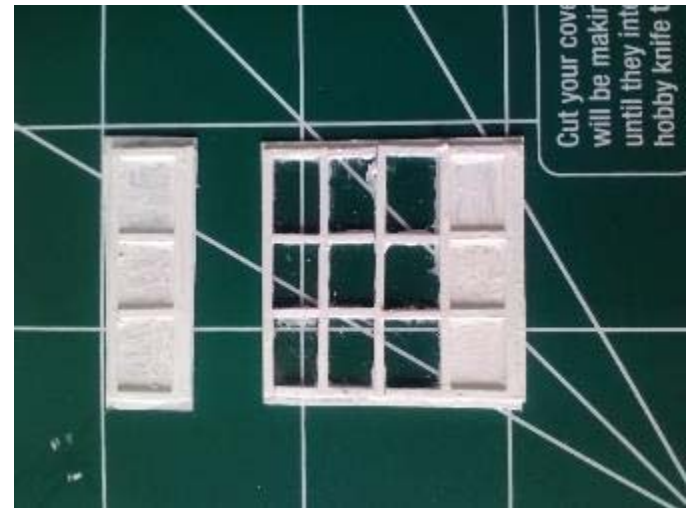


STEP 23:
With the posters in place I glued the wall sections in place. The interior scenes were starting to take shape.



STEP 24:
With the interior walls in place I turned to the task of making the service bay doors. Several of the existing Pure Stations retained what appeared to be their original segmented lift-style garage doors. These included sections with glass pane panels to allow for more light to enter the bays.

I started by cutting to size a full door from clear plastic stock. I then framed the panels using scale 1"x4" styrene stock. I wanted one door to be partially open so for the second doorway I cut and framed only a single door section to represent the bottom section of the door.



STEP 25
Once the doors panels were framed I applied a coat of white paint to the trim and bottom section panels as shown above. This gave the effect of the bottom quarter section as being constructed with solid panels and the other panels having been finished with glass panels. The see-through effect is worth the extra time and effort.



STEP 26

I then positioned the garage details in the service bays using a trial and error method. I thought the one bay would be dedicated to tire installations and light repairs which would not require the use of the lift. The far bay, given the high peaked roof would receive the hydraulic lift and equipment associated with jobs requiring the mechanic to work from beneath the vehicle.



When I came up with a satisfactory layout of the detail parts I proceeded to glue the parts in place. I again used **Tacky Glue** since it has a slower setting time than CA type glues and dries clear.



STEP 27

To check the placement I took several photos through the doors to the bays. I think you'll agree that the service bays look suitably cluttered but functional for a busy service station.



STEP 28

Moving on the store-yard behind the service station, I first laid down a base coat of ground foam. I applied a coating of Arlene's **Tacky Glue** spreading it evenly across the styrene base. I then sprinkled a neutral color ground foam across the surface of the glue and spread the foam as evenly as possible. I allowed the glue to dry before layering other colors of foam to create a variation of hues to the dirt, grass and weeds in the back lot.



STEP 29

Tacky Glue bonds well with the styrene base and allowed me to add additional scenic effects using white scenery cement and wetting solution. In this step I've added additional

ground foam colors, used a wetting solution and applied dilute scenic cement.



STEP 30

After allowing the scenic cement to dry for 24 hours. I positioned the junk details and glued them in place in the store-yard. Again I used Arlene's **Tacky Glue** to place the detail castings.



Here's ground level view of the yard. I left a bare walkway to the service bay door and clustered the scrap piles in the higher ground cover.

STEP 31

I used a section of **Blair Line's** wooden fencing to provide a border along the store-yard. Following some of the model's tips I assembled to fencing, distressing a board of two. While the Service Station has received a fresh coat of white wash. I wanted the fence to appear slightly worn. After assembling the section I applied a wash of dilute white acrylic. The wash was applied in several coats until the desired level of weathering was achieved. I wanted the fence to have a weather-worn-haven't-seen-paint-for-awhile look. The fence was then glued in place establishing the border for the yard.



The assembled fencing from the back side



Here the fence has received several washes of white



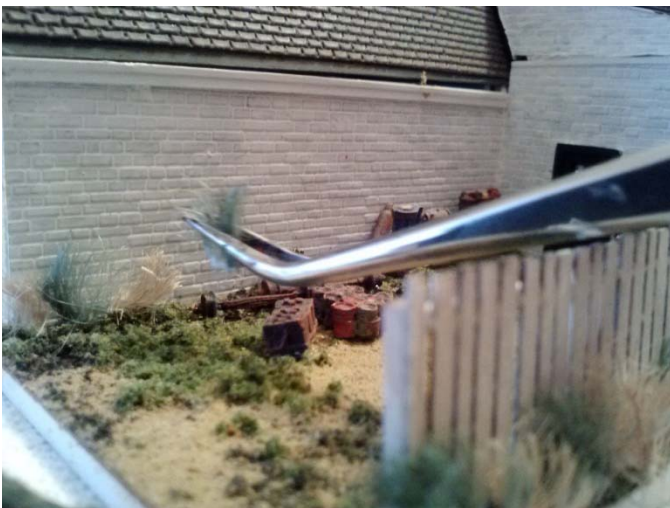
The fence has been installed setting off the store-yard scene



Patches of weeds and tall grass can be made with hemp twine

STEP 32

An inexpensive way to simulate weeds and tall grass is to use hemp twine available in craft stores such as **Michael's**. Be sure to use hemp twine since the fibers are easily cut and separated. I use both natural colored twine and some that was dyed green. I cut the intensity of the green dyed twine by spraying a strand with dilute bleach and allowing the strand to dry overnight on a paper towel. I then cut the strand into 1/4" to 3/8" segments and separated the fibers. I then mixed fibers together from dyed, bleached, and natural strands.



STEP 33

The final step in this issue's serial on modeling a Pure Oil service station is to grow some weeds in the store yard and along the fence. It was a simple but repetitive process of taking a cut strand of twine, spreading the fibers while holding the strand with tweezers. Dip the strand in a puddle of scenery cement (e.g., **Elmer's**). Then place the tuft of fibers in the desired location. To set the tuft gently press the tuft down with a finger. Be sure to vary the color of the tufts to make a random pattern of dry and green weeds.



Norfolk Southern 8841 and 8874, both GE Dash 9-40C's, lead a trio of units hauling freight through Jonesborough with the first signs of spring in the air.



Norfolk Southern 8853, a GE Dash 9-40C, heads northbound out of Jonesborough TN on a foggy spring day



Variety is where you find it even in the most mundane intermodal container freight

BUILDING SHELL CREEK
DEVELOPING A VILLAGE ALONG THE ET&WNC RY



Working from photographs and measurements from the field, Fred Alsop is recreating the Larkin residence in miniature.



Here is street side view of the General Store in Shell Creek



Fred ponders the next step in building the Larkin residence in styrene



The finished Larkin House... Fred has captured the feel of the building with all its corners and peaked roofs



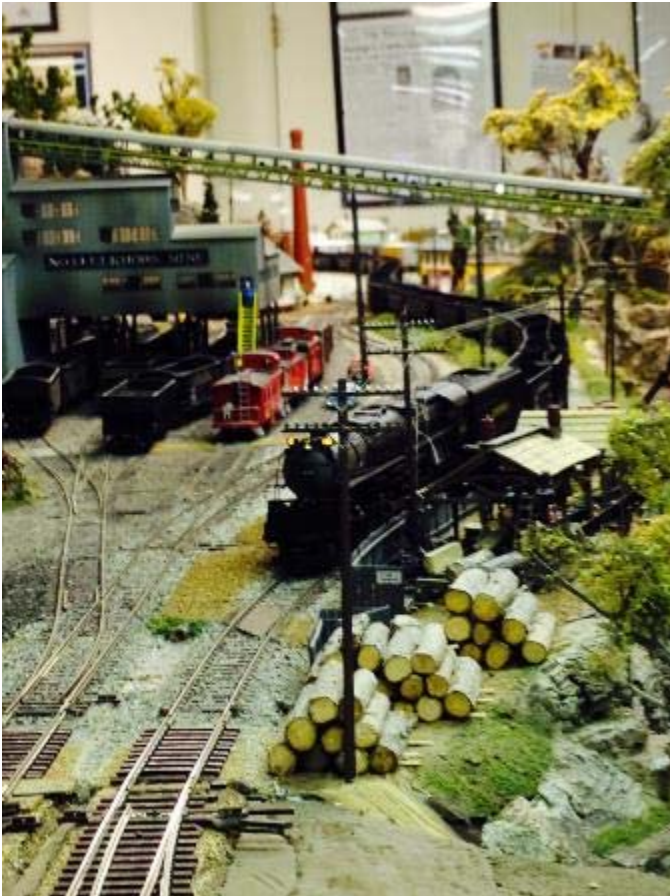
A close up of the Larkin House



Another Shell Creek residence us well allong

FEBRUARY HERTIAGE DAYS
APPPALACHIAN COAL HAULERS IN ACTION

Photos by Paul Haynes



February MEMRR Heritage Days featured Coal Haulers – Here's Paul Haynes' Challenger passing the Elkhorn Mine



Another look at Paul's Challenger in action.



Lumber in the foreground – big steam in the background – could there be better railroading than this?



Big steam – heavy hauls were evident throughout the operating session... here' a meet of two behemoths at Elkhorn



A pilot shot from down low – an ideal perspective to take in steam at it level best

**FIVE YEARS RUNNING, STEAM'S UP
AT THE CARTER RAILROAD MUSEUM
ON MARCH 28
NATIONALLY-RECOGNIZED ETSU
FACILITY TO AGAIN FEATURE A HERITAGE
DAY OF
MODEL STEAM LOCOMOTIVES IN
ACTION FOR 2015**

The 5th Annual STEAM UP has scheduled for the last Saturday of this month, March 28, at the George L. Carter Railroad Museum located in the Campus Center Building of East Tennessee State University. Following up one of the most popular program of the last four seasons, the traditional date has been carried over to again enjoy the sounds and sights of the steam locomotive. Members of the George L. Carter Chapter of the National Railway Historical Society and the Mountain Empire Model Railroaders club intend to 'pull back the throttle and let er' roll' to again give attendees a real look at how these trains operated.

For decades, the steam locomotive reigned supreme in railroading worldwide. Often referred to as an 'iron horse' due to its unique smells, sounds, and visible motion, the most advanced examples had no problem topping 100 mph when needed. By the Second World War, however, ongoing development of the internal combustion diesel platform began to make serious inroads. After all, like real horse, steam engines needed care and maintenance. They required a literal army of pipe-fitters, boiler-makers, experience machinists, and other skilled labor. Perhaps like the work horses displaced by trucks, steam locomotion was nearly completely gone by 1960, though its design is still widely associated with railroading to this day.

"Some people feel that steam railroading was almost romantic, with the engine's inherent sounds and motion akin to an organic being, despite being hulking machines," says Geoff Stunkard, the coordinator of the Heritage Days program. "Now five years running, our Annual Steam UP! event was created to give people an idea of how that equipment was used, some of its technical evolution and its finest hours in miniature form. This day that should be fun for anyone who recalls that era, even if it was before they were born."

Steam trains of all sorts will be prominently displayed and operated on the large 1:87 HO scale layout that is housed in the museum, which includes a 21-stall steam-era roundhouse. Demonstrations of various engine designs in electric model form will give the public an idea of how varied these machines were. Children will have a chance to play

with models of popular engines like Thomas and James in the museum's special children's activity room.

The Carter Railroad Museum is open on Saturdays from 10:00 AM to 3:00 PM, and includes model railroad layouts, a special child's activity room, and ongoing programs. There is no admission fee but donations are welcome for its upkeep. The museum is also seeking artifacts for display, including the newest addition dedicated to the long-defunct, but well-remembered 'Tweetsie' line, the East Tennessee & Western North Carolina Railroad; this room, still under construction, again will be open for guided tours during event days.

In addition to the displays, there is also a growing research library, the National Railway Historical Society chapter, membership opportunities, and an oral history archive being established as part of the museum's programs. Info can be found online at

<http://etsu>

or

<http://johnsonsddepot.com/glcarter/cartermuseum.htm>

The Mountain Empire Model Railroaders (MEMRR) works in conjunction with the museum to demonstrate and maintain the model layouts, museum exhibits and other projects. More info can be found at <http://www.memrr.org>. Membership opportunities are available to adults, and include special benefits and model railroading enjoyment.

The George L. Carter Railroad Museum is located on the campus of East Tennessee State University, Campus Center Building, 176 Ross Drive. The entrance door is adjacent to the flashing RR crossbuck; for more information contact the Museum Director, Dr. Fred Alsop, at telephone 423/439-6838 or by email at

alsopf@mail.etsu.edu.

**2015 Dates to Remember: George L Carter
Railroad Museum**

March 28:	5th Annual STEAM-UP
April 25:	Song of the South: Southern Railway Heritage
May 30:	Modern Railroads: Moving Mass in the 21st Century
June 26-28:	ET&WNC RR Historical Society National Convention
June 27:	For Power and Glory: Passenger Trains of Yesterday and Today SPECIAL: Second section of Walker china collection debuts

July 25:	Go West, Young Man – Big Country Railroad west of the Mississippi	HarvestFest for Little Engineers
August 29:	Little Engines that Could: Industrial and Shortline Rail Operations	November 14: Homecoming at Carter’s Place – 8th Anniversary
September 26:	ChiTown – Midwestern Lines and the Windy City	November 28: Precision Transportation: N&W and NS Glory
October 31:	George L Carter’s Fabulous Clinchfield Lines;	December 19: Home For Christmas: Railroadng in the Cold Weather States

**IN MEMORIUM
JACK COPE**



Mr. Cope was a life-time Master Gardener, a member of the Southern Appalachian Plant Society, and a member of the Watauga Valley Chapter of the National Railroad Historical Society where he worked as a member of the mechanical crew.

Survivors include his wife of 62 years, Jeanne Cope, Jonesborough; son, Charles Douglas Cope, California; daughter-in-law, Carolyn Cope, West Virginia; granddaughters Corinna and Delilah, California, and cousin Walter Cope, South Carolina.

A memorial service will be held at a later date to be announced.

In lieu of flowers, Jack requested donations be made to the George L. Carter Railroad Museum, P.O. Box 70703, Johnson City, TN 37614, on the campus of East Tennessee State University. Condolences may be sent to the Cope family online at www.dillow-taylor.com. Dillow-Taylor Funeral Home & Cremation Services, Jonesborough, 753-3821

Jack Cope

JONESBOROUGH

Mr. Jack Cope, age 86, Jonesborough, passed away Wednesday, April 1, 2015, at the Johnson City Medical Center.

Mr. Cope was born in Sylva, North Carolina, and is the son of the late Dillard and Hattie Grace Sherrill Cope. He was preceded in death by his son, Robert Michael Cope.

Mr. Cope was a United States Army veteran and was wounded in Korea. He retired from General Telephone Company in Florida, where he was a supervisor of telephone equipment installers.

The memorial service for Jack Cope will be held at Jonesborough Presbyterian Church on Thursday, April 23 at 2:00pm. A reception in the fellowship hall afterward is possible, but nothing has been planned.

**MOUNTAIN EMPIRE MODEL
RAILROADERS
MINUTES FOR THE MARCH 2015
BUSINESS MEETING**

The meeting was called to order by club president, Fred Alsop at 6:30 p.m. with 22 members and 1 visitor in attendance.

Officers Reports:

Secretary:

Debbi Edwards reported that the February meeting minutes were published in the March Signal Bridge. She then made a motion to accept the minutes as published and the motion passed.

Newsletter Editor:

Ted Bleck-Doran reported that the Signal Bridge has 24 pages this month and 24 pages next month. He thanked all the members for their contributions.

Treasurer:

Gary Emmert reported that the club had more income from dues being paid and had expenses for the RIP track.

Webmaster:

John Edwards reported that the mailing list is now up to date and messages are going out in a timely manner.

Vice President:

John Carter reported that there will be no program tonight due to the length of the by-laws committee report. There is no program currently scheduled for the April meeting. May’s program will be Key trains by Gary Emmert.

Fred thanked members for their hard work in keeping the museum running in his absence.

Announcements:

- 1) Birthday parties are a lot of work and thank you to all members who help make them happen. Danielle and

Fred are in the process of fine tuning the planning of birthday parties.

- 2) Copies of the HOn3 Annual are for sale, for \$20 each. Our Tweetsie layout is featured in the magazine (photos & article by Geoff Stunkard) along with 2 articles from Johnny Graybeal.
- 3) Jonesborough museum update: the contract has received approval from all necessary parties at ETSU and is in the hands of Jonesborough for approval. This is a very time consuming process. Will keep membership apprised as the project moves forward.
- 4) Circus Day in the Little Engineers room is March 21st.
- 5) Robert Majors Jr. sent a letter to Fred Alsop regarding railroad memorabilia that he would like to donate to the museum. He will be in town the last week in March and would also like to visit the museum.

Old Business:

- 1) The next planned learning session will be announced.
- 2) Spring Fling is March 20th at 6p.m. at the Black Olive Restaurant in Jonesborough. Jim Pahriss sold the last 3 tickets during tonight's meeting. There were a total of 40 tickets sold.
- 3) This year's rail excursion is June 13th to Knoxville. Information will be sent out via email to members and previous attendee's. Tickets are \$95 for adults and \$80 for children 3-12 yrs old. We have 160 seats available. There will be a press release with a cut- off date of May 31st.
- 4) We are putting together an operational tutorial with a operations checklist. If you have an idea that you feel should be included contact John Edwards or one of the other members working on it.
- 5) We are out of the old club brochures. Geoff Stunkard is working on our new brochures. If you have any ideas for the brochure contact Geoff.
- 6) John Carter spoke to Frank Fezzie regarding the electronics ordered for the main layout and the Tweetsie layout. The order should arrive at anytime. If anyone needs anything please see John.

New Business:

- 1) April 28th is our 5th Annual Steam Up. We will be celebrating coal and steam.
- 2) John Carter stated that the Coordinators Meeting notes will be published in the Signal Bridge.

3) Upcoming Events:

- a. There will be an Appalachian Studies conference on campus on March 27. They would like to tour the museum. Fred Alsop asked for volunteers so that the museum could be open.
- b. Imagine Johnson City is requesting a display and volunteers representing the club and museum for April 3rd. They will also try to interview people who have stories regarding earlier days in Johnson City. Caroline Gregg will be there to see if there will be any railroad interviews that she can get. At this time the location is unknown.
- c. Blue Plum Festival is June 5th – June 7th . We will probably do as we did last year with the Cope Layout. This is a great opportunity to inform the public about our club and the museum. We hope to have the new brochures available for this event. Dean Small has been working on the Cope Layout and is doing a great job. If you would like to help work on the layout, see Dean Small.
- d. Amanda Kelly is involved with the YMCA Summer Camp program and would like to bring approximately 140 kids (in shifts) to visit the museum on Thursday, June 18th. By a show of hands there were enough volunteers available on that day so Fred Alsop will make the necessary arrangements.
- e. For the 2nd consecutive year ET&WNC Railroad Historical Society convention will be in Johnson City, June 26th to June 28th at the Carnegie. Fred stated that it is a great organization, one that MEMRR members should consider joining.
- f. Jonesborough Days is July 3rd and 4th. Jim Pahriss is going to see if he can get us space in the Visitors Center once again. We will have the Cope Layout running and are in need of volunteers.
- g. Gary Emmert stated that we now have current pricing for club shirts. There is a nice variety available. Please see Gary Emmert for ordering info.
- h. John Carter informed the club that the Kingsport Railfan Association has an upcoming meeting and would like to have it here. Fred said that we will need volunteers for this event. There were no objections to hosting this event. More details (date, etc) to come.
- i. Mike Buster talked to Marian Bankus. She will be in town in May to visit the museum. She had 1 request – Please get the dust off the trees (on the Bankus Layout).

- 4) Fred Alsop then called for volunteers.
- 5) The next meeting is April 21st at 6:30.

Club president, Fred Alsop then turned the meeting over to Ted Bleck-Doran (Chair of the Bylaws Committee). After lengthy discussion the Article XII revisions were tabled,

awaiting further revisions. The amended materials will be published in the April Signal Bridge for members to review.

Jim Pahrns moved to adjourn the meeting at 9:25. Motion passed.

Respectfully submitted
Debi Edwards, Secretary MEMRR

KEEPING UP WITH THE PROTOTYPE **SOME NEWS UPDATES YOU CAN USE**

NORFOLK SOUTHERN SWAPS SD40-2 TO CSX FOR SD80MACS



CSX SD80MACs TO WEAR ns PAINT SOON

CHATTANOOGA – Norfolk Southern has completed a swap with CSX Transportation, trading a number SD40-2s for the remaining CSX SD80MACs. NS swapped 12 SD40-2 locomotives to CSX for its 12 SD80MACs. The deal reunites all active SD80MACs built on the NS roster, bringing the total number to 29. CSX SD80MAC No. 4594, the only SD80MAC to be retired and scrapped so far, was not included in the trade.

Norfolk Southern plans to repaint and place in service a number of the SD80MACs at Chattanooga this spring that only require minor mechanical work or upgrades. Any SD80MACs requiring more extensive work will move to the railroad's Juniata Shops in Altoona, Pa., for shopping and new paint prior to being released for service. Road numbers for the new locomotives will be NS Nos. 7217-7228.

Locomotives involved are CSX SD80MACs Nos. 4590-4593, and 4595-4602, and NS SD40-2s Nos. 3425-3427, 3430, 3432, 3433, 3438, 3439, 3440, 3443, 3446, and 3447. Conrail was the sole purchaser of the SD80MAC model from EMD, ordering 30 in the mid-1990s. During the Conrail breakup, Norfolk Southern received 17 units and CSX received 13.

NORFOLK & WESTERN 611 IS FIRED UP:



N&W 611 on the turntable at Spence NC

SPENCER, N.C. – The sight of smoke rising from the stack of Norfolk & Western Class J No. 611 filled the Carolina blue skies on March 31 at the North Carolina Transportation Museum as the famous 4-8-4 saw its first test fire after restoration. This marks the first time the engine has been in steam since Dec. 7, 1994. Crews started the process of bringing the engine back to life about 6:30 a.m. Eastern time. A switcher towed the engine out of the Bob Julian Roundhouse and placed it on a track beside the 1924 structure, close to a source of coal and compressed air. By 11 a.m. Eastern time, the process was going smoothly with no complications, all gauges working and a half glass of water on the gauge. By 3:40 p.m., crews built up 150 pounds of steam pressure in the boiler: halfway to operating pressure. "The restoration is expected to go fast and smooth from here," says *FireUp 611!* organization volunteer coordinator Cheri George. Norfolk & Western 4-8-4 No. 611 is in the home stretch of its restoration after a successful test fire after repairs began last May 29. The locomotive was fired all day and achieved its maximum working boiler pressure of 300 psi. The crew opened the throttle to blow out the ports on the pistons and valves and took the opportunity to celebrate by blowing a Class J Hancock three-chime long-bell whistle. A few minor pipefitting leaks were noted, but otherwise the steam test was a success. The safety valves will be set at the next fire up. Meanwhile the tender is getting painting and lettering. "We're ready for insulation next," Fire Up 611! Chief Mechanical Officer Scott

Lindsay tells Trains News Wire. "The test was a success from every aspect." The locomotive will mark its 65th birthday next month. It is expected that the locomotive will return under its own power to its home at the Virginia Museum of Transportation and pull excursions on Norfolk Southern in 2015, although a timetable for this and a schedule have not been set. Restoration work on No. 611 began in June 2014. Trains Magazine will provide comprehensive coverage of the return to steam with a special magazine, 611 in Steam, available in July and with a DVD available in October. (Above from Trainsnewsire.com March 31)

NORFOLK SOUTHERN RAILWAY TO ROLL OUT MODIFIED GE LOCOMOTIVE MODEL AS PART OF MULTI-YEAR REBUILD PROGRAM



NS will convert its GE Dash-8 40CWs to Dash-8.5s in upgrade program

Norfolk Southern Railway long has aimed to reduce locomotive fleet costs and increase motive-power efficiency by rebuilding and redeveloping its yard and local switchers. Now, the Class I is trying to apply its rebuilding expertise to GE Transportation road locomotives — and develop a new model in the process. Through a six-year program, NS plans to rebuild 84 GE Dash 8 locomotives that were manufactured in 1989 or 1990, and lack modern electronics and amenities. Pegged to become the railroad's first-ever Dash 8.5 locomotives, the rebuilt units will feature custom wide-body cabs and high-tech engines designed to boost fuel efficiency and reduce air emissions.

About three-fourths of the road fleet are GE models and a rebuild will cost half as much as a new locomotive, according to the Class I. With lower operating costs in mind, Chairman and Chief Executive Officer Wick Moorman several years ago approached the Mechanical Department to determine if expertise gleaned from rebuilding yard and local switchers — including successful transformations of Electro-Motive Diesel locomotives into SD40E units — could carry over to the road fleet, says NS Vice President of Mechanical Don Graab. "We decided that if we could do yard and locals, why not road power?" he says.

The 4,000-horsepower Dash 8.5s will be very similar to Dash 9s, except they won't feature low-weight transfer trucks. The Dash 8.5s will incorporate electronic systems — such as electronic fuel injection — and be configured to wirelessly issue health-status reports, says Graab. The first Dash 8.5 is expected to roll out of the railroad's Roanoke, Va., shop and roll onto a test track sometime in May. NS will need to obtain U.S. Environmental Protection Agency (EPA) approval for the unit's new engine configuration, says Graab.

The Roanoke shop has become a "center for excellence" for the rebuild program and other work performed on GE units, such as engine repairs for Evolution® Series locomotives that were introduced in 2005, he says. NS doesn't enter into maintenance agreements with GE the way other railroads do, preferring instead to maintain its own GE units. The locomotive builder provides parts and guidance, says Graab. "We found it's a lower cost to maintain them ourselves. The feeling was we didn't want to turn over such valued assets to a third party," he says.

The railroad's rebuilding efforts evolved from the GE arrangement, says Graab. To ensure the Roanoke shop is optimally equipped for the program, NS last year installed a \$1 million CNC line-boring machine that's designed to repair engine frames that typically had been scrapped. NS now saves about \$155,000 for each salvaged GE frame. The department also plans to replace bridge cranes at the shop and is considering a drop table, says Graab.

In addition, NS is adding workers at the shop, which employs 276 people. About a dozen recruits were hired in January to assume various positions, such as machinists and electricians. As the program ramps up after tests are conducted and the EPA approval process is completed, the shop will turn out 18 Dash 8.5s per year, says Graab. In the meantime, the department is considering the next potential outgrowth of the rebuild effort: converting motors from DCtraction to AC-traction on a portion of NS' 1,200 Dash 9s. (By *Jeff Stagi*, Managing Editor NS release)



Paul Haynes caught these CSX Trains in Kingsport TN

**COORDINATORS' MEETING
MARCH 2015**

Cope Layout:

Dean Small: The bumper car kit has 12 missing magnets. He contacted Faller and asks for replacements. Waiting on a reply.

Library:

Gary Emmert: No change in the library at this time. There were a couple of books donated.

G-Gauge Layout:

Michael Baker: G scale both are up and running. Will see of Bachman Engines will run in kids room next Thursday.

Secretary:

Debbie Edwards Secretary submitted min for Newsletter concerning Coordinator meeting for February and current cards.

Communication Coordinator:

Position needs to be filled.

N-Scale/Z-Scale Coordinator:

Gary Gilliam: Scale is running. Need to find a home for z-scale.

Newsletter Editor

Ted Bleck-Doran: Newsletter is up and out. By laws committee is ready to report. Major changes are to the membership. Everyone please read prior to next meeting date.

Special Events Coordinator

Jim Perish: Special Events –Spring Fling. Train Excursion to be announced in near future. Sales are good per Gary Emmert.

Display/Heritage Days Coordinator

Geoff Stunkard: No update

Rip-track Coordinator

Jim Hoyt: Rip track is working well and offering clinics is interested.

HO Layout Coordinator

John Cater: HO Scale- Facia has been repaired.

Electrical Coordinator

Frank Fessie is working on track and electronics to assure it is working properly.

Website Coordinators

John Edwards and Bob Jones -Website: Website is up and running.

By-laws Work Group

The new By Laws changes have been emailed to all current members.

*Submitted by:
John Carter*



A street scene on the Cope Layout - the layout will be displayed at several upcoming festivals in the area



Major progress has been made on the Rabetoy portion of the Tweetsie layout - the standard gauge portion is up and running with full automatic signals in place.



Paul Haynes asks: Can any one identify the item pictured above by function and r



A pair of CSX switch units are caught at idle in Kingsport by Paul Haynes



Eastman Chemical has added new tank cars with updated safety features as evidenced by the picture above – photo by Paul Haynes

THE VIEW FROM THE ENGINEERS SIDE OF THE CAB. THE PRESIDENT’S COLUMN FOR APRIL

Spring-like weather has finally arrived and the changes in the out-of-doors are welcome after the cold, ice and snows of winter. There are new stirrings in the MEMRR and at the Carter Railroad Museum. As we look forward to the longer days of the season we are saddened to reflect on the loss of a member and friend with the passing of **Jack Cope**. Jack and Jeanne have long been supporters of the Mountain Empire Model Railroaders, and the railroad museum, and Jack was an active member before his failing health limited his activities including his passion for railroading. His gift of a traveling layout to the club made it possible for us to represent our organizations and our zest for model railroading to the public at many local festivals and events. Jack and Jeanne continued to support the Carter Railroad Museum even upon his death requesting that memorials to him be made to the museum in lieu of flowers. We will use any such funds received to honor his memory and his friendship.

I wish to thank all of you who came to the railroad museum on Friday, March 27th to host the walking tour of the Appalachian Studies Conference. The conference recorded more than 800 attendees, but only 7 joined us for a requested tour of the Carter Railroad Museum! We had more volunteers from the MEMRR and the Carter Chapter NRHS there than we had visitors! I wish to thank you for coming at the request of the university; coming early to find a parking place on a university class day; and for continuing to support the university and the museum with your service. Your efforts are greatly appreciated and there was no way to

predict what the numbers for the turnout for the walking tour of campus would be.

As small as the ASC guest list of visitors to the museum was on Friday the direct opposite was true the following day when we held our Heritage Day Event, the “5th Annual Steam-up”. This Heritage Day event has proved to be one of the most popular of all our special museum train days and we set record numbers of 107 children and grownups in the Little Engineers Room and more than 200 visitors counted in our large gallery. We had people wall-to-wall for most of the day who showed lots of enthusiasm for the miniature steam locomotives and their consists that plied our scale rails during the day. Everyone was tired by the end of the day and none of our members stayed long after the official museum closing time to run their trains on the layout that Saturday. But what a great day it was and what wonderful crowds came to see the layouts and the exhibits. I had to miss most of it because of my involvement in meetings on a floor above the museum as a member of the ET&WNC RR Historical Society’s Board of Directors. We met to finalize plans for the Society’s 27 Annual Convention to be held at the Carnegie Hotel 26-28 June with the Carter Railroad Museum again acting as co-host.

Geoff Stunkard our Heritage Day Coordinator has a favorite local railroad as the planned focus for our next Heritage Day Event on April 25th. when we celebrate **Song of the South—Our Southern Railway Heritage**. Lots of our members have Southern Railway locomotives and consists and they will be the models we will be operating on the club and museum layouts on that date. Please plan to come and help out. Bring your Southern RR green, black and whites and any of the railroad’s memorabilia you may have for display and let’s make a big day of it.

Our **Second Annual Spring Fling** was held on March 20th at the Black Olive Restaurant in Jonesborough, TN and was a

great success with approximately 40 members of the MEMRR and the Carter Chapter NRHS attending. Our thanks are extended to **Jim Pahr** who made the arrangements for us. The food and the fellowship was outstanding and those who attended concurred that this is an event that we should plan for again in 2016. That being the case we are open to suggestions as to where it might take place.

A planned visit to the Carter RR Museum by **Robert** and **Helen Majors** in March resulted in their donating more than \$3,000 worth of railroad diner china, lanterns, railroad paperwork and other collectable railroad memorabilia to the museum. Among the items is a piece of Clinchfield Railroad china and a CRR lantern (both are on display in the Carter RR Cabinet just inside the main gallery doorway), but there are many other pieces of china from southeastern railroads to add to the Walker China Collection now on display. The Majors, who are Raleigh, NC residents, saw a newspaper article on our china collection that was sent to them by a friend back in November 2014 and decided to give part of Robert's large collection of railroad materials to us. We will catalog the collection and display it as we can and have expressed our gratitude to Mr. and Mrs. Majors for their significant gift to us.

The **Carter Chapter NRHS** will be making public announcements about their planned rail excursion slated for 13 June, 2015. Those patrons who have taken previous trips with the chapter have been contacted by email and many have already secured their tickets. Press releases are set for 17 April and I will be a guest on several local television stations to promote the event. This trip proved to be very popular last year and sold out completely and we expect it to do so again this year. The trip includes bus transportation from ETSU, a tour of the Knoxville Locomotive Works steam shop, a steam powered train excursion on the 3 Rivers Rambler Railroad and a luncheon on the paddle-wheeled *Star of Knoxville* as we cruise the Tennessee River. Cost of the trip is \$95 for adults and information is available at the Carter Railroad Museum and on our MEMRR website. The trip is limited to 160 people, the capacity of the train, and we will have exclusive use of both the train and the riverboat. **Get you tickets and get on board before they are all gone!** This is a great trip package!

Ted Bleck-Doran, John Edwards, and Gary Emmert put a lot of work into a new draft of our clubs Bylaws and we had a first reading and tweaking of it at the March meeting. The proposed version with its updates and changes will be printed in the newsletter (this edition) and we will soon be voting on adopting it with these changes as our working club Bylaws. Please read and study the proposed changes and be prepared to vote for or against them as we seek to amend and update our Bylaws as our club continues to grow and evolve. This is the document that our club is governed by and the "rule book" for how we operate as an organization.

Your voice and vote are needed to support this guidebook for our club.

As the season's climate warms and the days lengthen more outdoors activities are planned by our local cities and townships for the public to enjoy. We have been a fixture in such events as the Blue Plum Festival and Jonesborough Days for years now and active participation in them for 2015 is already on the club calendar we planned back in January. Much of what we do is centered around the Cope Traveling Layout and will be so again this year. **Dean Small** has taken on the coordinator-ship of this layout and has been creating some new scenery on the layout's inserts. This is a big job and Dean could use some help with the modeling and the scenery in order to have it looking its best to represent the MEMRR and the Carter Railroad Museum. Please let him know you are willing to help with this phase of the makeover of the layout and give him a hand with this club project. We have more than 100 members in the MEMRR and we need some of you to come work on this club layout in earnest over the next few weeks. This layout represents the club outside of the railroad museum and we need for it to be the best attraction we can make it to show off our considerable skills as model railroaders and to demonstrate the fun of building and operating a model railroad layout.

Work is continuing on a proposed, and club approved, Operations Tutorial Program & Checklist. **John Edwards** has taken the lead on this project with some help from other members. The goal is to create a document that will contain a checklist for each full individual member's use on the complete operations of the club layouts in the large museum gallery. This multiple page brochure will guide the user through all the procedures for opening and closing the museum; for starting up, running and shutting down each of the model train layouts; and will have some troubleshooting information as well. In addition to having the hardcopy program as a ready reference, there will be a checkout procedure, similar to that needed to operate any somewhat complex machinery, that each full member operator will have to work through annually with at club tutor in order to be "certified" to operate the layouts. This should be a win-win situation with each member going through the brief program being confident that they can operate the layout and open and secure the museum without the assistance of others and for the club and the museum the assurance that we have done all we can to increase the skills needed to give members complete access to the museum and everything inside it. The goal is to create in each full member the knowledge and skill level to encourage to you visit the Carter RR Museum any time that you want to and to be able to have fun running your trains and enjoying your hobby without someone's assistance.

Geoff Stunkard and I have been working on a new MEMRR brochure with the necessary information about our model railroad club, a brief club history, contact information, club

operations and meeting locations, the association with the Carter RR Museum and an attached membership application form that can be completed and mailed to the club treasurer. Geoff is updating all the informational materials from our previous brochure and adding new photos. He plans to have a draft of this professional-looking club brochure ready for viewing and comments at the next MEMRR business meeting on April 21st. When the brochure is approved arrangements will be made to approve the cost of the printing and we will soon, thereafter, have them ready for distribution.

The May ETSU Commencement will have our own **Danielle**, our Federal Work Study Student, who has been helping **Taylor** in the Little Engineers Room this year as one of our graduates. Danielle will be moving to New York and we will be looking for another skilled young lady to take her place to help with all the children who think the Little Engineers Room is one of the coolest places to play and make new friends in the area. Please join me in thanking Danielle for her outstanding service to the museum and the area's children over the past 9 months. Danielle, we wish you the very best as you make your transition from student to working adult and congratulations on your successful earning of your college degree.

There are many on-going projects at the Carter Railroad Museum that provide opportunities for you to assist in with your technical and model railroading skills. They also provide the comradery to join with other model railroaders to learn or perfect new skills. Work is still progressing on the MEMRR club HO-scale layout with the design of the diesel and car maintenance area on the movable module in the yard with its service tracks, buildings and transfer table. **John Carter** is the coordinator for that project and he and the other members working on it could use your help. As already mentioned **Dean Small** is coordinating work on the Cope Traveling Layout and we have public show events coming up in June and July during which the layout will be on display. We could use your help in getting it ready to represent us. The Tweetsie Project is still moving along. I have 9 of the 10 scratch-built structures that will represent the little

community of Shell Creek along the ET&WNC RR right-of-way constructed but the project needs lots of hands. **Ken Harmon** is busy constructing great looking miniature trees for this layout by the hundreds and if you want to learn how to create your own trees while helping us build the thousands that will be required for our miniature mountain forests please join Ken and he will get you well on your way. We also need thousands of puffball trees on the mountainsides and several of us can quickly show you how to create them for the layout. The puffball tree construction, and learning how to make them, takes only a few minutes and very little modeling skill, yet they are very important components of the Tweetsie's forested scenery. Talk to me and I'll get you started. **Frank Fezzie, John Edwards,** and **Larry Jackson** can be found working on all of our layouts as our electrical gurus and these fellows can also use your assistance with no special electrical skills required and you can learn a lot about wiring model train layouts and DCC command from them. There are scores of car kits for the Tweetsie that need to be assembled so our little HO_n3 locomotives have something to pull on their 3 foot gauge tracks so if you would care to work on these I can make them available to you. These are not the only opportunities for enjoying the fun of model railroading that exist at the Carter Railroad Museum, but only a listing of a few that are open to you to join in. The first step is up to you. Tell us what you would like to do to help us grow and we will get you involved in it.

We have a great model railroad club a we are doing an outstanding service for the Carter Railroad Museum, East Tennessee State University and the surrounding Tri-Cities community. We continue to improve our own club HO layout while improving the railroad museum that houses it. We have become a Saturday destination for the public and a weekly destination for our members. Listen to the sound of the whistle of the train in the night and dream of all the destinations yet to come.

Fred J. Alsop III
President, Mountain Empire Model Railroaders
Director, George L. Carter Railroad Museum, ETSU

THE ELECTRONICS SHOP

FRANK FEZZIE

Last month, we addresses the importance of having all rails in turnouts properly supplied with track power to prevent the problem of dead rails causing to hesitate and stall as they run over the track. Specifically, we showed how to use electrical switches in Tortoise machines to insure that the rails were powered.

But how can we achieve our goal of no dead rails in turnouts when there no electrical contacts available, typically when no Tortoise or similar machine is used to throw the turnout? There are several possible solutions, depending on the type of turnout being used. But first, again let's take a look at Fig A below and review the terminology of turnouts.

We use the term **turnout** instead of **switch** for this piece of track in order to avoid confusion with an **electrical switch** that turns equipment on and off. The two **stock rails** are the outside rails of the turnout and are continuous from end to end of the turnout. The **switch rails** are the two rails that move when the turnout is **closed**, selecting the straight or **through** route, or **thrown**, selecting

the curving or **diverging** route. The **points** are the ends of the **switch rails** that contact the **stock rails** when the turnout is **thrown or closed**. The **points** are connected together with a **throw bar**. The other end of the switch rails connect to the **closure rails** with pivots or hinges. The **closure rails** run from the **switch rails** to the **toe** of the **frog**, and normally do not move. The **frog** is the section where the rails cross between the **through** and **diverging** routes. The **heel** of the **frog** is made up of the two rails that come together at a point within the **frog**.

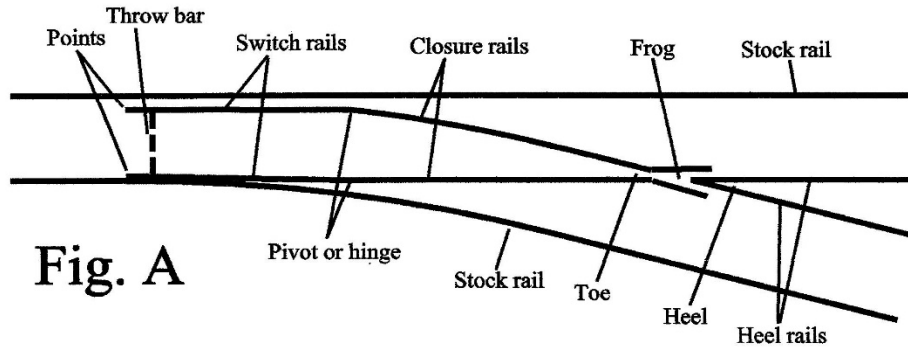


Fig. A

In most commercial turnouts, the entire middle portion consisting of the **switch rails, closure rails, frog, and heel**, receive electrical power from the contact of the **points** with the **stock rail**. This middle portion has to change polarity depending on which way the turnout is thrown, and using the **points** will accomplish this. The problem is that this connection is not reliable, especially in the long run. Oil, dirt, lint, ballast, ballast glue, and oxidation can all accumulate in this area over time. This makes the electrical connection unreliable, leading to dead rails within the turnout, and ongoing maintenance problems to try and keep the points and stock rails clean for good electrical contact. Not every turnout will give problems, but nearly every layout with more than a few turnouts will experience this problem over time.

There are several solutions to this problem when there are no electrical contacts available on the switch machine. Which one is best depends upon whether the **throw bar** metal or plastic, and whether the **frog** metal or plastic.

Let's start with the classic plastic frog turnout, such as the Insulfrog turnout made by Peco. This unit has spring loaded points with a plastic throw bar between the points, and is often used in layouts because the expense of a switch machine can be avoided. This turnout is dependent on contact between the **switch rail** and the **stock rail** to supply power to the **switch rail, closure rail, and the heel rail**. Referring the Fig B below, the fix here is to use feeders or jumpers to connect each **closure rail** with the adjacent **stock rail**, thus guaranteeing that all rails have power and do not depend upon the contact at the points to supply that power. If possible, also add a jumper made from decoder wire beneath the turnout between the **switch rail** and the **closure rail**.

An item to watch for is this. The two closure rails have opposite electrical polarity and get quite close together at the toe of the frog. Similarly, the two heel rails are also opposite polarities and get close together at the heel of the frog. There are sometimes problems with certain wheel sets bridging the gap between the rails and causing a short circuit, stopping the train. I have observed the former in Atlas turnouts and the latter in Peco turnouts. You may need to use a file and increase the width these gaps in certain turnouts.

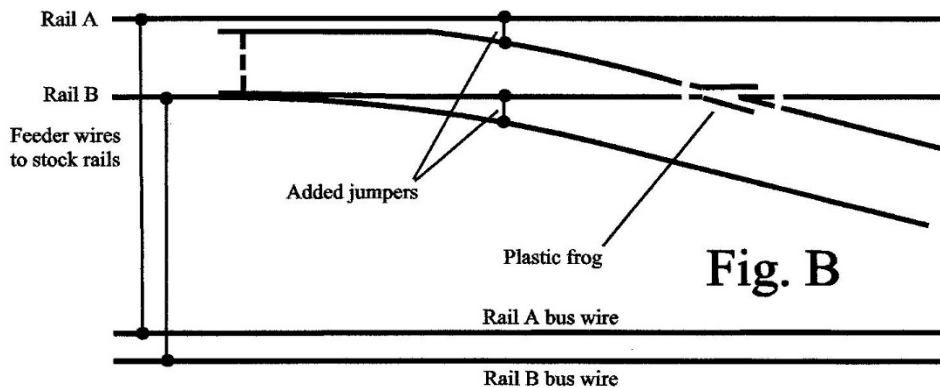
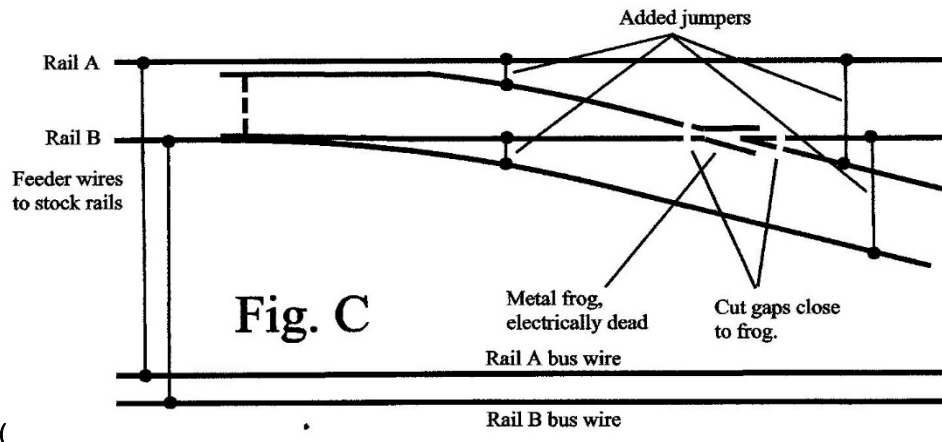


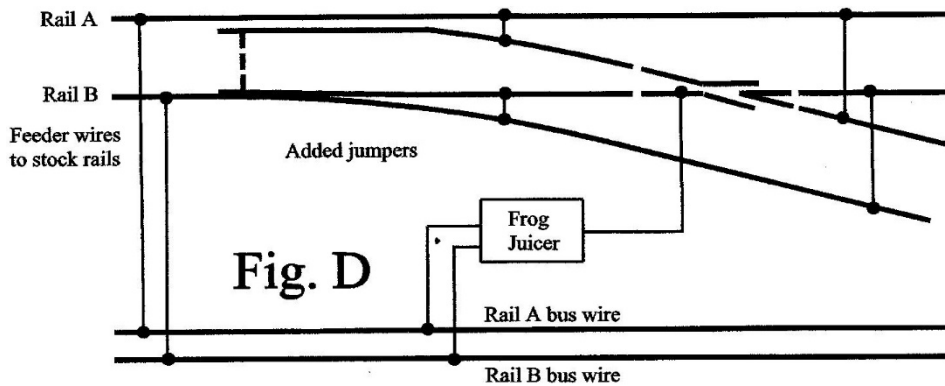
Fig. B

If one is working with turnouts with metal frog and plastic throw bar, such as the Peco Electrofrog, another option presents itself. Referring to Fig C below, isolate the frog by cutting gaps in both rails at the toe end and the heel end of the frog, making the cuts as close to the frog as is practical. Next attach feed wires or jumpers as shown in the diagram and you are ready to go. The frog

remains isolated and electrically dead, so we have effectively turned a metal frog turnout into the same thing as a plastic frog turnout.

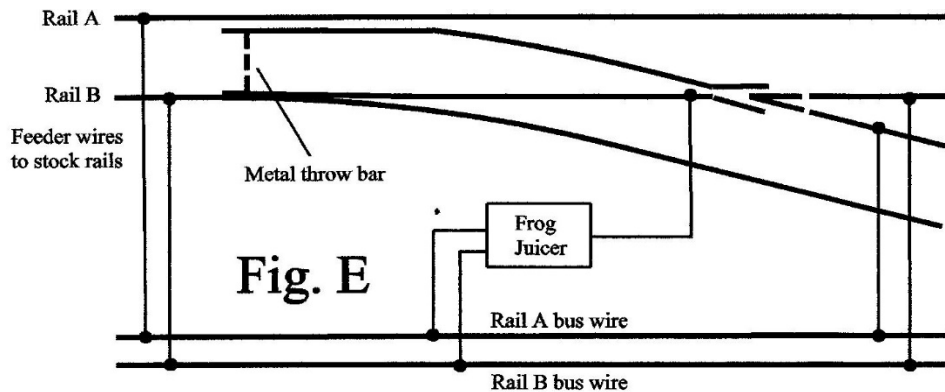


The solution just presented has one big drawback; the frog is electrically dead, thereby eliminating the advantage of having a metal frog. What we need is a device like an autoreverser that can feed power to the frog and correct the polarity to match the position of the points. The Frog Juicer is a DCC device built to do this exact task. If the throw bar on our turnout is plastic, then the best wiring is shown in Fig D.



The Frog Juicer supplies power from one rail to the frog. When an engine hits the frog, if the polarity is wrong then the Frog Juicer detects the resulting short circuit and instantly switches the frog to the other rail, thereby eliminating the short-circuit while maintaining power to the engine.

If the throw bar of the turnout is metal and connects the points together then we have to use the wiring as shown in Fig E below. Here, the Frog Juicer will be supplying power to the frog, closure rails, and switch rails.



Next month I will address questions about bus and feeder wire size and spacing. If you have a question about electronics in model railroading, please send it to me via e-mail at frank@ffweb.info and I will do my best to answer it for you, either directly or in this column.

**MOUNTAIN EMPIRE MODEL RAILROADERS
BYLAWS**

(Final draft perfected March 17, 2015)

Article I.

The name of this organization shall hereafter be known as, MOUNTAIN EMPIRE MODEL RAILROADERS (MEMRR).

Article II.

The officers of this organization shall be elected by popular vote of the membership at the November business meeting each year and retain that office for one calendar year. The officers shall consist of a President, Vice President, Secretary, Treasurer, Newsletter Editor, and Webmaster. Officers shall perform their duties and responsibilities according to those enumerated in APPENDIX A: Duties of the Officers of the Organization

Article III.

Committees shall be drawn from the general membership with appointments made by the president based on interest of the individual members and needs of the club. Committee Chairpersons shall be appointed from Full and Adult Household members. Committee membership may include persons from all membership classifications.

Article IV.

Membership is open to any individual with a sincere interest in model railroading and shall be governed by the duties, rights, responsibilities and obligations as described in Appendix B: Table of Membership Classifications, Dues, Rights, Responsibilities and Obligations. All membership levels include a digitally available copy of the club newsletter known as *The Signal Bridge*.

FULL MEMBER is defined as one who is 18 years of age or older and pays "Full Member" dues as set by the club in Article VIII and is willing to construct or assist with the building and/or operation of one or more modules or layouts which meets the club specifications. ONLY PAID UP FULL MEMBERS will have access to the museum key box.

HOUSEHOLD MEMBER is defined as a FULL MEMBER if 18 years of age or older or as a YOUTH MEMBER if 14 to 17 years of age. HOUSEHOLD MEMBERS shall reside at the same address as the FULL MEMBER. HOUSEHOLD MEMBERS should be interested in model railroading and be willing to support club activities. HOUSEHOLD MEMBERS will have one vote per adult 18 years of age or older.

YOUTH MEMBER is a non-voting member 17 years of age or younger and will be accepted if sponsored by a FULL MEMBER. The FULL MEMBER shall be present and will accept full responsibility, financial and otherwise, for the sponsored youth.

STUDENT MEMBER is a voting member who is a full-time student enrolled in any private or public technical school college or university. Proof of student status is required to establish and maintain student membership.

DISTANT/REMOTE MEMBER resides 100 miles or more from Johnson City and intends to occasionally participate in MEMRR meetings and activities.

EMERITUS MEMBER is one who has been a long time active member who is voted to this lifetime voting status by 2/3's vote of the membership present.

HONORARY MEMBER is one who has been awarded special non-voting membership for outstanding contribution by a non-member. To be established by 2/3's vote and renewed by similar vote at each November meeting.

Article V.

Election of officers and changes to the constitution or bylaws must be announced to the membership no less than one month in advance. Membership will consist of all individuals listed on the official roll kept by the treasurer. Changes to the aforementioned documents of the club will require a vote "in the affirmative" of one more than half the membership voting. Passage of regular business items will require a majority vote of the members present at the meeting when the item is on the floor. Members must be sent notice by email (surface mail should the member not have email access) of special called meetings no less than one week in advance of the proposed "called meeting" date.

Article VI.

The regularly scheduled business meeting of this organization shall be the third Tuesday evening of each month.

Article VII.

These bylaws may be amended by the membership, as deemed necessary, by the process set forth in Article V.

Article VIII.

Each member will pay his or her dues to the treasurer no later than January 31st. At that time non-paid members will be removed from the distribution of the newsletter (herein known as *The Signal Bridge*) with the February edition. An extension may be granted upon approval by the President and the Treasurer. The key box code to the George L. Carter Railroad Museum door is to be changed each February. The dues will be fixed for the next year at the November meeting and published in the minutes of that meeting.

Article IX.

The President may appoint an Audit Committee once a year to audit the books and physical assets of the Treasurer and to count the "cash on hand" kept by the Treasurer. The audit report will take place after the January business meeting and thereby present the incoming administration an accurate and verified base for the new fiscal year to run January 1st to December 31st).

Article X.

All club funds will be kept and maintained by the Treasurer. All expenditures must be submitted to the Treasurer for reimbursement upon receipt of appropriate receipts. Upon termination of this club, all funds remaining will be used to pay outstanding debts. Any club-owned property will be sold and the proceeds, along with any remaining cash funds, will be donated to a 501C3 organization.

Article XI.

This club has been organized and will operate exclusively for the pleasure, education, and recreation of its members. No part of the club's income and/or contributions will accumulate for the benefit of any member.

Article XII.

Unfinished modules shall show substantial improvements in a timely manner. If recommended improvements are not implemented on schedule after advisement from the Executive Committee (officers of the MEMRR), the disposition of the module or modules will be brought to a vote by the membership.

Article XIII.

Each FULL MEMBER is encouraged to work the equivalent of one full Saturday, or two half-day Saturdays, at the current club display venue per month. Each member is to sign up for scheduled operating days and/or special events in advance so adjustments can be made to schedule. Showing up unscheduled with staffing already scheduled is encouraged but will not count towards fulfillment of this commitment.

Article XIV.

Approved expenditures shall not exceed original estimates by more than 10% unless prior approval by the Treasurer and one other executive officer. (Executive officers are: President and Vice President). No expenditures will be reimbursed without receipt and all receipts must be signed and dated by the purchaser.

Article XV.

A hard copy of the club newsletter will be available at an additional fee for duplication and mailing. The additional fee will be established annually

Article XVI.

Pro-rated dues rates for new members who sign up during the year.

Jan. thru Mar. 100%

Apr. thru June 75% (for balance of the current year)

July thru Oct. 50% (for balance of the current year)

Nov. and Dec. 100% (this will include the following year's dues)

APPENDIX A
Duties of the Officers of the Organization

President:

- 1 Prepare meeting agenda and preside over the Monthly Business Meeting.
- 2 Appoint Committees for various tasks as necessary.
- 3 Maintain contact with Train Show operators.
- 4 Prepare a monthly column on club activities and news and submit it to the Newsletter Editor for publication in the "Signal Bridge".
- 5 Assign individuals to specific tasks, i.e., Program Director, Recording Secretary, Specification Librarian, etc.
- 6 Provide contact point for local media, civic organizations and political leaders.
- 7 Is responsible for promotional aspects of the club, i.e., club logo, club brochures, media news releases, etc.

Vice President:

- 1 Assume the duties of the President in his/her absence.
- 2 Is responsible for monthly club programs.

Secretary:

- 1 Take minutes at Monthly Business Meeting and Coordinators' Meeting (a Recording Secretary may be appointed by the President to perform this function).
- 2 Send copies of minutes to newsletter editor.
- 3 Originates official club correspondence (i.e.: thank you cards/letters, condolences/etc.)

Treasurer:

- 1 Maintain club funds and account for same in writing.
- 2 Collect annual club dues from members.
- 3 Prepare monthly financial report (income and expenditures).
- 4 Prepare Annual Financial Report.
- 5 Maintain current Active Membership Roll.
- 6 Order club shirts, caps, patches and other club items

Newsletter Editor:

- 1 Publish and distribute monthly newsletter, "The Signal Bridge".
- 2 E-mail "The Signal Bridge" club newsletter to the Webmaster for distribution in digital format to the membership.

Webmaster:

- 1 Secure and maintain a suitable web host for the MEMRR web site.
(Insure that yearly host fees are paid)
- 2 Design and create MEMRR and George L. Carter Railroad Museum web pages.
- 3 Maintain and update web pages in a timely manner.
- 4 Maintain an E-mail list of all members with computer access.
- 5 Notify all members with computer access of important upcoming club events.
- 6 Once all versions (extra and/or bonus) of "The Signal Bridge" club newsletter are released they will be combined into one monthly edition and then posted on the MEMRR Website in a timely manner.
- 7 Maintain MEMRR E-mail server.

Communications Coordinator

- 1 Identify potential members that come into the museum and give them an overview of the club and the museum.
- 2 Give them a quick tour of the facilities.
- 3 Help prospective members get the proper paperwork filled out to join the club.
- 4 Introduce potential new members to other members of the club
- 5 Once they decide to join, schedule time on Thursday night or Saturday to give them a complete tour and explain the following:
 - a. How the club operates.
 - b. Operational characteristics of each layout
 - c. Explanation of all the facilities and how to use them.

- d. Give them copies of any material available on layout operations.
- e. Insure they get a parking pass and access to the museum.
- 6 Make sure you send them the “Welcome Aboard” survey. Based on their answers, direct them to work with the Coordinator or work group that best meets their interests.
- 7 Attend the Coordinators Meeting, when required, to report on membership interests and programs desired by new members.
- 8 Periodically compile and report the new membership survey results at the monthly General Business Meeting and at least once a year in the Signal Bridge (Was in the process of compiling).
- 9 As requested, contact inactive and former members to try and get them involved back in the activities at the museum and club.
- 10 Mail copies of the Signal Bridge to members who have paid for hard copies of the publication.
- 11 Work to complete any assignments requested by the officers of the club.

RIP Track-Bad Order Coordinator

- 1 Repairs rolling stock to put back into operation.
- 2 Maintains inventory of club owned property (to include rolling stock and motive power) & location of such property.

Librarian

(The following duties shall be performed under the auspices of MEMRR and the George L. Carter Railroad Museum ETSU)

- 1 Receives, inventories, and catalogues all club books, pamphlets and visual media(i.e., video tapes, CDs, DVD, posters, prints, photographs, etc.)
- 2 Shelves, stores, displays and otherwise properly maintains club library collections.
- 3 Circulation and check-out/check-in system for member use of the library collections

Historian

- 1 Maintain the club archives
- 2 Compile and keep a roll of inactive and former members.



APPENDIX B
Table of Membership Classifications, Dues, Rights, Responsibilities and Obligations

MEMBER CLASS	FULL (WITH HOUSEHOLD)	STUDENT	YOUTH	DISTANT REMOTE	EMERITUS	HONORARY
DEFINITIONS	Full membership with rights, privileges and obligations as per below; 18 of age or older; <i>(others residing in the same Household may be enrolled as members for an additional fee for each with FULL member privilege if adult or Youth privileges if under 18 years of age)</i>	College student with proof of enrollment	Ages 17 and younger with Full member providing sponsorship <i>(may be enrolled as part of a Full membership with Household option)</i>	Limited membership; must live more than 100 miles from Johnson City to be eligible	Life time honorary membership upon 2/3 vote of membership	1 yr Honorary membership upon majority vote of membership
DUES	\$30 (+ \$6 each adult/youth)	\$18	\$12	\$12	Free	Free
PRIVILEGES						
<i>Signal Bridge (electronic edition)</i>	YES	YES	YES	YES	YES	YES
<i>Signal Bridge (hard copy edition)</i>	\$24 (\$2/MONTH)	\$24 (\$2/MONTH)	\$24 (\$2/MONTH)	\$24 (\$2/MONTH)	\$24 (\$2/MONTH)	\$24 (\$2/MONTH)
<i>Key box code (24/7 access)</i>	YES	NO	NO	NO	NO	NO
<i>Module ownership</i>	YES	NO	NO	NO	NO	NO
<i>Hold Office</i>	YES	NO	NO	NO	NO	NO
<i>Voting rights</i>	YES Voice and Vote	YES Voice and Vote	NO Voice only	NO Voice only	YES Voice and Vote	NO Voice only
<i>Running rights (General)</i>	YES	YES	YES With Supervision	YES With Supervision	YES With Supervision	YES With Supervision
<i>Running rights (1st Preference)</i>	YES	NO	NO	NO	NO	NO
<i>Supervised access</i>	N/A	YES	YES	YES	YES	YES
<i>Use of work rooms</i>	YES	YES	YES With Supervision	YES	YES	YES
<i>Social Functions</i>	YES	YES	NO Except when invited	YES	YES	YES
<i>Committee Membership</i>	YES	YES	YES	NO	YES	NO
<i>Coordinator Council</i>	YES	YES	NO	NO	NO	NO
RESPONSINILITIES						
<i>Saturday Obligation 1/month -or- 6 hrs/month at special events</i>	YES	NO	NO	NO	NO	NO
NOTES						
	Remains the same	Dues increase	Remains the same	Replaces family/household member	Life time membership for longstanding member with special contribution	1 yr membership to non-member making special contribution

APPENDIX C
History of Amendment and Ratification of Changes

Amended by the general membership 02/20/2001.

Updated 3/21/06 to include approved Amendments of 02/20/2001 and voted changes to bylaws in 2004 by the general membership.

Amended by the general membership 05/16/2006.

Amended to its present form by the general membership 03/18/2008.

Amended to its present form by the general membership 09/18/2012.

