



THE SIGNAL BRIDGE

NEWSLETTER OF THE MOUNTAIN EMPIRE MODEL RAILROADERS CLUB

JUNE 2015 - MEMBERS EDITION

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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 ??

SOUTHERN RY #2594 – GP30 TENNESSEE VALLEY RAILROAD MUSEUM CHATTANOOGA, TENNESSEE

Photos by Ted Bleck-Doran



MAY HERITAGE DAY TO FEATURE HEAVY FREIGHTS MODERN RAILROADING AT ITS BEST AT THE GEORGE K CARTER RAILROAD MUSEUM

JOHNSON CITY (May 21) — East Tennessee State University's George L. Carter Railroad Museum will hold its May Heritage Day on Saturday, May 30, from 10 a.m. to 3 p.m.

The theme for the event is "Modern Railroads: Moving Mass in the 21st Century," and modern trains and equipment currently operating will be featured, including Amtrak, as well as local lines CSX and Norfolk Southern.

"We will maintain a historical focus at the Carter Museum, but his annual May program is a big draw, allowing our volunteers a chance to exhibit today's railroading equipment in scale form," says Geoff Stunkard, the museum's Heritage Day coordinator. "Our younger visitors and club members really identify with the modern railroads, and this gives people a chance to see some of the same trains they might have even watched pass by on their way here."

Modern technologies and corporate development have created a handful of 'super railroads' that now handle a majority of the nation's rail service. Moreover, responsible environmental changes resulted in increased power and capacity for those lines, making today's trains some of the most impressive in history. Various freight cars in use today allow more material to be hauled quicker and easier, while modern passenger travel is moving people at faster speeds.

NC&StL RY 2015 Reunion Attending an Historical or Preservation Meeting Can Be Rewarding

The Nashville Chattanooga & St. Louis Railway Preservation Society holds its Reunion convention the third Sunday each May. A site located along the former right-of-way of the "Dixie Line" is selected and fans of this fallen flag gather to swap information, tales and stories of the line's storied history.

The 2015 Reunion was no different from those held over the past several years. Hosted by the Tennessee Valley Railroad and Museum in Chattanooga, 50 railfans gathered in the former NMRA building on the TVRR grounds. Highlights included a night photo shoot featuring SRY 4501 steam engine, a backshop tour, a ride on the TVRR from Chattanooga to Chickamauga Junction, two presentations (the first on modeling NC&StL equipment, the second on Civil War era railroading from the Southern perspective), and memories of NC&StL operations, by a retired NC&StL

Members of the George L. Carter Chapter of the National Railway Historical Society and the Mountain Empire Model Railroaders (MEMRR) club will coordinate the exhibits.

Visit www.memrr.org to learn more about MEMRR, which helps demonstrate and maintain the model layouts, museum exhibits and other projects.

The Carter Railroad Museum is open every Saturday from 10 a.m. to 3 p.m. Admission is free, but donations are welcomed. The museum can be identified by a flashing railroad crossing signal at the back entrance to the Campus Center Building. Visitors should enter ETSU's campus from State of Franklin Road onto Jack Vest Drive and continue east to 176 Ross Drive, adjacent to the flashing RR crossing sign.

The museum is in the process of creating a scale replica of the Tweetsie line in a 1,300-square-foot display hall. Visitors may view this work-in-progress exhibit.

To learn more about the museum, visit <http://johnsonsdepot.com/glcarter/cartermuseum>.

For more information about Heritage Day, contact
Dr. Fred Alsop, museum director,
at
423-439-6838
or
alsopf@etsu.edu.

For disability accommodations, call the ETSU Office of Disability Services at 423-439-8346.

dispatcher, Mark Womack. There was even time to sightsee around Chattanooga including the railroad themed hotel the Chattanooga Choo-Choo and a ride on the Incline Railway to the top of Lookout Mountain.

What follows are a few photos depicting the Reunion's activities and displays. If your favorite road has an associated historical or preservation society which holds gatherings, it would be a great opportunity to gather information, meet other railfans, and build new friendships.



Part of Tom Knowles NC&StL Locomotive collection – foreground is 2-8-0 #407 with lightly modified Vanderbilt tender and boiler with a typical NC&StL capped stack.



A pair of "Dixie's" (NC&StL Ry never ran a "Northern" 4-8-4 during its existence!) - in the foreground is glider 576, also known as a "yellow stripe," while behind it sits a "Yellow Jacket", a semi-streamlined "Dixie".



The Dixie Line had three articulated locomotives (#'s 900-902) that served as helpers on the Chattanooga Division south out of Cowen TN. Number 900 was scrapped following a boiler explosion.

SIDE NOTES:

Helpers never pushed passenger trains always hooking on the front of the train and pulling the train over the mountain; also they never pushed from behind a wood framed caboose; rather they would cut in between the caboose and rear of train to push.



Tom's modeling hasn't been limited to steam. The GP9 is an example of his work with 1st Generation locomotive power. He modified a Athearn GP9 by adding the proper Mars light castings he purchased from Details West associates. The paint and weathering would indicate a unit just prior to the hostile takeover of the NC&StL by the L&N in 1956.



The N-Gauge community is not without it's NC&StL following...a VO-1000 switcher hauls a string of "Dixie Line" freight cars.



An A-B set of F7s is in the foreground leading a string of passenger cars... the blue and grey paint scheme was snappy looking when new.



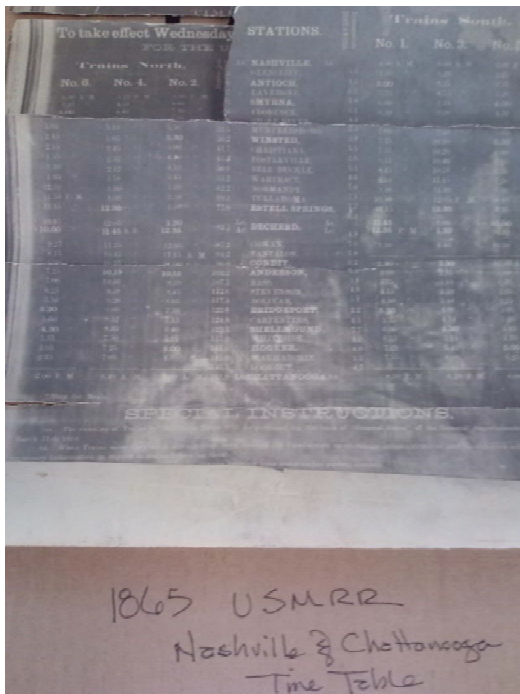
Those who want the W&A/NCRy Great Locomotive Chase connection N-Gauge has models that fit the roles of the "General" and the "Texas"



Even G-Gauge has a NC&StL following... Three NC&StL yellow-stripe boxcars were on display at the Reunion.



The NC&StL heavily promoted its connection with the Civil War hosting veteran reunion pilgrimages to the battlefields in and around Chattanooga and Chickamauga... the railroad even branded itself as the "Battlefield Route" having lines nearby other battlefields - e.g. - Nashville, Franklin, Murfreesboro, etc.



Some of the memorabilia on display proved to be extremely rare, for example this fragile copy of a NC Ry timetable from 1865 when it was under the control of the US (Union) Military RR.



Hidden in the dead line was NC&StL #814 (and ex-Clinchfield) – here the TVRR shop foreman recounts the harrowing tale of 814's rescue from an abandoned spur on the Clinchfield after a steel scrap dealer had already started rail removal.



Of course the Reunion offered an opportunity to view and inspect at close hand actual NC&StL equipment – above are the 710, a GP7 in freight colors, and caboose 41.



Also on view was #36 a VO-1000.



The second half of a NC&StL RY F7 A-B locomotive set sits on an adjacent track in the deadline at the TVRR shops



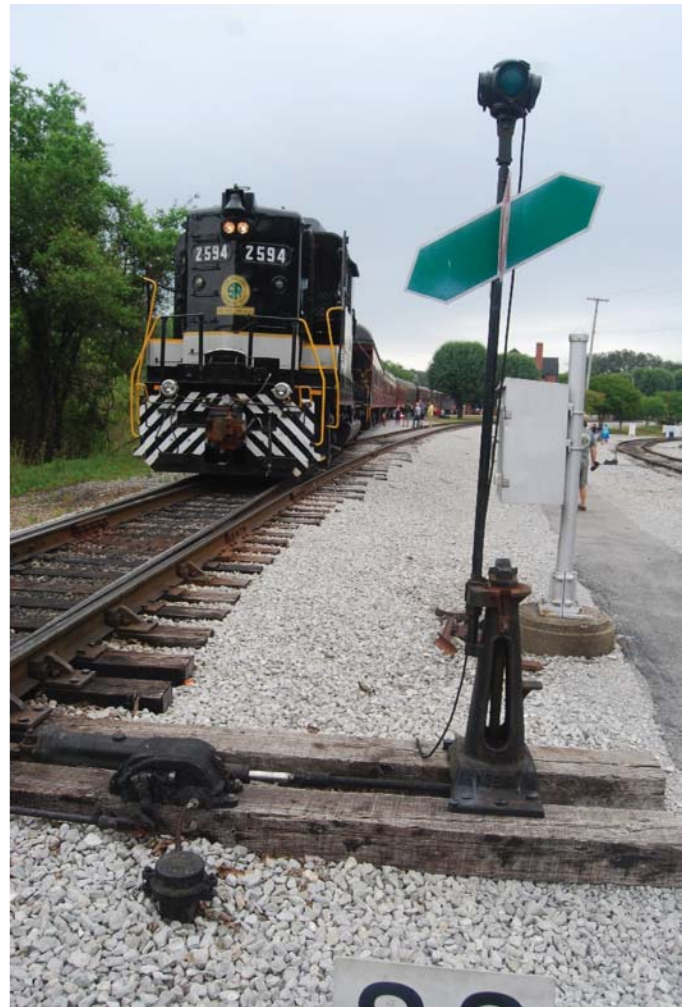
Following a tour of the backshops TVRR set up flood lights for anight photo shoot with 4501 the star attraction... no one left without taking at least one quality shot.



Even the depot at the backshops was lit for photo ops... you could almost hear the clatter of telegraph keys and of phones ringing out in the night.



On Saturday morning we boarded a flute-sided lightweight passenger car for the trip to Chickamauga Junction. Above is the dining car where light refreshment could be had on the ride to the junction or a full lunch served with traditional railroad flare – full china – silver service and linens!



Our train was pulled by SRY 2594 a restored GP30.



An added bonus was a ride to the top of Lookout Mountain on the Incline Railway. Built in 1894 the incline touts itself to be the steepest railroad grade in the world at 70 degrees inclination near the top of it over 1 mile climb.



The top of Lookout Mountain has fantastic rock outcroppings
As well as ...



Spectacular view of the Tennessee River valley like the one
above overlooking the city of Chattanooga.



So... give a thought to attending your favorite preservation group's
convention or gathering. It will be a great railfan outing I'm sure.

SHAPING UP SHELL CREEK DEVELOPING A MODELLED COMMUNITY



The Shell Creek Schoolhouse is ready for a summer session...



Ask Fred about the back story regarding the cow...



The residential portion of the village is shaping up....



A more realistic look is emerging as ground cover is added...



The main street has its first business advertisement...



A view of a horse drawn wagon passing under the ET&WNC.



The first passenger is seen waiting for down at the depot...



An overview of the Shell business district



Shell Creek also had a stock pen



Fred has added some ground cover and scenic details

Rumor has it that the building of the Shell Creek village will be featured in an 8-page spread in the 2016 HO_n3 Narrow Gauge Annual to be published this fall by White River Press – another fine article by Geoff and Fred appears in the offing.

Ask Geoff to show you the photo-shopped image of Shell Creek he plans to submit as a cover shot or lead photo for the article. It's spectacular!

**ANOTHER STORIED LOCOMOTIVE
GETS A MAKEOVER
C&O 2-6-6-2 #1309 IS READY FOR MAJOR
BOILER WORK**



MAJOR WORK AHEAD FOR 1309. Western Maryland Scenic Railroad's ex- C&O 2-6-6-2 No. 1309 has been disassembled and is ready to undergo major boiler work and overhaul of its running gear and other critical components. In February

2015, 241 tubes and 36 flues from the inside of the boiler were removed, which will permit all surfaces of the boiler shell to be thoroughly cleaned and ultrasonically tested for hidden flaws. Following this, crews will install new tubes and flues, returning the boiler to essentially "as-new" condition.

Currently, machinists are working on running gear parts, rehabilitating valves, and generally working through the thousands of tasks required to bring a massive machine like this back to safe operating condition.

Reassembly of the locomotive is expected to begin this spring following completion of work to the WMSR's other steam engine, ex-Lake Superior and Ishpeming Railroad 2-8-0 No. 734, which is receiving major boiler work and repairs to its running gear.

This photo, taken April 1, 2015, shows the stripped-down 1309 in the WMSR's Ridgeley yard. Once work to the 734 is completed, the 1309 will be moved into the shop. Access to the Ridgeley yard to take these photos was obtained through advance approval with the WMSR. Visitors are not permitted into the yard without making prior arrangements with the WMSR.

– Alex Mayes
POTOMAC RAIL NEWS
Potomac Chapter -NRHS

CHUCKEY TENNESSEE SOUTHERN RAILWAY STATION GETS NEW LIFE RESTORED STATION BEING REBUILT IN JONESBOROUGH

The station’s preservation will be consist of original and newly fabricated construction. Much of the original structure will be preserved in the rebuilt depot.



East end of the station being reassembled



Roof trusses reassembled ready for setting in place



The reconstructed depot will sit on the north side of the NS mainline through Jonesborough



Two of the three trailers used to store pieces of the station

It is interesting that a number of former railroad stations have received new life over the past several years including: the former Clinchfield depot reborn as the Tupelo Honey restaurant, the ET&WNC depot restored as a micro-brewery (both in downtown Johnson City), and now the SRY Chuckey station in Jonesborough.



Braces for the overhanging eaves appear in good shape



A pile of support timbers slightly worse for the wear... these have been replaced with new lumber.

THE VIEW FROM THE ENGINEER'S SIDE OF THE CAB THE MEMRR PRESIDENT'S COLUMN

Sold Out!!! Approximately two weeks prior to the deadline for ticket sales for the G.L. Carter Chapter NRHS's Spring Rail Excursion in Knoxville **Charlene McLeod** sent word that they had sold the last tickets and had a waiting list for more. The Chapter has 162 members and guests going with them on Saturday June 13th to tour the Knoxville Locomotive Works steam shop, ride the 3 Rivers Rambler behind a vintage steam locomotive and cruise the Tennessee River aboard the paddle wheeler *Star of Knoxville* for our luncheon voyage. The Chapter will have exclusive use of the train and the boat and will be traveling from ETSU to Knoxville and back aboard the 3 modern buses of Premier Transportation Inc. **Charlene** and **Dan McLeod** have once again done an outstanding job of handling all the ticket sales with numerous telephone calls, emails, mailings and all the many, many things that go into working with the public to make sure all who have made reservations are accommodated. For all of our MEMRR members who are supporting our sister museum NRHS chapter by participating in this trip your presence is welcomed and the Carter Chapter NRHS thanks you for coming along to enjoy the fun and adventure.

The Carter Chapter NRHS has recently designed a new logo pin for sale to the public and we have some at our weekly sales table at the Carter Railroad Museum on Saturdays if you would like to see them and perhaps purchase one or more. The sales table has been an active place since we decided to begin to man it on a regular basis. **Jim Pahr** has taken the lead in staffing the table and it provides an opportunity to talk to many of our museum visitors and to get a better count of the numbers of visitors without the

distractions many of our MEMRR members have when trying to operate trains on the layouts, talk to visitors and carry on radio conversations with the train master; and count people. Having someone at the sales table do the counting for us seems to be a better situation for all concerned. **Roger Teinert, Gary Emmert, Mike Baker** and others have also taken shifts at the sales table, especially when Jim has been on the road.

At our May 14 Coordinators Meeting a number of items were discussed that will be found in detail elsewhere in this issue of *The Signal Bridge* but they include: 19 new hardback books added to the museum library including a copy of *The Blue Ridge Stemwinder* by John Waite which is the authoritative book on the ET&WNC RR. **John Carter** has a number of new buildings that need to be assembled for the diesel maintenance end of the HO yard. **Roger Teinert** has sent welcoming and information letters to 5 new members and suggests that we put together a short DVD that could be sent to churches, fraternal organizations, clubs, etc. , to inform a wider audience about the MEMRR, the Carter Chapter NRHS, and the Carter RR Museum. This is good idea that we need some help in putting together. **John Edwards** is continuing to work on the draft for a club/museum operations tutorial for all members. **Frank Fezzie** is re-wiring the wye on the club HO layout. The internet drop requested at the April Coordinators Meeting has been installed by ETSU in the Alsop Gallery and the additional monitor requested for the Marsh Gallery has been obtained.

Carter Railroad Museum, Carter Chapter NRHS and MEMRR events scheduled include the following:

- Thank you if you helped us on **May 13th** when member **Lanny Norris's** daughter brought the entire **Jonesborough Middle School 6th grade class**, more than 100 children with teachers and chaperones, to visit our railroad museum. The group was well behaved and our

museum volunteers reported everything went smoothly even with the large, energetic crowd of youngsters.

- By the time you are reading this the **Annual Blue Plum Festival** in Johnson City will be history, but we will have participated once more by displaying the **Jack Cope Memorial Traveling Layout** in the Hands-On Museum. **Jim Pahr** made the arrangements with the museum for the display space and **Gary Emmert** and **Mark Woomer** co-directed the moving of the layout and its manning during the festival for our volunteers from the Carter Chapter and the MEMRR. **Mark Woomer** provided the tow vehicle to move the layout from its home at the Carter RR Museum. **Dean Small**, the coordinator for the layout, has put a lot of work into getting it ready for this show, and for Jonesborough Days to follow, and has it in good operating condition as well as looking nice for the viewing public. Thank you one and all for your support and for "showing the flag" through the display of this layout to the public. We will be doing something similar with it for Jonesborough Days on July 3-4 and will once more need everyone's help.
- On Thursday, June 18th, beginning around 9:45 a.m. former Station Master at the Carter RR Museum's Little Engineers Room, **Amanda Kelly Blackburn**, will be bringing 145 youngsters from the **YMCA Summer Camp** to the Carter Railroad Museum for a visit. They will come in two shifts so the museum can more easily accommodate them. We will need volunteers for several hours that day from approximately 9:15 a.m. to 2:00 p.m. to operate the layouts and to help with traffic control. Please mark your calendars and come assist us as we really need you to make this all go smoothly.
- The Railroad Museum is once more co-hosting the 27th Annual ET&WNC RR Historical Society Convention. The society will be meeting the 26-28th in Johnson City with the Carnegie Hotel being convention headquarters. Their annual membership is \$30 and the registration for the convention is \$49 that includes two dinner meals, free admission to Tweetsie Railroad on Saturday for all their regular ticketed events, a ride on the original Tweetsie railroad on Sunday from the Christian Ministries Camp to Pardee Point, and other convention events. You need to consider joining this historic railway society and attend the convention that will see many of its delegates visiting the Carter RR Museum on Saturday.

The MEMRR took possession of 5,000 new club brochures that were designed by **Geoff Stunkard** and they look very professional on their slick, glossy paper. Geoff also found a good printer who did the job at a very low price (thank you Geoff). We have put some in various places in the railroad museum and we need to get some out to **HobbyTownUSA** and perhaps other spots in the Tri-Cities area. I have ordered

10,000 new rack cards and they are being distributed by a Jonesborough company. The Carter Chapter NRHS is in the final stages of design for a brochure for that chapter and are seeking a printer to have their work on it in print. We will place them in the Carter Railroad Museum as one distribution point when they are delivered.

I have a scheduled meeting with Town of Jonesborough City Manager, Bob Browning, on June 8th to discuss the Memorandum of Understanding (MOU) between Jonesborough and ETSU towards the establishment of a satellite railroad museum there. I shall keep you informed of any developments.

Geoff Stunkard received word the last week of May from **George Riley**, Associate Editor for White River Productions, that he wants an 8 page article on the Shell Creek section of the Tweetsie Railroad Layout for the 7th Edition of the **HON3 Annual**. This is very exciting news indeed for it means we will be getting publicity for our MEMRR club and the Carter Railroad Museum in a national/international narrow gauge model railroad publication in two consecutive years. I have completed all the buildings on that section of the layout and Geoff and I have been documenting the construction of the structures and the scenery of "Shell Creek" but we still have a lot of work to do before the June 30th deadline set for the publication. A lot of our members have been helping on this entire project in many ways from tree making, to wiring, to painting rails, to installing electrical components, to you-name-it. We are 3 years into the project and it still has a long way to go, but our efforts to recreate a layout that engages part of our local rich railroading history now has caught the eyes of many modelers far beyond the realm of the Mountain Empire

Summer is just around the corner with all of its opportunities, festivals, events, vacations, etc. As the MEMRR becomes more involved in supporting the Carter Railroad Museum we can expect to have more growth and more activities for the MEMRR and the museum we are affiliated with. We had 90 visitors for our Heritage Day Event featuring Modern Railroads on May 30th. These are opportunities for us to promote our skills at model railroading and our passion for trains and railroading in general. This venue also promotes the recruiting of new club members with their own model railroading talents and experiences. The MEMRR has come a long way in its 20+ years of existence and never have we been more visible to the communities we all represent. The identity of the MEMRR is well established. We shall continue seeking to make the most of it. Have a great summer and I'll see you at our club meetings and at the Carter Railroad Museum. 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

**NS HERITAGE UNITS PARADE
THROUGH THE AREA
HERITAGE UNITS PASSING THROUGH
JONESBOROUGH IN MAY-JUNE**

Norfolk Southern promised that the Heritage series of locomotives would earn their keep being assigned wherever needed. Train watching in East Tennessee has become more interesting of late as NS appears to have rerouted several of the Heritage units to our region.



NS EMD SD70ACe heritage units 1073 and 1074 at South Yard in Roanoke, VA. 20 Jul 2012. Photo ©2012 by Mike Ramsey
May – No. 1073 - Penn Central



NS GE ES44AC 8114 on NS train 772 at Saint Clair, VA. 14 Apr 2013. NSDash9.com. Photo ©2013 by Jim Kleeman
May – No. 8114 - Norfolk Southern (red)

Here is a sample of the Heritage units passing through our area over the past month or so. The Penn Central and original Norfolk Southern (red scheme) units appeared much in need of washing. The other units were in much better condition their colorful but road worn coat of dust showing.

The addition of these units to freight movements passing through has made train watching more enjoyable. These added to the other off-road units (e.g. - BNSF, UP, CN, CP and other lease units) have brought a new degree of variety to motive power lash-ups. Other interesting sights have been more UP units showing up now that NS has swapped, traded, bought, and leased former UP units to increase their

available power while delaying the purchase of Tier 4 compliant units. EMD won't have their tier 4 compliant units available until next year. The ex-UP units still wear their yellow and grey scheme but UP lettering, logo, and flag have disappeared for the most part and have been replaced with black NS and number lettering below the cab window.



May – No. 1071 - Central of New Jersey



NS ES44AC 8101 leads NS train 64R at Marietta, PA. 19 Apr 2013. NSDash9.com. Photo ©2013 by Jim Kleeman
May – No. 8101 - Central of Georgia



NS GE ES44AC 8104 at Welch, WV. 13 Apr 2013. NSDash9.com. Photo ©2013 by Jim Kleeman
June – No. 8104 - Lehigh Valley

COORDINATORS MEETING
MAY 14, 2015

The meeting was called to order by club president Fred Alsop at 6:05 p.m.

Ted Bleck-Doran – Newsletter:

The Signal Bridge is 20 pages. He requested that members send him articles to add to the newsletter. He also shared that the TN Comptroller’s office web site has track plans for active and abandoned railroad lines in TN.

Gary Emmert – Librarian:

We have 19 new books, including a copy of *The Sternwinder*. He also reported that we need more wrapping paper for the china and carbon paper for the silver. Fred Alsop stated that we have left over carbon paper. Gary reported that he now has the NRHS Carter Chapter pins for sale for \$5.00



Jonathan’s BNSF locomotive leads a mixed freight on the MEMRR layout

John Edwards – Webmaster:

He has been working on the outline for the club tutorial. He needs information from all coordinators on how to set up and shut down the various layouts.

Gary Gilliam – N and Z Coordinator:

He reported that we need to get the Z scale layout out of the trailer. He feels that it is not safe in there due to changing weather conditions. After much discussion a resolution was not reached. He said that the new N scale engines (2 Southern and 1 Clinchfield) are running good. The new couplers are working much better.

Bob Jones – Webmaster:

He has added several train shows to the website and will update the information for them as they become available. He set up an NRHS link which includes an introduction, copies of the Coal Road and excursion information. He has also added a Tweetsie link and it is in the process of getting information updated. He has updated the members area of

the MEMRR website with 6 new members added and there is a column that shows when the changes were made.



A quiet moment on the MEMRR layout

John Carter – HO Layout:

They have been working on the yard extension. They have received 5 buildings, the repair shop and a crane. If anyone is interested in putting these kits together please see John. We will probably need to order some more turnouts. They are talking about redesigning the Y. We gave Frank Fezzie a controller that has not been working for a long time, to see if he can repair it, if not he will send it out to be repaired.

Roger Teinert – Communications:

– Reported that he has sent out 5 letters to prospective new members and have had no responses. He would like to make a video to give to different organizations promoting the museum and club. He is going to check to see if we can do it in house.



Steam blasts from a tunnel on the MEMRR layout

Gary Gilliam added that they need to get rid of the double slip on the HO layout. Fred will talk to the module owner about it the next time he comes in.

John Carter stated that Frank Fezzie’s rewiring program is complete from the Y to Paul Haynes module and all switches are working.

Gary Emmert said that we need a crossover on Paul Haynes module.

Fred Alsop – Club President:

The club meeting will be next week and he will be out of town. John Carter will be presiding over the meeting. He will email all necessary info to John. He will also show John how to use the overhead projector. Fred thanked everyone for all their work with the 6th grade class. The next event will be in June with the YMCA. Approximately 140 children will be visiting. We need volunteers for this event. Fred talked about the new brochure.

Bob Jones said he would like to post the brochure on the website.

Meeting was adjourned at 6:56.

Respectfully Submitted
Debi Edwards
MEMRR Secretary



Steam's up on the Tweetsie Layout as No. 6 leaves the depot

MOUNTAIN EMPIRE MODEL RAILROADERS MINUTES FOR THE BUSINESS MEETING MAY 19, 2015

The meeting was called to order at 6:30 by club Vice President John Carter with 14 members present.

The members voted to have next month's pre-meeting dinner at 7 Hermanos Restaurant, which is located in the Market St. Wal-Mart Shopping Center.

John Carter then welcomed new member Richard Jackson.

OFFICER REOPRTS:

SECRETARY –

Debbi Edwards report that she turned in receipts for miscellaneous card purchases to the club treasurer. April Business Meeting Report was accepted as published in *The Signal Bridge*.

NEWSLETTER EDITOR –

Ted Bleck-Doran reported that the Signal Bridge is 20 pages this month. Next month's submission deadline is June 8th.

TREASURER –

Gary Emmert reported the income, expenses and balances for the months of April and May. We have 118 paid full members. Gary also requested that we have a copy of next year's dues printed and hung in the club so that members know ahead of time how much the new fee's will be. A motion was made and passed.

WEBMASTERS –

Bob Jones requested that someone send him an electronic copy of the by-laws so that he may post them in the

member's area of the club website. He also reported that he did update to the members list this morning. There is a column that shows when a member has joined the club. Any changes that are made to the member's page will show the date of the change in the update column. He is working on the link to the NRHS Coal Road.

John Edwards stated that both he and Ted Bleck-Doran had problems with Outlook Express, so if you have a MEMRR email address and are having problems with your email (or anyone who wants an MEMRR email address) please contact him. He is no longer using Outlook Express but is using Mozilla Firefox as a browser. John told membership about Mozilla Firefox including the fact that it is free.

VICE PRESIDENT –

John Carter reported that tonight's program is Key Trains by Gary Emmert. Ted Bleck-Doran will do next month's program. July's program will be presented by Fred Alsop. Gary Emmert asked Mike Buster if he would like to do one on "dry transfer" in Aug.

PRESIDENT –

(Reported by John Carter) Fred wanted to thank everyone for their hard work when Lonnie Norris's daughter's 6th grade class from Jonesborough Elementary School toured the museum.

OLD BUSINESS:

1. The Rail Excursion is on June 13th and is sold out.
2. John Edwards shared the tutorial program and checklist (in its current rough draft form). He told members that he needs information for each portion of his checklist so that he can make sure that this program and checklist is complete. Included will be everything involved from the time you open the door until the museum is closed

at the end of the day. Also included will be all the information needed for the Little Engineers Room.

3. Blue Plum Festival is June 5th – 7th. We will have the Cope Layout on display at the Hands On Museum. We do need volunteers for moving the layout on Thursday June 5th and on June 7th. We also need volunteers to man the layout during the Blue Plum Festival.
4. The new club brochure is being printed and we have paid for 5000 brochures.
5. YMCA Summer Camp visit is on Thursday, June 18th. There will be 140 children (in shifts) visiting the museum on that day so we need volunteers to come help that day. The time is unknown at this time but will be sent out to the members.
6. The members voted to not have our Annual Christmas Party at The Choo-Choo Café, instead to have a pot-luck style party. John Carter is going to check with Tipton Hayes to see if their room is available and will report back at next month's meeting.
7. Memorial Cars – a gentleman donated about 12 N&W passenger cars for use as memorial cars for members that we have lost. Mike Buster will take the cars home, strip and clean them. The cars will be airbrushed and lettered in gold with the member's name. Some of the cars of military people will have a casket draped with the American Flag. They will have bunting on them and some will be lit.
8. Gary Emmert requested that the policy for ordering club shirts etc. be as follows: orders that are placed by the Saturday after each monthly business meeting will be available for pick up at the following month's business meeting.

NEW BUSINESS:

1. May's Heritage Day is Model Railroad Moving Mass in the 21st Century.
2. The coordinator's meeting minutes will be posted in the Signal Bridge.
3. The club voted to reduce the membership fee for Dave Finger, therefore making him a Distant Remote Member.
4. John Edwards spoke to Fred Alsop and he agreed that when we do the Call for Volunteers that we also do a call for the Trainmaster/Dispatcher. Anyone interested will get training for this position. The motion was voted on and passed.

The Call for Volunteers and Train Master were made.

ANNOUNCEMENTS:

The next coordinators meeting will be June 11th.

Paul Haynes reported that May 23 is Spencer. The 611 will be running. Information can be found on Paul's facebook page. John Edwards said that Trains Magazine has got live video of the 611 running now. If you don't subscribe to the magazine you can register online and give them a password and you can watch the video without it costing anything.

PROGRAM:

Gary Emmert gave a very interesting and informative presentation explaining exactly what a Key Train is and how it is run. Most meeting attendee's did not know what a Key Train is and were very interested in learning about them.

Our May meeting was adjourned at 8:26.

*Respectfully submitted,
Debbi Edwards
Secretary MEMRR*

**FROM BOX TO LAYOUT
BUILDING A BRANCHLINE YARDMASTER
BOX CAR KIT**

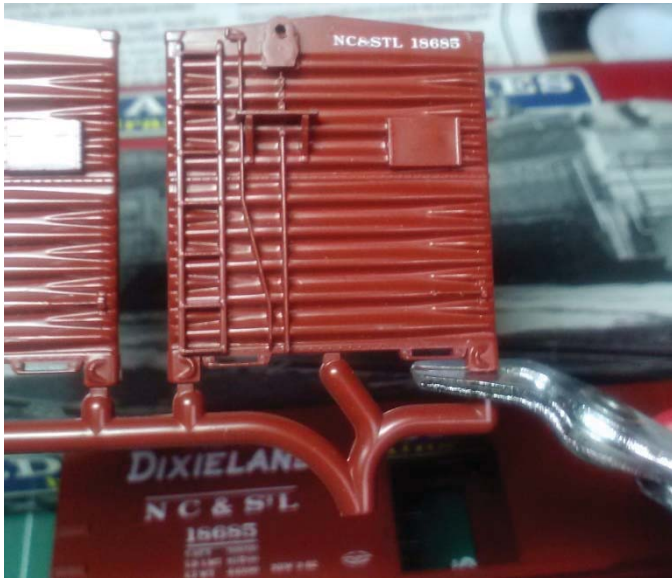
By Ted Bleck-Doran

Branchline makes a series of car kits offered in its Yardmaster line. These kits are nicely molded and, when finished, make nice additions to one's collection of rolling stock. I purchased several NC&StL Ry and N&W period box car kits with represent cars from the 40's and 50's. Each are accurately lettered and painted for their prototype make, model and series. The kits are only slightly more complicated to assemble than the old Athearn "Blue Box" kits of the 1950's-70's. What follows are some hints and suggestions for assembling these kits.



STEP 1:

Once the car kit box is open familiarize yourself with the instruction sheet and the various parts. This is particularly important when assembling the underbody parts and orienting the brake cylinder with the end panels.



STEP 2:

Separate the parts from the injection sprues. A good pair of plastic shears will come in handy. An X-Acto hobby knife with a No. 11 blade will also work nicely. Using the edge of the hobby knife or hobby file, the cut edge can be smoothed before assembly.



STEP 3:

Inspect the parts before assembly for an extraneous flash and trim the flash away with the hobby knife. The Branchline kits come with minimal flash but special attention will avoid problems later. There is frequently flash located around the coupler pockets which can foul the free side-to-side movement of the couplers when mounted.



STEP 4:

While you have the hobby knife out local the mounting holes along the ridge of the roof. These need to be enlarged to accept the pegs on the underside of the roof walk.

NOTE: If you are modeling an updated version that has had the roof walks removed – these holes will need to be filled with body putty and painted.



STEP 5:

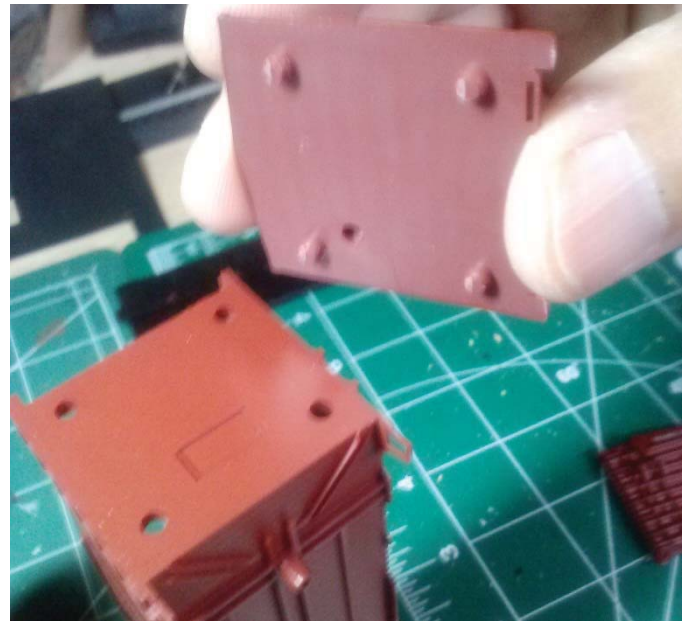
These kits come with large hex nuts to provide the proper car weight. It is best to affix them in place early in the assembly process so that the glue can dry and set. The interior of the car body has two raised circular posts for mounting the nuts. Place an ample bead of glue around the outside of the post and press the nut over the mounting post. The nut fits comfortably when centered and pressed into place. I used a medium setting CA glue to affix the nuts.

**STEP 6:**

Working from the underside of the roof, place a drop of plastic cement in each mounting hole. (Testors MasterModeler glue comes with a nice applicator needle providing good control – any solvent type of plastic glue will work). Working from the underside reduces the chance of marring the paint finish on the exterior side of the car.

**STEP 7:**

Carefully press the mounting posts on the underside of the roof walks into the holes along the ridge of the roof. Using a solvent based glue softens the inner edges of the hole and “lubricates” the posts when they are inserted. Press the roof walk in place. Inspect the final placement of the walks to ensure the walks are settled tightly against the roof ridge and there are no bows or waves in the walks.

**STEP 8:**

Use the same process as described in **STEP 7** to affix the end pieces and brake wheel in place. The Branchline kits come with the appropriate ends for each respective car which provides an extra level of realism. **NOTE:** There are different mounting lugs on the “A” and “B” (brake wheel) ends.

**STEP 9:**

The trucks come unassembled – consisting of injected molded casting bolster and side frames, along with metal wheel sets, and self-tapping screws. As with other parts I inspected the castings for extra flash removing any that was left as part of the manufacturing process.

NOTE:

This is a good time to check the trucks for their free –rolling ability and to ream out the journal boxes if any wheelset appears to be too tight.



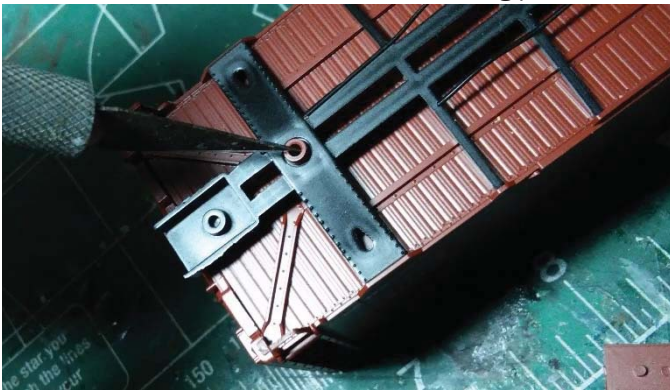
STEP 10:

After assembling the trucks I used an MNRA Standards Gauge to check the back-to-back spacing of the wheel and the flange depth. This is an easy and often overlooked step that ensures against derailments.



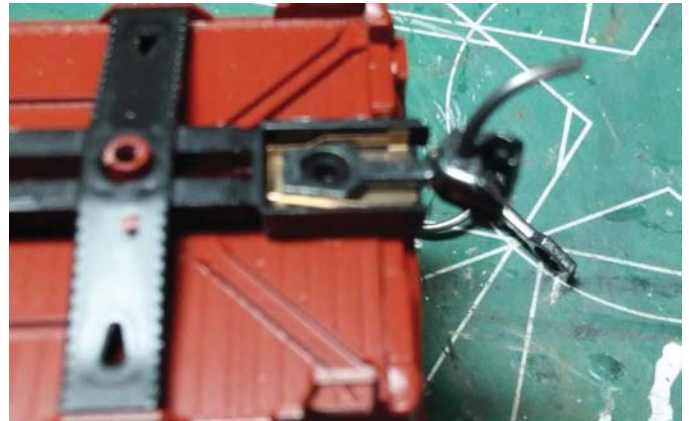
STEP 11:

The kit comes with generic plastic knuckle couplers – I try to maintain the practice of using exclusively Kadee couplers. Before installing the couplers I inspected the knuckles for excess flash left over from the manufacturing process,



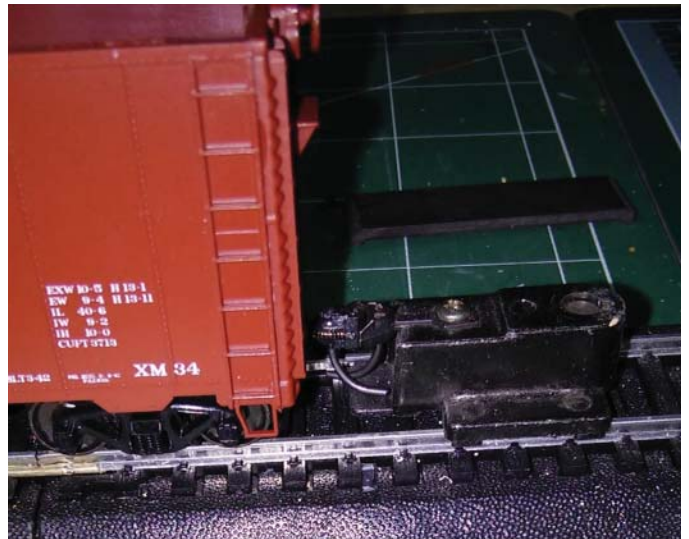
STEP 12:

The molded center beam and underbody detail was then glued in place making sure that the brake cylinder was properly aligned with the brake wheel end. As with the roof, the holes for the truck screws was widened slightly to assist the self-tapping screws to seat themselves. I had difficulty starting the screws on earlier models finding that the screws wandered when trying to seat them in the holes.



STEP 13:

I next seated the coupler assemblies in the coupler pockets. As much as I dislike the idea of having to glue the coupler pocket covers in place, the pin on the back of the cover plate is too shallow to hold the cover in place...so glued in place it was. One solution is to drill out the plate for a small screw to hold the cover in place.



STEP 14:

Once the glue sets – check for coupler height and trip-pin clearance. Kadee makes a gauge – pictured above – that is easy to use .The Branchline models meet the clearance and height standards when assembled but it is always smart to check. A coupler that sits too low requires a shim between truck bolster and car body. One that sits too high will require

a coupler with a knuckle-head offset on the shank available from Kadee.



STEP 15:

With the underbody complete my attention turned to the doors. Branchline has provided an option to install the doors as operational by providing a plastic piece that gets glued to the back of the door. Prior experience with this system led to some dissatisfaction since it was difficult to install the doors and to keep them square with the opening. On my models I chose to glue the doors in place.



STEP 16:

The final step is to place the roof in place. If you want access to the interior - to place a bead of glue around the inside edge of the car body and press the roof down in place.



These models from Branchline are easy to assemble and take an average of 45 minutes to build. Many of the cars come with multiple numbers. My NC&STL RY car came with 4 distinct numbers enabling me to build a fleet of box cars what are unique.



**THE ELECTRONICS SHOP
FRANK FEZZIE**

Proper selection and placement of track power electrical bus wires and track feeder wires are a constant concern when building a layout. There are many ways to wire a layout, all of which may work well. Thus, it is difficult to give hard rules about how it should be done. It often comes down to the builder's preferences about electrical matters along with his level of skill in this aspect of model railroading. In this

column I will lay out the guidelines that I follow and the reasoning behind them.

The purpose of the track electrical bus and the track feeders is to deliver the operating voltage and current to the rails that is required by the trains. There should not be any voltage drops that result in a train visibly slowing down as it passes over a section of track. The wiring needs to be sufficient so that any short-circuit across the rails will result in the circuit breaker supplying that section tripping and shutting off the power before any damage can occur.

The track electrical bus, or track bus, consists of 2 wires that follow the path of a section of track, typically beneath the layout. The 2 wires carry the electrical power for the 2 rails of the track or tracks above. The track feeder wires, or track feeders, are wires that connect to each rail of the track and then drop down through the roadbed and connect to the track bus wires below.

Why do we need a track bus? Can't we just feed the power to the rails at one point and let the rails carry the voltage around the layout? This method will work for a small loop of track, such as one might put around a Christmas tree. Unfortunately, rails are not a great conductor of electricity. They work okay for short distances, 10 feet give or take, but beyond that the higher resistance of rails and rail joints can result in excessive voltage drops and slowing of trains. The copper wire in the track bus insures that track power is distributed evenly around the layout.

What size of wire is best for the track bus? Wire size is specified by gauge such as 14 gauge or 14 awg for example. The lower the number, the thicker the wire and the greater the current that can be carried for a given voltage drop. Layout size and scale along with the number of engines that will be run at one time are all important factors. HO scale trains draw more current than N scale trains and can benefit from larger track bus lines.

In a small layout, maybe up to 5 feet by 9 feet in size, that track bus can be as small as 18 awg wire. Standard lamp cord is a good wire to use for this. In a room-sized layout, say 10 feet by 12 feet, 16 awg wire should be used. Here, heavy duty lamp cord is a good choice. For the next size up, perhaps 12 feet by 16 feet, 14 awg wire should do the job. For any larger layout you should use 12 awg wire for the track bus.

Now you might wonder why we would use 12 awg wire, capable of carrying 20 amps, for a track bus that typically is only required to carry 1 or 2 amps. The answer is that in model railroading we can only tolerate a small voltage drop. Our operating voltage is only 12 to 14 volts, as compared to power wiring in a house that supplies 120 volts. So our voltage drop due to current in the bus wires must be much lower. In long track bus runs, the limiting factor dictating wire size is the resistance of the wire, not the current capacity of the wire.

Should solid wire or stranded wire be used? Either will work. I prefer solid wire for both the track bus lines and the track feeders. Solid track bus wires are stiffer and help support the wiring under the layout, and they are easier to strip where feeder wires need to be soldered to them. Solid feeder wires are easier to solder to the rails. Stranded wire is more flexible and should definitely be used in any location where

the wire will be required to bend and move on a regular basis.

As for feeder wires, the choice is easier. These wires are short, typically 18 inches give or take a little. The amount of current that the feeders need to carry is limited by the relatively small amount of track that they feed, often 6 feet or less. Either 22 gauge or 24 gauge is a good choice for feeders. It is more difficult to hide the feeder wire and the solder joints at the rail when you use 20 gauge or larger wire. And 26 gauge or smaller wire can be a little weak, both in terms of current capacity and physical strength to resist the pulling and tugging that occurs as one works on bus lines under the layout.

Twisted pair phone wire, commonly called cat 3, cat 4, cat 5, or cat 6, is readily available. It is usually 24 gauge. Telephone station wire, typically with 4 conductors (red, green, yellow, and black) and is not twisted is usually 22 gauge. If you are going to have a minimum number of feeders then use 22 gauge wire. I use 24 gauge almost exclusively on HO and N scale layouts for feeder wires as well as the wiring to tortoise machines. But keep in mind that I try to have feeder wires at least every 5 feet or so.

Should the bus lines and feeder wires be twisted, or can they just run side by side? From the perspective of electrical noise and interference, I have not seen any convincing information to dictate whether either twisted or side by side is best or necessary. So I look at it more from a mechanical angle. Twisting the bus and feeders can keep things a little neater under the layout. The negative aspect of twisting is that it can make it a little more difficult to separate the wires in order to make connections. If you do twist the wires, I suggest you limit the bus lines to one twist per foot and the feeder lines to two twists per foot. This will help keep them easier to separate for connections while having enough twist to keep the 2 wires together along their run.

How far apart can feeders be spaced? This is not simple to answer, but 8 to 10 feet is about the greatest distance you should have between feeders, and they should be 22 gauge wire. I prefer 4 to 5 feet as a maximum, using 24 gauge wire for feeders. You should not depend on rail joiners that are not soldered to carry power from one section of track to the next. These joints break down electrically over time and become unreliable.

My real guideline for feeders is this; every piece of track should either have feeders attached to it or it should be soldered at both ends to pieces of track that have feeders. Under this guideline, a piece of track is either a piece of flex track or a turnout. I typically will solder three piece of flex track together and attach feeders to the two end sections. I always put feeders on all turnouts. Another example would be a turnout and two pieces of flex track. The turnout at one end would get feeders and the flex track at the other end would get feeders. I use 24 gauge feeders, and every

soldered up set of track has two sets of feeders attached. If I am using sectional track, then I will solder a number of pieces together to make up to 6 feet of track, and then put a set of feeders near each end.

Should I use crimp connectors or solder when joining wires? One way to look at it is that you are going to have to do some soldering anyway. The only way to attach feeder wires to rails is with solder. So why not use solder on all of your wiring joints? This is my approach, but then again I am comfortable with soldering. Technically, a “high quality” crimp joint is as good as solder.

But to achieve “high quality” crimp joints, you have to have 3 things. First, you have to have very good crimp terminals. Second, you have to have the proper crimping tool designed for the terminal. And third, you have to have the correct wire type, solid or stranded, and the correct wire size for the terminal. It is difficult or impossible to get these items at

local big box stores. You almost always have to get them from electrical or electronic supply houses. Those that follow these guidelines can make good and reliable crimp connections, but at a higher cost than soldering the joints.

How about “suitcase” connectors for connecting feeders to track bus lines? The same guidelines above apply here. 3M makes an excellent suitcase connector. Make sure that you have the proper wire types and gauges to match the connector and you will have good reliable joints, but at a higher cost than solder joints. One advantage of crimp joints and suitcase connectors is that they can be a little easier to work with than soldering when you are under the layout.

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.





Nashville Chattanooga and St. Louis Railway
Caboose #41 at the Tennessee Valley Railroad and Museum
Chattanooga, Tennessee