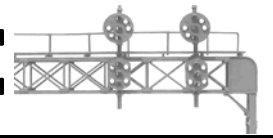


# THE SIGNAL BRIDGE



Volume 16

NEWSLETTER OF THE MOUNTAIN EMPIRE MODEL RAILROADERS CLUB  
MARCH 2009 ISSUE

Number 3

From the Conductor's Desk...

## CLUB OFFICERS

**President:**

**Fred Alsop**

**Vice-President:**

**John Carter**

**Secretary:**

**Art Daniels**

**Treasurer:**

**Duane Swank**

**Newsletter Editor:**

**Ted Bleck-Doran**

**Webmaster:**

**John Edwards**

## LOCATION

**ETSU Campus, George L.  
Carter Museum**

## HOURS

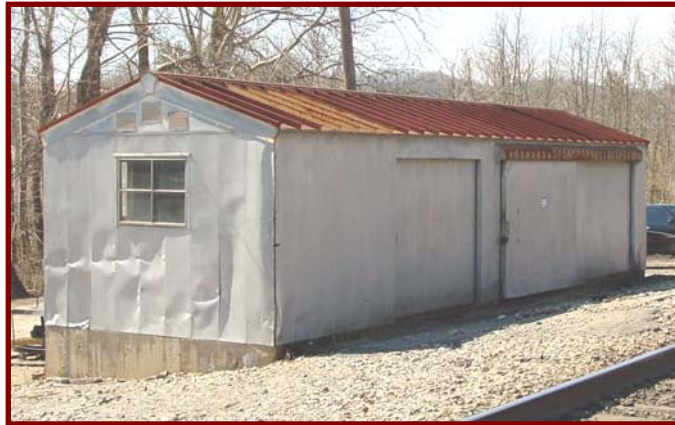
**Business Meetings are held the 3<sup>rd</sup> Tuesday of each month. Meetings start at 7:00 PM at ETSU Campus, Brown Hall Science Bldg, Room 312, Johnson City, TN.**

- A social gathering is held prior to the business meeting at **EL TORITO** on State of Franklin near ETSU in the Kroger Plaza starting at 5:45 PM. Visitors and those interested in joining MEMRR are invited to attend.

- Work nights are held weekly on Thursday evenings starting at 4:30 PM and lasting until ???

- Open viewing and operating layout is available every Saturday from 10:00 AM until 3:00 PM.

## LESSONS FROM THE PROTOTYPE – PART 1



What do visitors see on our layouts that they don't see as often in real life? The answer may not be all that obvious, but becomes more so when we think about perspective. Most of our layout are built at table to shelf height. That is between 32" and 48". When viewed by a visitor they have a bird's eye view of our miniature world. From that perspective the roofs of our buildings become a visual focal point. Often the roofs are left in pristine - like new condition.

Here are three examples from the real world that might help us to model our favorite prototype a bit more realistically. The first is a Maintenance-of-Way shed near Spruce Pine (above). Notice that in spite of a recent coat of paint on the siding the roof has received scant attention. The metal roof is heavily rusted with rust streaks extending below the eaves onto the protective cover of the door track. A panel appears to have been replaced and is less rusted. Think of the conversation starter your MOW shed would be if you followed mother nature's weather technique.



The second example also comes from Spruce Pine. This time the General Store's metal roof supports a coat of paint to preserve the roof and add a few more years of life to it. But also shows signs of wear and exposure to the ravages of sun and rain. The glint of metal peeks through the peeling paint.. This effect can be easily modeled using the dry brush technique described by Fred Alsop in his "Weathering with Oils" in the January 2009 issue of *The Signal Bridge*."



The third example comes from Jonesborough. While the building in the photo has been demolished, it's a wonderful example of the varied shades and colors a heavily weathered roof can have. Washes and dry brush streaking techniques can bring life to a building model that would otherwise be quite unremarkable.

Photos by John Edwards and Ted Bleck-Doran

**Mountain Empire Model Railroaders**  
**February 17, 2009**  
**Minutes**

**Call to Order and Recognition of Visitors and NEW Members:** The meeting was called to order by President F. Alsop at 7:04 PM with 23 members present. There were no guests or new members present.

**Officers' Reports:**

**Secretary's Report:** F. Alsop presented the minutes in the absence of the Secretary (Art's wife is recuperating from surgery). Minutes of the January meeting were published in the February issue of *The Signal Bridge*. There were no corrections. Minutes were approved as printed.

**Newsletter Editor's Report:** T. Bleck-Doran stated that the February issue of *The Signal Bridge* has been distributed electronically and by mail. Hardcopy editions are being mailed out to 21 members who have elected not to receive copies by email. Two of those are honorary members. F. Alsop commented on the information regarding the Interstate Hopper Car fleet (see item under old business below). J. Edwards/G. Robetoy are developing an article on resistance soldering. Others were encouraged to prepare material for the newsletter.

**Webmaster's Report:** J. Edwards reported that the web server is upgrading security software and has provided a help sheet and software should problems with the MEMRR site develop. There are still free email accounts available for members. These may be requested through J. Edwards.

**Treasurer's Report:** D. Swank reported a balance forwarded of \$1,760.83 and income of \$657.50. Expenses were \$105.13 and additional authorized expenditures of \$500.16. February balance on hand is \$2,313.20 with an unobligated balance of \$1,813.04.

F. Alsop/D. Swank reported that MEMRR has opened a non-interest bearing checking account. The President and Treasurer have check-writing authority. Checks to the club may be made out to MEMRR or Mountain Empire Model Railroaders.

D. Swank also reported that 63 members are paid up for 2009. An additional 16 member have yet to renew for the new year.

**Vice-President's Report:** J. Carter reported the following programs have been lined up:

- March: F. Alsop – "The Cass Scenic Railway"
- April: L. Frazer – "Colorado Narrow Gauge"
- May: J. Carter – "Track Work Basics"
- June: J. Milhorn/H. Hyder: - "Airbrush Painting – Part 1"
- June: J. Milhorn/H. Hyder: - "Airbrush Painting – Part 2"

**President's Report:** F. Alsop reported the following:

- Renovations to Rooms 100A and 100B have started with the removal of the vapor hood. Cost estimates for floor repair, painting, and enclosing pipes are complete. Building management will also inspect the common wall between the hallway and the proposed Children's Activity Room to see if a window can be installed or already in place.
- MEMRR has received several donations including O Gauge and S Gauge equipment, G Gauge controller (J. Pahr) and N Gauge flex track (W. Hemsley). F. Alsop requested help in assessing the value of the O- and S-Gauge equipment.
- Legal counsel advised the club that the use of stepstools and stepladders for visiting children represented no

additional liability to the club or university. Caution should be taken to prohibit the use of chairs and other furniture. The club may wish to apply caution stickers on the club owned stools.

**Old Business:**

**Museum Display Cases:** F. Alsop thanked G. Cameron for providing the original equipment and models for the display cases. The club members should take responsibility for providing items for display. Rotating displays have been proposed with several members stepping up with ideas and items for display.

**April 4<sup>th</sup> Train Show:** G. Cameron reported a change of date for the Spring train show which will be held April 4<sup>th</sup>. The show will feature open houses at the Train Center and MEMRR clubs, seap-meet in the parking lot near HobbyTown. B. Barrett is opening his Activity Center for clinics.

**Photo Contest:** T. Bleck-Doran indicated that there are over 20 entries for the 1<sup>st</sup> Annual Photo Contest. The last entries need to be received by February 28<sup>th</sup>. Winners will be determined by popular vote during open house Saturdays during the month of March.

**Interstate 50-ton Hopper Cars:** H. Hyder reported that Bowser/Accurail is prepared to produce a run of Interstate 50-ton Hopper cars. 17 members have ordered 75 cars so far making the price \$12.98 each. An additional order of 25 cars is needed for a price reduction. Recommendation to use the cars as a club fund raiser failed to get support from the floor.

**Publicity Brochure:** Active discussion regarding creation of a promotional brochure occurred. H. Hyder reported that an initial print run of 25,000-100,000 would be needed. 100,000 would cost \$2,500. B. Barrett has indicated that the HobbyTown owners in the region might be willing to cover some of the costs. Several members expressed concern that only 3-5% of this type of advertizing ever receives positive action and that the expenditure may not be effective use of funds.

**Club Logo Contest:** Tabled due to lack of committee action or report.

**New Business:**

**MEMRR First Bank Checking Account:** As reported in by the treasurer, a checking account with First Bank of Tennessee has been opened with check writing privileges granted to the Treasurer and the President.

**Buss Wire Upgrade:** The need to upgrade the buss wire for the HO layout was discussed. Color coding is non-existent. Additional feeder wires needed on modules. Recommendation to inventory problems module-by-module to make a more accurate estimate of corrections needed. Recommendation to replace the existing buss wire was made. Some members wished to retain as much of the existing wire. Motion: M. Hemsley, A. Morton - to set aside \$300 cash reserve for new wire. Passed (22-1)

**Air Brush Equipment:** J. Milhorn offered to donate airbrush equipment ha has been using to the club for use by members. Motion: to accept donation with special thanks. Passed.

**Layout Reports:**

**N Scale:** W. Hemsley/A. Morton reported that there has been some progress on up grades to the wiring with new feeder wires

added and new flextrack installed. Buildings have been cleaned and ground cover is to be refreshed next.

**HO Scale:** J. Carter reported that the two turnouts for the passenger station stub tracks have been received and are ready to install. F. Alsop reported that electrical wiring on the roundhouse is progressing with feeder wires installed. LED lighting is to be added next. Exterior walls have been installed. Weathering of pit and turntable bridge are planned.

**G Scale:** The layout needs some track upgrades.

**Volunteer Work Schedule:** Volunteers for Club open house sessions on Saturdays in February and March were recruited. List is posted in the club room and on the website. Members are reminded that each member is expected to volunteer the equivalent of one Saturday each month.

**Announcements:** Ashville Train Show, February 20 and 21<sup>st</sup>. Ashville Civic Center, \$5.00 Admission.

**Program:** J. Pahriss provided the program showing a DVD titled: "The Great Train Story: The Chicago Science & Industry Museum HO Layout."

**March Meeting:** The next meeting will be **Tuesday, March 17<sup>th</sup>, 7:00 PM, ETSU Campus, Brown Hall, Room 312.** Dinner for those who want to dine and socialize earlier at **5:45 PM** at **El Torito Mexican Restaurant** on State of Franklin in the Kroger shopping center complex west of the ETSU campus.

Meeting adjourned at 9:05 PM.

Submitted by:  
Ted Bleck-Doran

### PRODUCT REVIEW Real Rails Edition Appalachian Conquest

Kalmbach has produced a new volume in the *Dream Plan Build* video Series. The latest volume is **Appalachian Conquest** in the "Real Rails" series. It brings the action of CSX's Corbin Division to your home entertainment center. The Corbin Division main line passes through Kentucky and Tennessee. There's lots of action as high horsepower engine pull, push and prod coal trains up steep grades and through mountain tunnels. There is excellent commentary to accompany the video shots. Both trackside views and shots from the cabs of CSX trains giving this video a pleasant mix of video footage and images. For anyone modeling eastern coal train and Appalachian country side this video is a must. There are lined and unlined tunnels, creek side running and high bridges, and flood loaders galore.

The Corbin Division has a rich heritage running back to L&N days before being absorbed by CSX. The footage was shot in the fall so riotous colors abound, making this a DVD the whole family will enjoy.

Chapters include:

- History of CSX's Corbin Division
- The Journey Begins - Orlando KY
- Perth South
- Helper Engine Tackles Crooked Mountain
- Corbin Yard
- Corbin Locomotive Shop
- Riding A Southbound Coal Train
- Tackling Grades at Duff Mountain and Morley
- Chaska Helper District
- Mountain Views through Oaks
- Ending Our Journey: La Follette, TN

Cost: \$24.90 (S&H Included)

### ALERT Club Room Security

Hey Gang,

I think this will be of interest to all, so here goes. Today, Wednesday Feb 18th, I was at ETSU to return a couple of items to the Museum. I first got the keys from the lock box and when I went inside to open the Museum doors, WHOA, much to my surprise, the doors were **NOT** locked. There sat our layouts and everyone's private stock totally at the mercy of whomever would turn the knob, open the door, and walk in. This was at three o'clock this afternoon.

I believe we all would agree that it is of the utmost importance that the doors be LOCKED, CHECKED, and VERIFIED that they are indeed **LOCKED** before the last one leaves. This is the second time I personally have found the Museum open and no one in there.

Respectfully,  
**Don Ramey**



**L&N Depot - Nashville, TN**  
Renovated as a hotel and boutique shopping center



**The view from the chief engineer's side of the cab:** Fellow MEMRRs, when you read this I will be railfanning along the Panama Canal (and looking at a few birds too). Hobie Hyder got bunch of orders for Interstate 50 ton coal hoppers and the order has been placed to Bowser. Another local fallen flag railroad will soon be better represented on our HO layout. Work continues on the roundhouse project and the accessory buildings that will go into the planned "new" freight yard. Our photo contest is underway and the submitted photos should soon be up for voting by our visitors. The lock may or may not be changed on 113 to lock

## Museum Security

Gentlemen and Ladies:

I reported our security problem to Public Safety on Thursday and they ran a check for me for the period between our entering the museum on the morning of Saturday, 14 Feb through the time on Wednesday when Don Ramey discovered our unlocked door. The surveillance cameras showed that workers from the physical plant had entered on Monday and Tuesday during the day with tools and HVAC filters. They probably just forgot to relock the door. I contacted the director of the Physical Plant today with a complaint about our problem and asked him to pass the word to his workers to be more careful because of the value of the museum's contents. He has done so. We also are going to try to solve the problem in another way. The keyshop will adjust the lock on the museum door (room 113) so that when you remove the key from the lock it will automatically lock itself. This is a solution that gives rise to another problem that the membership must become aware of.

**FROM NOW ON IF YOU OPEN THE DOOR TO 113 AND YOU REMOVE THE KEY THE DOOR WILL LOCK. So placing the key on the HO layout as we have done in the past will have to be done with care because if you leave it there and go outside the museum for any reason the door will lock behind you and the key will be locked up safely inside the room. You will have to call Public Safety (439-4480 or 439-6900) to get you back inside and rescue the key. When we are working in the museum we can do two things to keep from locking ourselves out (besides keeping the key in your pocket), 1) block the door open with the wooden wedge like we do on Saturdays, or 2) hold down the panic bar on the inside while turning the key in the lock and it will remain unlocked until you put the key in the lock again to disengage the keeper.**

I have made several signs that I will post when I get to the museum around mid-day tomorrow (Saturday 21st) to remind everyone of the changes outlined above. In the meanwhile try to avoid locking the keys inside the room.

Fred Alsop  
President, MEMRR  
Director, George L. Carter Railroad Museum

when the key is removed (it still had not been changed as of Wednesday, March 4<sup>th</sup>) so continue to be careful to lock the door behind you when you leave the museum—and, if the tumbler has been changed be careful not to leave the key inside the room and lock yourself out!

The ETSU Physical Facilities crews began work on remodeling rooms 100B and 110 on Monday, 2 March. The work is moving along very quickly and you are welcome to check on it for yourselves. The children's railroad playroom will get bright reds, yellows, greens and blues on the walls and a couple of custom-built benches along two of the walls to hide the drain pipes while providing places to sit and play. A carpet will be installed on the floor. The large counter has been cut down in size a little and moved to the west wall by the door. New lights are being installed there as well. The pipes in 100B have been covered with a display shelf and boxed over to conceal them. In the next few days that floor will have new tiles and the walls will be painted a semi-gloss off white.

I have requested that the air supply be turned on in 108 in the "paint booth" as well as along the benches. Jim Millhorn has generously donated many of his spray painting supplies and equipment to the club and museum and will be setting up the airbrush equipment using that air supply when and if it becomes available. Jim is a master model painter and he has agreed to provide his equipment on the condition that we use it and has volunteered to teach those of us who want to learn from a real master the techniques of doing so. Just let him know that you want to learn and be diligent students. Thanks Jim.

The N-scalers have been very busy rewiring the Bankus layout and will be realigning some of the track work. New wiring is also underway on the HO-scale layout to improve its operation. There is a lot going on every Thursday night and we could surely use you help, so come on down and get involved. Looking for a layout to decorate? The Jack Cope analogue HO portable layout needs some engineering and imagination to get some interesting buildings and scenes going on it. We have all kinds of projects that are just waiting for the right people to take them on. You don't have to own a module to get involved and we will soon have even more finished space available to turn our time and talents for model railroading to. Spring is coming very soon and with it MEMRR and the Carter Railroad Museum will take on that fresh look of the new growth of the season. Happy railroading and enjoy your hobby.

Fred Alsop,  
President, MEMRR and  
Director, George L. Carter Railroad Museum.

## How To Tricks And Tips...

### SOLDERING

By G. M. Rabetoy

Soldering is among the most useful and important techniques available to the model railroader. If one is planning to do any wiring or work with brass, it is an essential skill. Basically, soldering is about the transfer of enough heat to melt solder and create a bond between metals. For all practical purposes, there are three ways to accomplish this task. Consequently, there are three general types of equipment that are required. Besides this, there are a few general purpose tools that are needed as supplements. Although there are multiple products available within each category, only a very few will suffice for virtually everything a model railroader will be likely to do. This discussion will mention all three methods of soldering but will focus on only two of them. Furthermore, it is recommended that anyone interested in soldering should consider the purchase of a video that demonstrates the techniques which will be mentioned below. Beyond that, only with practice can one develop the necessary proficiency with which to achieve satisfactory results. Soldering is not difficult if done correctly and with good (not cheap) equipment. A list of recommended vendors is provided below.



**Photo One (Left to Right)**  
**Weller Soldering Station (5-40 Watts)**  
**(Temperatures to 900 degrees F)**

**P-B-L Soldering Video**  
**P-B-L Resistance Soldering Unit (300 Watts)**  
**with Tweezers Attached and Foot Pedal**  
**P-B-L Resistance Soldering Probe Attachment**

Most individuals will begin with a soldering iron. Though many are available, I would recommend one with variable settings (5-40 watts for example) and the ability to change tips to suit the job. The one that is illustrated is available from Micro-Mark (product number 81014) and has a built-in soldering iron and sponge holder. In addition, one will need a supply of different types of solder (normal and low temp), flux (rosin and non-rosin (non-corrosive and acid)), and tip tinner/cleaner. As well, the following tools (also useful for the other methods of soldering to be discussed) are suggested:

- wire cutting pliers
- wire stripper
- needle nose pliers (flat and serrated tips)
- ceramic mat
- wire brush
- fine grit sandpaper

- positioning/parts holding tool
- hobby knife
- vise (Panavise)
- "third hand" parts holding and positioning tool(s)
- old paintbrush (to apply non-rosin flux)

Arguably the best way to start soldering is to simply tin (adhere solder to) a piece of brass. This is accomplished by putting some flux on a piece of stock brass, applying sufficient heat to bubble the flux, and then spreading solder which has been first applied or directly fed to the tip of the hot soldering iron on the brass over the fluxed area. If one then takes a second piece of brass and tins it in the same manner, the two pieces can be joined together by simply putting the two tinned areas in contact and applying sufficient heat to melt the previously applied solder. If the desired position is not achieved, the two pieces can be reheated, disengaged, repositioned, reheated, and joined together again. If one wants to join another piece of metal next to the first without causing a disconnect, higher temp (ex. 430 degrees F melting point) and lower temp (ex. 275 degrees F melting point) can be used. That's all there is to it. I like to use this type of soldering when doing circuit boards or especially when working with low temp solder and joining other metals with low melting points as well.



**Photo Two:**  
**Ceramic Soldering Pad 12" x 12"**  
**(Withstands Temperatures to 2,800 degrees F)**  
**On Ceramic Soldering Pad:**

**Front Row (Left to Right):**

**Q Tip (For Cleaning Flux Residue)**  
**Soldering Wick**  
**Tip Tinner and Cleaner**  
**(Radio Shack Part Number 64-020)**

**Middle Row**

**Supersafe Superior No. 30 Soft Solder Liquid Flux (Water Cleanup)**  
**Rosin Flux**  
**Tix Zinc Chloride Liquid Flux (Alcohol Cleanup)**  
**Tix Anti-Flux**  
**Tix Solder (275 Degrees F Flow Point)**  
**P-B-L Soft Solder (430 Degree F Flow Point/Alcohol Cleanup)**  
**P-B-L Soldering Paste**  
**(430 Degree Flow Point/Soap and Water Cleanup)**

**Back Row:**

**Rubbing Alcohol (For Cleaning Flux Residue)**  
**behind Ceramic Soldering Pad**

The second method of soldering is called resistance soldering. When one has become expert in the use of a soldering iron, moving on to resistance soldering will open up even more possibilities in soldering. Most available units provide either 200 watts or 300 watts of power. I prefer the 300 watt P-B-L unit (product number 1-PBL-831) because one never knows when failing eyesight (or preference) will cause gravitation to a larger scale which may require more power when working on larger pieces of brass. This type of soldering works by creating intense heat over a tiny area by means of a tweezers or a probe attachment, each of which have both overlapping and unique applications. In resistance soldering, a paste type of solder (with flux admixed with the solder) can be applied between the pieces to be joined followed by heat application. Alternatively, flux may be applied and solder fed into the area of attachment or pre-tinned pieces may be joined (or disconnected and rejoined) as above. This type of soldering is extremely fast. I never use this type of soldering for circuit boards. However, I almost always use this type of soldering when working on brass locomotives and wiring polarized plugs and track feeders. When proficiency is obtained, one never needs to worry about melting flextrack ties or using heat sinks when wiring electrical feeders to the rails with this type of soldering.



and Southern Railway were forced to reopen part of Union Station on December 1, 1966, and use it until March 30, 1968.

The *Humming Bird* was canceled in 1968. At that time, the L&N Railroad earned some unwanted publicity when it terminated the final run of the train en route after a federal judge lifted the order keeping the train running after the ICC approved its permanent discontinuance. The passengers were then bussed to their destinations.

The third method of soldering is with a torch. I don't use this method nor do I feel that most model railroaders (except perhaps those doing certain specialized brass locomotive installations) need to concern themselves with this method.

The following provides a list of vendors that I personally use and recommend:

**Micro-Mark**

Micro-Mark  
 340 Snyder Avenue  
 Berkeley Heights, NJ 07922  
 Telephone number: (800) 225-1066  
 Website: <http://www.micromark.com>  
 Email addresses: [micromark@worldnet.att.net](mailto:micromark@worldnet.att.net)  
[MMTechService@att.net](mailto:MMTechService@att.net)

**P-B-L**

P-B-L  
 P.O. Box 769  
 Ukiah, CA 95482  
 Telephone number: (707) 462-7680  
 Website: <http://www.p-b-l.com>  
 Email address: [pbl@p-b-l.com](mailto:pbl@p-b-l.com)

Photographs illustrating the equipment discussed are shown with the exception of the above mentioned wire brush, paint brush, flat nosed pliers, and fine grit sandpaper which were omitted from the photographs for simplicity.

**Photo Three:**

**Front Row (Left to Right):**

- Wire Stripping Tool**
- Wire Cutting Pliers**
- Positioning Tool**
- Hobby Knife**
- Needlenose Pliers**

**Back Row:**

- Panavise with Extra Jaws**
- Third Hand Too**

**HISTORIC PASSENGER TRAINS  
 LOUISVILLE & NASHVILLE RAIROAD  
 THE HUMMINGBIRD**

The *Humming Bird* was a named train of the L&N. The train, inaugurated in 1946, originally ran from Cincinnati, Ohio to New Orleans, Louisiana, via Louisville, Nashville, Birmingham, Montgomery and Mobile, and later via a connection at Bowling Green, Kentucky to Memphis, Tennessee.

In the mid-1950s, Train 5 departed Louisville, Ky at 10:05 pm for New Orleans. Train 6 was the northbound number.

The original equipment was part of a 28-car order of 4 train sets of lightweight aluminum cars built in 1946 by ACF. Fourteen cars were assigned to the "Humming Bird" and fourteen to the "Georgian." Many of those cars were removed from service in the late 1960s due to severe corrosion problems.

The L&N Railroad served the old Union Station in Memphis, until its closure on April 1, 1964. The railroad then used Central Station. Both L&N