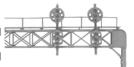


THE SIGNAL BRIDGE



Volume 17

NEWSLETTER OF THE MOUNTAIN EMPIRE MODEL RAILROADERS CLUB JULY 2010 ISSUE

Number 7

Branchville SC Railroad Museum Part 2 – The Collection





For the June Clinic, Gary Rabetoy shared a number of photos from a visit to the Branchville SC Railroad Museum, home to the oldest railroad junction in the world. The Signal Bridge featured several photographs from the museum in last month's issue. We are pleased to highlight a few more in this issue.

The museum consists of the Branchville Station, freight house and several pieces of rolling stock including a former Southern Ry caboose. The grounds and building are well maintained and inviting. The freight house is under renovation with plans to house some of the museum's outside displays. The station sits in the

middle of what was once the junction, with narrow canopied walkways along the mainline and branch track. The walkways provided scant cover for passengers transferring between trains.

The freight house provides some interesting modeling opportunities. The open-air covered platform and arched window and doorways would provide a visually interesting model to build.

Also displayed outside and around the station building are several vintage baggage carts, hand cars and speeders.







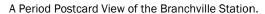








The interior of the depot is given over to a small but impressive collection of railroad artifacts. A Velocipede occupies a corner of the waiting room (second row of photos on left). A model of the City of Charleston, the first steam locomotive to run in South Carolina occupies the center of the room (photo second row right). Other artifacts include lanterns, marker lights, telegraph sounders and keys, and other rail related photos and documents. All in all, Gary reports the collection along with its friendly curator make stopping at Branchville worth the time. It's an especially nice diversion on the way to Charleston and points south,





Train Watching at Mountain Empire Model Railroad Club: Amtrak in Miniature - Part 2

I have acquired some Amtrak Passenger equipment and want to make up a couple of representative train sets to run on the club layout Saturdays. This has taken me down a path of research to see what Amtrak has run in the past, what is contemporary, and what's in store for the future. In the next several issues I'll share what I've found out about Amtrak's fleet past – present – and future.

Let's look at the GE Dash8-32BWH. The information is drawn from Wikipedia.com, the photos are from Geno Daily's Amtrak Photos archive at http://www.trainweb.org/amtrakpix/, and Amtrak Photo Archive at http://www.hebners.net/amtrak/.

GE Dash 8-32BWH



Amtrak locomotive #511, a GE Dash 8-32BWH

GE Dash 8-32BWH				
Power type	Diesel-electric			
Builder	GE Transportation Systems			
Model	Dash 8-32BWH			
Total production	20			
AAR wheel arr.	В-В			
Gauge	4 ft 81/2 in (1,435 mm)			
Prime mover	GE 7FDL-12			
Power output	3,200 HP (2.4 MW)			
Career	Amtrak, Amtrak California			
Number	(Amtrak) 500 - 519 (Amtrak Calif.) 2051, 2052			
Nicknames	"Pepsi Cans"			
Locale	United States			
Delivered	1991			

The **GE Dash 8-32BWH**, also known as the **B32-8WH**, is a modern diesel-electric passenger train locomotive used by Amtrak. It is based on GE's *Dash 8* series of freight train locomotives.

Twenty of these locomotives were delivered to Amtrak in 1991 and numbered 500 through 519. They were nicknamed "Pepsi Cans" by many railfans, due to being delivered in a wide-striped red, white, and blue paint livery. They were eventually repainted into Amtrak's Phase IV paint scheme, which railfans referred to as "Diet Pepsi." Most of them have subsequently been repainted yet again, this time in the current Phase V paint scheme, which some railfans refer to as "Crystal Pepsi."

Today, the Dash 8-32BWH has been relegated to yard switching and transfer service, displaced by the newer and more powerful GE Genesis, but the Dash 8s occasionally substitute for the Genesis units if necessary.

Two of the locomotives, 501 and 502, were purchased by the California Department of Transportation and renumbered 2051 and 2052, and received the Amtrak California paint scheme. They are used on the Capitol Corridor and San Joaquin trains.

From Wikipedia, the free encyclopedia



Amtrak #500 Phase V "Crystal Pepsi" Paint Scheme



Amtrak #516 Phase IV "Diet Pepsi" Paint Scheme



Amtrak #511 "Pepsi Can" Paint Scheme



MEMRR Group Coordinators Meeting – June 10, 2010

To: Fred Alsop III, President, Mountain Empire Model Railroaders (MEMRR)

From: Gary Rabetoy, Coordinator, Rabetoy Layout Development Operating Group

Rabetoy Layout Development

Progress Report

- 1. Members of the MEMRR toured the ET&WNC Right-of Way (ROW) (including a short section of the Linville River Railway ROW) on Sunday, March 21, 2010. The tour was arranged by Philip Sloan and covered the ROW from Newland, North Carolina, to the deck bridge over the Doe River near Hampton, Tennessee. MEMRR members included Fred Alsop III, John Carter, Gary Emmert, Rich Gallaher, and Gary Rabetoy.
- 2. Fred Alsop III independently explored the ET&WNC RR ROW through the Doe River Gorge on Sunday, April 4, 2010, from the Doe River Gorge Camp to the bridge at Tunnel # 4. Multiple photographs were taken documenting the topography for reference and for possible backdrop development.
- 3. Benchwork materials were purchased through the assistance of Paul Haynes on Monday, May 10, 2010. The benchwork materials consisted of two sheets of 4ft. x 8 ft. birch plywood at \$99.90 and 336 feet of 1 in. x 4 in. spruce lumber at \$127.68 for a total cost of \$227.58. It is currently in storage at Main Street Wood Shop. Thank you, Paul, for your assistance.
- 4. ET&WNC RR brass locomotives # 10 and 12 were tested by Gary Rabetoy on Friday April 30, 2010, and Monday, May 10, 2010. After lubrication, tests were conducted on a section of straight test track mounted on an 8 foot board with a 2% grade in each direction. Preliminary results showed both locomotives to be operational with locomotive weights between 4.5-5 ounces and with tender weights of 2 ounces. All wheelsets were in gauge. Starting voltage (DC) was found to be 7.3 Volts and headlights and backup lights were operational. Both locomotives were capable of climbing a 2% grade in both forward and reverse directions. Similarly, both locomotives were capable of pushing 4 high side gondolas (1.5 ounces each) and one long caboose (2 ounces) (all Blackstone Models) up a 2% grade without slipping [total of 5 cars/8 ounces]. Locomotive # 12 ran slightly faster than locomotive # 10 in forward and slightly slower in reverse. Both locomotives would occasionally stall, presumable due to loss of electrical contact. Neither locomotive was tested in a forced stall, over a turnout, or on a curve. Bullfrog Snot was not applied nor were the two locomotives in the display case at the George L. Carter Railroad Museum tested. These latter locomotives reportedly have been previously shown to be operational though they have not been further tested.
- 5. Information received by Fred Alsop III from Johnny Graybeal at the Railgrass Festival in Kingsport, Tennessee, on Saturday, May 8, 2010, led to additional track plan research by Gary Rabetoy. A track plan was noted to be available in the July, 1981, issue of Model Railroader magazine (available in the MEMRR collection as noted by Gary Emmert, MEMRR Librarian). Thank you, Gary. This

plan (by Jim Kelly in the July, 1981, Model Railroader on page 71) and other pertinent articles are provided in ENCL. 1. The other articles from the above edition included in ENCL. 1 are:

- All aboard: Narrow gauge by Jim Kelly (pages 56-57)
- An ET&WNC train you can model by Jim Kelly (pages 62-65)
- Tweetsie: Narrow Gauge on the Blue Ridge by Jim Kelly (pages 66-71)
- Towards a Tweetsie Ten-Wheeler by Jim Kelly (page 85)
- 6. Philip Sloan of Cranberry Car Shops delivered a collection of rolling stock and structures that had been purchased by Fred Alsop III on Thursday, May 20, 2010, in the amount of \$1,000.00 for the ET&WNC RR layout (ENCL. 2). These items were received by Duane Swank and Gary Rabetoy at the George L. Carter Railroad Museum on Saturday, May 29, 2010. Thank you Fred and Philip.
- 7. Following the delivery of items noted in # 6 above, Philip Sloan and Gary Rabetoy reviewed the track plan concept being proposed for the ET&WNC layout in the Ken Marsh room including modifications at Cranberry, North Carolina (turntable addition), Hampton, Tennessee (track arrangement), and Johnson City, Tennessee (dual gauge track designation). In addition, a concept for connections via the donated Rabetoy layout (representing the Southern and Clinchfield Railroads) with the ET&WNC RR layout was discussed. Philip Sloan finalized these changes on Sunday, June 6, 2010, and these are shown in ENCL. 3.
- 8. On Thursday, June 3, 2010, Paul Haynes was provided with information which will allow benchwork for the shelf area of the ET&WNC RR layout to be built. Briefly this will encompass three portable modules. Two modules will be 2 ft. x 8 ft. in size and one will be 2 ft. x 6 ft. in size.

The sides of the former two modules will cumulatively require four 8 ft. long side rails and eighteen 22 $\frac{1}{2}$ in. long cross braces all of which will be made of 1 in. x 4 in. spruce lumber. Seventy two # 10 1 $\frac{1}{4}$ in. flathead wood screws will be required for the frame. Also required will be two 3/4 in. birch plywood tops, which will be 2 ft. x 8 ft., and which will be left unattached at this point. The latter 2 ft. x 6 ft. module will require two 6 ft. long side rails, seven 22 $\frac{1}{2}$ in. long cross braces all of which will be made of 1 in. x 4 in. spruce lumber, and twenty eight # 10 1 $\frac{1}{4}$ in. flathead wood screws for the frame. Also required will be one 3/4 in. birch plywood top which will be 2 ft. x 6 ft. and which will similarly be left unattached at this point. The cross braces will all be placed inside the side rails (end pieces as well as interior pieces) and will be on 12 in. centers and attached by four # 10 1 $\frac{1}{4}$ in. flathead wood screws (two on each side). The total for the above is as follows

- Four 8 ft. side rails of 1 in. x 4 in. spruce lumber
- Two 6 ft. side rails of 1 in. x 4 in. spruce lumber
- Twenty five 22 ½ in long cross braces of 1 in. x 4 in. spruce lumber
- One hundred # 10 1 1/4 in. flathead wood screws
- Two 2 ft. x 8 ft. tops of 3/4 in. birch plywood
- One 2 ft. x 6 ft. top of 3/4 in. birch plywood

Screw holes for the cross braces will be drilled in the side rails with centers measured ¾ in. in from the above and below edges. All screws will be countersunk. Cross braces will have matching holes drilled in their ends to accept the screws. Cross braces will have five ¼ in. and four 5/8 in. holes drilled in the centerline of each cross brace for connection and wire access respectively. These holes will be directed parallel to the long axis of the side

frames. The initial $\frac{1}{4}$ in. hole will be drilled 4 in. in from each side. The initial $\frac{5}{8}$ in. hole will be drilled 2 in. in from the initial $\frac{1}{4}$ in. hole (6 in. in from the side) on both sides. Holes will alternate at 2 in. intervals subsequently to achieve the above pattern.

Side rails will not need the usual ¼ in. connection holes as there will be no other modules attached to the sides.

These items will be prepared according to the schedules of Paul Haynes, Duane Swank, Fred Alsop III, and Gary Rabetoy. Thank you Paul, Duane, and Fred. Following preparation, the materials will be transported to the Ken Marsh Room at the George L.Carter Railroad Museum for assembly.

9. On Friday, June 4, 2010, a call ((207) 639-4462) was placed by Gary Rabetoy to Matt Sharp at Train and Trooper requesting information and assistance on sound decoder installation in the four brass ET&WNC RR locomotives that have been previously purchased through Cranberry Car Shops. Two subsequent calls were placed, one on June 7, 2010, and another on June 9, 2010. None of the calls were answered, except by an answering machine, and thus far a message left requesting a return call to Gary Rabetoy has not resulted in a return call.

10. Recommendations:

- When feasible, construct a circular test track to allow breakin of the four brass ET&WNC locomotives.
- Re-test the above locomotives after break-in.
- Discuss sound decoder installation in the above locomotives with Matt Sharp at Train and Trooper.

- Prepare and assemble the ET&WNC RR shelf benchwork in accordance with the above directions. This will require the additional purchase of one hundred # 10 1 ¼ in. flathead wood screws.
- Following construction of the shelf benchwork, commence the design and fabrication of the leg extenders/levelers for the Rabetoy layout to reach the same exact height as the ET&WNC RR shelf benchwork.
- Following construction of the leg extenders/levelers for the Rabetoy layout, design and fabricate the splice and lift-out sections for the Rabetoy Layout.
- Following construction of the splice and lift-out sections for the Rabetoy layout, re-connect and make operational the Rabetoy layout.
- Await approval of the final version of the ET&WNC RR track plan (ENCL. 3) provided by Philip Sloan.
- Following approval of the track plan noted above, commence track laying on the shelf portion. Bob Jones has agreed to be in charge of track laying. Thank you, Bob.
- Subsequent recommendations will follow regarding the rest
 of the project at a future meeting. These will include
 completion of the undeveloped donated module benchwork
 and benchwork development to connect the shelf portion of
 the ET&WNC RR layout with the portion to be built on the
 undeveloped donated modules.

Respectfully submitted.

Gary Rabetoy



The View from the Engineer's Side of the Cab

Welcome our newest member, ETSU student **James Bailey**

from Clarksville, TN. Club member **Allan Morton** is recovering from back surgery and we wish him a speedy and full recovery. Fellow member **John Edwards** is still suffering from a yet-to-be-diagnosed medical problem and we extend our best wishes to him and Debbie as well. We hope to see you two fellows around the railroad museum again very soon.

Thanks to Bill Hensley, Tod Eaton, Bob Jones and Lyle Montieth for joining me on Monday, June 28th, to host the Little Bucs (K-3) and their teachers at the Carter Railroad Museum. Our little visitors enjoyed seeing the trains operating on the layouts, but were especially interested in creating their own layouts and train operations on the floor of the Little Engineer's room with Thomasthe-Tank and friends.

John Carter has confirmed our summer picnic date with Mr & Mrs Tom McKee, who will be our hosts at their home for this annual event. We will plan on arriving around 4 p.m. on Saturday, August 21st. (the August 14th date we had tentatively chosen earlier created a conflict for the McKees). The McKees are graciously furnishing the meats for us. We will need to get a headcount for attendees and I need a volunteer, or volunteers, to organize the picnic to assure we have a balanced compliment of foods, drinks, desserts, and the plates, napkins, plastic ware, etc., to make this a memorable event. Please contact me, or any of the club officers

to volunteer. A map will be furnished on the club website and in *The Signal Bridge*.

The Cope Traveling Layout is back in its "home" in the railroad museum. Thanks to **Gary Emmert** who furnished his truck to bring it back and to **John Carter** who helped Gary and me with moving it from downtown Kingsport where it had been since the Blue Plum Festival. We will need to do some minor repairs to its "woodlot" and some additional touching up before it is ready to travel again. Protective Lexan barriers need to be purchased and installed and the benchwork needs a coat of fresh paint, but these will be worked out with the layout's coordinators and work team. If any members want to build some new inserts for this layout the invitation is still open to try your creative and modeling skills on this small project.

The HO yard benchwork extensions and the new staging yard benchwork is now in place and painted. The laying of new track and turnouts will begin on Thursday, July 7th starting with the staging yard. John Carter will head up the gandydancers laying the track and Joe Roberts has volunteered to be the coordinator for all the electrical wiring for the entire HO layout. Joe is currently planning the wiring and the required electrical support needed to make this large club layout run as flawlessly, electrically-speaking, as possible. Please let Joe know of any reoccurring electrical problems you have experienced on this layout so he may be aware of them and seek to find solutions. Some of our benchwork/modules are approximately 17 years old now and are beginning to show their age and could use some TLC. The ETSU electricians pulled the wiring for a new power source to the "dispatcher" area in the "U" of our new yard complex on June 30th. This was accomplished by installing 2 ceiling-to-floor conduits; one for the electrical service and one carrying the computer and telephone cables. The computer, printer,

telephone, test track, and Zepher DCC station are now all relocated to this area of the HO layout. Lyle Montieth has been busy cleaning up the wiring under the benchwork created by our moving these machines. Bill Hensley installed shelf brackets to support the DVD player on the post opposite the TV monitor. Tod Eaton installed the brackets to hold our name tag board and helped me install a wall display cabinet for the G-gauge layout's extra locomotives and rolling stock. Housing these items in it frees up an additional shelf for display in our large glass-fronted cabinets.

Paul Haynes, Gary Emmert, Gary Rabetoy, and others have been busy building benchwork for the new HO n3/HO Tweetsie layout. They could use help in construction and in painting the benchwork if any of our members would like to lend them a hand. This work is going on in the Ken Marsh Room.

Bob Jones has been spending long hours at the museum with his laptop and scanner. He is building a computer file that can be downloaded on a CD/DVD of the books we now have in our growing library. In addition to the usual reference information regarding author, title, publisher, date, etc., Bob is scanning in tables of contents for all the books, and some of the illustrations found in some selected volumes. When he completes this project we will have a very user friendly cataloged system that will give anyone one who wants to have a little more than the standard library information about holdings in our collection there for the

asking. Bob has some reading time between each scan and he says he is enjoying all that he is learning about railroads and railroading from this work

As you can see there are lots of things going on with the MEMRR at the Carter Railroad Museum in addition to operating our layouts and hosting the Little Engineers on Saturdays. This is a very active model railroad club and you as members have the opportunity to exercise your creative talents while enjoying the company of some truly exceptional people. If you are not a regular at club meetings, Thursday evening work sessions, or Saturday operating sessions, you are missing out on a great opportunity to share your model railroading skills and to learn some new ones from this club. What are you waiting for? There is something for everyone to do and lots to learn in a friendly and hospitable atmosphere. Thanks to everyone who continues to provide the energy and know-how that allows all these projects to stay up and running. You are truly appreciated for all that you do.

Hope to see you soon. We have a picnic to plan and layouts to build!!! Hear the whistle blow and dream of all the destinations yet to come.

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



MEMRR Group Coordinators Meeting – July 8, 2010

To: Fred Alsop III, President, Mountain Empire Model Railroaders (MEMRR) From: Gary Rabetoy, Coordinator, Rabetoy Layout Development Operating Group

Rabetoy Layout Development

Progress Report

- 1. Fabrication of the shelf area benchwork was commenced on June 10, 2010, with the initial cutting of the plywood tops for the shelf section of the proposed ET&WNC layout. Further cutting of the cross braces took place on June 17, 2010. Final cutting of the plywood tops took place on June 24, 2010. Access holes were drilled in the cross braces on June 24, 2010, and assembly was completed on the two 8 ft. plywood topped benchwork sections on July 1, 2010. Paul Haynes performed the cutting, Gary Emmert performed the drilling, and Gary and Paul assembled the above two sections of benchwork. Thank you, Paul and Gary.
- 2. Analysis of the track plan provided by Philip Sloan disclosed the following track requirements (see table below):
- 3. An additional telephone call was placed on June 18, 2010, to Matt Sharp at Train & Trooper ((207) 639-4462) and a message was left regarding DCC installation in the ET&WNC brass locomotives. Similar to previous calls (please see the MEMRR Group Coordinators Report of June 10, 2010), this call to Matt Sharp was not returned. In further consultation, it appears that Matt Sharp is not noted for returning telephone calls. Apparently

the best way to contact him is to get lucky enough to call when he is answering the telephone. Therefore, I have no intention to place any more calls to Matt Sharp and will pursue other avenues regarding DCC installation if approved to do so.

4. On June 18, 2010, a call was placed ((541) 535-1755) to Joe D'Amato at Micro-Trains Line and a message was left inquiring about possible production of rolling stock in HOn3 scale representing the ET&WNC RR. Email messages were also sent on June 21 and 22, 2010. I also spoke with John Waite ((573) 864-0254) and Johnny Graybeal ((828) 719-8056) on June 22, 2010, about such a project and gathered information from them for Mr. D'Amato stemming from his request for information in an email he sent to me on June 21, 2010. I sent an email to Mr. D'Amato with the requested information on June 22, 2010. There was no subsequent email response from him. It does not appear likely to me that Micro-Trains or Blackstone (see below) would have any interest (for economic reasons) in developing a product line featuring ET&WNC RR rolling stock. This issue was also discussed with Johnny Graybeal in the telephone conversation noted in section 3 above and his impression was the same.

5. Recommendations:

- A. Finish assembly of the one 6 ft. section of benchwork for the shelf side of the ET&WNC layout.
- B. Design, fabricate, and assemble the leg extenders/levelers for the Rabetoy layout to allow that layout to reach the exact same height as the ET&WNC RR shelf benchwork.
- C. Reconnect and make operational the Rabetoy layout. This will require the additional design, fabrication, and assembly of the splice and lift-out sections for the Rabetoy layout.
- D. It is my impression that the layout plan drawn by Philip Sloan is a good plan but that it is overly complex (primarily on the Johnson City/shelf side) and too expensive to build. It also does not completely satisfy the proposed scenic requirements regarding the Doe River Gorge and its placement on the layout. Therefore, I met with Emile Hamm

on June 26, 2010, and we discussed combining the Philip Sloan plan with the Jim Kelley/Model Railroader July, 1981, plan. Emile has agreed to develop a CAD plan incorporating the above two plans with placement of the Doe River Gorge on the outside sections of the undeveloped modules. Thank you, Emile.

- D. When the Emile Hamm plan is available, further review and discussion should be considered before purchasing additional supplies.
- E. Consider contacting other professional DCC installers for the brass ET&WNC locomotives.

Respectfully submitted: Gary Rabetoy

Johnson City/Shelf Portion:							
	<u>Needed</u>	<u>Available</u>	<u>Shortfall</u>	Cost/Item	<u>Total Cost</u>		
Dual Gauge Right Hand Turnouts	10	2	8	\$39.00	\$312.00		
Dual Gauge Left Hand Turnouts	14	2	12	\$39.00	\$468.00		
Dual Gauge Track	135.45 ft.	90.18 ft	45.27 ft*.	\$12.00	\$288.00 *24 1 m Sections		
Cork Turnout Pads (HO Scale)	10 Right	0	5 Pkgs	\$ 4.99	\$ 24.95		
	14 Left	0	7 Pkgs.	\$ 4.99	\$ 34.93		
Cork Roadbed (HO Scale)	135.45 ft.	0	135.45 ft.*	\$28.09	\$ 56.18 *2 75 ft. Pkgs		
Tortoise Turnout Machines	24	0	24	\$16.75	\$402.00		
DP/DT Micro Switch	24	0	24	\$ 3.99	\$ 95.76		
Cranberry/Modular & Connecting Portion:							
Narrow Gauge Right Hand Turnouts	2	4	0	NA	\$000.00		
Narrow Gauge Left Hand Turnouts	6	3	3	\$15.19	\$ 45.57		
Narrow Gauge Track	99.2 ft.	119.73 ft.	0 ft.	NA	\$000.00		
Cork Turnout Pads (N Scale)	2 Right	0	1 Pkg.	\$ 4.99	\$ 4.99		
	6 Left	0	3 Pkgs.	\$ 4.99	\$ 14.97		
Cork Roadbed (N Scale)	99.2 ft.	0	99.2 ft.*	\$16.29	\$ 16.29 *1 75 ft. Pkg.		
				\$ 5.99	\$ 5.99 *1 15 ft. Pkg.		
Tortoise Turnout Machines	8	0	8	\$16.75	\$134.00		
DP/DT Micro Switch	8	0	8	\$ 3.99	<u>\$ 31.92</u>		
				-	Гotal: \$1,935.55		

Rayon Manufacturing: North American Rayon and Bemberg Plants in Elizabethton. TN

From Wikipedia.com and other web resources



The Power Plant at North American Rayon

Rayon is the oldest manufactured fiber, having been in production since the 1880s in France, where it was originally developed as a cheap alternative to silk. Dupont Chemicals acquired the rights to the process in the 1920s and quickly turned rayon into a household word, churning out yards of the cheap, versatile fabric. Rayon drapes well, is easy to dye, and is highly absorbent, although it tends to age poorly. Many rayon products yellow with

age and pill or form small balls and areas of roughness where the fabric is most heavily worn.

Rayon is used in a variety of textile applications, including shirts and skirts, and appears in both woven and knitted forms. The fabric has gained an unfair reputation because it is frequently used in cheaply constructed garments that do not stand up to heavy wear. However, rayon is an excellent, nicely draping alternative to silk and is frequently used in evening gowns and other flowing garments.



The Power Plant

The manufacture of rayon begins with cellulose, frequently extracted from wood pulp, although any plant material with long

molecular chains is suitable. The cellulose is steeped in caustic soda, which concentrates some of the cellulose into soda cellulose, which is then rolled or pressed to remove excess soda solution. After pressing, the cellulose is shredded into a substance called *white crumb*.

The white crumb is allowed to oxidize, forming shorter molecular chains, and treated with carbon disulfide. The soda cellulose reacts with this substance, forming *yellow crumb* due to inorganic compounds that emerge during the chemical process. This yellow crumb is dissolved in a caustic solution, which relaxes the hydrogen bonds in the cellulose, producing a highly viscous substance. This substance gives its name to the manufacturing process, called the *viscose process*.

This viscous fluid is allowed to age, breaking down the cellulose structures further to produce an even slurry, and then filtered to remove impurities. Small air pockets are forced out to ensure a strong, even fiber, and the mixture is forced through a spinner, which forms many even strands of fine thread that enter a setting solution to form cellulose filaments: also called rayon. The rayon is stretched to form a strong, even bond, washed, and then formed into rayon fabric.

This complex process results in a great deal of environmental pollution, inspiring a drive to clean up the industry. The rayon industry has also suffered from the development of cheaper artificial fabrics with a much shorter manufacturing process, such as nylon. Rayon is frequently blended with true synthetic fabrics for various applications, and it is advisable to follow individual care labels on rayon garments, as these blends have specific handling needs.



Another View of the Powerhouse

A fire razed much of rayon factory according to an article by Lee Davenport Assistant City Editor of the *Bristol Herald Courier*. He wrote:

"Black smoke billowed from the roof of the mostly vacant North American Corp. plant Friday as flames engulfed the building that once housed the city's largest employer. Fearing a release of potentially deadly fumes officials closed city schools - two of which are within sight of the plant and put nearby Sycamore Shoals Hospital and residents on alert that an evacuation might be ordered. Before dawn, officials were worried that

more than 5 million pounds of chlorine stored at the former North American Rayon complex could mix with water being used to douse the flames and give off a caustic vapor. But the evacuation watch was called off at about noon, when officials learned that the chlorine was the type used to purify swimming pools and would not react violently with water."



left and below, show some of the extent of the damage to the factory. While the fire was still burning Friday night, the fiames' threat to a repository of chlorine stored there had abated. The chlorine, in granular and tablet form, was a concern but it created no immediate danger, an official said.

Aerial scenes

lasen Devis Tretal Haraid Course



Jason Davis/Eress Herald Counce

The fire burned into the afternoon when part of the roof at the 1.3 million-square-foot plant collapsed. Firefighters were pulled out of the burning building.

Officials who at first were concerned about the chlorine fumes had a new worry as the day wore on. Officials said Elizabethton's water supply suffered during the drought this past fall and that the city's water source had not fully recovered. Hydrant water was supplemented by tankers and siphoned water from local streams.

Runoff from the firefighting efforts made its way into the Watauga River, which runs behind the plant, and was believed responsible for a fish kill. Tennessee Emergency Management Agency officials said they had received reports that residents were picking dead fish out of the river, and the agency warned that eating them could be dangerous. It appeared the fish had suffocated.

At the height of production in the 1960s, North American Rayon Corp., as the facility was once known, was the city's largest employer. But in 1997, most of its work force - about 1,300 people - were laid off!



Mountain Empire Model Railroaders Meeting, June 15, 2010 Minutes

Call to Order: The meeting was called to order at 7:01 PM by club president, Fred Alsop. There were 16 members present.

Officers Reports:

Secretary's Report: Secretary Don Ramey was absent, Minutes had been published in the June issue of *the Signal Bridge*. Motion to accept the minutes as printed was made and seconded. Motion passed.

Newsletter Editor's Report: F. Alsop complimented the editor for producing a 10-page edition. The editor reported that several members had contributed material for inclusion in recent issues. There will be series articles on Amrtak, ET&WNC right-of-way and layout improvements. Members were invited to share photos from summer railfan outings. Material can be submitted in any formate. The editor will tweak submissions.

Treasurer's Report: D. Swank provided a report on the club treasury. The report is on file with the treasurer. Motion made an seconded to accept the report as presented. Motion passed.

Webmaster's Report: No report received as the webmaster was absent.

Vice-President's Report: J. Carter reported that June program would be a photographic tour of the Branchville SC Railroad Museum; July program would be TBA.

President's Report: F Alsop thank members who had volunteered to assist with several layout projects. A full account of his comments were published in the June issue of *The Signal Bridge* – A View from the Engineer's Side of the Cab.

Old Business:

- 1. Racks-by-the-Tracks, Blue Plum Festival: G. Emmert reported that things went well withshowcasing the not-so-portable layout at the three venues in May and June. D. Doughty collapsed an the Blue Plum Festival and had to be taken to the hospital. He was reported at home and doing well. Some discussion occurred about returning the layout to the museum and about its portability. No action taken.
- 2. MEMRR/GLCRR Museum Library Status: G. Emmert reported that B. Jones has scanned in cover pages and Tables of Contents for a third of the hardback books thus far donated to the club. These will be placed in .pdf format and available to MEMRR Members on CD/DVD discs. Most of the magazines and in binders or shelf file boxes. J. Pahris has donated file boxes for this collection. Garden Railways have yet to be shelved. Discussion regarding working with the Library Science Department to insure a proper catalogue of the club holding is done. Not action taken.
- MEMRR Summer Picnic (Ideas and Volunteers for a Committee: The McKees have invited the Club once again to picnic at their lakeside home. August 14th with a rain date of

August 21st were suggested. Early evening start time (Picnic has been set for August 21st at 4:00 PM). Tom McKee will provide the meat, the club will provide the rest including paper goods.

New Business:

- Coordinators' Meeting: see Coordinators' Meeting report for June 10th above.
- Broadway Paragon 2 Sale: The club took advantage of Factory Direct Trains 2-for-one sale on the Paragon 2 SD40-2 locomotives. One each in a Norfolk Southern livery and a Southern paint scheme were purchased.
- 3. Dungannon Depot Anniversary: The club has been approached to take the display layout to the 100th Anniversary of the depot at Dungannon VA. Transportation, costs, volunteers were discussed, Motion to decline was made and seconded. Motion passed.
- 4. Sales of Prints, Ornaments, Caps, surplus HO & N Equipment: all ornaments were esold out. One sale was uncounted but the money was later accounted for (person paid for mixed purchase by check.
- CRR prints: F. Alsop has framed two sets of prints for sale with a cost of \$50 per framed print.
- Cope Layout: The need for a trailer was discussed. No action taken.
- 7. Trolley Trip to Charlotte NC: H. Hyder discussed plans for a day trip to ride and view the car shops of the Charlotte NC Trolley system. He reported that 8 people ehad signed up to go.
- Speeder Ride: A railfan outing to ride speeder cars near Ashville has been postponed until later in the year. Date TBA.
- 9. ET&WNC Convention. J. Shipley talked about the upcoming ET&WNC RR Convention. There will be available (cost \$35) a DVD of aerial photo of the right-of-way taken by the Department of agriculture following the 1940 flood. F. Alsop has obtained a copy for the club.
- NMRA: G. Cameron relayed a message that L. Buckholder from the Knoxville/Oakridge club wants to attend one of our meeting to promote the NMRA.
- 11. Troubleshooting Guides: the need for troubleshooting guides for the three layouts was discussed. Guides have already been published in The Signal Bridge.

Program: The Branchville SC Railroad Museum Gary Rabetoy

Meeting Adjourned 8:45 PM

Next Meeting: Thursday, July 20th Minutes expertly crafted and submitted by:

Fred Alsop John Carter And, Ted Bleck-Doran

Photos From Around The Club





Operator's Booth with Computer and Zephyr Programing Tracks





The New Conversation Pit – er – Staging Yard





Josi and Don down in the tunnels



News Flash... Paul Haynes came upon a gruesome discovery the other Thursday night when he arrived for the work session. He reported the body of Mrs. McGilacudy was found on the front porch of her farmhouse. "She was just a pool of plastic," said Haynes. "Given the heat of the past few weeks, she must have just melted," he continued. The carpenters working on installing a new roof seemed oblivious to the plight of the recently deceased McGilacudy."Who's going to pay us now," one worked exclaimed as he walked off the job. "It's strange," added Haynes, "Her pets seem unfazed by all the events."

Keep cool this summer!