



THE SIGNAL BRIDGE

NEWSLETTER OF THE MOUNTAIN EMPIRE MODEL RAILROADERS CLUB

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LOCATION

ETSU Campus
George L. Carter
Railroad Museum

HOURS

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

Brown Hall
Room 312
ETSU Campus,
Johnson City, TN.

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

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

SPECIAL FOCUS THIS ISSUE

RAILFAN OUTINGS FOR THE SUMMER, Pt. 2 PLANNING SUMMER OUTINGS WITH A RAILROAD THEME



Railfan outings can range far afield e.g., – a once in a lifetime ride on the Durango & Silverton Railroad



Or... just lounging around the neighborhood to catch the local color.
Photos courtesy of Ted Bleck-Doran (top), Paul Haynes (bottom).

PAUL'S PICS PAGES
PHOTOS FROM THE LENS OF PAUL HAYNES
DWARF SIGNAL PRODUCTIONS



CSX SD-40-2 # 6116 seems to have become a regular here in Kingsport.



This morning was foggy, as seen in photo #'s 2, and 3, with 6116 leaving For Erwin.



Even with the cutback in rail activity, Kingsport still sees rail traffic, both switching and through traffic. CSX's SD-42 #8116 is already busy, shuttling down to the other end of the yard for switching duty to get an early start on the day.



Norfolk Southern *016 creeps out from behind a string of hoppers in FirscoYard, July 16th of this year.



#484 getting ready for the trip from Chama to Antonito on the 1st of July.

DISTRESSED ROLLING STOCK
THE COMMON 7GONDOLA



KCSM (Kansas City Southern de Mexico) #61314 and GRW (Gary Railway Co.) #87699 carry open loads of coiled steel... the coils are secured only by their weight



NW (Norfolk and Western) #89323 with scrap metal load



CR (Conrail) #609149 Mill Gondola with a load of structural steel



AMGX (AMG Resources Corporation) #4000 running empty



NS (Norfolk Southern) #194391 with a load of scrap metal



AMGX (AMG Resources Corporation) #4018 running empty



NW (Norfolk Western) #97134 with a load of structural steel



CEFX (The Cit Group/Capital Finance Inc [Transportation Corp. Of America]) #31860 with scrap metal load



CEFX (The Cit Group/Capital Finance Inc [Transportation Corp. Of America])#31992 with scrap metal load



CIGX (The Citi Group Capital Finance, Inc) #800869 with scrap metal load



CEFX () #80400 with scrap metal load



OMNX (Omnisource Corp.) #548 with load of scrap metal



CIGX (The Citi Group Capital Finance, Inc.) #82230 with a load of scrap metal



CSXT 142954 tagged



CIGX (The Citi Group Capital Finance, Inc) #800710 with scrap metal load



CSXT 151371 XM tagged

RAILFANNING VIRGINIA
NATURAL TUNNEL HERITAGE DAYS

RAILFANNING WYOMING
THE UP YARD AT CHEYANNE



Photo by Paul Haynes

Each year the supporters of Natural Tunnel state Park partner with the Norfolk Southern to sponsor Railroad Day. This year's Railroad Day was held from 10 a.m. to 3 p.m. Saturday July 16th.at the Natural Tunnel State Park.

For years, the railroad has played a vital role in the economy and history of Southwest Virginia, and, for this event only, guests will be able to walk into the tunnel via the railroad tracks. There will also be a Norfolk Southern engine on display at the south portal of the tunnel.



Paid a visit to the Frisco yard near Gate City, VA, and found three sleeping NS locos, ES44AC # 8012, and two SD40-2's, #'s 3375, and 3575. Photo above and following by Paul Haynes.



This is one of several BNSF pics I took Sunday.



Sunday we stopped here to check out the r r depot. About five minutes after arriving, a west bound U P stack train stormed through at a pretty good clip, while in the hole, an east bound BNSF stack train awaits clearance before pulling out onto the main.





A pair of UP locos #'s 8601 and 2526 with a stack train in tow is winding its way through an "S" curve, before splitting the signals, then rolling through the right hand curve in a cut as they approach the rail yard in Green River, WY for a crew change. This scene was just as the sun was fast sinking towards the horizon. Photos above and below by Paul Haynes



RAILFANNING WYOMING CHEYANNE DEPOT MUSEUM

The Cheyenne Depot was the first in a series that Henry Van Brunt designed for the Union Pacific. In 1885, as he was beginning the design for the Cheyenne Depot, Van Brunt sent his business partner Frank M. Howe from Boston to Kansas City to open a branch office there. As the depot was approaching completion in 1887, he moved there himself. As construction was underway on the Cheyenne Depot, Van Brunt designed a similarly scaled passenger station for the UP at Ogden.



Paul at the throttle of UP #4014

The Ogden depot featured a prominent central clock tower similar to the Cheyenne building and a complex roofline with numerous dormers.



The Union Pacific Railroad Museum is located in the former Cheyenne Depot, a majestic structure in anyone book.

Although it resembled the Cheyenne Depot in its overall scale and configuration, the Ogden structure used brick construction and lacked the distinctive Richardsonian Romanesque detailing of its Wyoming counterpart. During the early 1890s Van Brunt & Howe also designed major depots for the railroad at Sioux City, Iowa, and Omaha, Nebraska. None featured the richly textured Romanesque design that Van Brunt had employed on the Cheyenne building.



Some of the displays exhibited in the depot.

Two of Van Brunt's earlier buildings—the Adams Academy in Quincy, Massachusetts, and Memorial Hall at Harvard—have

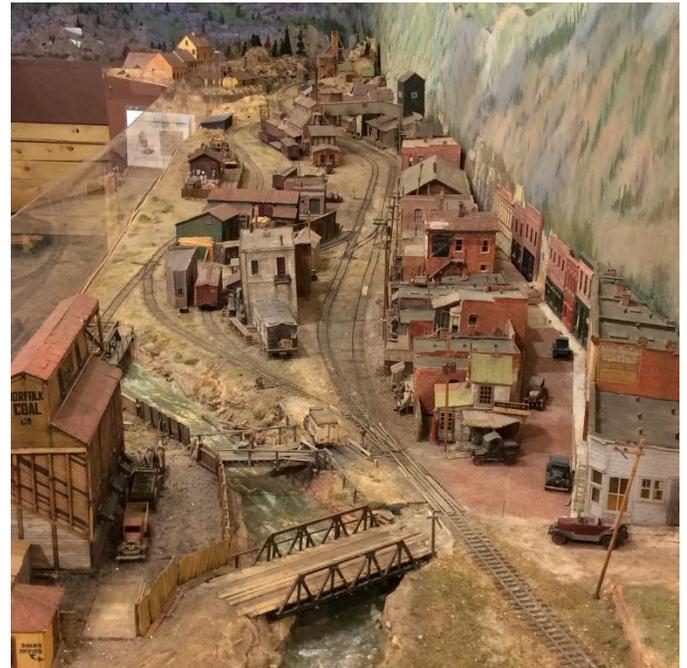
subsequently been designated as National Historic Landmarks. Both buildings were primarily educational in nature, unlike the Union Pacific Depot in Cheyenne. And both were built relatively early in Van Brunt's career, before his move westward, using an entirely different architectural idiom than the Depot. Neither reflected Van Brunt's later architectural development, as illustrated by his commercial and railroad commissions of the 1880s and 1890s.

The series of railroad structures undertaken for the Union Pacific Railroad marked a defining stage in Henry Van Brunt's career. With the Cheyenne Depot in 1886 as the pivotal point, he moved his office from the East Coast to the Midwest and—to a certain degree—redefined his architectural philosophy and style. In his writings and his buildings, Van Brunt sought to assimilate what he saw as Western robustness with Eastern sophistication. In so doing, he hoped to imbue Western architecture with a heretofore underdeveloped sense of originality and prestige. Few others, in his view, were attempting this mission. "I do not believe there are as yet a dozen men really conspicuous for a capacity to express their art in those indigenous terms which take root and fructify the West," he stated in 1889

MODEL RAILROAD AT THE DEPOT



The relocation and rebuilding of one of the world's most popular and loved narrow gauge model railroads, the Union Central and Northern is occurring in the 2nd floor baggage room at the historic Cheyenne Depot Museum. The Union Central and Northern (UC&N) Model Railroad layout created by Harry S. Brunk of Clarkson, NE officially opened during the 2012 Depot Days. Mr. Brunk spent over 30 years handcrafting everything from the scenery to the rolling stock for this HO scale of the narrow gauge Clear Creek (Colorado) Lines of the Colorado and Southern Railway. The UC&N's development has been chronicled in over 100 magazine articles over the years in *Narrow Gauge & Short Line Gazette* and the *Model Railroader*. While the layout is very well known it has never left Mr. Brunk's residence or been on public display until now.



Overview of the UC&N model railroad

Through the generosity of Mr. Brunk and thoughtfulness of Mr. Rick Steele, owner of [LaBelle Woodworking](#) the UC&N has been donated to the Cheyenne Depot Museum for permanent public display.

A VISIT TOT HEE UP YARD AND ROUNDHOUSE



The Union Pacific roundhouse, turntable and machine shop are located in the westcentral portion of the Union Pacific rail yards in Cheyenne. The impressive stone Union Pacific Depot, constructed in 1886, with its 118-foot high clocktower is located only a short distance to the northeast of the roundhouse and dominates the skyline in that direction. The machine shop, a large rectangular-shaped brick building was constructed in 1919 and represents another early component of the rail facilities.

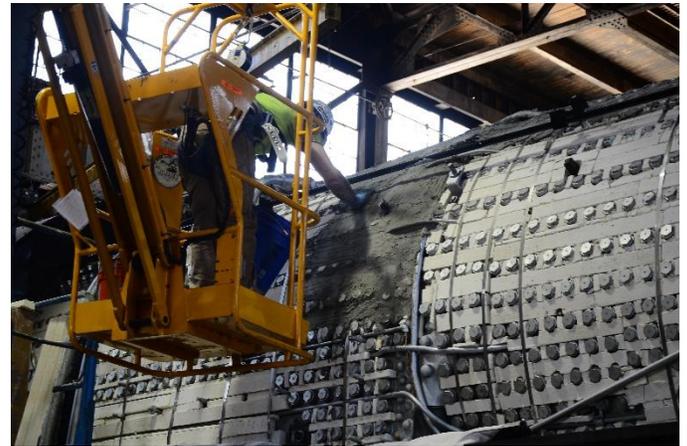


844's auxiliary tenders outside the Cheyenne Roundhouse

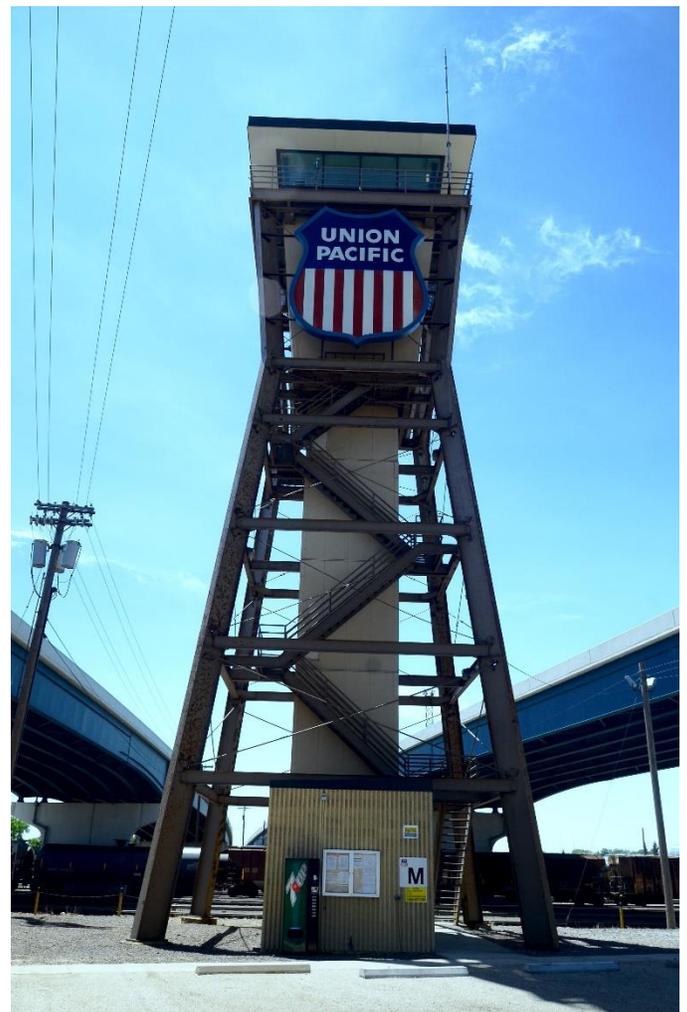


844 undergoing inspection and major shopwork

The roundhouse was constructed in 1931 and is a massive wedge-shaped brick building with a three-tiered roof. The 126-foot diameter continuous span type turntable and control house were constructed in 1941 and replaced a smaller turntable dating from 1911. The turntable has a rail-embedded circular concrete apron and is considered an integral component of the roundhouse facility. The Union Pacific roundhouse, turntable, and machine shop are historically significant due to their unique engineering attributes designed for a single function, the maintenance and storage of steam locomotives. The structures are also significant due to their relationship to the continued development of the first transcontinental railroad and its effect on the formation and growth of Cheyenne and the Territory and State of Wyoming.



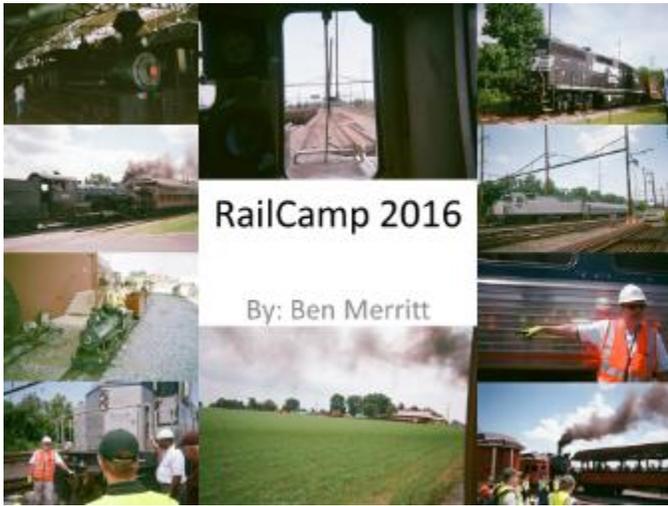
Replacing the lagging on UP 844



Union Pacific's yard tower at Cheyenne

RAILFANNING DELAWARE
RAILCAMP EAST 2016

PowerPoint presentation by Ben Merritt



THANKYOU!

This was by far the best week in my life! This was an amazing program that helped me find what I would like to do in my railroading career. It also let me talk to the people that share the same love for railroading as I do. On the first day we all said the same thing, "I have never met anyone who shares the love and intrest for railroading and railfanning like me until today."



"WE HAD LOTS OFR FUN"

We all met together for about 2 hours the first night and got to know each other.



WHERE WE STAYED

We stayed at the University of Delaware in a brand new dormitory called George Read Hall. We ate in the cafeteria for breakfast every day and dinner most days. I even made friends with two of the cafeteria ladies.



DAY 1

We got up in the wee hours of dark o' clock and ate a quick breakfast. It was quick because we were all excited to get to the Amtrak Wilmington Training Facility. We had a lengthy safety briefing and overview and played a game of railroad jeopardy.



We went out for our first break to just barley catch a Norfolk Southern train going through the Amtrak Northeast Corridor Interchange.



After getting to go inside and outside the train we went inside and took a quick break. We then went to the other part of the Amtrak training center tour, and did the thing I was looking forward to the most that week...

Getting to drive the locomotive simulators.



We then got to go inside the cab of Amtrak engine #527. I got to work the brakes, horn, and bell. Then the Vice President of operations for Amtrak took us in an AmFleet 1 coach car and see the technical components as well as the mechanical components as well.



After a long day we ate dinner and headed to the Newark Amtrak/SEPTA Station. We got there and immediately saw trains rushing by on the Northeast Corridor. A stopping train's conductor had some spikes from the NEC.



Railfanning on the NEC:
(Please use the following YouTube link to Ben's video clip)
<https://www.youtube.com/watch?v=JoF93-XEZvw>



DAY 2

Once again we woke up before the crack of dawn. We were really excited to go our first activity of the day. We were going to the Wilmington Amtrak maintenance facilities. We got to see everything from using a milling machine to produce wheels and other parts to repair work on engines from mechanical problems to body work. We were really lucky to see them pick up a full ACS-64 body. One camper quoted, "They slung it around like it was a toy."



We left the maintenance facilities and went to CTC and CNOC where we saw dispatching and staffing operations for the majority of Amtrak. At CTC we saw the local area dispatching on the NEC. At CNOC we saw the national office where they deal with anything operational wise. We had been with the Vice-President of operations for Amtrak the whole day and he would be with us till about 10:00 at night we disembarked the Amtrak Acela Express.





We went to the Wilmington station and waited for our train to come. When it arrived we were surprised by seeing they had placed the catenary inspection car and the theatre car on the end of our train and reserved the two cars for us. We traveled to Washington's Union Station.



When we got to D.C. they had plenty of things for us to do. We splitted up into our 4 groups of 6 and started going to our stations. First, we went with the Amtrak Police and learned about how they keep Amtrak and its customers safe. We even got to watch their police dog sniff out a explosive. Then, we went with the stationmaster of Union Station and learned about its history and architecture. Then we went with the VP of operations into K tower which controls and dispatches all trains at Union Station. Last we went to look at the different private cars around the station and we went inside a office that deals with construction and problems on the NEC.



We hopped onto an Acela after eating pizza at UNO's Bar & Grill. We got to look inside the electronic components that operate the

car. But, the best part was that we had a entire car to ourselves. We arrived at Wilmington and took the vans back to the college.



DAY 3

We headed out into Amish Country to go to the Railroad Museum of Pennsylvania. When we got there they had a day of activities to complete. First we did a scavenger hunt looking for locomotives, rolling stock, and historical artifacts. Then, we did a tour of the museum with the privilege of getting to name any engine inside or outside and we could go inside it. Next, we worked on putting together a presentation on the Shay Locomotive #1, which we will give 2 days later. Last, we toured the restoration shops where they were almost finished restoring a pensie locomotive.

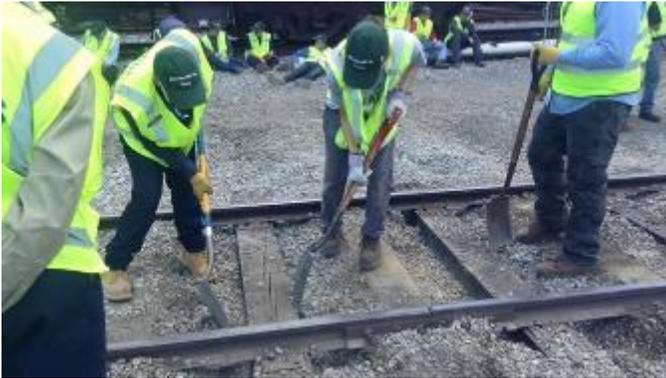


DAY 4

We headed out very early to the Strasburg Railroad. We had a busy day ahead of us. We split into groups and started going to our activities. First we went to the doodlebug, which is a passenger car that has been turned into an engine. Before I realized it, I was driving a train. I thought I did pretty good for their first time.



Next, we went out to the yard to do some switching. We learned hand signals, how to couple and uncouple, and how to inspect a train to send it out of the yard.



We ate a quick lunch and headed back out to the yard. This time to install 4 railroad ties. It was hot and muggy at this point, but we were happy to be working on the railroad. I had my luck with driving in a spike. I kept hitting the rail and didn't succeed in driving the spike in completely.



We then went to the shops at Strasburg Railroad where we used a CNC engraving machine to engrave a railroad spike with the words "Strasburg Rail Road." Then, we clear coated it to preserve it and keep it from rusting. Then, we went to the welding station and had our luck with welding on a metal sheet.



Last, we went to the activity that I had to choose a favorite part of Rail Camp, would be my favorite. We got to drive the Cagney puffer belly steam engine. I was excited about driving the Cagney so I volunteered to go first. I took it to one end of the park, and then I let someone else drive, but since we started in the middle of the line I also got to go last and pulled it to the culvert where the staff emptied the firebox and pulled it into the shed.



HARD COAL vs SOFT COAL

Bituminous coal or black coal is a relatively soft coal. Anthracite is a hard, compact variety of coal that has a submetallic luster. Strasburg uses both types of coal. They use Bituminous Coal for the larger standard gauge locomotives, and they use Anthracite Coal for the smaller 15" Cagney.



Day 5

It was the last day and we were all sad that we had to leave camp. We headed out to the Railroad Museum of Pennsylvania where we were to give our presentations on our locomotive we picked out. We had picked the Shay and were completely ready to present. But first, we had to listen to the other groups presentations. It was finally our turn and we blew it out of the Ballpark. We had several members of the public tuning in since I had made an announcement on the intercom system.



Since we had finished lunch early we went to a small hobby shop where we browsed for about 30 minutes. I didn't buy anything since I was limited on money by then. Afterward we went to Strasburg and rode the train. We heard the ghost whistle of the railroad. <https://www.youtube.com/watch?v=aJdQz9ECYDs> Then, we did some rail fanning before heading to dinner at the caboose motel.



We headed to dinner which was in an amazing passenger car. We were waiting to go in the restaurant and the train passed by headed back to the yard.

https://www.youtube.com/watch?v=zD_LVe9UrMk

We went inside and ate, I had a bacon cheeseburger and fries. It was delicious. We then headed back to the dorms to say our goodbyes.



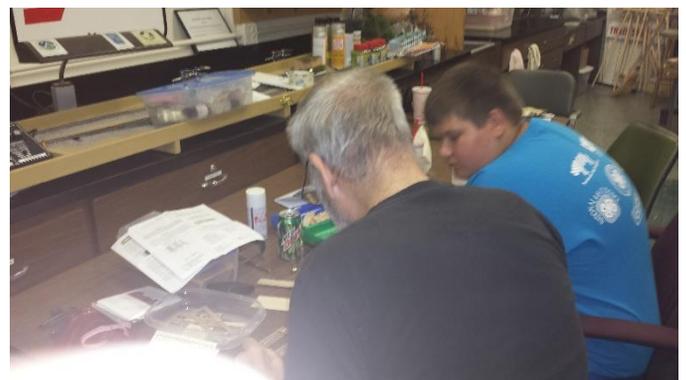
We got to the dorm and all sat down in the lobby of the dorms. We then proceeded to tell everyone how we got to Rail Camp and what we liked and didn't like. I had nothing to complain about, it

AROUND THE MEMRR WORKSHOP ET&WNC CAR BUILDING WORKSHOP

By Gregg Mundkowsky



On Sunday July 17 at 2pm the first car building workshop was held at the George L Carter RR Museum. Ben Merritt and myself were working on flat car kits from Mont Blue Model Company. Ben had already completed two of the flat cars before this workshop so he was showing me some of the tricks he had picked up. Please note: Ben had never built a craftsman level kit before this and only had one plastic freight car kit under his belt, this is also my first try at a craftsman kit. The kit is laser cut wood with plastic brake parts, fishing style line and some metal wire. While at the workshop Ben completed car number 3, while I was ready to add the truss wires w/ turnbuckles and the brake wheel assembly.



Now let me explain how we are doing the kits, a member signs out a kit from Fred or Gary, they then assemble the kit minus the trucks and couplers, they then return the built unpainted car and Rich will then take for painting and decaling. After this is completed he returns it and Ted takes it and installs the trucks and couplers. Using this format we

hope to avoid burning out the people working on the cars. I am hoping that we can make this a regular event as we have over 80 cars to assemble.



Folks we need as many people working on these as possible, I understand that people have a life outside of the club but if you could donate a Sunday afternoon or Thursday night to working on a kit it would be greatly appreciated.

THE BEAR IS BACK



Bear Anderson was back in town during July. He made the trip from Richmond VA where he and his wife now live in part to work on the Tweetsie layout's scenery.



He picked up where he had left off prior to the move to

Virginia... at the south portal of the tunnel of tunnel 3 between Hampton and the Doe River Christian Camp.



The close confines of that portion of track required the fabrication of an insert for the walls of the tunnel approach. The tunnel portal also presented another challenge... two different strata of rock meet at the tunnel face.

Those lucky enough to have been at the club the Thursday and Saturday Bear was in enjoyed seeing a master at work. The photo above doesn't do justice to Bear's masterful work.

GLCRRM RECEIVES STEAM LOCOMOTIVE BELL



The George L. Carter Railroad Museum received a bell from a steam locomotive on July 23rd. The Richard Sowers family made the donation to share a piece of railroad history that they have enjoyed for many years.



How do you move a 1:1 scale railroad locomotive bell?

The origins of the bell is shrouded in mystery. The only individual with knowledge of where the bell came from died before he was able to relate the history. What is known about the bell is that it has been well traveled.



Fred, Geoff, and Logan discuss where to exhibit the bell

The bell was first acquired in the Washington DC area, so may have been from an eastern railroad. It traveled to Texas where it was mounted on a post and serves as a dinner bell for the family. It returned east in a family move begging the question... "What do you do with a 300 lb. +/- bell?"

A HUNDRED YEARS SPAN OF MEMORIES
Gladys Lacey Jones and Family Members Visit the Carter Railroad Museum.



On the afternoon of Thursday, July 14th, members of the Lacey family visited our museum with the special purpose of seeing the progress we had made on the ET&WNC RR layout, and in particular to see the models of the Hobson store and post office and the Blevins depot. They were led for the 3rd consecutive year, by their matriarch, Gladys Lacey Jones. They are relatives of Dawn Lacey Fritz who has been an MEMRR member and who spread a lot of the brown paint that covers the scenery base over much of the HOn3 layout. The Laceys have a family reunion every fall that brings them close to Gladys' childhood home place that stood behind the Hopson Store near the Blevins depot both of which were built along the Tweetsie railroad tracks by her father, Robert Lacey, Sr. We have a photo of the store with the Lacey family posed in their Sunday best standing in front of the store in 1915. Gladys is in the photo. She is the little girl standing alone on the loading platform. She told me she did not like the photographer and did not want her picture taken and was assured by him that if she stood to the side on the platform she would not be in it. He did not tell the truth! Gladys' recent visit followed her 105th birthday. She moves a little slowly and she shows the effects of a long life, but her mind is sharp.



As she viewed our models of "her store" and her daughter, Bette Noble, pointed out the details of the model as a Tweetsie train slowly moved by, she was told that the photo had been brought to life by the model and that the little people posed in front of the store represented her family.

She asked if the little figure in the blue coat on the loading platform was supposed to be her. “Yes” she was told. Upon hearing that she replied, “ The coat is the wrong color. My coat was red”. I quickly apologized for the error pointing out that all we had to work with was a black-and-white photo and we had guessed at the color of the clothing, but hastily added, “we will have a red coat on the little girl long before your next visit”. Can you imagine what a special coat that must have been for her to clearly remember its color 100 years after the photo was taken?



Dawn provided the family relationships as, “My grandfather was a brother to Robert Lacey, Sr. in the picture. My father and Gladys are 1st cousins; Bette Nobel and I are 2nd cousins. So, Gladys and I are 1st cousins once removed. It’s so much fun at reunions doing the once removed, twice removed, etc. Gladys’ married name is Gladys Lacey Jones and Bette is short of Elizabeth Lacey Jones Nobel.



Robert Lacey, Sr. felt if he built as store and post office building and a depot for the ET&WNC that the trains would stop on a regular basis and a town would grow up around this nucleus as had been the case in other communities. Alas, this did not happen in Blevins.

Accompanying the Laceys were Steven Nobel, Bette’s husband; Nicky Webb of Calico Rock, AR; Sandra Cassidy from Scappoose, OR (both Dawn’s nieces), and two younger

family members whose names I failed to get. The Nobels and Gladys live near Atlanta, GA.

"Pulling Power on Parade" displayed at Carter Railroad Museum on July 30

On Saturday, July 30, East Tennessee State University’s George L. Carter Railroad Museum’s monthly Heritage Day will feature “Pulling Power on Parade— Articulated Steam.” The mammoth multi-cylinder locomotives were the apex of horsepower in their era. Articulated steam engines made use of four sets of cylinders instead of two, which allowed a second group of larger driving wheels to be added beneath an extended common boiler length. This increased pulling capacity and was especially useful in mountainous regions where grades could overwhelm smaller engines.

Introduced to America at the turn of the 20th century, the culmination of the design was a Union Pacific creation nicknamed “Big Boy” from the Second World War era, and it remained the largest, as diesels began overtaking steam propulsion soon after the end of the war. All North American articulated models were retired by 1961, but there have

“There were few machines as visually stunning as articulated steam engines,” says Geoff Stunkard, the coordinator of the Heritage Days program at the museum. “We cannot bring a real one here to display, but we will be able to recount what made them favorites of railroad enthusiasts in their heyday. This will include model versions and display materials, and should be a great chance to remember their existence and importance.”

Model train replicas will be operating on the Mountain Empire Model Railroaders (MEMRR) club’s 24x44, 1: 87 HO scale layout. Video productions about these designs will be playing on monitors, with illustrated items to add to the theme for the day.

GEORGE L. CARTER RAILROAD HERITAGE DAYS SERIES EVENTS FOR 2016

- Aug 27- Coal, Coke and Commerce: The Appalachian Carriers
 - Sept 24 - Streamliners in Action
 - Oct 29 - Next Stop Nashville: L&N, N C& St.L, TC
 - Nov 26 - Carter Homecoming/Tribute to the Clinchfield
 - Dec 31 - N&W/NS Heritage
- Articulated locomotive usually means a steam locomotive with one or more engine units which can move independent of the main frame. This is done to allow a longer locomotive to negotiate tighter curves. Articulated locomotives are generally used either on lines with extreme curvature— logging, industrial, or mountain railways, for example— or to allow very large locomotives to run on railways with regular track curvature. Articulation is also applied to some electric

locomotives, such as the Italian FS Class E656. Articulated locomotives saw service in many nations, but were very popular on narrow gauge railways in Europe and saw their greatest size developed in the United States, where the Union Pacific Big Boy 4-8-8-4s and the Allegheny H-8 2-6-6-6s were some of the largest steam locomotives ever built.

Many different schemes for articulation were developed over the years. Of these, the Mallet locomotive and its simple-expansion derivative were the most popular, followed by the Garratt type (mostly built in the United Kingdom, popular throughout Europe, Africa and European colonies), and the various geared steam locomotive types, the latter largely used in logging, mining and industry. Most other types saw only limited success.

The major types of articulated locomotive are as follows:

- The Fairlie, with two powered trucks under a double boiler, or its Single Fairlie singleboiler derivative with one powered and one unpowered truck (known as a Mason Bogie in the United States)
- The Garratt, with an engine unit at each end carrying coal and water supplies, and a boiler unit articulated between them
- The Mallet locomotive, with one fixed engine under the rear of the locomotive and a radially swinging engine unit in front
- The Meyer locomotive, with two powered engine trucks under the locomotive (generally with the cylinders inward). Also, the Kitson-Meyer variant with the trucks spread apart to allow a deeper firebox between them.

Golden Spike Award

The Golden Spike is the easiest, and for many people, the first AP award that they earn. It is designed to demonstrate familiarity with different areas of the hobby, rather than expertise in a particular area. So take a look at the requirements - you may find that you have met most, or all of them already.

Here's the [Golden Spike Award Application Form](#) . Use it as a checklist, you may surprise yourself.

1. Rolling Stock (Motive Power & Cars)

Display six (6) units of rolling stock (Scratchbuilt, craftsman, or detailed commercial kits).

Notice that the requirement is to "display" them. Nowhere does it say that they must earn a minimum number of points in judging - just that they must be displayed. (In the monthly contests at your division meetings, for example. Even having them set out on your layout, or a table in your basement counts as "display").

These models need to show a little more effort than a "shake the box" kit. For example, by itself a freight car kit straight out of the box, is not enough to qualify. However, by painting and decaling it, adding a little detailing, perhaps some weathering, etc., you'll have a qualifying model in no time!

2. Model Railroad Setting (Structures & Scenery)

Construct a minimum of eight (8) square feet of layout.

Again, there is no requirement about how good or how elaborate your layout must be - just that you must "construct" it. On the other hand, you may have trouble convincing someone that a loop of track nailed to a piece of green painted wood constitutes a "layout" . . . How much is 8 square feet of layout? Well, a typical module is 4 feet by 2 feet, and would easily satisfy this requirement.

Construct five (5) structures (scratchbuilt, craftsman, or detailed and commercial kits). These structures may be separate, or one or more of them may be part of a single scene.

The same comments apply here about the type of kits. The idea is to show that you can do more than glue a simple plastic kit together. Painting or weathering are good things to consider. Remember that "structures" aren't just buildings. Things like bridges and trestles also fall into this category.

3. Engineering (Civil & Electrical)

NMRA GOLDEN SPIKE AWARD PROPOSAL

The Golden Spike Modular Layout

I propose that as a club we construct a traveling modular layout which we can take to shows and other venues like we use the Cope layout for. This will give members who want to build a module a chance to use it as part of the club. The idea is that the club provides the four corner modules and club members provide the straight modules. A Committee can be formed to come up with standards that can then be voted on. For standards we could use the current club standards or possibly Free-Mo. The layout name is derived from the idea that members who would like to pursue the NMRA Golden Spike Award, part of which requires building a layout of a minimum 8 square feet. A 2x4 module fit this requirement if you read the rest of the requirements you see a lot can be done on the module.

Below is the requirements for the Award copied from the NMRA Website: <http://www.nmra.org/golden-spike-award>

Three (3) types of trackage are required (turnout, crossing, etc.). All must be properly ballasted and installed on proper roadbed. Commercial trackage may be used.

This requirement sounds a lot harder than it is. First, notice that last sentence about commercial trackage; you don't have to hand-lay anything - you can just install a store bought turnout. "Types of trackage" can be just about anything: turnouts, crossings, and grade elevation (a change in elevation of the track) are all examples of "types of trackage". Also, note that the three types DO NOT have to be different. For example, just having three simple turnouts will qualify. The "proper roadbed" requirement can be met by laying the track on a raised roadbed, (such as cork) and ballasting it. The purpose of this requirement is to show that you understand roadbed profile, drainage, etc.

All installed trackage must be properly wired so that two trains can be operated simultaneously (Double-track main, single-track main with sidings, block or command control, etc.).

This requirement can also be easier than it sounds. Notice the option for a single track main with sidings. This means that as long as you can cut power to the sidings individually, you can run one train, park it on a siding while you run another, then park it and run the first again. This meets the requirement.

Provide one additional electrical feature such as powered turnouts, signaling, turnout indication, lighted buildings, etc.

Don't read more into this than is there. A powered turnout can be something as simple as an Atlas turnout with a switch machine. Think in terms of anything that runs off the 'Accessories' terminals of a power pack and you're half way there.

One other thing to remember: Not all of these requirements need to be met on the same layout (or piece of layout). They don't even need to be met in the same scale! If you want to build G scale rolling stock, an N scale Model Railroad setting, and an HO scale layout for trackage and wiring, go ahead.

Also, the Golden Spike, as well as the other parts of the AP have a certain amount of flexibility. For example, suppose you and your (friend / spouse / child) work together on all your projects, but do twice the required amount (12+ units of rolling stock, 16+ square feet of layout, 10+ structures, etc.). You can both be considered, as long as you can show that you have each demonstrated the required skills.

A short cut for building the Mont Blue Model Kits After completing two of the Mont Blue Model Flatcar kits I found that it is easier to install the under-car brake detail right after removing the frame from the jig after step 2 but before step 3. (Do Not Install the Brake Booster Cylinder at

this time) install part E4 and the Dead Lever and the Live Lever and then turn the frame upside down so you can install the wire going between the two levers and then to the top center where the bolster will go. This will replace most of step 9, then continue with step three adding the brake cylinder and wire at step 9.

Gregg Mundkowsky

RAILFANNING JOHNSON CITY

By Paul Haynes

I was on my way to Pennyman's for breakfast, when I happened by the ET switcher as it was shoving a cut of cars towards State of Franklin Rd. grade crossing. In the third pic, the switcher has cleared the grade crossing and is easing around the bend, headed for the switch lead on the north end of J C, joining the NS line.



**MOUNTAIN EMPIRE MODEL
RAILROADERS
BUSINESS MEETING MINUTES
July 2016**

The meeting was called to order by President Alsop at 6:37 with 13 members present.

SECRETARY REPORT: Secretary Debbie Edwards reported that no minutes from June meeting were available for review. President Alsop announced that Amy Merritt would temporarily act as secretary until Debbie would be able to resume secretarial responsibilities with Debbie graciously thanking Amy for assistance.

NEWSLETTER REPORT: Ted Bleck-Doran thanked newsletter contributors and welcomed future articles and features. There is interest in obtaining information regarding different events within a 1/2 days drive for future publication.

TREASURER REPORT: In the absence of Treasurer Gary Emmert due to illness President Alsop reported the income, expenses and balances for the month of June.

WEBMASTER REPORT: John Edwards stated that a notice will be posted regarding restaurant for pre-meeting meal. August meal will be at Portabello's restaurant. President Alsop reported that Bob Jones has updated the library list with the addition and cataloging of 53 new books. Feel free to check them out!

VICE PRESIDENT REPORT: Vice President John Carter reported that Ben Merritt will provide the July program which discusses Ben's Rail Camp experience. September program will be provided by Paul Haynes in the form of a video. Also, Dr. Alsop and John Edwards will be working on wooden buildings in August. John also requested on behalf of some members that museum property and layout items deemed appropriate for sale be offered to members first as opposed to the public, with reference made to the train show table.

Motion was made by Ted Bleck-Doran that items for sale be offered during Thursday work night sessions on a table in Room 236. Newsletter will announce sale date(s) and times.
Motion Passed.

PRESIDENT REPORT: President Alsop expressed gratitude to the MEMRR members who provided tours for 60 Coalition for Kids. He also thanked the membership who participated in hosting the East TN NRH Railfan group (20-25 people) who visited the museum last Thursday. Visitors were pleased with our progress with the Tweetsie layout. He also reported on the entertaining visit by 105 year old Gladys Lacey with suggestion may by membership for a possible future article on this unique experience.

COORDINATOR'S MEETING: John Carter listed items that need attention on the HO layout. Mike Baker stated that large scale track has been cleaned and everything is going fairly well. Gary Gilliam discussed locomotive repair and difficulty with circuit breakers. Frank Fezzie will be asked for assistance with this issue.

OLD BUSINESS:

1. Our ET&WNC RR Layout manuscript and photos are at White River Productions.
2. We have moved a lot of stored items to Valleybrook facility which provides 1000 square feet of storage.
3. Progress report was given on moving Pete Morsette's layout and other railroad materials from his home in Kingsport. An appraiser is still being sought to evaluate the layout. Gary Emmert and Donald Beck are currently packing the layout, but we are still awaiting an estimate.
4. How is the new club Paragon 3 locomotive and Rolling Thunder sound system? Feedback was provided by several members regarding the sound quality and challenges present with the new sound system. The **SYSTEM IS CURRENTLY BEING RE-EVALUATED.**

NEW BUSINESS:

1. Railroad Heritage Day July 30th is "Pulling Power Parade--Articulated Steam".
2. Coordinator's Meeting: No July meeting was held.
3. ET&WNC "Tweetsie" Layout: Greg Mundkowsky reported on the progress of the layout and invited any members interested in car assembly to meet on specified Sunday afternoons for an assembly line process.
4. Annual Picnic has not yet been planned.
5. The Labor Day weekend Rail Fan Expedition was discussed, with explanation of the entire trip agenda and pricing determined to be set at \$450 per person with a minimum of 30 and maximum of 56 available spaces. Information on the expedition will be advertised with a August 19th cutoff payment date.

Volunteers for Saturday Operation Sessions were obtained for the remainder of July through August 13th.

ANNOUNCEMENTS:

Next Coordinator's Meeting is August 11th at 6:00 pm at the Campus Center Bldg, room 235.

Other announcements: Roger Teinert will be working with Kelsey to generate new kid events in the Little Engineer's

Room. Michelle will be contacted for Facebook page assistance.

*Respectfully submitted,
Amy Merritt, Acting MEMRR Secretary.*

THE PROGRAM: "A Great Week--The Delaware Railcamp" was provided by Ben Merritt followed by meeting adjournment.



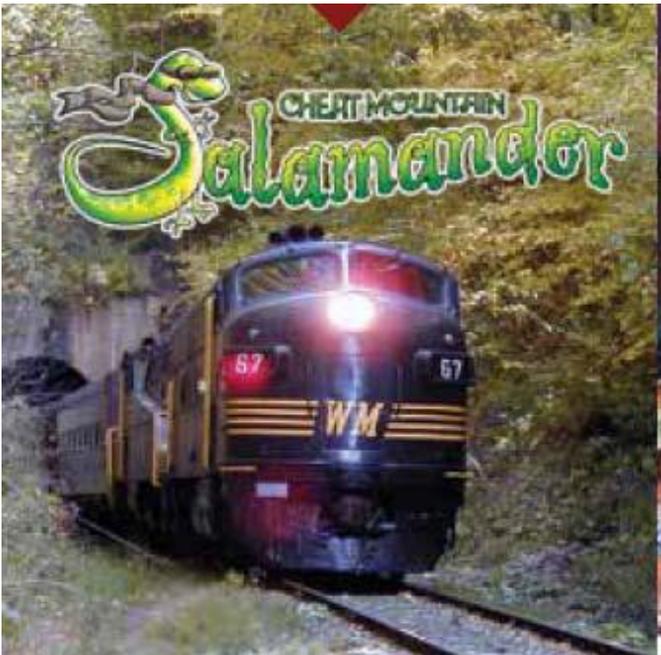
**THE GEORGE L. CARTER CHAPTER of the
NATIONAL RAILWAY HISTORICAL SOCIETY
and**

**THE GEORGE L. CARTER RAILROAD MUSEUM, ETSU TRAIN EXCURSION
THE WILD HEART OF WEST VIRGINIA RAIL
ADVENTURE**



The George L. Carter Chapter, of the National Railway Historical Society in conjunction with the George L. Carter Railroad Museum at East Tennessee State University, will conduct an overnight Labor Day weekend train excursion on three West Virginia railroads, Saturday- Monday, September 3-5, 2016.

and have a stop at Whittaker Station in route to see their outdoor display of vintage logging equipment. Our train at Cass will deliver us across the mountain to Old Spruce to transfer to the Cheat Mountain Salamander. We will ride the rails from a town that was once considered the highest and coldest community east of the Mississippi. The train, named for a small endangered amphibian whose entire range is in the watershed of the river draining these mountains in this remote wilderness area, will take us back to Elkins, where we will spend our second night at our hotel.



We depart by modern motor coach from ETSU on Saturday, September 3, for Elkins, WV where we will check into the Holiday Inn Express before going to dinner and evening entertainment at the Gandy Dancer Dinner Theatre.

On Sunday morning we will travel to Cass Scenic Railroad State Park to ride the Cass Scenic Railroad in the rugged mountains of West Virginia. The railroad was established in 1901 to bring timber to the mill using some of the same geared, Shay, locomotives that are still in operation in the park today. The route up towards Bald Mt. will carry us up some 11 percent grades that can only be negotiated by these Shays. Cass has the largest fleet of working geared locomotives in the country and you will get to see their shops



On Monday morning, September 5, we will bus to Durbin, WV, to ride aboard the Durbin Rocket powered by a rare Climax, old #3, geared steam locomotive, built in 1910. The ride is 10.5 miles and takes about 2.5 hours. Following our train ride we will board our bus for a short trip to a local restaurant for lunch after which we will begin our journey back to Johnson City.

Passengers should arrive at ETSU's parking lot No. 22a on Go Bucs Trail (accessible from Jack Vest Drive off State of Franklin Road or South Greenwood Drive off State of Franklin Road) at 6:15 a.m. to be checked in and loaded onto the bus

by 6:45 a.m. with departure promptly at 7:00 a.m. The bus will not wait for late arrivals and no ticket refunds will be made if you miss the bus. There are no parking restrictions in this lot on the ETSU campus on weekends.

The price for adults and/or seniors for this excursion package is \$450.00 double occupancy. These prices include the roundtrip bus ride to Elkins, WV, your roundtrip train fare on all 3 railways, and the dinner theatre on Saturday night, hobo lunch on the Cheat Mountain Salamander, buffet dinner at the Railyard Restaurant on Sunday night, and two hot continental breakfasts at our hotel. The price does not include lunches on the road on Saturday or Monday, or any tipping.

Ticket order forms and liability waiver forms can be picked up at the George L. Carter RR Museum (open Saturday's only from 10:00 a.m. until 3:00 p.m.) in Johnson City or printed from the memrr.org website, choose **NRHS News**, then **EXCURSIONS** or go to the glcarternrhs.com and printing off your ticket order and waiver of liability forms. The signed liability waiver form **must** accompany the ticket request form. Please have your ticket requests in by August 19th. Space is limited to 56 travelers so don't delay in making your ticket request. Sunday morning

We shall reserve the right to cancel the trip if we have fewer than 35 participants.

Make check or money order (no cash please) payable to:
George L. Carter Chapter, NRHS.

Please mail the ticket request form along with the signed liability waiver form to:

George L. Carter Chapter, NRHS;
519 Headtown Road,
Jonesborough, TN 37659.

We have a limited number of seats available so please get your ticket requests in early. Ticket sales must be cut-off on August 19th. Sorry, no refunds can be made.

If you have further questions regarding this excursion, please contact Charlene McLeod at 386/717-2925 or chardanmcleod35@comcast.net

Day One:

- Depart ETSU Johnson City for Elkins, WV
- Check into Elkins hotel
- Dinner and show at Gandy Dancer Dinner Theatre

Day Two:

- Warm Continental Breakfast at hotel
- Depart on the Cass Bald Knob train excursion at the Cass Depot
- Transfer to the Cheat Mountain Salamander train excursion at Old Spruce
- Lunch included on board
- Arrive by train at the Elkins depot
- Buffet dinner at the Railyard Restaurant

Day Three:

- Warm Continental Breakfast at hotel
- Depart for Durbin to ride the Durbin
- Rocket
- After lunch depart for Johnson City

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

We are into the heat and the heart of summer and that always reminds me of picnics. The **Annual Carter Railroad Museum Picnic** has been scheduled. **Jim Pahrís** has been in touch with **Kim** and **Tom McKee** and they have once more invited us to come to their home on Boone Lake to host this yearly outdoor dinner that has become one of our social highlights for the year. The McKees have a lovely home on the lake shore and Tom has long been into G-Scale trains and has several garden layouts on the property that we can enjoy. They will once more furnish the meats and we will be responsible for bringing all the other "fixins" for the feast. **Jim Pahrís** will coordinate the event and he will need a head count (remember adults only; but including Ben, Alex and Willie) and what you will be bringing. If there are expenses for tableware, plates, cups, etc., the the MEMRR and the

Carter Chapter will split the costs 70/30 as we have in the past. So, put **Sunday, September 18th, with a starting time of 4:00 p.m. on your social calendars and we will enjoy your company at the picnic!** Location maps and other details will be made available later.

Our **ETSU Museum Parking Permits** will expire at the end of August. I will make a request for new passes for our members and have them available for you before the end of the month. Remember to sign out only one pass per member no matter how many automobiles you have and to display the pass on your dashboard if you are parking on the ETSU campus during a week day (weekends do not require you to display a parking pass) before 3:30 p.m. Your parking pass will not excuse you from a ticket if you park illegally in a fire lane, service vehicle spot, handicapped spot (unless you are displaying a handicap emblem on your vehicle) or other restricted parking area.

As reported earlier, the **2nd Annual Big Train Show** has been scheduled for June 2-3, 2017. Flyers are available at the Carter RR Museum. If you are going to attend a train show

anywhere within 500 miles or so during the next 9 months, please take some of our train show flyers with you and distribute them at the show. Please also speak to the vendors and the clubs with operating layouts and invite them to consider being a part of the show. We had great positive responses from the vendors and layout operators who attended our initial show in June of this year regarding the turnout of visitors, the publicity the show received locally and nationally, and the outstanding quality of the venue. Many left the show asking us to reserve a place for them for 2017 and we expect this next train show to be bigger and better than our first one with more vendors and layouts and longer show hours on Friday. So, please help us out. Help us recruit vendors and layouts to help us to continue to make this event bigger and better every year. This is a fund-raising event for the George L. Carter Railroad Museum and some of the monies raised in 2016 will go back into making the show even more visible to potential vendors and train lovers in 2017. **Roger Teinert** is the chairman of the Train Show Committee and you can contact him for information. If you would like to be part of the committee let him know and please reserve the dates of May 31-June 1 to help us set up the tables and signage in the ETSU Mini-Dome and June 2-3 to help us with the show and to attend it yourself, along with Sunday, June 4th to help us take down tables and return them. It is a big job and the organization for the 2017 show began almost as soon as the 2016 show closed. We need a lot of help to make it work; especially just before and during the actual event. Please put it on your calendar and let Roger, or another committee member, know that you will be able to volunteer as needed.

Labor Day Weekend Train Excursion to Wild and Wonderful West Virginia: The George L. Carter Railroad Museum and the George L. Carter Chapter NRHS are co-hosting their first over-night railroad excursion. They have put together a 2 night/3 day package that includes round trip transportation from the ETSU campus, all meals except 2 lunches on the road, 3 train rides on 3 different railroads (Cass Scenic RR, The Cheat Mountain Salamander, and the Durbin Rocket) and two nights lodging in the heart of West Virginia. Two of the trains are behind steam locomotives, one a Shay and one a Climax. The entire package is only \$450 per person (double occupancy). **Seating is limited to 56 train enthusiasts and the deadline for getting your application in is August 19th.** You won't want to miss this Labor Day adventure and you will not be able to do if for a better price or in more enthusiastic company. Make your plans ASAP. The details are printed elsewhere in this newsletter. You can download the information and the ticket application and waiver of liability forms to make your reservations at www.memrr.org ; www.glcarternrhs.com; or the Carter Railroad Museum website at the ETSU homepage. For more information contact **Charlene McLeod** at **386/717-2925** or at chardanmcleod35@comcast.net .

We had a visit in July from our former member, **Bear Anderson**, who now resides in Virginia. Bear is a terrific scenery guy who did most of the scenery on the N-Scale layout in the Johnson City Tupelo Honey Café and all of the rockwork scenery on tunnels 1, 2, and 3 on our Tweetsie layout in the Carter RR Museum. Bear spend several days in the museum creating more scenery on these three tunnels, enjoying socializing with his many club members here and exchanging scenery ideas. He promises to be back soon to work on the layout. If you have not seen the Tweetsie layout in the past few months please drop by and check it out and see the new rock work that Bear has skillfully added to it.

Ben Merritt , who was 13 years old when he attended the Delaware National Railway Historical Society's Rail Camp for high school-aged boys and girls in July 2016 (he turned 14 recently) gave an excellent PowerPoint and video presentation of his week at the camp to the Carter Chapter NRHS and the MEMRR as the program for their July business meetings. Ben is an outstanding young man with a long-held passion for trains and railroading and he did a very professional job with his presentation to us relating the fun, excitement and the educational activities he was able to engage in at the camp. Ben's trip was sponsored by the George L. Carter Chapter NRHS and he was the first of many youngsters that the Chapter plans to send to this national rail camp. We could not have chosen a better representative to sponsor. Well done Ben!

New module owners are making big changes on their modules on the MEMRR HO-scale layout. Drop by and see the changes and engage them in their plans for what they want their modules to look like and how their creations will fit into the Appalachian theme of the layout and enhance the operations of the layout. We long ago established a set of "Standards" for the layout soon after the club was established and all members who own modules need to familiarize themselves with these standards to build to enhance the layout, improve its operation, and to blend their work into the overall theme of the layout while striving to bring the entire layout up to museum quality standards. We have thousands of visitors coming to our Railroad Museum annually and that creates some pressure to have every bit of the layout operating in a smooth and professional manner, and to always look its best for the public, and for ourselves, as it is the testament to the skills all of you have as model railroaders. And, of course, please continue to have fun as that is the major reason we are participants in the hobby. Your skills, expertise, and your outgoing helpful relationships with our visitors continue to make the Carter RR Museum one of the "5 coolest places to visit in the Tri-Cities".

Our Heritage Day Coordinator, **Geoff Stunkard**, continues to create monthly event themes that the public comes to see in big numbers. For the **July "Pulling Power on Parade—Articulated Steam Locomotives"** we recorded 103 visitors along with 21 members who brought their big behemoths that chugged around the layout sounding as much like the

big steam locomotives as the sound systems in a 1:87 miniature locomotive can. The steam locomotives are always a popular draw for the museum and these events are only successful because of the trains and the enthusiasm to run them that are provided by our members. Thanks fellows for all you do to make the railroad museum a place that our visitors and our members want to spend part of their Saturdays. Well done!

There are lots of projects underway at the Carter Railroad Museum. **HO Layout Coordinator, John Carter**, continues to lead a dedicated core of members on the work that is underway on the club's layout to bring the operation of the new freight yard into reality. Help is needed to detail the yard, complete the diesel facility, and other assorted tasks. If you would like to help with this just drop by on a Thursday work night and lend a hand. The more help we have on this project the sooner we can begin to operate the yard to its full potential and move more towards running and building and "servicing" trains and locomotives on its many facilities.

Gregg Mundkowsky has been talking to members who are not module owners on the HO-Scale club layout and promoting the idea of starting a group who would like to build their own modules that could be assembled at other venues to operate and to represent the club at these events similar to what we have done in the past with the Jack Cope Memorial Traveling Layout. This would provide a way for members to design their own piece of a bigger, mobile layout, and have the pride of ownership of their piece of the layout. If you are interested please contact Gregg and let's see if something grows out of this initiative.

John Edwards has been mastering the operation of the LaserKnife the museum purchased to create the many unique buildings that are required to populate the ET&WNC RR layout we are building in the Ken Marsh Gallery at the Carter Railroad Museum. While the learning curve on the actual operation of the machine is not too steep, the creation of the computer programs that take the scale drawings of the buildings that I have been producing and converting them into a computer program takes some time and a bit of a steeper learning curve. We have a several step process going on to go from a photograph of a building we want to produce to actually holding the various components John has produced on the LaserKnife that I can then assemble. John and I need to have one or more folks who can act as backups for John as needed. We need people with some computer skills to learn the "cad-type" programs that allow the translation from my drawings to the program that will direct the cuts of the knife. If you would like to learn the programs involved please talk to John and help us out.

There are lots of events scheduled inside the museum's galleries and outside of its walls. Come and join the fun and share your talents with other hobbyists with your same interests in model railroading and in the prototype railroads.

We welcome you to participate as much as you can and want to be involved. The MEMRR is a very active model railroad club. The Carter Chapter NRHS embraces the prototype railroads and co-sponsors numerous rail excursions annually. The Carter Railroad Museum is the home for both organizations. It is a "cool" place to be. 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

RAILFANNING UTAH
SALT LAKE CITY
Text from Wikipedia.com



Photo from Paul Haynes

The first line, running from downtown Salt Lake City south to Sandy, was completed in 1999. The second line from downtown to the University of Utah was completed in 2001 and extended in 2003. An extension to the Salt Lake City Intermodal Hub was completed in April 2008. In August 2011, two extensions to South Jordan and West Valley City were completed.^[28] With the opening of these two extensions in 2011, the TRAX lines were renamed as colors instead of destinations, with the Blue Line running from the Salt Lake City Intermodal Hub to Sandy, the Red Line running from the University of Utah Medical Center to the Daybreak community in South Jordan, and the Green Line running from the intermodal hub to the West Valley Intermodal Hub. In 2013 the Green Line was realigned slightly north and away from the Salt Lake City Intermodal Hub, allowing for the opening of the extension to the Salt Lake City International Airport. Several months later, in August 2013, the Blue Line was extended further south to Draper (which opened August 18, 2013).^[29] The extensions to South Jordan, West Valley City, Draper, and the Airport were funded in part by a Salt Lake County sales tax increase that would pay for all four of the proposed TRAX extensions.^[30] A letter of intent signed with the Federal Transit Administration on September 24, 2007 secured the remaining funding for the light rail lines.

Both the University Line and its extension to the University Medical Center were completed ahead of schedule. A daily ridership of 15,000 was expected for the initial 15-mile (24 km) line in 1999. By the beginning of 2008, the expanded system of 17.5 miles (28.2 km) served an estimated 40,000 passengers each day.^[32] Ridership for the fourth quarter of 2012 was reported to be at 60,600, making it the ninth-busiest light rail system in the country.



Photo from Paul Haynes

Light rail in the Salt Lake Valley was first seriously discussed in the late 1980s to provide an alternative to traffic congestion on I-15, but the idea was met with much criticism. On October 10, 1988, Congress approved \$5 million in funds to preserve land along the proposed light rail corridor.^[33] Funding for the light rail line itself, however, remained uncertain. After Salt Lake City won the bid for the 2002 Winter Olympics in 1995, UTA used the city's host status to accelerate obtaining funding through the Federal Transit Administration (FTA). Construction began in 1997. Protesters at the groundbreaking insisted that light rail would be both dangerous and a waste of money. Public opinion remained divided and businesses on Main Street in downtown Salt Lake City suffered during the construction period.

After the north-south line opened in late 1999 with sixteen stations, ridership expectations were quickly met. The system was enthusiastically embraced by valley residents, to the surprise of many, and once-skeptical communities soon began clamoring for extensions.

Funding for the University Line to Rice-Eccles Stadium allowed it to be completed in 2001 with four new stations, ahead of schedule and the Olympics. An extension to the University Medical Center that added three new stations was completed on September 29, 2003, fifteen months ahead of schedule.^[34] An infill station at 900 South in Salt Lake City was constructed in 2005, and a second infill station, at 9400 South in Sandy (Sandy Expo), opened in August 2006. On December 13, 2006, the UTA Board of Trustees voted to change the name of the station next to the Delta Center to

"Arena" in response to the renaming of the nearby indoor arena to EnergySolutions Arena.



A Blue Line train at Salt Lake Central Station
From Wikipedia.com

On February 23, 2006, plans for extending the main line westward to the current Salt Lake City Intermodal Hub near the Gateway District were approved. Two stations were built near the Gateway shopping district, as well as one at the Salt Lake Central Station (Salt Lake Intermodal Hub). They opened in April 2008, bringing the total number of stations to 28.



From Wikipedia.com

UTA has two service centers for TRAX maintenance: the Lovendahl Rail Service Center, which is just off the Red Line in Midvale, southwest of its junction with the Blue Line, and the Jordan River Service Center, which is just off the Green Line northeast of River Trail. The Salt Lake City Southern Railroad, a subsidiary of the Utah Railroad, operates freight service over TRAX tracks via trackage rights.