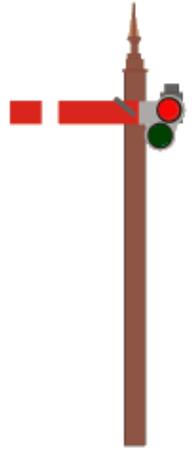


The Semaphore



THE OFFICIAL PUBLICATION OF THE
WNC MODEL RAILROADERS, INC.

A 100% NMRA CLUB



On the web at www.wncmrr.org & [Facebook](#)

June 2011

VOLUME 40 NUMBER 10

Our next meeting is on June 5th at 7 PM.

Send comments about and contributions to this newsletter to [editor](#).

Please keep us informed of changes in your address, phone number or email address.



**ATLANTIC AND YADKIN (A&Y) CONSOLIDATION # 542 AT SPENCER,
NC ON MAY 20, 2011 .**



NEWS FOR OUR MEMBERS

OUR NEXT MEETING

Our next meeting will be starting at 7 PM on Thursday June 2nd.

Clinic: 'Tunnels, Nitro and Convicts' (Building a railroad that couldn't be built) by Steve Little

Synopsis: Steve Little to do his presentation on his book. It will be entertaining evening discussing how the railroad was built from Hickory to Asheville. Steve will have books (if anyone is interested) for sale. Come to learn and have fun. **See you there!**

REPORT ON THE LAST MEETING

The meeting was called to order at 7:00 PM by Superintendent **Fred Coleman**.

The modules will be at the Metrolina Expo Trade Center on June 25, from 9:00 AM to 4:00 PM. Set up will be on Friday, if you can help out contact **Fred**.

We continue to assist Peggy Keyes establish a model train museum at Lake Lure.

Don't forget that the SER convention is coming up on May 20 to 22 in Macon, GA.

The nominating committee was name with Jack Mershon as chairman to have a slate of candidates for Directors. If you have a candidate in mind, contact **Jack**.

An update on **Fred's** making water clinic. **Dave Anderson** experimented with matte and gloss finish Mod Podge and can make waves. You have from about 45 min to 2 and 1/2 hours to form waves from a thick layer of the stuff. One could assume that you could build up the Mod Podge if you wanted to do that to create a wave.

Following a short break we had **Clint Smoke** present how he made a layout from a real information gathered about the Abington branch of the Norfolk & Western. He did present this to the N&W historical Society. It was a very nice presentation and it's in our backyard. You could make a nice day trip up there.

ELIADA KID MODULE UPDATE



Kourtney's Place



Grandma's House



Paradise Land by Brandi S



These are some of the modules made in the last few months. Come down and join the fun. No experience required, just some problem solving. Learn from helping them get to the finish!

Our program for the June meeting will include a presentation on the Building the Western North Carolina Railroad from Hickory to Asheville. Here is a little background information.

Historical background: The Time and Place

Let us start our examination of the building of the Western North Carolina Railroad to Asheville by considering the time and place. In a period of 50 years, we had the first practical steam locomotive, the establishment of regular rail transportation, and the construction of a railroad that bridged the North American Continent. In the midst of all this, efforts were underway to build a railroad through the relative wilderness and challenging mountains of western North Carolina starting as early as 1855. At the time, the area was rich in resources but few in people: Buncombe County had a population of just over 12,000.¹ The roads were little more than dirt trails that facilitated travel by stage coach.² In addition to the isolation, terrain, and the war, there were failings among the railroad officials including corruption and embezzlement.

Building the Railroad

Work finally started on the Western North Carolina Railroad in 1866. The plan was to connect Salisbury and Asheville, and continue to Tennessee. From Salisbury to Old Fort, the route was not too difficult, but the route from Old Fort to Asheville was another matter, for in the path lay the mountains that form the Eastern Continental Divide. The route through the mountains was surveyed several times, and the final route involved laying track in a series of loops so as to maintain a grade of no more than 2.1 percent, or approximately 2 feet of rise in 100 feet of travel. While this grade is not significant to pedestrians or motor vehicles, it is about the limit for traditional railroad locomotives.

The linear distance from railroad milepost 113, just west of Old Fort, to milepost 122 is just 3 miles, but the distance by rail it is nine miles. In that same distance the railroad climbs almost 900 feet. Those nine miles of ever-curving track helps maintain a more reasonable grade. Those loops, or circles, are an engineering challenge in themselves. If all of the curves were added together, they would equal eight complete circles. Where the terrain would not permit this approach, tunnels were dug through the mountains. Between Old Fort and Swannanoa, there are seven tunnels totaling 3,589 feet. The longest tunnel is the one on the western end, the Swannanoa Tunnel, at 1,832 feet.

Building this railroad was not easy. In addition to the terrain, weather and remoteness of the area, the task of digging seven tunnels was immense. The new railroad was used to facilitate its own construction as it moved westward, especially during the removing the material from tunnel excavations. The only other alternative for moving materials was by cart pulled by ox or mule. To expedite the process, engineer James W. Wilson decided to take one of the locomotives around the mountain by road, thus providing power on the west end in what would become Swannanoa Tunnel, the longest of the tunnels.

Another challenge was the lack of black powder for blasting the rock to make both cuts and tunnels. Remember that the hostilities had ended in 1865, and there was still an element of distrust all around, as well as a real shortage of the material. To overcome the shortage of black powder, Wilson solved the problem in two ways. One approach was to have the laborers build large fires in the tunnel to heat the rocks. They would then pour water on the rocks to rapidly cool them.

While not efficient, it did work, and the cost of both labor and firewood was relatively cheap at the time.

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A more effective alternative was to make a blasting mixture of nitroglycerine and corn meal. This mixture was poured into holes which had been hand drilled into the rock. Fuses consisted of reeds and pine needles. There were many dangers with this process, and many accidents resulted leading to injuries and fatalities.

Work was completed on the Swannanoa Tunnel, the last of the tunnels, on March 11, 1879, and according to a telegram sent to Governor Zebulon Vance, "daylight entered Buncombe County today through the Swannanoa Tunnel," thus connecting Asheville with the rest of the state's railroad system. Shortly after the telegram was sent, a collapse occurred in the western end of the tunnel burying 23 laborers.ⁱⁱⁱ

North Carolina sells the railroad to Richmond and Danville Railroad Company

Once complete, the state decided to sell the railroad, subject to several conditions. One of these conditions was that the railroad would be continued westward from Asheville to Paint Rock, Tennessee. The extension was completed by 1881. While this project was underway, construction of another branch, later known as the Murphy Branch, was started westward with a destination of Ducktown, Tennessee. Work progressed westward, reaching Canton, North Carolina in 1882 and Murphy, North Carolina in 1891. Ducktown was an attractive goal as newly discovered copper mines had the potential of providing lucrative traffic. Construction delays slowed progress and the race to Ducktown was won by the competing Louisville and Nashville Railroad.^{iv}

The Western North Carolina Railroad merged with the Richmond and Danville Railroad to become the East Tennessee, Virginia, and Georgia Railroad. Unfortunately, the nation faced a recession in the early 1890s, and the East Tennessee, Virginia, and Georgia Railroad, among others, went bankrupt.^v In 1894 the Richmond and Danville Railroad became part of the Southern Railway.^{vi} In 1982 the Southern Railway merged with the Norfolk and Western to become Norfolk Southern, one of two major railroads serving the eastern half of the United States. Norfolk Southern operates freight trains daily over the Asheville to Salisbury line. The grades, tunnels and loops are still there. Maybe someday in the not too far distant future, we will see the resumption of passenger traffic on this line. When that occurs, we can ride the train to Salisbury, and beyond, and see for ourselves what it took to build the road.

ⁱ Old Buncombe County Geological Society web site: www.obcgs.org

ⁱⁱ Mitzi Tessier. *The State of Buncombe*. Virginia Beach, VA: The Donning Company, 1992. p. 42

ⁱⁱⁱ Cary Franklin Poole. *A History of Railroading in Western North Carolina*. Johnson City, TN: The Overmountain Press, p 7

^{iv} Poole, p. 9

^v Poole, p. 9

^{vi} Poole, p. 9

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SRHA HOLDS 25TH ANNUAL CONVENTION AT SPENCER

By Clinton H. Smoke, Jr.

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The Southern Railway Historical Association held its 25th Annual Convention Meeting at Spencer, NC over the weekend of May 21 and 22. About 80 members participated.

Events started on Friday evening with a unique opportunity to photograph a vintage scene staged by the good folks at the NC Transportation Museum. Using Barber Junction Station as a backdrop, and with the help of several volunteers as actors, we had a chance to photograph the recently restored A&Y 542. (Cover photo.)

On Saturday we headed north to Greensboro, appropriately by train, where we toured the beautifully



restored 1927 Greensboro Depot, saw the model layouts of the Carolina Model Railroaders, and several other railroad-related sites of historical interest. (See adjacent photos.)

At one time, Greensboro was served by six railroads. They connected east, west, south and north. There were 27 daily passenger trains. Today, eight passenger trains stop at Greensboro, and some 50 freight trains pass through daily. In addition to serving as the city's railroad station, the Depot is also now the hub for the Greensboro Transit Authority.

After lunch we took the train back to Spencer and saw the rollout and official dedication of the 542 at the Spencer Roundhouse. A&Y (Atlantic and Yadkin) 542 was a Southern locomotive but it spent most of its time on lease to the A&Y. (Hence its current markings.) It has been



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recently restored by the generous support of donations to the museum, and by countless hours of work by volunteers. It looks great!



That evening we gathered for an enjoyable evening of friendship and dining. Mr. Jim Wrinn, editor of *Trains Magazine* was the featured speaker. He was introduced by Mr. Bill Shaffer, recently retired NS VP for Planning, both are charter members of the SRHA and both provided a bit of interesting information about the founding of the SRHA organization. Mr. Wrinn also shared a few words and a few pictures of the process by which *Trains Magazine* is published.

Some folks seem to get the right job; Mr. Wrinn may be one of the best examples of this. He grew up in NC and was reading *Trains* while still in grade school. When he got to college (UNC) his advisor asked him what would be his dream job. Jim's reply: "To be the editor of *Trains Magazine*." He spent a few years working his way up (in other publications) and about five years ago got is dream job.

On Sunday we had a private behind-the-scenes tour of the NC Transportation Museum. The entire event was well planned and executed. Everything went well. Our time was well spent, and the events were all interesting and informative. The weather was perfect.

All photographs by the author. All are copyrighted 2011. ©





MACON TRACKS, SER CONVENTION REPORT

By Dave Anderson

This years Southeastern Region (SER) of the NMRA convention was held in Macon, GA. The weather was clear, but nice in the air conditioned meeting space on the campus of Macon State College. (Yes there is such a college.) There were a variety of clinics offered, some repeated on both days. There was time to get together with other modelers and discuss things.

Friday, before the convention was the SER board meeting. You will read about the minutes in the upcoming Southerner. All members are invited to attend, but only board members can vote on motions, Division Superintendent are board member, nobody can be a proxy Division Superintendent. (Fred is the SER Vice President, a voting member) It was three hours long, but everything important was covered.

The afternoon and evening was filled with clinics for the modeler and some for the non-rail associate. There were a variety of clinics. For railroad planning, the using historical documents clinic provided a wealth of idea sources. He showed how he used Corel Draw[®] to make the line standard gauge and trace the Sanborn insurance maps to get the yard that used to be in Atlanta by the old passenger terminal. He then took that image and placed it on areas of his new layout in HO scale. (He found out he could do this fairly recently!) He was rebuilding his layout because of a 100 plus flood inundated his house within the last two years. It was an interesting clinic for anyone looking to have some historical location or freelance based on a real railroad. Sandborn maps sometimes had all the tracks, and sometimes did not but a generic (tracks) notation. He found the architect drawings for the Southern passenger terminal in Atlanta, a good find for a modeler. It made you think of what might be out there.

There was a clinic on ballasting track that made a few pointer on ballasting track in any scale. He showed some simple ideas, and thoughtfully answered question.

The clinic on detailing and kit bashing laser structures was very well presented. He showed how he took three buildings and made one out of it. It showed some expansion to the business (it was a casket company). He discussed weathering, and small details to change the look of a building from the original structure. It was a entertaining clinic.



Yard Supervisor with 2 remote control box for yard engines. *(cost slightly more than a super chief)*

The Macon NS Bronson yard tour was a treat. You got to see things up-close and personal. They showed the RIP facility. I got to see them do a wheel set change and the movement of the car by the rabbit. We also toured the tower where we had a great view of them operating the hump yard. They were kind enough to send about 45 cars over the hump onto the 50 classification tracks for us to watch. Everything is automated, but still you have a human using the cut lever. The engine moving the cars is an SD-40 with two slugs attached operated by remote control. The same person who is operating the cut lever is remotely controlling the locomotives. (The ultimate DCC throttle!) The yard is 5 miles long, and built on a swamp. They are constantly draining the area, and yes they have a wildlife problem. An engineer



The same person who is operating the cut lever is remotely controlling the locomotives. (The ultimate DCC throttle!) The yard is 5 miles long, and built on a swamp. They are constantly draining the area, and yes they have a wildlife problem. An engineer

(Continued on page 8)



Yard Motive power, RC receiver on middle slug

getting off his engine was attacked by a gator at 1:30ish in the morning. Not your normal trackside hazard, but a modeling possibility.

There were a few model for people to look at, and a module club had a layout. They were offering DCC throttle instruction and answers to DCC questions. It all wrapped up on Saturday night with the dinner. It was time to meet other people from around the region.

Photos by Dave Anderson All are copyrighted 2011. ©

Ice house module in contest room.



RIP at work



NS will be doing trials of the Genset soon.

EVENTS FOR MODELERS:

LOST RR

The LOST RR Modules will be appearing at the **8th NC MODEL TRAIN AND RAILROAD ARTIFACT SHOW & SALE**.

June 25th, 2011 @ Metrolina Expo Trade Center, Building 1, Charlotte, NC
9 AM to 4 PM

Contact [Fred](#) if you can help out on the 24th or 25th, preferably both.

EXTRA 2011 WEST



NMRA 2011 SACRAMENTO, CA

2011 NMRA CONVENTION

July 3-9, X2011, Sacramento, CA
Check [out website for details](#)

National Train Show

July 8 to 10 check out [the website for more details](#),