

Newsletter of the Carolina Southern Division 12, Mid-Eastern Region, National Model Railroad Association

Volume 20 Number 10

October 2020

Division Coming Events (See <u>CSD Website</u> for further details) Division Meeting and Visit Saturday, Oct 17<sup>th</sup> 10:00am Southeastern Narrow Gauge & Shortline Museum

Newton Depot 1123 North Main Ave. Newton, NC.

### **Superintendent's Corner**

By Alan Hardee

GREAT NEWS!!! North Carolina has now entered Phase 3. I have setup a Carolina Southern Division 12 meeting for October 17<sup>th</sup>. I contacted Matt Bumgarner at the Southeastern Narrow Gauge & Shortline Museum in Newton Depot to setup our visit. The Newton Depot is located at 1123 North Main Avenue in Newton, NC. We will meet at the depot at 10:00 AM to start the tour of the restored depot, numerus prototype equipment under the covered pavilion. We will see which projects are underway from our last visit 2 years ago. I know that the museum recently expanded their collection with the addition of former Alexander Railroad Alco S3 #6 and a former Amtrak diner. It should be a

great visit for ALL. Please note that the museum will require a mask and follow safe distancing guidelines. Hopefully we can check in on Brookford as well to see if any track cleaning is needed. The tentative plan is to open Brookford on November 21<sup>st</sup> to show during the Hickory Train Show on that same day. YES, you read that right. Matt Bumgarner has scheduled another show in Hickory for the 21<sup>st</sup> at the Hickory Metro Center just off I-40. We will be seeking volunteers to man the layout at Brookford and to work the show handing out flyers with directions.

Now, a little sad news. Normally around this time of year I am sending out request asking (Begging) for help with the Metrolina Model Railroaders Southern Christmas Show layout. Unfortunately, The Southern Christmas Show has been cancelled for 2020.

I hope Everyone stays safe and healthy as we slowly get back to a somewhat normal routine.



#### UPCOMING AREA TRAIN EVENTS

Hickory Train Show Hickory Metro Center Saturday, November 21<sup>st</sup>

Other events will be announced when scheduled

STAY SAFE AND HEALTHY.

# **Editor's Notes**

By Ed Gumphrey

Another month when I'm not going to say very much from my point of view as editor. I hope everyone is staying safe. I'm glad to see a meeting and visit scheduled for the Divison, as well as a train shown in Hickory next month. Because of personal health issues I won't be attending, but nevertheless take pleasure in seeing some things returning to normal

I'm disappointed to hear from Gil Brauch, MMR, that he hasn't from anybody volunteering to take over duties as our new webmaster. If you can help, please step up.

As always, I hope you enjoy this edition. I welcome your feedback and recommendations. Of course I'm always looking for new authors as well. Let me see what you've been doing so we can share your experience throughout the Divison.

#### **SUBMISSION GUIDELINES**

I target the 1<sup>st</sup> of each month for publication. Please submit articles for publication by the 27<sup>th</sup> of each month. The preferred format is MS Word, but I can convert most other formats.

For questions and help, email me at editor@carolinasouthern.org

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# **DIVISION AND REGIONAL NEWS**

By Ed Gumphrey

The Division will resume activities with a meeting and tour on Saturday, October 17<sup>th</sup> at Southeastern Narrow Gauge & Shortline Museum in Newton Depot to setup our visit. The Newton Depot is located at 1123 North Main Avenue in Newton, NC. We will meet at the depot at 10:00 AM to start the tour of the restored depot, numerus prototype equipment under the covered pavilion.

As our Superintendent noted in his monthly comments, there's also a train show scheduled for November at the Hickory Metro Center on Saturday, November 21<sup>st</sup>.



Presidential trains as from this 1939 photo are pretty much a thing of the past.

## But voting isn't.

Make sure you exercise your rights and vote for the candidates and issues of your choice.

Not much else to report.

A little less than a year from now, The Southeastern Region (SER) will be holding their 2021 Convention very close to our Division. Hosted by our neighboring Palmetto Division, the event will be held in Greenville, SC June 10-13, 2021.

# **A CALL FOR CLINICIANS**

Dave Winans, Co-Chairman for the SER 2021 Convention is looking for any CSD members who would be interested in presenting clinics at the convention in June 2021. For those of you who present clinics at RMU and/or had planned on giving clinics during the cancelled 2020 convention, SER would be a great opportunity for you to spread your expertise event further. Contact by e-mail to <u>clinics@SwampRabbitExpress.org</u>

Their website at <u>www.swamprabbitexpress.org</u> is already populated with some interesting information. I'll publish more information about this event as we get closer.



#### **ATALE OF THREE LOCOS & A FALLEN FLAG**

Part 3 By Duncan Parker The New Steam Engine, No. 2

After the completion of most of the railroad (they're never finished, you know) including the low line (Flat Bottom) and the high line (Chicken Run) I set my mind to building a second live steam locomotive, a 7.5" gauge, 2.5" per foot, 1/5th scale narrow gauge Mogul with all the bell's and whistles of a full sized loco. The locomotive took the better part of 8 years spare time to complete, working nights and weekends between work, honey do's, and regular other stuff called Life.



My completed Mogul bright and shiny and ready for service.

The following is a pictorial presentation of my live steam Mogul, as it comes to life. The basis for my locomotive was a set of castings, plans, and a professionally built boiler for a Mogul called the Fitchburg Northern from allenmodels.com. I knew I could build everything to complete the locomotive except the boiler. I didn't have the welding skill to build a safe boiler as well as meet the safety standards required by the State of North Carolina.



Boiler by professional Boilermaker Ed Perry

Hydro test to 200 PSI

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I hydro tested the boiler to 200 PSI, double the planned operating pressure. It passed the test, holding pressure for 30 hours with 0 drop. A hydro test involves, plugging all holes, filling the boiler with cold water, then apply the desired pressure. Doing this provides a safe way to prove the boiler is sound.





Frame, Wheels, and Connecting rods.Stevenson Valve gear.The Frame was built up using ½" bar stock bolted together with socket head cap screws. This created arigid platform for all the components that make up the completed locomotive.



Cylinder, steam chest, cross head and guide.





Photo to the Left Feed water heater tubes located in the smoke box.

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Propane burner jets, Johnson Bar, Feed water pump.



Springs, Cross head pump. Note blind driver.





Saddle water tanks installed



Parts required for one brake shoe assembly.



Brake Shoe installed. Wire spring keeps shoe at correct angle to the driver and prevents dragging.





Finished brake shoe assemblies ready to mount.



Note, the brake pull rods are temporally mounted on the outside of the drivers for testing only.



Air cylinder above ready to install. Left photo, Brake lever, cylinder not attached Below shows how brake pull rods are connected



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#### Cow Catcher design, layout, and construction.



Milling Buffer Beam.



Milling lower frame.

Layout



Glued together and ready for paint.

Starting to Assemble.



Mounted on finished locomotive.



Cab interior controls.



<u>NC Boiler inspection number plate.</u> Inspection is required annually for a fee.



Cross head feed water pump.



Steam dome with two commercial safety valves.





A great day at the former Triad Live Steamers track, Farmington, NC



Propane Tank and Air Compressor in riding car.



Son-in-law trying his hand as engineer.



**The End** This is the final installment of my adventure with large scale modeling. I hope that you have enjoyed the adventure with me.

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#### **My Southern S Line**

#### **Conover Plan and Benchwork**

By Tim Rumph

The favorite parts of model railroading for me are layout planning and benchwork construction, and I'll show how I do some of both. This section of the layout will include parts of three industries. While researching my layout, I've found some on-line resources to be very helpful. One of them is the USGS (US Geological Survey) <u>Earth Explorer</u>. That's where I found this picture that includes a part of downtown Conover and the Conover Chair Co.



It may be no surprise, but the Conover Chair Company no longer exists. That site is now occupied by Premium Fabricators LLC, which is still part of the furniture industry, but is no longer served by rail. I discovered the Conover Chair Co. through a deed search on the <u>Catawba County</u> <u>GIS</u> web site, which has a very helpful and easy to use web site.

The other two industries are next to each other. The first is the piggyback (or TOFC) facility that the Southern Ry. had in Conover. The other is a plant owned by Hickory Springs which manufacturers foam and mattresses. I found this image on the <u>NC DOT</u> web page.



Conover Chair and Hickory Springs are about 1-1/2 miles apart and there are other interesting things between them, including Interstate 40, but I have a basement to build this layout, not a basketball court. Every layout includes some compromises and selective compression. Here is the plan for the section I'm calling the Conover Corner. This L shaped section is a hair under 8 feet long and 4 feet wide. The long leg starts out 6-7/8 inches wide, and angles out to almost a foot at the base of the L. The short leg is 8 inches wide, and there's a gusset between the two sides.



Building this section starts with cutting the top deck, checking the fit between the end of the Newton Spreader section and the room corner, and adjusting it. When I cut it out, I thought it looked a little narrow in the corner and realized that I'd left off the "gusset" between the two legs, so I had to cut that to size and put it in place, and attach it with some splice plates.



I thought about whether to put the splices on the top, where they would be in the way of the risers and scenery (I will eventually do scenery, but I want to get things running first!). Instead, I decided to put the splices on the bottom, which would give me a smooth top, but the framework would be a little more complicated since it would have to fit over the splices.

I used my usual building methods. The deck and the frame are cut from 1/2" plywood. In this case I used the hardwood plywood from Home Depot. This is glued together with brads driven into it to help hold things together while the glue dries. You can see my pneumatic brad nailer in the picture. This method also takes lots of clamps.





Here's a picture of the bracing under the corner of this section. You can see the notches in these pieces to go around the splices. These were cut with a dado blade on my table saw. The notch on the cross piece where it goes over the long piece was also cut this way.

One thing that is visible in this picture is that the side of the section against the wall (in the back in this picture) is higher than on the front, or aisle side. The back is 2-1/2" high, and the front is 1-1/2". This was done because the upper level is cantilevered from the wall, and the higher frame in the back will help support it. That means that the cross pieces need to be angled. Since I'm fond of my fingers, I used the arrangement below to hold the pieces to be cut. Safety First!



My friend and co-worker (and fellow P&W club member) David came over to give me some help replacing a light I couldn't reach. When that was done, we brought the completed framework for the Conover Corner into the train room and fit it in place to check it. It fit fine, and even with only three screws in it, it was quite sturdy. After checking the height of the first riser, which needs to match up with the previous section, we took it down and put it back on the benchwork.



Next I'll be cutting splines from a 1x8 poplar board for the spline roadbed. Then I'll figure out the grades I want and start cutting and installing risers and the roadbed, followed by track and wiring. I'll also need to think about lighting under this level, since the lower level will now be below it.

Tim Rumph



## WOOD CHEMICAL PLANT A SCRATCH BUILD PART III

By Ed Smith

Here's a quick update on what is turning into a long project. Due to back and new neck issues, my model railroading is really suffering. First, all my layout work has ceased and now sitting at my work bench is a chore. That being said, I have completed the last 3 of 7 structures of my chemical facility. They are the boiler room, saw shed, and pump house. These represent the power plant of the facility (pic 1).

First, the boiler room. Using a Hydrocal kit of a brick Double Boiler, a Walthers N scale smoke stack, and Dimensional wood, I fabricated a boiler. An N scale stack was used because the HO scale one was too large. I built an enclosure for the smoke stack and added it to the back of the boiler. The Hydrocal was painted, detailed, and weathered (pic 2). I built the building on a piece of foam core board. Using Dr. Ben's Baby Building Blocs, I laid out the basic structure with ventilation openings (pic 3). I placed the boiler assembly in the enclosure to check clearance (pic 4). completed the stone work, 22 courses representing 20' in HO, cut an opening



Pic 1: The last 3 structures for the Wood Chemical Plant.

for the steam pipe, and built the rafters using Dimensional wood (pic 5). Using Bass wood, the roof was added to the rafters and the stone was weathered with Micro Mark Gray stain (pic 6). The boiler was glued in place, rust colored ground cover was added, tulle was added to the 3 openings, to represent screen, and a water line with an outside shut off valve was glued to the boiler. Using Dimensional wood, louvres were added to both roof gable ends (pic 7). The door will be a fabricated roll-up metal door. All weathering was done with Micro Mark and Hunterline stains and pan pastels. The HO dimensions are basically 35' x 35', height 28', with a total of 45' to the top of the smoke stack.



Pic 2: The finished boiler assembly.



Pic 3: Basic structure layout.



Pic 4: Test fitting the boiler assembly.



Pic 5: Walls at full height and rafters in place.



Pic 6: Stained rafters and building blocks.



Next was the saw shanty. This is an open-end shelter measuring 27' x 29', height 10', in HO. First, I built the studded side walls using Wood Pile wood sticks. These closely resemble 6" x 6" studs. Right Way clamps were used during glue application to maintain true 90° angles (pic 8). Wood was cut, weathered, and distressed for the siding boards. Bass wood was used for the roof (pic 9). Corrugated metal roofing was applied, weathered, and distressed to represent a well-worn roof (pic 10). The structure was glued to foam core board, machinery from Woodland Scenics was added, and ground cover glued down. HO scale wood cords were stacked outside. These will be used for the charcoal reduction (pic 11).



Now, the pump house. Water will be drawn from a nearby river and pumped to the necessary buildings. The structure has an HO footprint of 25' x 28'. First, using HO resin cinder blocks, I laid a 2-course foundation. The door openings were laid out and the machinery test fit (pic 12). I used a 3D printed combustion engine and oil well pump to fabricate the pumping apparatus. Dimensional wood was used for the building sill and the doors were glued in place (pic 13). Floor planks were cut, weathered, distressed, and glued in place (pic 14). The framing and roof rafters were completed (pic 15). The rafters were test fit and cross members, for stability, were added. All the wood framing was weathered with stains and pan pastels (pic 16). Finally,

the weathered, distressed plank siding was added, a tar paper roof installed using medical fabric tape painted flat black, and a laser cut fan in the front peak and Tichy louvres in the back peak for ventilation were added. The entire building was weathered, a water line added with outdoor shut off valve, a temporary fuel line installed (pic 17). Outside details, including a fuel tank, water tank, water line, and roof ventilation will be added later.



Pic 12: Laying out the pump house.



Pic 13: Openings and sill plate installed.



Pic 14: Flooring and some wall structure done.



Pic 15: Framing and rafters assembled.



Pic 16: Framing weathered with pan pastels.



Pic 17: Completed Pump House.

Finally, I built boardwalk segments that will connect the buildings when they are secured (pic 18, 19).



Here are the buildings added to the complex with all 7 buildings temporarily set in place (pic 20).



I used basic tools to construct these buildings, relying heavily on a Northwest chopper for cutting wood. A Razor saw and wire brush were used for distressing wood by dragging the tool across the wood. Elmer's glue, wood glue, and ACC were the adhesives used. The weathering was done with acrylic paints, pan pastels, chalks, and Micro Mark and Hunterline stains. If I can do it, anyone can.

Barring any more health issues, next month I hope to share how I built the loading platforms, tank loading facility, and interior and exterior details. As usual, with the new norm, stay safe.



ED

### **CLOSING PAGE BONUS**



NS 9358 announces the arrival of fall in vibrant color.

#### **Division Brass**

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