

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

Volume 20 Number 6

June 2020

**Division Coming Events** (See CSD Website for further details) **IN KEEPING** WITH **GOVERNOR COOPER'S** PUBLIC HEALTH **ORDERS, ALL** DIVISION **ACTIVITIES** FOR THE **MONTH OF** JUNE HAVE **BEEN** CANCELLED.

## **Superintendent's Corner**

By Alan Hardee

We have made it to June. Finally, some things are starting to open. We still can't gather in large groups yet so we will not have a meeting in June. The biggest change during the last month was a decision about the Carolina Special 2020 MER Convention. The MER Board made the decision to cancel / postpone this year's convention. Not to restart a heated discussion on the Division's Facebook page, but both terms can be interchanged and still be correct. There will not be a MER convention in 2020 but MER did ask Carolina Southern Division Board if we would be willing to move to 2022 prior to the decision. So, what does two more years do for us? Hopefully a few more local layouts are finished and ready for open house tours and operating sessions.

The Hickory Train Show is still on for June 13. Although Matt isn't sure about entrance limits, masks will be mandatory for entry and gloves are recommended. Visitors will be routed one way along aisles with separate entry and exit points. If we see each other there, maybe we can have a quick meeting. Six feet apart of course.

## UPCOMING AREA TRAIN EVENTS

### RESCHEDULED 18<sup>th</sup> Annual NC Railroad

Expo Saturday June 13th 9:00am – 4:00pm Hickory Metro Convention Center 1960 13<sup>th</sup> Ave Dr SE Hickory, NC 28602

Historic Spencer Shops Train Show Saturday August 29<sup>th</sup> 9:00am – 5:00pm Sunday August 30<sup>th</sup> 12:00 – 5:00pm 1 Samuel Spencer Drive Spencer, NC 28159

SCHEDULES FOR OTHER AREA TRAIN EVENTS ARE NOT CLEARLY DEFINED.

MEMBERS WILL BE NOTIFIED OF SCHEDULED EVENTS OF INTEREST WHEN NEW INFORMATION IS RECEIVED.

IN THE MEANTIME, STAY SAFE AND HEALTHY.

# **Editor's Notes**

By Ed Gumphrey

Well, some activities are starting to slowly return to our lives. I hope you have all stayed healthy and safe during the past month. We still won't have a Division meeting during the month of June, but for those willing to venture out, there is a TRAIN SHOW next Saturday, June 13<sup>th</sup> in Hickory. See details in the banner on the left.

To use the "good news and bad news" cliché, the bad news is obvious. The MER decided to cancel this year's Convention that we were going to host in October. You'll see the MER President's letter below. That disappointing news is offset by two bits of good news:

- (1) Carolina Southern Division will get another chance to host the MER Convention in 2022.
- (2) Our neighbor Region, the SER, is holding their 2021 Convention vary close-by in Greenville, SC a year from now. There's more information below.

Although the level decreased during May, it was still encouraging to see some activity as posted by members on social media. Scott Perry and Neal Anderson, MMR, continued to share some of their hobby activities.

NMRA-X continued, and I expect these popular video clinics and tours will continue. Keep an eye on your e-mail for notifications from NMRA.

In this edition, you'll see a project by Ed Smith to build a signature scene on his Erie railroad. Scott Perry provides a detailed product review that will be of special interest to other scratchbuilders.

As always, I welcome your feedback, criticism and recommendations. But most of all, I welcome your submissions of articles about your model railroading projects. Remember, this is YOUR newsletter. Oh yes, don't miss the last page bonus – it's a repeat publication of a great photo. Enjoy!.

## **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 <u>editor@carolinasouthern.org</u>

## **DIVISION AND REGIONAL NEWS**

By Ed Gumphrey

The Division cancelled its May meeting, and we won't be meeting in June. As Superintendent Alan Hardee mentioned in Superintendent's Corner, MER has cancelled the Convention for this year. We'll get another crack at things in 2022.

For the information of Division members, here's the official notification from MER President Kurt Thompson, MMR:



There's no way to sugarcoat the truth. Due to the continuing issues surrounding the COVID-19 pandemic, I have decided, with the consent of the Board of Directors and in concert with the Carolina Southern Division Local Convention Committee (LCC) to postpone the convention. Yes, I used the word "postpone."

After consultation with the Carolina Southern and James River Divisions, the respective LCCs have agreed for James River to relinquish the 2022 convention and the Carolina Southern team will push back their convention until 2022.

It's with a heavy heart that this decision was made. With our membership falling mostly in the age range above 60 years of age, a significant number of us would be ill-served by having a convention. Also, at this time, there is no assurance that the North Carolina Governor will have removed the various pandemic associated directives on social distancing and sheltering at home.

Now for the "positive spin": for the 2021 Convention in Hunt Valley, MD. I hope that you each will work on one or two models to place in the model contest or in the Model Showcase for the Mt. Clare Junction Convention. As I mentioned in my email to the Region a couple of weeks ago, the stay at home order allows us to spend some dedicated time on our hobby.

As for myself, I'm working on my layout so that it will be operational for the

convention, actually sooner. The structures may be mainly mock ups but the switching can still be done.

Chins up, folks. We'll get through this and have some fun with our hobby while we do.

Kurt Thompson, MMR President, Mid-Eastern Region

While on the subject of Conventions, 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. 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. So, here's more to look forward to next year.



# Visit Beautiful Greenville, South Carolina

Enjoy many model, layout, prototype, and non-rail activities at the

> Swamp Rabbit Express

June 10-13, 2021 Information at: www.swamprabbitexpress.org Social media postings by Division members were more rare during May, but there were some interesting pages. Alan Hardee continued to post links to historical videos from the North Carolina Transportation Museum. If you missed any of them, you can find them on NCTM's website at:

https://www.facebook.com/pg/nctrans/videos/?ref=page\_internal

Scott Perry stayed active. He posted a series of pictures of a "business card" scratchbuilding project in On30. It was part of a contest to build a model with the "footprint" of a standard business card. I grabbed one of his Facebook photos as shown below. You can find more at Scott's blog: <u>http://modelrailroadersnotebook.blogspot.com/</u>

Another interesting post from Scott was a picture of a tank car repurposed as a storage tank. This cries out to be the subject of a small trackside industry. Scott has more photos at:

http://modelrailroadersnotebook.blogspot.com/2020/05/three-domed-tank-car-repurposedand.html



You can always count on Neal Anderson, MMR, to be active, and he didn't disappoint during the month of May. Neal posted the below photos on his Facebook page. They show the wide range of Neal's model-building interests, from HO scale custom trackwork to a scratchbuilt tank car for 7.5" gauge. Neal has a great series of step-by-step photos of his tank car at: <u>http://kklrailroad.com/7-5-tank-car/</u>



NMRA-X continued with clinics and layout tours during May. They had a full day of activity Saturday, May 30<sup>th</sup>. I missed out, but received some info that it was another great series of videos. I am told that Scott Perry participated – one of our members told me it was a great clinic. Keep an eye on your email for more announcements from NMRA on more NMRA-X presentations in the future.

I'll close out the news discussion with the following picture. I grabbed this off of a Facebook post and shared it on the Division's Facebook page, and repeat it here for a good chuckle. I don't think those hose protectors will do much to protect this firefighting crew's hose.





## LEARNING

By Ed Smith

Many modelers, who are building layouts, try to re-create signature scenes that will identify the area they model. For me, the Starrucca Viaduct is that scene. It is the premier structure of the Delaware Division of the Erie R.R. It is located in Northern Pennsylvania, just south of Binghamton NY (pic 1). The viaduct was built in the late 1840's and is still in service today. It consists of 17 stone arches, spanning over 1000' with a height of 100'.



Pic 1: Starrucca Viaduct, near Lanesboro, Pennsylvania. Completed in 1848 by the Erie Railroad, the viaduct is still in use today by the New York, Susquehanna and Western Railway. Photo from <u>classicstreamliners.com</u>.

I knew I wanted to replicate this structure as prototypically as possible. My first inclination was to install it on the layout so it would be the first thing seen as you entered the room. This idea failed due to flow of the track plan. Next, I tried to fabricate the arches using a variety of materials and techniques. One was hand carving the stone arches using foam board. All these endeavors were less than desirable - primarily due to my skill level, but also because of the

materials I had available. During these experimental stages, I was able to finish the spline roadbed, knowing I would cut out the sections in the areas where bridges and viaducts were to be installed.

Although it took a while, I found the perfect solution by attending the National Conventions. This is where I met Bob Gans. He was the owner of Stone Works. His company produced Hydrocal replicas of stone bridges and viaducts located in the Northeast. Primarily these were Pennsylvania railroad structures, with one exception; the Starrucca Viaduct. The quality of these plaster castings was excellent. So, I bit the bullet and purchased enough to do all 17 arches. This consisted of 16 piers, 16 arches, 2 half arches, and enough delicate cap stone strips to cover the whole length. As far as I can tell, Bob is no longer in business.

The viaduct was constructed on a 1" x 6" board 12' long. Each pier and arch were sanded, squared, leveled, and then using white glue, glued together. This resulted in 16 sections. They were lined up on the board, leveled, then all glued in place. After everything dried, the half arches were added on each end. This created all 17 arches at a length of 11'. I experimented with acrylics until I came up with a mixture of grey, raw umber, and brown, that I used as a wash on the stone. I cut out 11' of spline and set in the preliminary structure (pic 2). I applied the Homasote roadbed that came with the viaduct (pic 3). This is where I discovered a major problem. Stone Works designed the area for the Homasote to be only 3  $\frac{1}{2}$ " wide. This was not enough room to maintain at least 2" centers on the track. On top of that, my spline roadbed was set at 2  $\frac{1}{2}$ " centers. So, I had to narrow my approach tracks to the viaduct by  $\frac{1}{2}$ " and expand the viaduct tracks to 2" centers. The narrowing of the approach was easy. The last 3 or 4 feet of track squeezed in  $\frac{1}{4}$ " each, attaining the 2" centers. The viaduct track had several obstacles.



Pic 2: The preliminary structure is put in place. 16 piers, 16 arches, and 2 half arches of cast hyrdrocal comprise the 11' model.



Pic 3: The homasote strip, provided with the Stone Works cast sections is only 3 ½" wide, requiring some ingenuity in setting track centers.

I used Walthers bridge track for the viaduct. At 2" centers, the track would take up the whole 3  $\frac{1}{2}$ " on top, covering the cap stone. This looked bad and was not prototypical. While researching, I came across pictures and a construction drawing that solved the problem (pic 4, 5). These showed a coping course of stone, covered with asphalt, on top of the cap stone. Using a razor saw, I cut off the outside edges on both sides of all the bridge tracks, 14 pieces in all (pic 6). This was 1/8" on each side, gaining my  $\frac{1}{2}$ " overall. To make the coping course, I cut 1/4"

strips of wood from spare 3/4" by 1/8" pieces (pic 7). I painted these strips with acrylics to get the asphalt look (pic 8). Then, using adhesive caulk, I secured the strips to the edges of the cap stone (pic 9). Now I had sufficient room to have 2" centers. The track was weathered and using caulk, glued in place and ballasted (pic 10). Since feeder wires would only be on each end of the viaduct, an 11' span, the rail joiners were all soldered for better conductivity. Finally, using Pan Pastels, the viaduct, track, and ballast were lightly weathered. The project was finished and I placed a few freight cars on the track to give a sense of scale (pic 11).



Pic 4: Research uncovered vintage photos that showed a coping course of stone covered in asphalt on top of the capstones.



Pic 5: A copy of construction drawing details helped clarify details for the model. Research pays off when trying to model a specific prototype.



Pic 6: Using a razor saw, the end portions of Walthers code 83 bridge track was carefully removed from 14 pieces.



Pic 7: ¼" strips were cut from spare 3/4" x 1/8" pieces of pine. These strips would be used to form the asphalt caps.



The end result closely resembles the prototype structure (pic 12 on next page). It took me many years, from start to finish, to complete this project. Just researching and finding the proper material was time consuming. But, also, a lack of focus hindered the construction. Although our Regional Convention has been canceled, I've been able to learn a valuable lesson. During preparation for the convention, I became more regimented and focused on singular projects. This attribute of starting and completing a project is invaluable. This important lesson has allowed me to make great progress on my layout.



Pic 12: Ed Smith's finished model of Starrucca Viaduct closely resembles the prototype. The 11' long model will be the star of a signature scene on his railroad.

Until next time, please stay safe and build something.

### ED

Editor's note: This is the first article Ed Smith has submitted without featuring his trusty assistant, Elway. From last month's photo of Elway with a mask on, I suspect he was still practicing social distancing, so he was not available for another photo opportunity.

## **Product Review: Ultimation Sander from Fast Tracks**

By Scott Perry

Photos by the author Open copyright to NMRA publications Editor has license to shorten or edit as needed without approval

I just received my new Ultimation Sander from Fast Tracks (Photo 01). Its Memorial Day Weekend so I have some time to play with it and put it through its paces. This is a precision sanding tool designed to make perfect precise components. My goal in modeling is to build more accurate, more precise models so I do invest in good tools. It is my drug habit. This is a major investment for me as far as tools go. We just have to answer, "why would anyone pay \$296.60 US for a manual (non-powered) sander and repeater!" Let's find out!

The sander comes packed very well (Photo 02). The box was secure in another box, and the unit is carefully packed in thick bubble wrap. The Ultimation Sander is a product of Canada and I'm a regular customer of Fast Tracks so I knew it would be a quality tool.



Photo 1: The Ultimation Sander by Fast Tracks



Fast Tracks loves to send post card literature (Photo 3). It also came with some "instructions", hex wrenches, and sanding disks. I bought a few more disks when I made the purchase. The knob on the turning crank is loosely screwed on backward to help protect it. Using the provided hex key I quickly turned it around (Photo 4).

I also bought the Ultimation Repeater (Photo 05) as it is cheaper when bought with the tool. The purpose of this device to help you make precision length and/or angled parts as accurately as possible. Think trestle bents that have to be the perfect angle and length. Like the sander it was well packaged and free of damage (Photo 06). The products are very nicely machined, and laser cut. It is a quality piece of equipment for sure. The sander is quite heavy as

well and construction is all metal. The Repeater device (photo 07) is a spring loaded "feeder" that attaches to the sander. It also comes with spare parts and hex keys.



Photo 3: Sander with tools and literature



Photo 4: You will need to reverse the crank handle knob.



Photo 5: The Repeater and some necessary wood from Mt. Albert



Photo 6: The Repeater is a spring-loaded material feeder for the sander.



Photo 7: The unit is about 14" long and has a protractor and feeder mechanism.



Photo 8: The sanding disc was stuck against the table, but was easy to adjust.

When I put the knob on, I immediately attempted to turn the sander but it wouldn't move (photo 08 on previous page). I quickly noticed that the table had moved slightly in shipping and the sanding wheel was butted up to the metal plate. A quick adjustment of the table by loosening the screw underneath (photo 09) allowed me to move it slightly and it worked fine after that. The table is on a hinge and is not fastened, so be careful when moving it around so you do not pinch a finger. It would be nice if the tabletop had a locking feature.

The next thing I grabbed were the "instructions." I put them in quotes because they are really more like a sales pitch than instructions. A person unfamiliar with tools is going to have a hard time with it unless they really follow the video on the website, and even that isn't great for setting up the device. I'm pretty upset that I paid so much for something that came with tons of pretty literature and no instructions for how to use the device!





Photo 10: The protractor has laser-etched degree increments.

Before we put it through its paces, let's check it out of the box. I set the protractor bar to 90 degrees (photo10) to test the accuracy of the device right out of the box. Spot on 90 degrees (photo 11 on next page)! Good so far! Let's check the halfway point at 45 degrees for accuracy (photo12). Again, spot on without any adjustments (photo 13 on next page). I like it when it comes out of the box without having to adjust. Good engineering.



Photo 11: Check the alignment with a square and adjust if needed.





There is a handy hole on the bottom of the frame (photo 14). I found that I really did need to fasten the tool down as it likes to walk on the benchwork. For the time being I used a clamp and fastened it to the workbench. I like the rubber "grip" on the sanding disk (photo 15)! It is easy to move with your finger or hand and get a very gentle, precise sanding on a part.



Why buy a tool like this? Here is a model of an engine shed (photo 16) that is under construction on my workbench. I model in O-scale, so the large beams are a scale 12" and 1/4" standard measure. It's a thick board as far as modeling goes. The only way to precisely cut this is with a saw, and they must be cut slightly longer so they can be sanded smooth. Trying to cut 50+ short boards with angles cut on both sides and at different angles took me almost two weeks of off-and-on modeling time. Had I had this tool I could have produced them all in a fraction of the time (maybe one evening) and at a significantly higher level of precision.

The guys on Wiley's Scale Modeling Podcast site (find them on Facebook) asked me to review the tool when I got it, so here it goes. Wiley's is a podcast for craftsman model kit builders and is extremely helpful for both new and highly experienced model builders. I highly recommend it. Like me, they are craftsman tool junkies.

What I want to test first is the ability of the device to duplicate parts and to see how accurate they can be. To test it I cut a really poor cutting of a 1/4" piece of harder than normal basswood (photo 17). The cuts were made with a Northwest Shortline Chopper. The wood is much too thick for a chopper and did not quite go through, so I broke the board leaving a nasty burr on the tip. That should be a good test. Uneven, unlevel, gross (photo 18). Perfect for a test! In real life I would have sawed this thickness of board with a Zona Saw and an X-Acto miter box, using a clamp to hold the wood in place. Very time consuming.



I held the wood against the protractor at a 90-degree position to the sander and gave it a few gentle cranks of the handle (photo 19). Sawdust piled on top of the wood part. The machine started "walking" across my desk even though I was barely turning the crank. Using a large clamp I fastened the tool to the workbench (photo 20). With the glass top it still moved a little. I'll eventually mount it to a wood base and then double clamp the wood to the desktop.



Photo 19: The board sanded smooth and at a perfect 90 degrees.



Photo 20: I used a Quick Grip clamp to hold the sander in place.

With both ends sanded, I measured the piece with a Vernier caliper (photo 21). 1.3000. As close as I can get to 1.3 inches! Now I want to make five more parts just like it, completely flat and sanded to 90 degrees on either end. To use the Repeater, you have to remove the protractor (photo 22). Using the provided wrench and hex key, loosen the nut on the bottom. My fingers are rather small for a guy 6'2" and I had a hard time getting the nut back on (photo 23). Finally, I lifted the table to get it to work. Some of you may have to fight with that nut to get it off and on because of the other parts underneath the table. Replacing it with a wing nut might be my next step. The assembly is made with the fine thread screw, compression washer, regular washer and a metric nut (photo 24).



I put the Repeater on and put in the screw and the knob to lock it in. The Repeater protractor is 1 degree off from the standard protractor (photo 25). I decided NOT to adjust the setting because I planned to change it back. We'll just deal with the single degree off. Using my Caliber Cutter (no longer in production, but a new device is coming out soon!) I cut boards about 1.4000 inches and did it as poorly as I could do it (photo 26). You can see here that the boards are crushed on the ends, broken, cut at angles, etc (photo 27 on next page). What we want to do is to sand both sides perfectly and size the whole board to 1.3000 inches.

You remember the photo above of the screw, two washers and the nut? The reason I did that is I accidentally picked up the thicker washer (more likely called a spacer) and put it on the nut assembly, instead of on the tightening knob (photo 28). When I did this the Repeater would not slide. Never said I was smart, just amazingly entertaining.



I mounted the first board I cut into the fixture by sliding the compression device back and dropping the board in (photo 29). When you let go of the slide, it compresses the board against the sander surface. After going back and watching the video a second time I realized that I didn't use the "thimble" or micro adjustment correctly (photo 30). I should have set it so there were a few threads on the left-hand side and then put the adjustment to zero. The markings are 0.001 each. There is a locking screw on the thimble that can be set with a hex key. You can adjust the tool to fit the piece or to a measurement.





With the device set I put in a board and began to sand. My natural way was to turn the sander clockwise and the piece politely jumped out of the fixture. Sanding counterclockwise (photo 31 on next page) seems to work better. I sanded one end flush, watching the gap between the thimble and the edge of the spring holder. When it got to half the distance, I flipped the piece

and sanded the other side until the thimble rested on the spring holder and the sander turned without friction. You can both feel and hear it. I cleaned off the sawdust from the piece and some fibrous edges and measured the second piece. 1.3020 (photo 32). Excellent tolerance for O Scale! A shout out to my On30 brothers out there!





Photo 32: The unit sanded the board to 1.3020.

As I began working on the third board, I noticed the heavy sawdust and the fibrous edges. This is a harder piece of basswood than normal and was quite messy (photo 33). I used a hobby knife to remove the fibers from the edge. The part measured 1.2985. Again, a good number.

The fourth board was not as accurate, and I could see that the board had a very slight angle on one end. My thought is that I didn't set the board in correctly. I'll blame that one on me. The sawdust is a pain and putting the tool over by the vacuum will be a necessity (photo 34). I'm using a fine brush to keep the work surface clean and the tool accurate. Boards five and six came out great at 1.3055 and 1.3005 respectively. Here are the six boards in line and a copy of the test data (photo 35).



and can interfere with the next piece.

came out with an average length of 1.2974 inches.

cleaned off.

Honestly, that is probably more accuracy (photo 36) than I need for O-Scale! I'm totally happy with that. The test data would have been way more accurate had I not botched piece 4. But hey, it's just you guys, so I'm not repeating the test.

Ok, let's test the angle cutting ability. This time I didn't make a perfect piece to set up by. I took the cutter and horribly cut six pieces at slightly varying lengths of about 1.2000" and ballpark cut the angles so no two boards are alike (photo 37). Here again you can see rough edges, different lengths and bad angles (photo 38). You know, like my normal quality of work! I changed the protractor and set the Repeater to 45 degrees. My goal was to get the length of the long side of the board to 1.1500. I put it in and sanded. Just 5 thousandths off (photo 39).

90 Degree Cut	Final Dimension	Tolerance
1	1.3000	0.0000
2	1.3020	0.0020
3	1.2985	-0.0015
4	1.2780	-0.0220
5	1.3055	0.0055
6	1.3005	0.0005
Average	1.2974	-0.0026

Another quick turn of the sander and I'm down to 1.1490. Good enough.



There is a video on the Fast Tracks site that you should review before you get started. There are not written instructions for using this tool, and it won't be intuitive for someone not familiar with tools. Take the time to see the video. You pull the spring-loaded compression device back and put the board in with the proper angle to the sanding disk. Gently let it spring back into place and start sanding (photo 40 on next page).

On the angles pieces the fibers are becoming much more plentiful (photo 41 on next page)! Here you can see the great angle cut, but the Covid "I've not had a hair cut in three months" look. A quick hit with the hobby knife took care of the very fine fibers. I didn't sand them because they are so fine they just move around. Once the first board was set, I set up the thimble and locked it down. You must lock it in place as it likes to crawl off the threads. Another good board. I checked the angle too and it was spot on. The remaining boards came out 1.1490, 1.1510, and 1.1505 respectively. To me these numbers are incredible for sanding (photo 42). I know I can't do this well cutting and not with a power sander or a Micro-Mark Sand It. And even if I could those options would take forever. These pieces are being made in seconds.

	27	45 Degree Cut	Final Dimension	Tolerance
		1	1.1490	-0.0010
		2	1.1550	0.0050
		3	1.1505	0.0005
		4	1.1490	-0.0010
Singer a		5	1.1510	0.0010
		6	1.1505	0.0005
Photo 40: Here is the piece mounted in the sander at	Photo 41: Fuzz and fibers are created in the sanding	Average	1.1508	0.0008
45 degrees.	process.	Photo 42: Angle board test data.		

The video recommends cleaning the sandpaper, so I took my brush and easily flicked the dust off to extend the life of the sandpaper. The Repeater is a bit long and tends to reach out and grab things, so be careful. Look at all the extremely fine dust (photo 43). I am wondering if the sandpaper is a bit too course for this kind of work and I may get some finer grit discs and try it.

Look at the edges lined up in an angle (photo 44)! Precision baby! You HAVE to have one of these for large scale wooden structures like trestles, snow sheds or buildings with a lot of angles on them.



Photo 43: The sander creates a lot of mess so have a vacuum handy.



hoto 44: Look at how nice they all line up in both angle and length.

In order to really give the tool a run for its money I built a small On30 trestle bridge to go over a creek (photo 45). The bents were some of the best fitting I've ever cut with tricky 8-degree cuts in hardwood dowels which are extremely hard to cut and shape.

Summary: The tool is expensive and is probably out of reach of a lot of folks in the hobby. For those that scratchbuild often and like to work in wood, this tool is almost mandatory. It is certainly a timesaver for professional modelers. For sure, put it on your Christmas list. Expect no instructions and study this blog post and the linked videos. Watch out for the moving table when you pick it up or you might injure a finger. When you buy it from Fast Tracks, don't buy any wood. Then you can come back with over 300 frequent flyer points and get a lot of free lumber! Enjoy!

Follow Scott Perry on Facebook or on his blog at http://modelrailroadersnotebook.blogspot.com/



## **CLOSING PAGE BONUS**



May 29<sup>th</sup> marked the "birthday" of reactivation of Norfolk and Western J-Class #611. In honor of that event, here's a repeat showing of a photograph provided by CSD member Joe Skorch. His wife grabbed this shot from an overpass as #611 was departing Spencer in 2018.

Superintendent Asst. Superintendent Clerk Paymaster Director 2022 Director 2023 Director 2021 AP Chairman Webmaster Newsletter Editor Program Chair RMU Chair Publicity Chair Membership

#### **Division Brass**

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