SUSQUEHANNA SIDETRACKS

An Official Publication of the Susquehanna Division 11,
Mid-Eastern Region of the NMRA

Volume 29 Number 4

The Columbia and Susquehanna Model Railroad Club is located on the second floor of the Columbia (PA) Historic Preservation Society. This 2,200 square feet HO scale layout features a replica of the town having numerous scratchbuilt houses and businesses. The above photo shows the PRR roundhouse and turntable which was a focal point of the massive railroad presence in the town. See page 11 for the complete article and photos.

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Norfolk & Western 4-8-4 #611 visits Strasburg Railroad until October 3rd.

From the Superintendent's Desk

July is coming upon us very quickly. On July 1st our new Directors begin serving our Division. Congratulations to Pat Mulrooney, Jeff Thompson, Lee Rainey and Ken Roth. The election results are on page 6.

Our second event this year will be on July 10th. This event will be a trip to the East Broad Top Railroad, the Rockhill Trolley Museum and the Bricktown Model Railroader Association. Lee Rainey has put together an excellent program for the day.

Our Division needs your help serving all of us. We need someone to take over as Clerk and someone to assist our Webmaster. Please see the article on page 7.

The Division was offered a table in the vendor area at the National O Scale Narrow Gauge Convention in Harrisburg on June 11th and 12th. We handed out some rail pass applications and some fliers on the East Broad Top event. It was a well-run event. It seemed strange that the convention only offered one clinic at a time. I am used to our regional conventions where you have three or four to pick from at any one time. The Division has been invited back next year. We would be glad to provide some clinic presenters.

It would also be nice if you could write an article for Sidetracks about your model railroad. Rich Wurst, our Sidetracks Editor, is always looking for printed material to include in our newsletter. After all, we are a model railroad group and too many of our issues of Sidetracks are lacking on articles about modeling projects or even prototype rail road articles.

I am looking forward to meeting again in person. I realize that the past year has been difficult for all of us. I guess I just miss seeing some of my friends. Time to decide which of the many projects I have planned to start on next.

Tim Himmelberger

Second Section

Susquehanna Sidetracks

Official Newsletter of the Susquehanna Division
Mid-Eastern Region, NMRA
5 Hardy Court, Lancaster, PA 17602

Contributing to Susquehanna Sidetracks:

Sidetracks welcomes contributions from the Division membership. Letters, articles, photos and other items may be sent to the Editor at the e-mail address listed below or the street address above. Deadline for submission for the next issue is August 15, 2021.

Membership Information

Susquehanna Division website:

www.susquehannanmra.org

Mid-Eastern Region website:

www.mer-nmra.com

National Model Railroad Association
8414 Gulf View Drive, Suite A & B
Soddy Daisy, TN 37379-2200
www.nmra.org

Board of Directors

Superintendent
Tim Himmelberger
super@susquehannanmra.org

Assistant Superintendent
Tedd Pounds
assist-super@susquehannanmra.org

Chief Clerk
Paul Tice
treasurer@susquehannanmra.org

Director
Pat Mulrooney
pmulrooney@susquehannanmra.org

Director
Lee Raineyy
lrainey@susquehannanmra.org

Director
Ken Roth
kroth@susquehannanmra.org

Director
Jeff Thompson
jthompson@susquehannanmra.org

Committee Chairmen

Achievement Program Chairman
Robert Charles, MMR
achievement@susquehannanmra.org

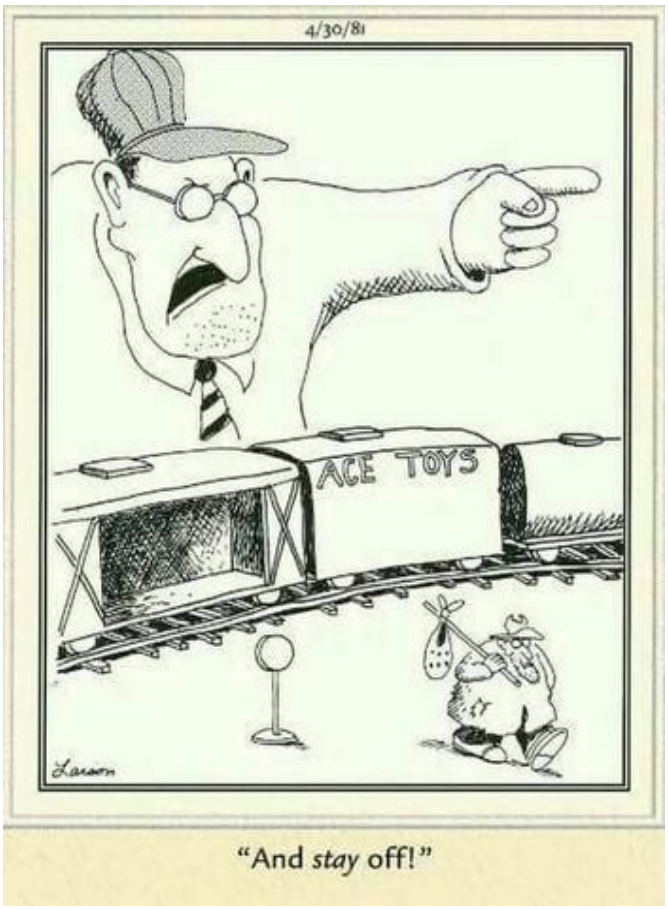
Model Showcase Program Chairman
John Wissinger, MMR
showcase@susquehannanmra.org

Membership Chairman
Howard Oakes
membership@susquehannanmra.org

Training
Alan Mende
training@susquehannanmra.org

***Sidetracks* Editor**
Richard Wurst
editor@susquehannanmra.org

Webmaster
David Collison
webmaster@susquehannanmra.org



Welcome New Member

Thad Malone

Carlisle, PA

2021 Division Events

~~**April** – New Holland - Pat Mulrooney and Jeff Thompson~~ – Canceled

May 1st– Columbia Railroad Day – Bill Lesjak and Barry Schmitt

~~**June** – New Oxford – Phil Peters and Howard Oakes~~-Canceled

July 10th– East Broad Top Railroad – Lee Rainey

September 18 – 19th, Mainline Hobby Supply Open House Tour

October – LSOP – Wayne Betty

October 21 – 24, Hunt Valley, MD, MER Convention, Chesapeake Division

November – Division wide Open House Tour

Amtrak EMD AEM7 Electric Locomotive #915 sits in the outside yard of the Railroad Museum in Strasburg, PA sporting an Amtrak 50th Anniversary banner.

Division Director Election

Following are the results of the MER Susquehanna Division 11 election for the Board of Directors:

Pat Mulrooney - 11 votes
Lee Rainey - 11 votes
Ken Roth - 11 votes
Jeff Thompson - 12 votes

Congratulations to our new Division Directors!

All results tabulated and recorded by Bill Lesjak, Election Clerk

Opportunities to Serve the Division

Chief Clerk

Paul Tice has faithfully served the Division as our Clerk since day one. Yes, he is the only person who has held this position in our Division, in fact, he remembers when our treasury was so small that we did not have enough to even open a checking account. Paul's health has been declining and he has asked that we find a replacement. Technically, this is a Secretary / Treasurer position. Anyone interested in serving the Division in this capacity please contact Tim Himmelberger at tlhimmel@comcast.net or call 717-454-8033.

Assistant Webmaster

Our Webmaster has requested an Assistant Webmaster be appointed. Areas of need would be for assistance with membership mailings and keeping the website up to date. Anyone who is interested in serving the Division in this capacity please contact Tim Himmelberger at tlhimmel@comcast.net or call 717-454-8033.

Western Maryland Scenic Railroad EMD GP30 #501 in Cumberland, MD.

Pennsy Camelbacks

The Pennsy's camelbacks were the product of a race to Atlantic City, New Jersey. In the latter nineteenth century, the Pennsylvania Railroad (PRR) and the Philadelphia and Reading Railroad (P&R) competed aggressively for fares between Philadelphia and Atlantic City. Railroad rivalry to serve Atlantic City began in the 1870s, and, by the turn of the century, the PRR and P&R had consolidated predecessor lines into their adversarial subsidiaries, the West Jersey & Seashore Railroad (WJ&S) and the Atlantic City Railroad (ACR), respectively. The intense competition took place on several levels such as time in transit, fares, schedules, and comfort on board. For an extra charge of 50 cents, riders could board a train at PRR's Broad Street Station for a direct, all-rail ride to Atlantic City via Frankford Junction; the Delair Bridge, which opened in 1896, over the Delaware River; and West Haddonfield, bypassing the congestion at Camden, New Jersey.

Most of Philadelphia's 1.25 million residents, however, preferred to take a ferry to Camden, either a PRR ferry to the Federal Street terminal or a P&R ferry for the longer ride to Kaighn's Point. From Camden to Atlantic City, the ACR ran the shorter route of 55.5 miles compared to 58.3 miles for the WJ&S. For approximately 25 miles the two lines ran parallel, and locomotive crews relished racing the competition. Time on the trains to Atlantic City, nevertheless, ran about the same, until 1896.

In 1895, with the Delair Bridge under construction, the P&R ordered from Baldwin Locomotive Works two locomotives for the ACR capable of hauling between Camden and Atlantic City a train of six cars in 50 minutes or eight cars in 60 minutes. The locomotives delivered in April 1896, road numbers 1026 and 1027, were camelback Atlantics (4-4-2) with 76 square feet of grate area permitted by the wide firebox behind the cab, 200 psi operating pressure, Vauclain compound cylinders, and 84.25-inch diameter driving wheels. Assigned to the *Boardwalk Flyer*, the locomotives set new speed records between Camden and Atlantic City. Over a two-month period in 1897, running every weekday, engine 1027 with five or six cars made the run in an average time of 48 minutes, an equivalent of 69 mph. ACR patrons could board a ferry at the foot of Walnut Street in Philadelphia and arrive in Atlantic City in about an hour. Two additional Baldwin Atlantics were ordered for the 1898 excursion season. The P&R management was delighted to advertise the superiority of their trains using broadsides, brochures, and newspaper reports of record-breaking speeds. The advertising won patrons and paid dividends, much to the chagrin of PRR brass three blocks away at Broad Street Station.

Pennsy Camelbacks (cont.)

The PRR had rostered American (4-4-0) Class D16a locomotives on the WJ&S since 1895. This subclass was equipped with 80-inch drivers for speed and had a heating surface of 1,905 square feet, larger than the 1,836 square feet on the ACR Atlantics, but burned anthracite in a Belpaire firebox on a narrow grate of only 33.2 square feet and had an operating pressure of 185 psi. While the D16a could achieve bursts of exceptional speed, the locomotive lacked the steaming capacity to compete effectively over the long haul with the ACR's camelback Atlantics. The PRR's pride and reputation were on the line.

A response was overdue when PRR Chief of Motive Power Theodore Ely charged Mechanical Engineer Axel Vogt to design a locomotive for the 1899 excursion season to outperform the ACR Atlantics. To provide for a larger steam plant, Vogt adopted an Atlantic (4-4-2) design, a camelback, classified E1, with fixed trailing wheels to support a longer boiler and wide firebox above the frame and behind the cab and the 80-inch drivers. The firebox, with a grate of 69 square feet for burning anthracite, combined the Wootten brick arch and combustion chamber with Belpaire staying and flat crown sheet. The boiler contained 353 1.75-inch tubes contributing to the 2,320 square feet of heating surface to generate steam for the 20.5 by 26 inch cylinders at an operating pressure of 185 psi.

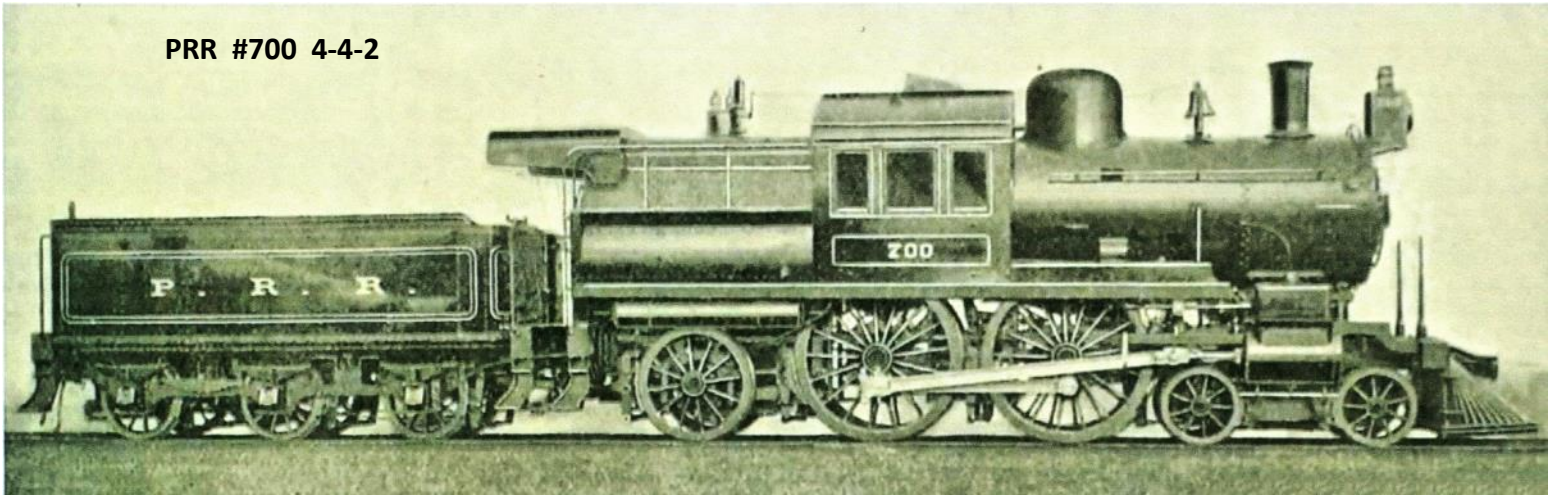
Ely, Vogt, and F. D. Cassanave, General Superintendent of Motive Power, all had a hand in fashioning features of the E1. The design included a cast steel frame, Stephenson valve gear, and balanced slide valves to reduce friction. Reciprocating components were kept as light as possible, including fluted main and side rods. The pivot point for the pilot truck with 36-inch wheels was located to reduce wear on the flanges of the leading drivers. The sand reservoir and steam dome were placed inside a single, large casing atop the boiler. A speaking tube between the fireman on the open platform behind the firebox and the engineman in the cab astride the boiler had a whistle mouthpiece to facilitate confirming signal aspects. The tender was a three-axle affair with the last two equalized, and it was equipped with a scoop to replenish the 4,000-gallon cistern at a rate of 3,500 gallons in 10 seconds at 68 mph. The editors of both *The Railroad Gazette* and *American Engineer and Railroad Journal* penned complimentary reports of the E1 including a photograph and dimensions of the locomotive. The PRR Juniata shops at Altoona delivered three examples of the E1 assigned road numbers 698, 700, and 820. Number 698 underwent tests on the New York Division, including a train of ten cars, 410 tons less the

Pennsy Camelbacks (cont.)

engine, between Broad Street Station and Jersey City on June 20, 1899, with the results exceeding expectations. In service on the WJ&S, the freesteaming, PRR camelbacks set new records celebrated by articles in *The Railroad Gazette*. On July 18 an E1 with seven cars ran the 58.3 miles from Camden to Atlantic City in 51 minutes. On the 20th an E1 headed an eight-car train, "[the largest number of cars heretofore hauled to Atlantic City on a similar schedule," the *Gazette* enthused. On the 31st an E1 with eight cars made the run in under 51 minutes. Headlined by the *Gazette* as "A Fine Run," E1 No. 698 sustained speeds in excess of 90 mph highballing to Atlantic City on September 11. The races between the ACR and WJ&S crews continued, but the records were being set by the PRR.

The 1899 E1 triplets proved to be the only camelbacks that the PRR would build or roster. The experience on the WJ&S raised serious safety concerns. The fireman rode in a precarious position on an open platform exposed to the elements, and the engineman sat against the boiler, summer and winter, and above the rods, which could fracture. Connecting the crew with only a speaking tube compromised the PRR practice of calling across the cab to confirm signal aspects, and it left only one person in the cab to address any malfunction. In 1900 the PRR redesigned the locomotive to locate the crew together in a cab at the rear. The camelbacks were tested on other divisions, assigned to the Long Island Rail Road, and scrapped in 1911.

Bob Blackson



(ED Note: This article is reprinted with the permission of Larry Moss, the Editor of the *PLS Gazette* - the newsletter of the PA Live Steamers, Inc. http://www.palivesteamers.org/)

Columbia & Susquehanna Model Railroad Club


Columbia Silk Mill

Probably the first thing you should know about "us", the Columbia & Susquehanna Model Railroad (CSMRR), is that there are changes coming! We have historically been a "Display" Model Railroad whose main purpose was to provide the public with an entertaining experience. But we have decided we would like to add Operating Sessions on our Railroad, open to other Model Railroaders to bring their DCC compatible locomotives and rolling stock and enjoy running on our Railroad!

We plan for this new venture to begin later in 2021, after we have all the track and switches electrified on our new section and have both roundhouses fully functional! All three of our main lines and all branches are accessible to one another, and there are numerous industries and other destinations for delivery and pickup, which should make for entertaining Operating Sessions. We have retrofitted the platform to connect with ***Train-Safes***,* so transporting trains to the layout can be done safely and efficiently.

In 1998 the Columbia Historic Preservation Society (CHPS), in Columbia, PA, was given an HO model railroad platform by a man in Lancaster, PA. The layout was removed from his basement in sections and stored on the second floor of the historical society. The building was originally a church at 21 N. Second Street in Columbia, whose congregation had moved to a new building in 1954. The building became a machine shop, and in 1984 was purchased by CHPS when the machine shop closed down. With the NS Port Road only a block away, the 1:1 scale train horns add to the miniature railroad effect.


Henry Clay Brown Iron Furnace Engine Facility at Chickies

* ***Train-Safes*** are a unique system of storing and transporting model trains. More information will be forthcoming as the Club determine how best to set them up for displaying, and transporting locomotives and cars.

Columbia & Susquehanna Model Railroad Club (cont.)


roundhouse in the expanded layout area

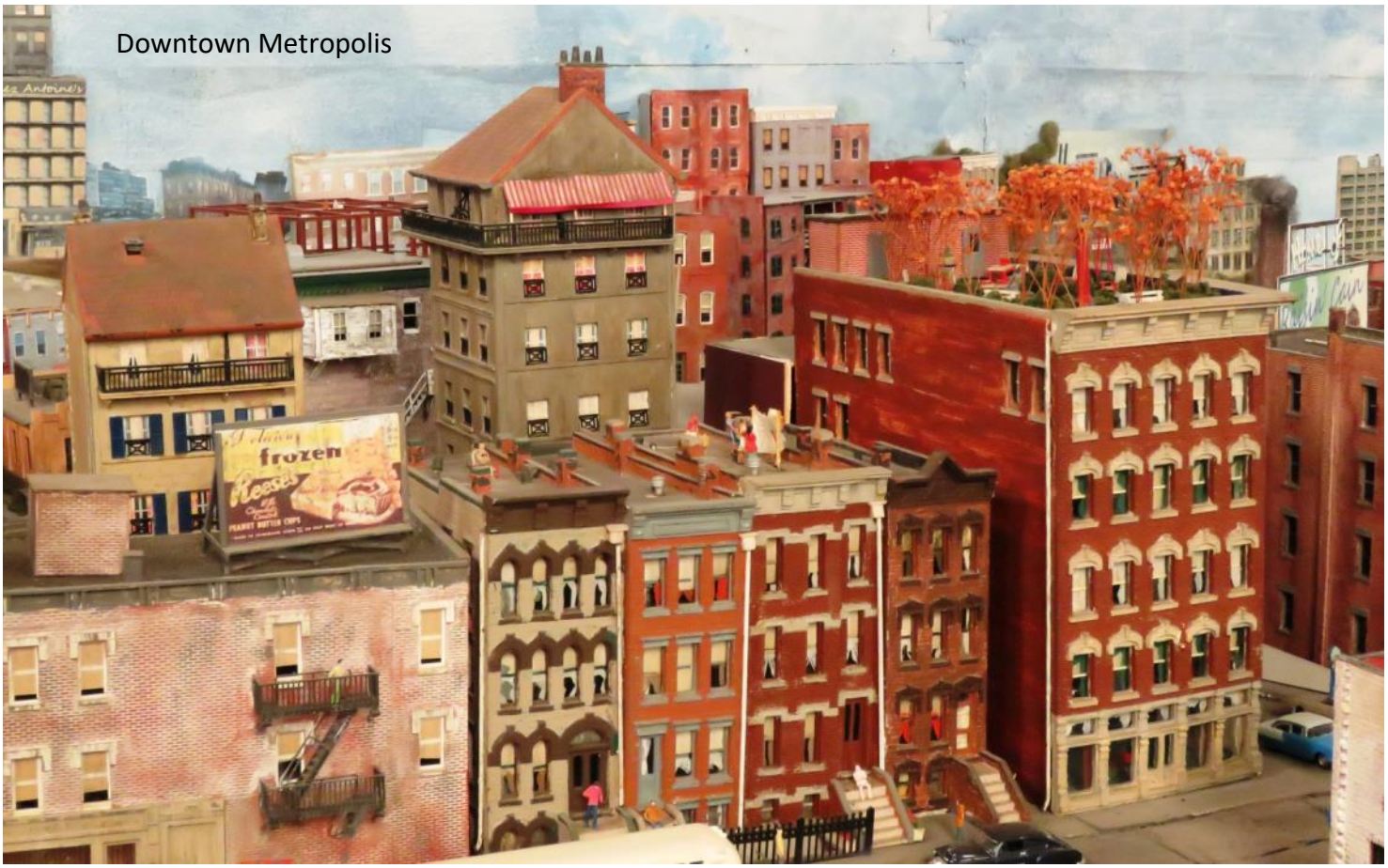
Buildings were constructed from styrene plastic, mat board, card-stock or plaster, using photos and CAD drawings as blueprints. The 200 square foot diorama was completed sixteen years later. Many of the buildings still exist today, some have gone to floods, fires and progress. The large Columbia Yard was installed, and passenger stations for both the Pennsylvania Railroad and the Reading Railroad were built from scratch. One of Columbia's two PRR roundhouses was also modeled from donated kits. The layout at that time was 1,000 square feet.

Fast forward to 2016. We were contacted by another man in nearby Landisville who was planning to move and asked us if we wanted his 240 square foot HO layout in his basement. Making a long story short, it's now part of an expansion we were long planning. That layout included his scratchbuilt 19 stall stone roundhouse. Plans are to make that operational once we get his turntable working.


Columbia PRR Yard

Over the years several good members came and left. They all contributed to today's 2200 square foot HO layout. We've worked individually and in small groups of 2 or 3 to do carpentry, wiring, scenery, track laying, ballasting, and detailing. Today, our group numbers seven who consistently participate. We operate as part of the Columbia Historic Preservation Society (of which we are members), and as a result, the Model Railroad is not separately incorporated, does not have bylaws, officers or dues. Literally no one is in charge! We all discuss together what our ideas are and decide, together, how to move forward. We're all friends and we enjoy the lengthy conversations that are how we figure out what to do. The only requirement we have for anyone interested in becoming a part of our Model Railroad family is that they get along with everybody else. We would like to have more folks involved, especially younger guys. There is much yet to be done to "fulfill the vision" and, like any Model Railroad platform, it'll never be "finished"! Our funding comes from donations given by the general public during our Open Houses, and we have been well-supported.

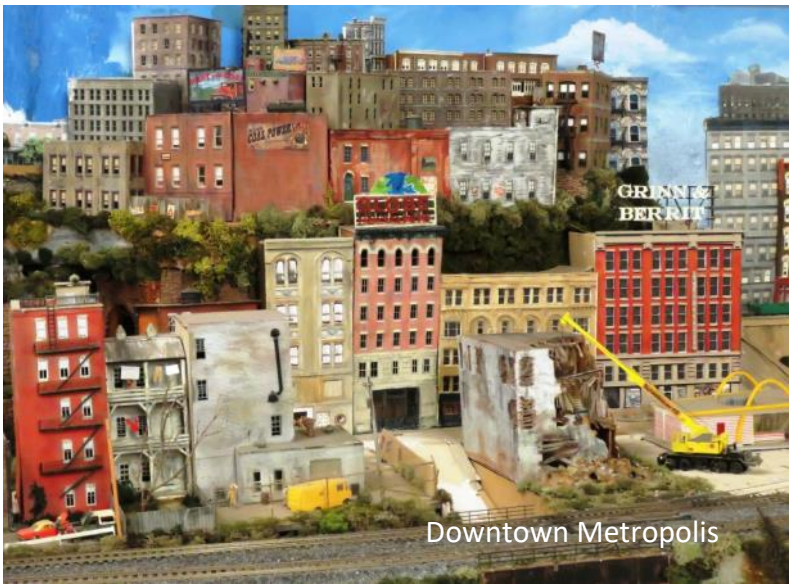
Columbia & Susquehanna Model Railroad Club (cont.)



Downtown Metropolis

The original guys re-assembled the tabletop layout and re-wired it. That included running wire under a ramp they built in an aisleway, and up to the dispatcher balcony which was the old choir loft! They also re-installed the original Zero-One system to operate the locomotives. Shortly thereafter, they left, and the layout sat unused for a while. In 1999, when the South Penn MRR Club in nearby Lancaster was disbanding, some of the members came to Columbia and made plans to pick up where the original three guys left off.

With the failure of the Zero-One system, and its obsolescence, the guys decided to change the layout over to DCC. Digitrax was chosen, and that still exists as the operating system today. The group decided to replace all the track and rewire. I was asked to scratchbuild a diorama of the Borough of Columbia as it would have appeared in the 1920-1950 era. Over the first decade of the 21st Century, we constructed two-foot high Masonite backdrops in order to cut down on the overwhelming size of the layout. The backdrop separated scenes and allowed visitors to focus on smaller scenes at a time. Backdrops were either hand painted or photos were printed and glued in place. Trees and bushes concealed the photo edges.


Downtown Metropolis

Columbia & Susquehanna Model Railroad Club (cont.)

Speaking of our Open Houses, as of May 1st we are back to our normal operating schedule. We are open 1-4 PM every 4th Sunday of the month from May through October. Starting Thanksgiving weekend, we are open 1-4 PM every Saturday and Sunday continuing through the 1st weekend after New Year's. This year Christmas Day and New Year's Day fall on Saturdays, therefore, we will not be open on those days. Fellow model railroaders are always welcome to visit whenever we are open. You are welcome to see the layout and talk "shop".

Doodlebug on the Reading Branch

The Columbia & Susquehanna is a freelance mainline railroad, based loosely on the Pennsylvania Railroad's Philadelphia and Susquehanna Divisions. An extensive branch line is based on the Columbia & Reading Railroad. Iron ore was mined in Ironville, a few miles from Columbia. The Henry Clay Iron Furnace, one of five furnaces between Columbia and Marietta, is modeled.

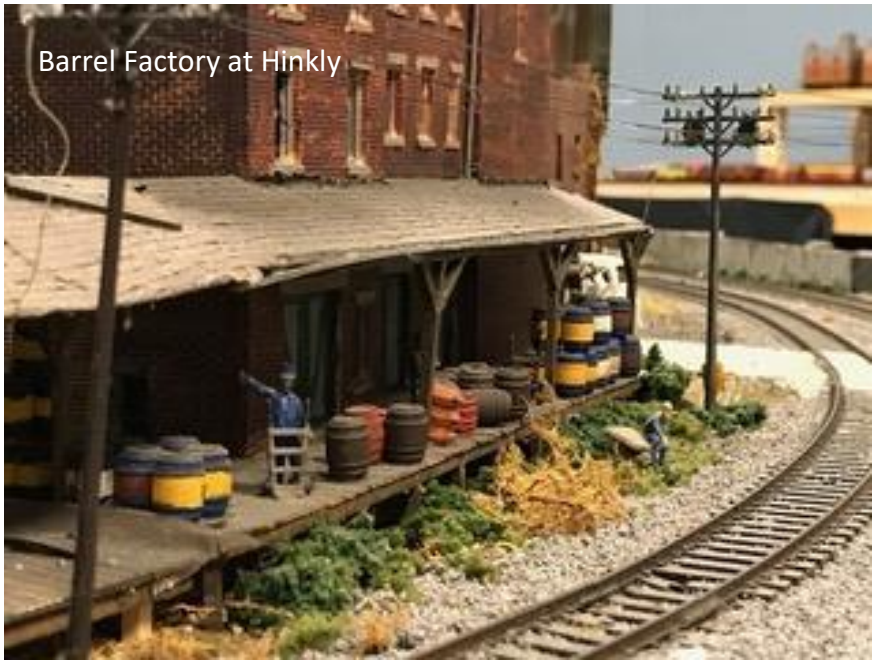
In the heated and air-conditioned 3,250 square foot layout room there are eight twelve-foot high stained glass windows, remnants from the days the building housed a church, and the sunlight through them dancing on the platform can be spectacular! The layout, including aisleways, is 50 feet by 45 feet and S-shaped. The construction is tabletop with 2 X 4 legs. The upper level is supported by 2 X 3 legs connected with L brackets. The surface is 7/16" plywood with ½" Homasote on top. There is one hidden access behind the 7 feet high gorge backdrop, where two people can stand. There are two smaller access areas, as well as six popups to reach trains that cannot be reached from aisleways. The old choir loft, overlooking the layout, is used as the dispatcher's area. A computer with programming track is located there, also.

Front Street Columbia circa 1920-30

North Front St. in Columbia saw plenty of rail action in the early 1930s.

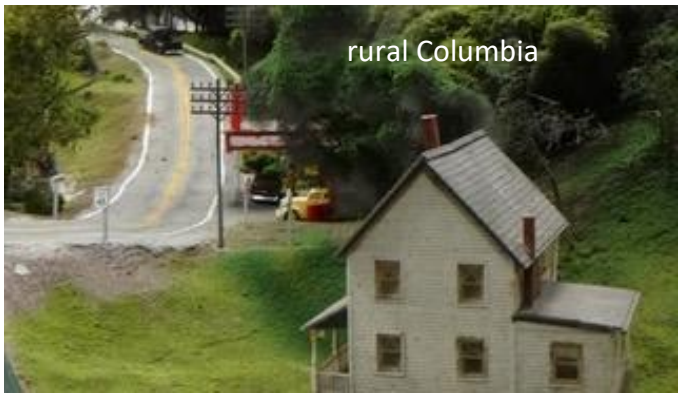
The track is Atlas Code 100 Flex track, and strip and sheet cork are used underneath in many areas. Mainline and branch line switches are #6 and #8, Yard leads are #6, most industries are #4, all Atlas. The 4 track Westbound staging is the largest yard with 280 ft. of track. The 4 track Eastbound staging is 150 ft., and the 8 track Columbia yard is 150 ft, also. There are two long control points (passing sidings) and two major inter-lockings where tracks diverge.

Columbia & Susquehanna Model Railroad Club (cont.)


Barrel Factory at Hinkly

The locomotives on the platform are member-owned, as are the well-over 150 pieces of rolling stock freight and passenger cars. PRR and Reading are the most prominent road names, but there are, also, Union Pacific, New York Central, Burlington Northern and Lehigh Valley locos on the layout. We run Big Boy, Cab Forward, Centipedes, K4's and E44's. Most of the engines are sound equipped.

Scenery has a Lancaster County, Pa influence with farmland (including a roadside stand), a covered bridge, a grist mill and high cliffs (prominent along the Susquehanna River). Lancaster and New York City influence are visible in the city of Metropolis. One Lancaster building even appears on the photo backdrop. A taste of Pennsylvania's coal regions is depicted near the Yurzan Mine, a coal mine along the upper line (Reading Branch). Hinkly, a small town along the main line in one corner of the layout is named for Hinkle's, a Columbia business established in 1893. Near Hinkly is a scratchbuilt road bridge, modeled after the actual art deco style Columbia-Wrightsville Bridge across the Susquehanna.


rural Columbia

While some hills are formed with 1" insulation board, most hills are made from hot-glued cardboard strips with brown paper and plaster cloth. Some rocks are made from plaster either poured into rubber molds, or into triple aluminum foil molds, but most are made from pine bark nuggets painted gray and hot-glued to canyon walls. Some roads and streets are modeled with styrene, while others are made from evenly spread joint compound. Dirt roads are made from river sand sprinkled on a painted area on the Homasote. Trees are created through many different art forms and materials to give a varied appearance.

Water features on the layout are modeled using Envirotex, a 2-part epoxy. For waterfalls, we use white aquarium filter pulled into strands. Modge Podge is drizzled to represent falls. Clear acrylic caulk on acetate is also used.

Most bridges are scratchbuilt from CAD drawings based on photos. The 130 ft high Martic Steel Trestle is located on the abandoned Atglen & Susquehanna (Enola Low Grade Line) fifteen miles south of Columbia. The bridge was part of the A&S rail trail, before an arsonist torched the wooden bridge deck. The bridge is scheduled to be restored. The Martic Trestle is modeled on the layout. Five miles north of that bridge is the high steel trestle at Safe Harbor. An N Scale model of that steel trestle is located on the layout, six feet back from the aisle. The smaller scale enhances the distance perspective. We, also, use N Scale buildings behind the HO Scale buildings in parts of Metropolis to represent depth and distance. Concrete bridges and walls are made from Owens Corning Formular ¼ inch Fanfold Rigid Foam Board, painted with Folk Art acrylic paints.

Columbia & Susquehanna Model Railroad Club (cont.)

Some humor is added to the names of the businesses in Metropolis. There you'll see the Grinn & Berritt Department Store, the "Him-He" chocolate factory (based on the nearby chocolate factory in Hershey). The signature candy bar is "Raisin Cane". Luke Warmwater is the royal flush of plumbers in town, and numerous others.

We recently purchased the Broadway Limited Lightning and Thunder Accessory, and I scratchbuilt an eerie looking Victorian mansion, now sitting on a hill! Clouds of poly fiber and aquarium filter, painted gray is attached to the backdrop. The Thunder and Lightning above the house creates a haunted experience.

In closing, there are still areas on the platform that need to be planned and constructed. The room also has a 12 ft X 2 ft alcove that might make a nice place to build a John Allen Time Saver.

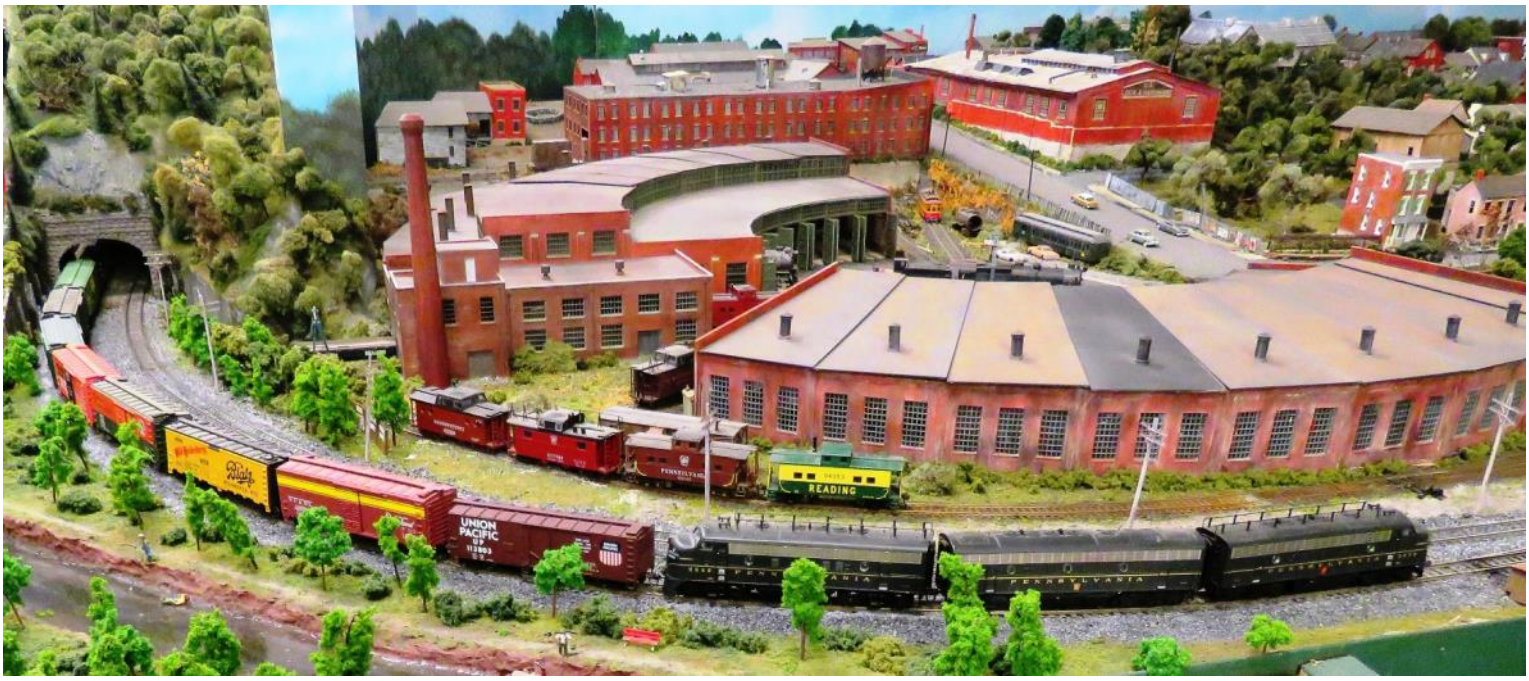
While seeing photos of John Allen's Gorre & Daphetid, Malcolm Furlow's Rio Grande Chalma and George Sellios's Franklin & South Manchester layouts were inspiring, the greatest inspiration to me is Jesus Christ. He gives me the skills, abilities and patience that I need. I see His image in the stained-glass windows every day at the layout to remind me of His power.

article by Tony Segro, Director of Trains, Columbia Historic Preservation Society

Photos by Rick Christopher and Rich Wurst

Columbia & Susquehanna Model Railroad Club (cont.)

PRR Roundhouse in Columbia



Union Lace Mill in Columbia

Columbia & Susquehanna Model Railroad Club (cont.)

Cab Forward awaiting permission to enter the PRR Mainline near Mellinger.

farmland along the Reading Branch

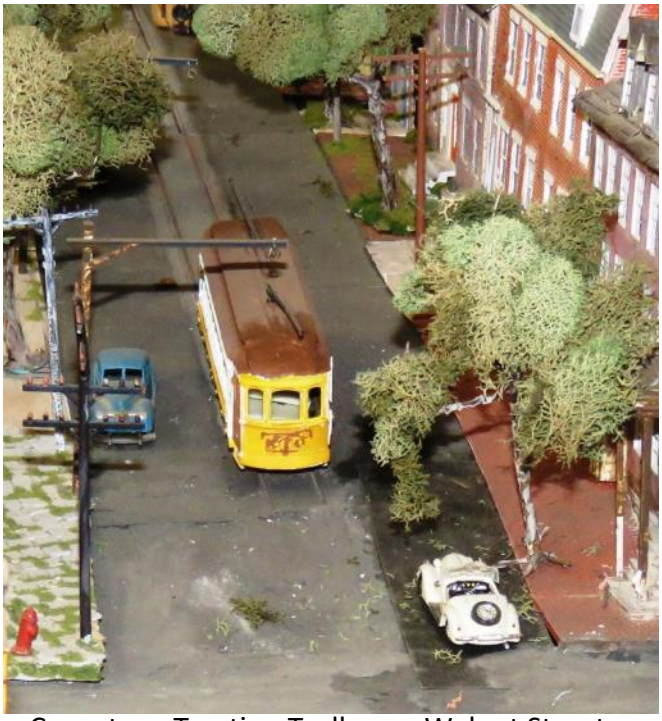
replica of the Martic Forge Trestle on the Enola Low Grade Line

scratchbuilt Feed Store along the Reading

Yurzan Mine facility along the Reading Branch

Columbia & Susquehanna Model Railroad Club (cont.)

Metropolis PRR Union Station and industrial sidings

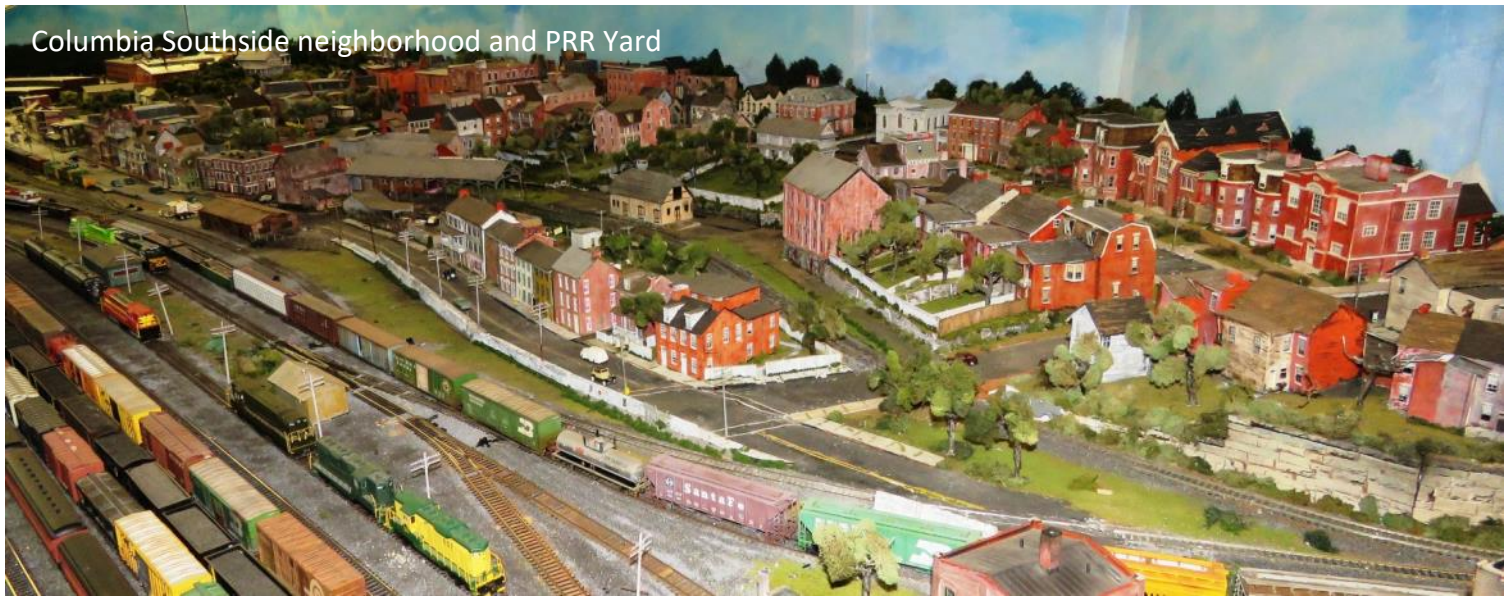


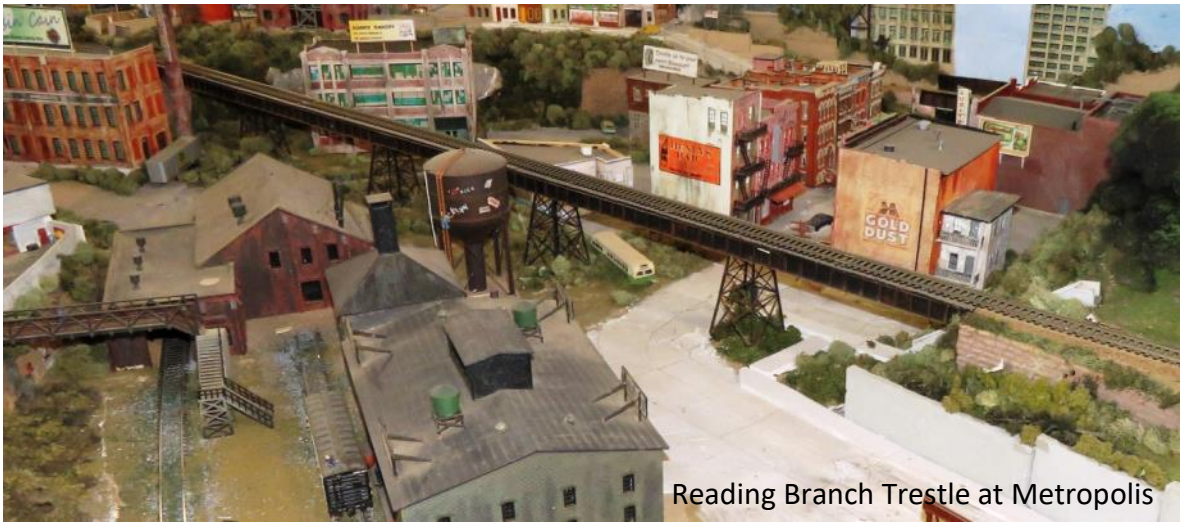
Conestoga Traction Trolley on Walnut Street, Columbia

PRR Columbia Yard at Front and Union Streets

Columbia & Susquehanna Model Railroad Club (cont.)

replica of the Safe Harbor Trestle (Atglen & Susquehanna Railroad)


Columbia Southside neighborhood and PRR Yard



Reading Branch Trestle at Metropolis

Columbia & Susquehanna Model Railroad Club (cont.)

Overview of Columbia & Susquehanna Railroad Club layout on the second floor of the Columbia Historical Preservation Society

PRR coaling facility in Columbia Yard

Mind the Gap

My layout is mostly double track and an operating session has 30 freight, 6 passenger, 4 locals, and other movements. Signals keep the trains moving and knowing the train positions enables the dispatcher to route the trains from origination to termination with a minimum of communications. This means block detection on all main line and staging tracks is necessary.

The block detection requires electrical separation of the blocks or gaps in the track. Typically, plastic rail joiners are used to hold the tracks together and keep things in line. This works great when the joints are nice and straight. But what happens when your joint needs to be on a curve? Those plastic joiners don't always keep the track nicely aligned and you get a kink. And if you slip the plastic joiners on and you don't remove the ties, you get a vertical hump too. The block joints should be close to the signal location, just beyond where the fouling point is. One added complication on my layout is, I isolate both rails. I have multiple boosters and use multiple circuit breakers to segregate sections of the railroad.

I use Micro Engineering code 100 flex track on the main line tracks (The PRR used 150 lb. rail on the lines I model). A combination of plastic insulators, razor cuts and abrasive wheel cuts are used to form the block cuts.

Recently, I had to change the location of a signal to include a new switch in an interlocking and another project isolated a section of track for power routing. In both cases I used an abrasive wheel to cut the existing track. To make the cut I used a standard .067 inch thick wheel. In HO scale the .067 inch cut is almost 6" wide (Fig 1). Big enough to have a noticeable dip in any wheel going over it. Before making the cut I secured the track with multiple spikes and nails to ensure that it did not kink or go out of alignment.

Now to get rid of that unsightly 6 inch gap. I took a page from the prototype and did some thermite welding on the gap. Well not exactly thermite, epoxy welding. I used "J-B Weld" KwikWeld ™ to fill the gap (Fig 2).

Figure 1 – the gap

Fig 2 – filling the gap

Mind the Gap (cont.)

Fig 3 cleaning the gap

Fig 4 – completed

I used a file, a razor knife and a wire wheel brush to clean up the weld and then paint over it (Fig 4).

Fig 5– weld installed and cleaned

I have the weld installed and cleaned (Fig 5), but as you can see it will need a second application on the near rail, while the far rail will have to be removed and correctly leveled before the next application.

I have only started to use this on the gaps and it appears to be a way to fill the gap and keep the overall track structure clean and smooth. I expect there may by some expansion and contraction issues over time as the rail will expand and contract more than the epoxy. Using the KwikWeld™ is fast and easy. I draw a small amount of each in a separate puddle and mix a very small amount for the gap. It does set fast so you need to work it in rather quickly. I use a pointy stick (buy them by the 100s for uncoupling) to stir and set the epoxy in place.

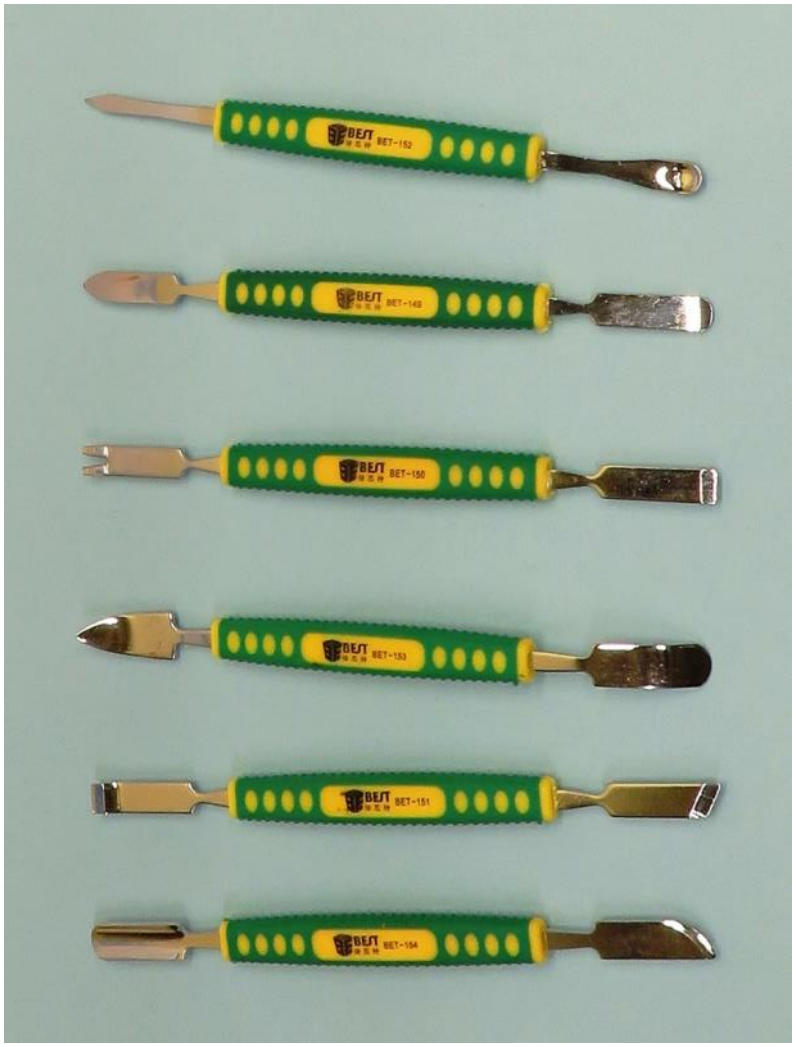
article and photos by Wayne Betty

The Tool Maven

I have to admit that I have a fascination with tools. Since they are an extension of our hands, I get a sense of satisfaction whenever a problem can be solved using a specialized tool.

Recently, my 5-in-1 remote needed a new rechargeable battery. It seemed so simple to remove the old battery and replace it. However, try as I might, I couldn't pull the rectangular battery out of its compartment. Even using a small needle nose plier, it wouldn't budge the battery.

On to the internet to see how this problem could be solved. I watched several interesting videos regarding the remote and its history of developing "swollen" batteries. It seems that over time this particular battery would swell so much it was impossible to remove from its compartment. The removal process required disassembly of the remote in order to extract the "swollen" battery. Further viewing showed how to open the remote case by running a "spudger" along the seam of the top/bottom portion of the remote. At this point I was introduced to a "spudger".

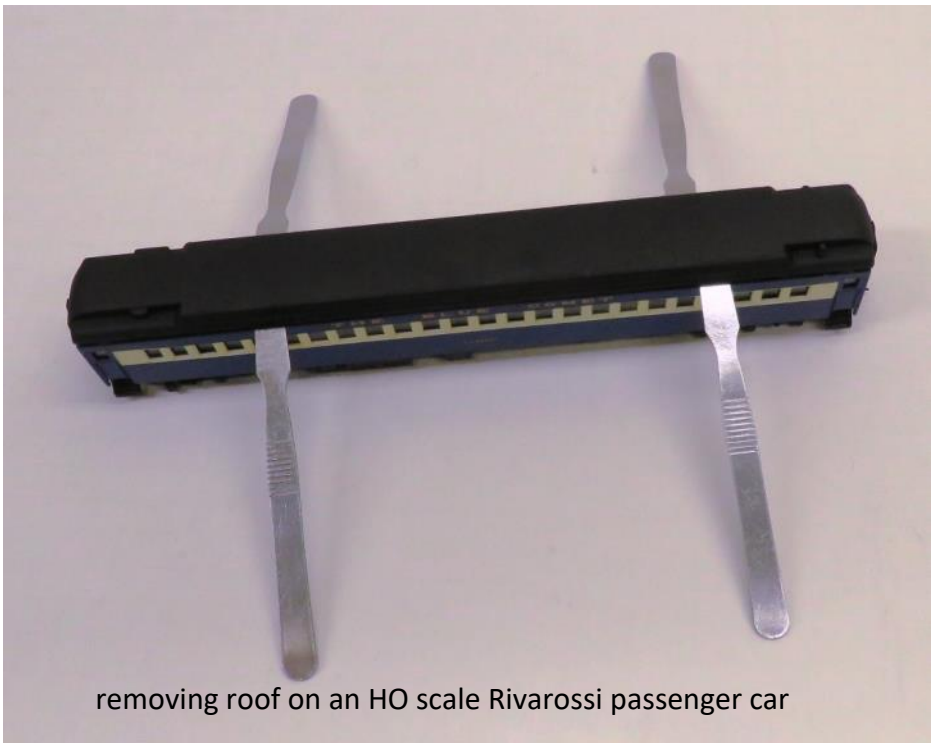


set of six double-ended, contoured pick / chisel tip spudgers

set of four single-ended, chisel tip spudgers

The Tool Maven

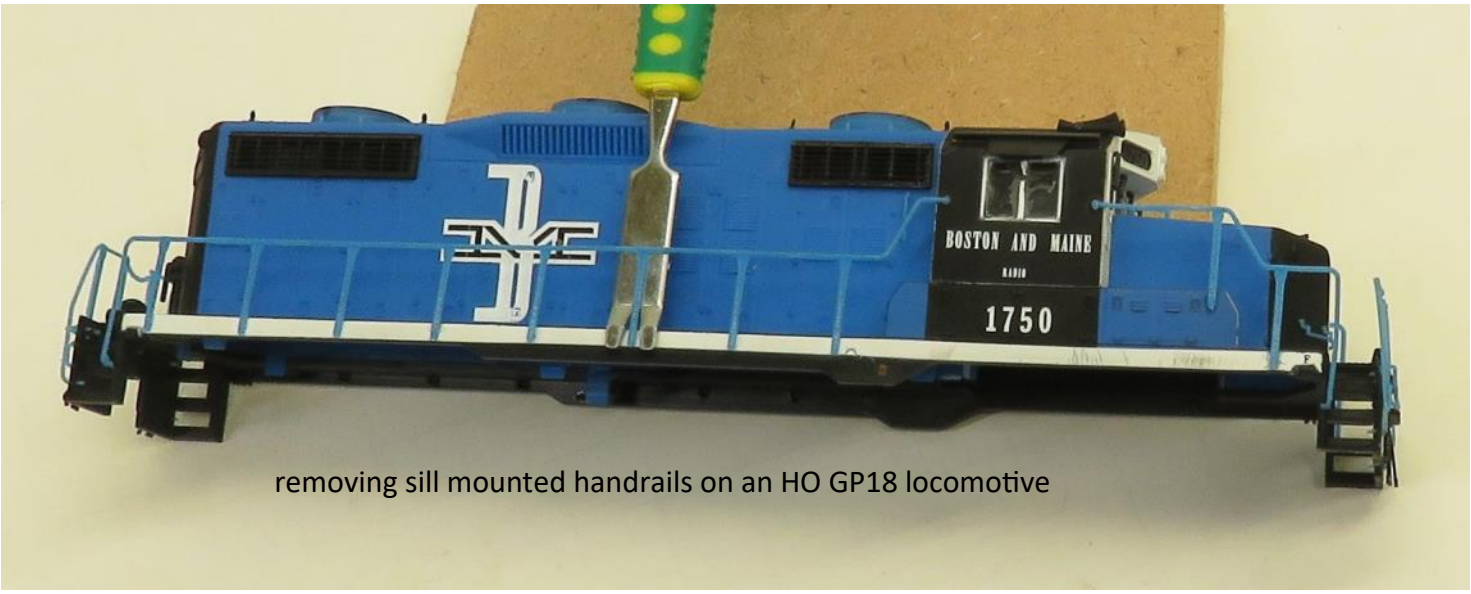
According to the dictionary a spudger is: “A computer technician’s tool used as a pry bar and probe for plastic parts.” It is especially useful for opening compression/snap fit joints found on numerous electronic devices and model railroad cars/engines. While searching the internet I discovered all shapes and sizes of spudgers. I purchased a set of double-ended spudgers with various tip shapes and a set of four standard spudgers



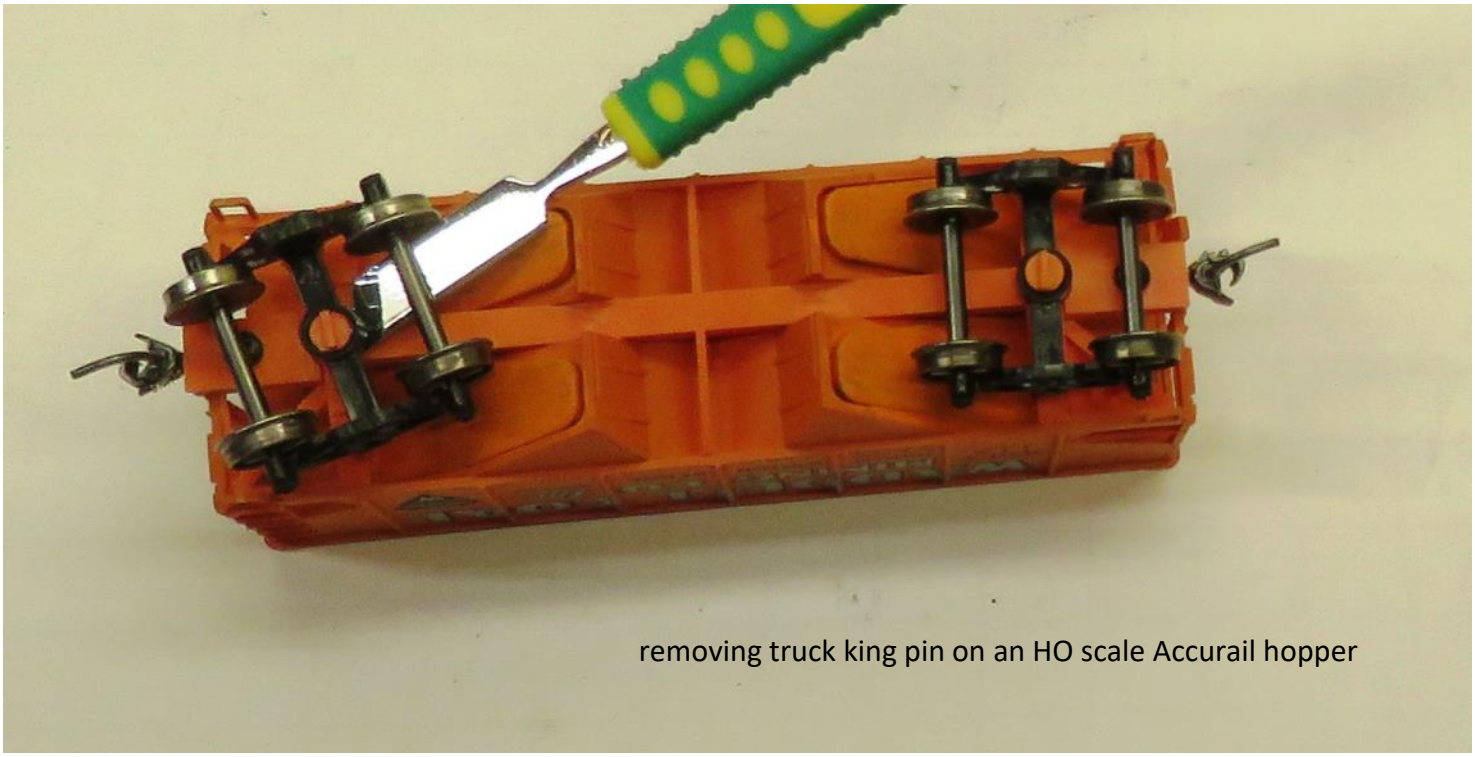
removing roof on an HO scale Rivarossi passenger car

removing sill handrails on an HO scale GP9 locomotive

The Tool Maven



removing sill mounted handrails on an HO GP18 locomotive



removing truck king pin on an HO scale Accurail hopper

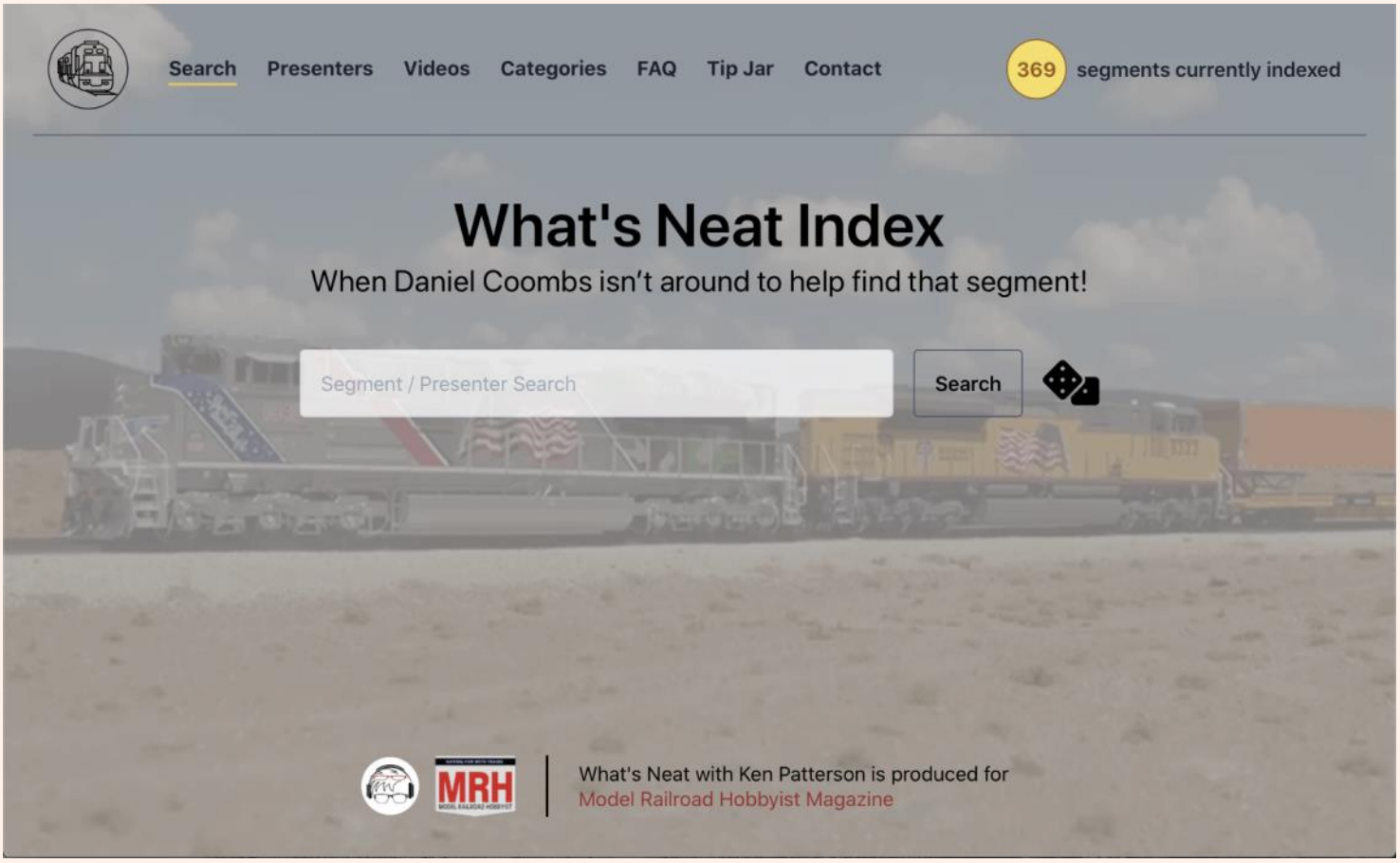
Besides solving my remote's 'swollen' battery removal I have found uses for my spudgers on passenger car roof removal, engine handrail removal and prying up the trucks of an Accurail car which attached to the frame with a plastic plug. These applications were completed without damage to the plastic seams or the trucks. I am sure I will find other uses as time passes!

article and photos by Claude Hammer

Reference Section

Robert Getty has built a web application that indexes every segment of Ken Paterson's “What's Neat” YouTube show for Model Railroad Hobbyist Magazine. It's free to use and member’s might find it quite useful: https://wnindex.theconsist.com

Sample screen shot below:



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