

C-Lines Railway and Productions

EDITION 3, VOLUME 1
AUGUST 2017



Table of Contents

The History of the Norfolk and Western J-Class Northern #611	Page 1
The TTI Railroad <i>A Shortline Never Forgotten</i>	Page 9
The New Kid on the Block: Menards	Page 11
History of the Disneyland Railroad	Page 15
Water Level Sprinters vs. Greenbriers in the Heart of Appalachia	Page 22
Railfanning on Location: Russell, Kentucky	Page 24
Weathering Train Cars and Engines	Page 26
A Note from the President	Page 28

The History Behind Norfolk and Western J-Class Northern #611

Author: Evan Cihlar

Instagram: @nkp765enginecrew

The Norfolk and Western Railway's J class steam locomotives are a class of 4-8-4 locomotives built by the railway's own Roanoke Shops located in Roanoke, Virginia between 1941 and 1950. The first batch, numbered 600 to 604, were built in 1941–42 and were delivered streamlined. The 1942 unit had a booster engine on the trailing truck and the 1943 unit 605–610 were delivered without shrouding and lightweight side rods, due to the limitations on the use of certain materials during the war; they were classified J1. When N&W showed the War Production Board the reduced availability numbers because of this, the Board allowed the J1s to be re-fitted as Js with the lightweight rods and shrouding in 1944. The last batch, 611–613, were built in 1950, all streamlined.

The first J's had 275 psi boilers, 70-inch (1,778 mm) driving wheels, and roller bearings on all wheels and rods; after about 1945 boiler pressure was raised to 300 psi (2,100 kPa). Calculated tractive effort was 80,000 pounds (36,000 kg) – the most powerful 4-8-4 without a booster. The 70-inch drivers were small for a locomotive that was to pull trains at over 100 mph (160 km/h). To overcome this, the wheelbase was made extremely rigid, lightweight rods were used, and the counterbalancing was precise.



As delivered, the Js had a duplex (two) connecting rods between the primary (second) and third drivers, but in the 1950s Norfolk and Western's engineers deemed these unnecessary. The 611 and several others of the Class were rebuilt with a single connecting rod. The negative effect of the J's highly engineered powertrain was that it made the locomotives sensitive to substandard track. While on loan, #610 hauled a 1,050-short-ton (950 t; 940-long-ton) passenger train with 15 cars at speeds in excess of 110 mph (180 km/h) over Pennsylvania Railroad's "racetrack", the Fort Wayne Division (a section of flat, straight track).

The class Js pulled the network's prominent passenger trains, such as The Powhatan Arrow, The Pocahontas, and The Cavalier between Cincinnati, Ohio and Norfolk, Virginia, as well as ferrying Southern Railway's Tennessean, Birmingham Special and The Pelican between Lynchburg, Virginia and Bristol, Virginia. Despite their power and speed, the class Js were among the most reliable engines, running as many as 15,000 miles (24,000 km) per month, even on the mountainous and relatively short route of the N&W.

There is one notable accident in the J class's service history, when on January 23, 1956, No. 611 derailed along the Tug River near Cedar, West Virginia while pulling the The Pocahontas. It was determined that the engineer ran the engine at an excessive speed around a curve and its high center of gravity caused it to flip on its side. The 611 was repaired and continued revenue passenger service.

In the late 1950s, N&W began purchasing first generation diesel locomotives, experimenting with fuel and maintenance cost. They leased several sets of EMD E6s, E7s, E8s from the Atlantic Coast Line and Richmond, Fredericksburg and Potomac Railroads. The diesels proved to be cheaper in maintenance and fuel cost, but several were required to equal the power of a steam locomotive. In the end, with steam parts suppliers closing because of other railroads switching to diesels, diesels prevailed and the clock began to tick until steam was retired. In 1958 and 1959, the railroad ran several Farewell To Steam excursions, with 611 pulling the last one in October 1959. While many of the locomotives went to the scrap lines, 611 was preserved. This was in part due to its superb condition after its 1956 derailment and subsequent repair, and also in part to the efforts of photographer O. Winston Link, who offered to purchase 611 himself rather than see it scrapped.

On June 12, 1946, #604 hauled the eastbound Powhatan Arrow after departing Cincinnati, Ohio at 8:10 A.M. for Norfolk, Virginia. But at 3:18 P.M., the locomotive derailed 4 miles west of Powhatan, West Virginia due to excessive speed at 56 mph killing engineer Grover

C. "Nap" Roberts and fireman Beecher Lawson. In addition, twenty-three passengers, three



dining car employees, and one train service employee were also injured. Due to the efforts of several men, including Link, engine 611 was saved. The locomotive was donated to the Roanoke Transportation Museum in Roanoke, in 1960, where it sat dormant for two decades. In the early 1980s, Robert Claytor, president of Norfolk and Western in its last months, had his eye on

611. His brother, W. Graham Claytor, once president of the Southern Railway, was in charge of Southern Railway's Steam Program. This program had been around since 1966 with Southern Railway 2-8-2 4501, sending steaming ambassadors system wide. Robert Claytor envisioned a similar program for the N&W. He made a lease with the museum, and in 1981, 611 was sent to Southern Railway's Norris Yard Steam Shop in Birmingham, Alabama for an overhaul.

In 1982, 611 emerged under steam, with the only change being a dual beam headlight instead of the single bulb lamp it carried in the fifties, and effectively wound up replacing another locomotive, Southern 2716, which had its excursion career ended during the restoration of 611 due to firebox problems. Norfolk and Western and Southern Railway had by this time merged into Norfolk Southern; this now doubled the amount of track available for 611 to tour. 611's first trip was a ferry move up the Southern into Lynchburg, Virginia, and then over N&W home



rails to Roanoke for a ceremony. In 1984, the American Society of Mechanical Engineers named 611 a National Historic Mechanical Engineering Landmark and it has since been added to the National Park Service's Historic American Engineering Record.

On May 18, 1986, 611 was at the head of a Norfolk Southern employee appreciation train from Norfolk, Virginia, with Robert Claytor at the throttle. One of the passenger cars failed to negotiate a switch on the main line through the Great Dismal Swamp, causing it and 12 other cars of the 23 car train to derail. Many of the nearly 1000 employees and their family members were injured; some of the more seriously injured had to be airlifted to hospitals in nearby Norfolk for treatment.

The derailment prevented the use of the main line for freight traffic for some time. This derailment brought a wave of change to the program, including the retirement of many of the older passenger cars. Despite the rumors, the program continued, welcoming another locomotive, former Norfolk & Western 1218, a simple articulated 2-6-6-4. The two continued to pull the systems' trains, with 611 even participating in a triple-header with N&W 1218 and Southern Railway 4501, until 1994, when another disastrous blow hit. In September of 1994, there was a switching accident in Lynchburg, VA, involving the passenger cars of an excursion consist that 611 was about to pull the next day. This damaged several cars, causing a shortage and the consequent need for more cars. A month later, NS executives terminated the steam program due to rising insurance costs, increasing cost of maintenance, and low spare system capacity.

The last steam excursion was in December 3 from Birmingham, Alabama to Chattanooga, Tennessee and back, pulled by 611. The next day 611 set off on a three-day trek home to Roanoke.¹ Between Salisbury, North Carolina and Roanoke, 611 displayed black flags on the last run of December 7, 1994. That evening, upon arrival at Shaffer's Crossing in Roanoke, 611 blew its whistle one last time and had its fire put out for the last time in the 20th century. In December 1994, 611 was put back in the museum, now known as the Virginia Museum of Transportation, under a new train shed. In 2003, a major renovation of the railyard brought a bigger train shed (The Robert B. Claytor and W. Graham Claytor Jr. Pavilion), and 611 was joined by twice former stable-mate, 1218. Both locomotives sat at the museum until May 24, 2014, when the 611 was towed to the North Carolina Transportation Museum in Spencer, NC, for restoration.

As one of the last, most prominent, and most distinctive locomotives assembled in Roanoke, No. 611 often serves as a symbol for Roanoke and its railroad history. It is also depicted on the Commonwealth of Virginia's "Railway Heritage" license plate.

On April 2, 2012, The City of Roanoke officially donated both 611 & 1218 to the Virginia Museum of Transportation.

In 2011, the Norfolk Southern brought back their steam program, under the name 21st Century Steam, leading to speculation among some about a possible restoration of 611. On February 22, 2013, the Virginia Museum of Transportation formed a campaign called "Fire Up 611!" to conduct a feasibility study with the goal of returning the 611 to active service. On June 28, 2013, museum officials said that they would restore 611 if they could find the money. The needed work includes repairing the engine truck, preparing a tool car and an auxiliary water tender, applying new safety appliances such as in-cab signals and an event recorder, installing new flues, boiler work, and hydro and fire testing, as well as test runs, inspection, and repairs of the tender, running gears, and air brakes.

On November 22, 2013, Norfolk Southern announced that they were donating \$1.5 million of the proceeds from an auction of a Mark Rothko painting to the "Fire Up 611!" campaign. In February 2014, several key appointments were made by the Fire Up 611 committee to the locomotive's mechanical team. The following month, a formal agreement was made with the North Carolina Transportation Museum for restoration. On April 1, 2014, she was announced that after raising \$2.3 million, the locomotive would move to North Carolina on May 24, 2014. 611 arrived in Spencer on May 25 and took part in the Streamliners at Spencer event the following weekend. Restoration work on the 611 began on June 2, 2014. The restoration was done with the help of volunteers, including several from the Age of Steam Roundhouse. Due to the generally good condition of the locomotive, restoration was complete within a year. On March 31, 2015, the 611 was fired up with its maximum working boiler pressure of 300 psi and the crew open the throttle up to blow steam out of the cylinders' piston valves. The test fire was a complete success and the 611 blew her Hancock three-chime, long-bell whistle for the first time in 20 years. However, 611 did not run sporting her original whistle in 2015 due to a disagreement between the whistle's owner and the FireUp611 committee. An original Hancock three chime long bell whistle was procured and installed for the 2016 and subsequent seasons to the delight of 611's fans.

On May 21, 2015, 611 made a brief test run from Spencer to Greensboro, North Carolina, pulling the Norfolk Southern passenger cars.

On May 28, 2015, the North Carolina Transportation Museum held photo runbys with 611 leading passenger and freight consists, plus night photo session.

The locomotive was scheduled to run several excursions during the summer of 2015 such as "The American" from Manassas, Virginia to Front Royal, Virginia in June 6 and 7, "The Cavalier" from Lynchburg, Virginia to Petersburg, Virginia in June 13 and 14, "The Powhatan

Arrow" from Roanoke to Lynchburg and "The Pelican" from Roanoke to Radford, Virginia in July 3, 4, and 5. On April 9, 2016, the 611 ran "The Virginian" from Spencer, NC to Lynchburg, VA and "The Blue Ridge Special" from Spencer, NC to Asheville, NC on the 10 that year. On April 23 and 24, 2016, the locomotive ran "The Roanoker" from Greensboro, NC to Roanoke, VA. on the ex-Virginian Railway main line.

On late spring 2016, the 611 ran the excursions that it did last year such as "The Powhatan Arrow", "The Pelican, and "The American". After that, the 611 would stay at the North Carolina Transportation Museum for the summer and moved back to Roanoke on August 8 and back to Spencer again on September 7 until October 24.

On December 21, 2016, the Virginia Museum of Transportation announced on their 611-page that the locomotive will return to the main line in 2017 with a schedule of public excursions.

On January 6, 2017 the 611 returned to the North Carolina Transportation Museum under her own power for Federal Railroad Administration (FRA) inspection. After that, the locomotive would run "The Virginian" round-trip excursion again from Spencer, NC to Lynchburg, VA on April 8, 2017. On April 9, the 611 would run "The Charlotte Special" round-trip excursion from Spencer to Charlotte, NC in the morning and a second round-trip excursion "The Piedmont Limited" from Spencer to Greensboro, North Carolina in the afternoon.

The TTI Railroad

Author: Walker W.

Instagram: @masonrails

The TTI Railroad is a shortline that hauls coal in central and eastern Kentucky. The TTI railroad has been running since 1979, although they don't run coal trains like they used to. In 1991, TTI became a subsidiary of CSX and upgraded the facilities in Maysville. TTI operates on the former Louisville & Nashville (L&N) Maysville-Paris branchline, which is calculated to be about 50 miles of rail line.

The route TTI took when they ran to Maysville was beautiful, cutting through Mason, Fleming, Nicholas, and Bourbon counties between Maysville and Paris. I've seen bits and pieces between the two towns, but most commonly the sections between



Maysville and the Fleming County line as well as between Millersburg and Paris. These two sections are, to my knowledge and from experience, the easiest to access from the road. US 68 runs close to the line between Millersburg and Paris, while a number of backroads as well as KY state route 11 follows the line from Maysville to Lewisburg. I haven't had much time to explore the rest of the line, but I'm sure that there are plenty of backroads that follow it.

TTI used to haul loaded coal trains north from Paris to Maysville, unload at the terminal on the east end of Maysville, and return south to Paris with empty cars. The power was normally 2 sets of second generation GE locomotives, with U28Bs being used first, with another lower-class engine trailing. Usually, the train would have 2 sets of engines, 1 up front and 1 pushing. This was commonplace as the engines on the rear were needed for the grade out of the Ohio River valley for braking on loaded trains and to reduce coupler strain on empty trains. Also, these engines weren't especially powerful, only producing 3,750 horsepower, as they were intended for use on priority train movements rather than coal drags. Nonetheless, those old GEs put on quite a show when they leave Maysville and head south, climbing the grade out of the Ohio River valley.

Unfortunately, TTI has had a severe decline in traffic due to the rising costs of coal. This is the main commodity they hauled, as I previously mentioned. For a short time, they hauled rock aggregates down to the transloader in Maysville, but it cost too much for TTI to haul it. Now, they mainly store cars, provide small switching on occasion, have a transloading facility, and dry storage for miscellaneous purposes.

I remember seeing TTI all the time when I was a little kid. They always came into town with 8 engines, usually a mix of *U28Bs*, *U36Bs*, and *B36-7s*. It was a nearly daily show. They'd always have 80-100 loaded coal hoppers coming into town and leave with all the cars empty. There was even a *U28B* that would pull coal cars through the unloader! It was quite the sight, until around 2011 or so when TTI's traffic declined sharply. At that point, they were running very few if any coal trains. A couple of years later, traffic rebounded a little bit but they were never the same after that initial drop. Power became *B36-7s* in an attractive blue and white livery and they weren't hauling 80 cars every day. As time progressed, TTI ran less trains and



they even ran unit rock trains a couple of times in 2015. After September 2015, I don't have much recollection of them quite frankly because I almost never saw them. The last day I remember that they ran to Maysville was sometime in 2016. After that, they closed the Maysville terminal, which is just a little more than car storage to

this day. I don't see them coming back anytime soon due to the price of coal compared to natural gas.

Currently, TTI is doing fairly well, hauling coal trains to their yard in Paris, Kentucky from the coal fields. There, they offload the coal onto trucks. Then, trucks take the coal to their final destinations around Kentucky. On July 23, 2017, a storm hit Maysville, the northern terminal for TTI. Unfortunately, the railroad suffered a washout somewhere between the junction with CSX and the Mason-Fleming County lines. TTI, so far, has chosen not to repair the line unless it's needed in the foreseeable future. Hopefully, there will be a need for TTI to restore the line to working order.

The New Kid on the Block: Menards

Author: Timothy Lewis

Instagram: @sdiv_tim

Menards is a chain of home improvement stores located mainly in the Midwestern United States. In total there are approximately 300 stores in 14 states, and are a major competitor for Lowe's and Home Depot. Now for me, I have never been in a Menards because I live in Southern California, and the nearest Menards is in Cheyenne, Wyoming. The one thing I have heard is that Menard's is like Costco. Selling everything and anything for your needs. But why am I talking about a Home Improvement store? Well Menards got into the toy train industry by getting Lionel to produce sets to sell in their stores in early 2010. In 2011, they started producing O gauge trains and the tooling came from companies that have disbanded

like many other manufacturers do too.

My first encounter with Menards came in 2013 when I saw an advertisement for an army tank on a flatcar in Classic Toy Trains. This was no ordinary tank as it included lights and sounds for \$24.99! Which was affordable for my budget at the time since I was building a military consist for my Steam locomotives. So I

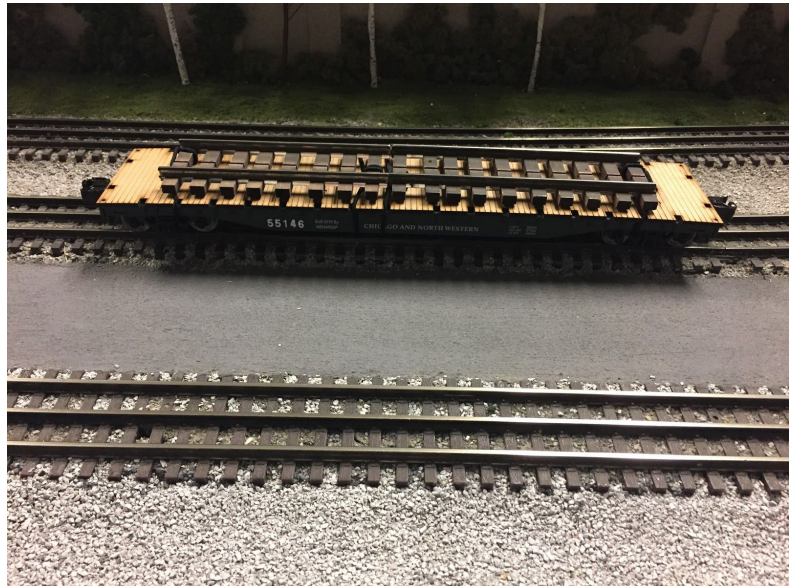


started with that and slowly Menards added more items to their line, which I did accordingly. The one thing that sold me to buy from Menards first was how I could spend under \$500 for a long Army consist with highly detailed pieces. I have purchased several Boxcars including an

Army boxcar with missiles on pallets inside and boxcars with airplane nose arts which I will be reviewing in the near future.

So how does Menards stay successful in selling their model train products? It started from selling flatcars with nice loads with lights and sounds. It eventually expanded to boxcars using the tooling from Williams by Bachmann originally owned by Kris Model Trains. The Boxcars came in various railroads, billboard paint schemes, weathering and interior add-ons for the Army cars. Buildings came with lights and other details to make an industry to make your layout more authentic. These buildings are similar to the quality you see on Woodland Scenic buildings. Then die cast cars came out for those who model modern diesel freight including tractor trailers and buses. Their tank cars and hoppers are from Williams by Bachmann tooling as well. The Hoppers are covered with tops with hatches that open or have coal loads for to insert. Menard's also sells cabooses, but in limited railroads. But the main reason that Menards has been successful is the dealer packs.

Dealer Packs can range from four, six or eight of one car. However the one thing that got people sold on dealer packs was the ability to purchase twenty-four flatcars under \$192.00! These flatcars have come in handy for making loads.



Earlier I mentioned the detail and amazement their buildings can do. The buildings originally started as O gauge exclusive buildings until the middle of 2016. When Menards announced they will start producing half of their O gauge buildings in HO as well, Menards made a name for themselves in the HO world. Buildings include lights including the occasional Miller Engineering signs that is built in to some of their buildings and the detail with their German shepherd mascot, Jack.

So Menards has made quality products for their customers. When I get started on my layout I plan to pick up as many of the building I can get as possible as sometimes they run out of their products. The most popular items that go are the cars with lights and sounds however down the road the item will return with some new improvements. Menards keeps improving their products because their amazing customer service listening to their customers to get newer and better products out to their customers. The deals that you can buy one train item and get a free giveaway item is cool too, you may get a train car or something train related that you can put to good use. Menards takes care of their customers if you have a broken product they will help you out to fix your problems. So go explore their website, you might find something to add to your collection.

The History Of The Disneyland Railroad

Author: Carmine Crudele

Instagram: @fairest_of_them_all_srt8

For as long as I can remember, trains have always been a part of me. Especially the Disneyland and Walt Disney World railroad. The first time I went to Disney, I had the opportunity to see my first real steam locomotive, thanks to my grandmother. I'll never forget it, that shrill whistle, hissing steam and the clanging of the bell. It's almost like it's alive, like a



living breathing entity. So sit back, relax, and enjoy the story of the Disneyland railroad.

The history of the Disneyland Railroad starts way before Disneyland was established. Railroads were an important part of the Disney family.

Before Walt's father, Elias, met Walt's mother, he worked for the Union Pacific railroad. Even

Walt's uncle Mike was a man of the high iron. As Walt matured, he wanted to pursue his career as an animator. Walt's brother, Roy, worked on the Atchison, Topeka, and Santa Fe railroad. As a news butch, Roy walked up and down the train selling snacks, newspapers and cigarettes to passengers. When Walt told Roy that he needed some extra cash, Roy suggested that he should get a job with the railroad. As a result of this recommendation, Walt briefly worked for the Missouri Pacific railroad as a news butch, like his brother. On his time off, Walt would bribe the engine crew with apples from his family farm to let him ride in the cab and show him how to operate the locomotive. Walt once stated: "My railroad career was brief, exciting, and unprofitable".

In 1928, Walt Disney loses a business deal. Not only his first animated "poster child", Oswald the lucky rabbit, but also just about all of his artists and staff from his company, known as "Laugh-O-Gram" studios. It was a train that helped Walt come up with the face of the Walt Disney studios we all know and love today. That ever-recognizable mouse known as Mickey Mouse was a result. Walt accredits Mickey's creation to his wife, Lillian. Walt debuted Mickey in his first animated cartoon, Steamboat Willie, and it was an instant hit. The rest is history. While Walt was producing all of these new cartoons, you can't help but notice there is always something train related incorporated into all of them. Railroads have always had a special place in Walt's heart, and they somehow chugged their way into Walt's cartoons.

Starting in 1948, Walt began to feel the stresses of work. One day, when he was getting a back massage after a polo related injury, the masseuse advised Walt that he should get a new and less dangerous hobby. A few days later, while Walt was setting up a Lionel layout in his office, Ward Kimball, one of Walt's head animators walked in. Some iconic characters, such as Jiminy Cricket and Snow White were his brainchild. Ward told Walt about his full sized narrow gauge railroad that he had in his backyard in San Gabriel California. Walt was then invited out to Kimball's residence in order to pay a visit. Ward Kimball's Grizzly Flats Railroad (GFRR) was a 3 foot narrow gauge railroad which operated from 1942-2006 and was the first full size backyard railroad in the United States. The whole railroad was comprised of about 900 feet of track. The roster consisted of several locomotives and several pieces rolling stock, including a Baldwin Locomotive Works 2-6-0 "Mogul" type steam locomotive. Ward restored and renamed the steamer "Emma Nevada", after a famous opera singer. The locomotive was adorned with Ward's one-of-a-kind oil paintings and was the pride of the railroad. The roster also boasted a coach that was meticulously restored with elegant carvings and varnished wood. Later on, after many complaints from surrounding residents about the



cinders from Emma's exhaust, Ward acquired a smaller 0-4-2 "Plantation" locomotive and named her "Chloe", after his daughter. She was smaller and cleaner, as she burned wood as opposed to coal.

Soon after his visit to the Grizzly Flats Railroad, Walt and Ward attended the Chicago Railroad fair. Other employees eventually found out that Walt had a passion for all things railroad related. Enter Ollie Johnston. Ollie is one of the original "nine old men" of the Disney studios. Ollie got Walt involved in live steam and invited him over to see his 1/12 scale railroad. Walt was hooked after that. He then approached Roger Broggie, the head machinist of Walt Disney Studios and asked him to build a 7 ¼' live steam locomotive. Roger had never tackled such a project before. Thankfully a man named Eddie Sargent advised Roger and Walt on the project. During this time, Walt became an apprentice machinist and learned to fabricate lots of the parts himself, Walt picked a Central Pacific "American" type 4-4-0 locomotive for the basis of his new locomotive and named her "Lily Belle", after his wife.

Every locomotive needs a set of tracks to stretch its legs, and as Walt and Lilly went shopping for homes, they came across a house in Holmby Hills, California on Carolwood Drive. This property included 5 acres of land for the 2,650ft of track that he planned to build. Walt dreamt of his own miniature empire, which he dubbed the Carolwood Pacific. The railroad consisted of the Lilly Belle locomotive, six gondolas, two box cars and two stock cars, all made by the studios machine shop. In addition, Walt built a yellow "bobber" caboose himself. The railroad's headquarters was located in the barn in the middle of "Yensid Valley", which is Disney spelled backwards. This structure housed electronic controls for the switches on the railroad, as well as a full machine shop for Walt to relax and work on his trains. While Walt was operating Lilly Belle, he was always dreaming of something bigger, much bigger. Eventually word got out about Walt's railroad and visitors started showing up at his front door asking to ride the on the Carolwood Pacific. In 1952, a guest engineer caused the Lilly Belle to derail. The derailment caused the whistle to fly off the boiler and burn a five year old girl. After this incident, Walt closed the railroad down in 1953 and the locomotive was put in storage.

However, Walt never forgot about his trains, and in that same year he started buying up land in Anaheim, California. Walt was dreaming of a place where both children and adults could go and have fun. As Walt always said, "I want it to look like nothing else in the world, and it should be surrounded by a railroad". Railroad construction commenced started in August of 1954, and the railroad was given the name Santa Fe and Disneyland Railroad. This was because the Atchison, Topeka, and Santa Fe Railroad co-sponsored the railroad in its early days, until 1974 when the AT&SF sponsorship ended. The original locomotives and cars, all built to 5:8th scale, were constructed in the studios shops from scratch. The locomotives cost \$40,511 each to build. Their construction fell under WED enterprises, which was an abbreviation of Walter Elias Disney. The locomotives were numbered one and two. Number one was known as the "CK Holliday". This name came from the founder of the AT&SF railroad, Cyrus Kurtz Holliday. The locomotive was patterned after a wood burning locomotive with its large diamond stack and oil headlight. The main assignment for this engine was to haul freight cars and a caboose, with the caboose being dubbed as "Retlaw 2". The number two was named "EP Ripley" after Edward Payson Ripley, the first president of the AT&SF after its reorganization in 1895. This engine was patterned after a coal burning locomotive, with a standard smokestack and electric headlight. Number two could often be seen hauling the passenger train "Retlaw 1".

The freight and passenger consists were both built in house by WED enterprises, with the total cost for the passenger consist at \$93,332 and the freight consist \$55,691. The route surveying around the park and roundhouse was overseen and by Earl Vilmer, a friend of Roger Broggie. On June 17th, 1955, the first trial run of the E. P. Ripley on the SF&DLRR was conducted. The track plan on the SF&DLRR was 1.2 miles in length. This plan included a spur track leading back to the roundhouse. Originally, the railroad only had two stations and two passing sidings. The passenger train only called at Main Street Station, while the freight train only called at Frontierland. After an accident with the passing siding, the passing sidings were removed in order to simplify operation.

An increase in guest attendance meant that the railroad needed more trains, and in 1958 the

SF&DLRR purchased its first Baldwin Locomotive Works product, number three. Number three was a 2-4-4T, and she was christened as the Fred Gurley. After a restoration that cost \$37,061, it entered service. Number 3 got its name from the president of the Santa Fe railroad in 1958. During that same year, three of the Retlaw cattle cars and 2 gondolas were modified with benches facing outward so passengers could get a better view the park and diorama, as did the open air cars. Also, the same day that the Fred Gurley made his first run also marked the debut of an enormous Grand Canyon diorama on the SF&DLRR. The diorama consumed nearly 300 gallons of paint. This diorama was the largest single piece of seamless canvas ever at 306 feet long and 34 feet wide. Walt even had a 96 year old Hopi indian chief named Nevangenewa bless the railroad and diorama.

On July 25th, 1959 the SF&DLRR added yet another locomotive to its roster. Number 4, named the "Ernest S. Marsh". The name derives from the chairman of the board of the Santa Fe from 1959. This Baldwin locomotive started life as a 2-4-0T saddletank locomotive. During restoration, the SF&DLRR rebuilt it into a 2-4-0 with a tender. In 1966, the "Holiday Green" and "Holiday Blue" car sets were added to the railroad to further accommodate the large number of tourists coming to the park. The railroad ran as the SF&DLRR up until 1974, when the AT&SF sponsorship ended and the railroad became Disneyland Railroad, as it remains to this day. Over the years the railroad has had many changes and in 1962, the railroad had its route expanded. The original Frontierland station was moved across the tracks and a covered platform was erected, and the station is now known today as New Orleans Square Station. In the July of 1964, Walt unveiled his Primeval World diorama which was formerly part of Ford's Magic Skyway at the 1964 world's fair. This diorama showcased audio-animatronic dinosaurs in their natural habitat. In July of 1974, the original Retlaw 1 passenger train was phased out of service due to the slow loading and unloading of the cars. The cars were then stored in the DLRR roundhouse to await their fate. The DLRR saved only the observation car, named the "Grand Canyon" and converted her into the parlor car "Lily Belle". With its varnished mahogany wood, velour curtains, floral wool rug and glossy red paint, she is the queen of the DLRR.

In the Mid 1990s Disneyland began to search for a fifth locomotive so they could have four trains running regularly in the park. A gentleman named Bill Norred offered to trade the DLRR's Retlaw 1 consist for a locomotive. After some discussion and seeing that the locomotive

would not "fit" in with the diminutive size of the DLRR, the locomotive was shipped to the Walt Disney World Railroad in Orlando, FL. However, the DLRR still needed its 5th locomotive. In 1999, the DLRR traded locomotives with the Cedar Point & Lake Erie Railroad in Sandusky, Ohio. This engine was an 0-4-4T named "Maud L.". This locomotive was built in 1902 by the Baldwin Locomotive Works of Philadelphia, Pennsylvania. A common assignment for the engine was included hauling sugar cane on the Barker and Lepine Company in Louisiana. Once she arrived in Disneyland, she was renamed the "Ward Kimball" and given a full overhaul which included a new cab, headlight, gold leaf silhouettes of Jiminy Cricket, and a new boiler built by the Boschan Boiler Company. The Ward Kimball was to be unveiled just in time for Disneyland's 50th anniversary. The Ward Kimball officially entered service for the DLRR on June 25th, 2005. On February 15th 2006 Ward Kimball's son, John, christened the locomotive during its dedication ceremony.



After many happy years of chugging around the Magic Kingdom to the delight of adults and kids alike, January 11th 2016 saw the temporary closure of the DLRR in order for the construction on the newest addition to the Disneyland park Star Wars Galaxy's Edge, to start. In the year or so the railroad was down, DLRR

enthusiasts and guests had a rare chance to see these locomotives, cars, and locations up close. A few even had the opportunity to talk with the railroad's crew, ask questions, and marvel at these gems of railroad history up close. The rolling stock and locomotives were parked at the Main Street station and the New Orleans Square Station. This accessibility allowed fans to sit where Walt once sat and to get an up close look at the original Frontierland station. One could hear the telegraph "beeps" going off inside. The telegraph replayed Walt's "Welcome" speech. You also had the chance to see the original boiler from the DLRR's number 2, E. P. Ripley. Blowing the whistle on air was also permitted. These sights and sounds were a rail and history buff's delight. Disney's imagineers were always hard at work not only bringing a galaxy far far away closer to us but also reinvigorating the DLRR's route. You now travel high above the Rivers

of America via tall trestles and across the new attraction, aptly named Columbia Gorge. You'll see waterfalls, wildlife and other scenic views. The DLR's dioramas both the Grand Canyon and Primeval world were also enhanced with new special effects.

The Disneyland Railroad has a rich and vibrant history, from humble beginnings of a boy with a passion for railroads and art, Walt worked hard and never gave up. He pursued his dreams no matter what life threw at him. All the while, he never forgot his trains. It was something he was passionate about, and they were the basis of Disneyland. From his Carolwood Pacific railroad in his backyard to his theme park empires around the world, they all have one thing in common. Without a train, none of them would have come to life. It was Walt's love of trains and railroads that led to Disneyland, and his small scale fascination that led to a full scale kingdom. The history of the Disney Railroads is something I love and am extremely passionate about, so I encourage all of you to check out some of the sites dedicated to Disney railroad history. I hope you enjoyed the history of the Disneyland railroad.

1. WWW.Carolwood.com
2. WWW.Carolwood.org
3. WWW.Waltdisney.org
4. WWW.Burnsland.com

Water Level Sprinters vs Greenbriers in the Heart of Appalachia

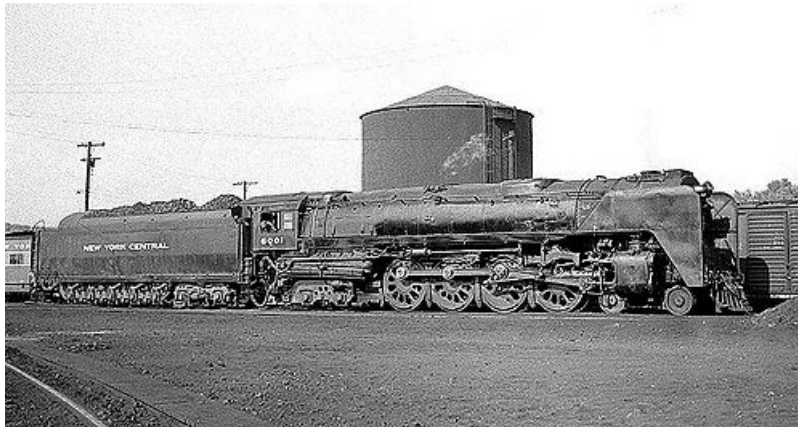
Author: Walker W.

Instagram: @masonrails

For my second steam locomotive comparison, I will be comparing two fine examples of 4-8-4s: the Niagaras of the New York Central (NYC) and the Chesapeake & Ohio (C&O) Greenbriers. Both engines were built for passenger service and were used on crack passenger trains until replaced by diesels in the 1950s, and had similar performance comparisons.

First up are the Niagaras. The New York Central purchased their handsome 4-8-4s from the American Locomotive Company (ALCO) in 1945, first ordering a single engine, designated an *S1a* by the Central. They were impressed with their performance and soon ordered more with 24 being produced in the same year as part of the *S1b* class. Since both classes of engines

had similar specifications, I will focus on the *S1b*.



The Niagaras were built for fast passenger trains on primarily flat lands. The locomotives weighed 808,000 pounds or about 404 tons. Their maximum boiler pressure was 275 PSI. With 75" drivers, these

engines produced about 61,000 to 63,000 pounds of tractive effort. The engines had a maximum coal load of 46 tons. Their tenders could hold 18,000 gallons of water, but the tenders had special scoops that could pick up water as the train was traveling, eliminating the need for water stops. None of the Niagaras were saved for preservation sadly.

Moving on to the Greenbriers, the *J3a* class engines were built by the Lima Locomotive Works in 1948 for the C&O. They were built to be one of the most modern engines Lima had at the time, in fact, some of the most modern steam engines ever built. Built for passenger trains,

but later demoted to freight service, the Greenbriers (named for the famous hotel in White Sulphur Springs, West Virginia) were not all that different from the Niagaras. Weighing about 868,000 pounds, or 434 tons, the Greenbriers rode on 74" drivers and had a maximum boiler pressure of 255 PSI. They had about 66,000 pounds of tractive effort, somewhat more than the Niagaras. The Greenbriers tenders had a maximum of 25 tons of coal and 21,500 gallons of water, and they did require water stops unlike the Niagaras. One Greenbrier survives today,



RailPictures.Net - Image Copyright © G. R. Harper

engine #614. It is on display in Clifton Forge, Virginia.

Despite their differences, the two engines do have some similarities. Both were built for passenger service, had a similar amount of tractive effort, and they had similar top speeds. The engines were similarly sized in terms of weight, although the Greenbriers were about 30 tons heavier.

Overall, my winner is the C&O Greenbrier. Although it is heavier,

the Greenbriers would be more capable for excursion service than the Niagaras because of the higher tractive effort from the Greenbriers. In terms of public relations, both engines are equally famous, despite C&O #614 that made its way to preservation and pulled excursions.

Railfanning on Location: Russell, Kentucky

Author: Walker W.

Instagram: @masonrails

In the second edition of *Railfanning on Location*, we will be looking at one of my favorite places: Russell, Kentucky. Russell is home to a yard that was once one of the largest rail yards in the world. It's located on the old C&O mainline, with the Cincinnati and Northern Subdivisions going west towards Cincinnati and Columbus, Ohio respectively. On the other side, the Russell Terminal Subdivision connects with the Kanawha Subdivision that runs from the end of the Russell Terminal Sub to Montgomery, West Virginia. The Kanawha Sub also connects with the Big Sandy Subdivision that runs down to Elkhorn City, Kentucky. These lines are part of the C&O Business Unit, so they use the same *Hxxx* series symbol for locals.

With that background information aside, Russell doesn't see too many trains, but they do see a good amount granted that many of the lines were built primarily for hauling coal. There are eight mixed freights that run in and out of the yard most days, with the exception

being train numbers Q302 and Q303. Those two trains run three days a week. A few unit trains, mostly coal and grain, will make appearances as they pass through the yard, going east with empties or west with loads most of the time. Grain trains are relatively sporadic, but they increase in frequency during winter

and spring. Amtrak's *Cardinal* runs Sundays, Wednesdays, and Fridays both eastbound and westbound. The eastbound train runs early in the morning, while the westbound counterpart runs sometime around 10:30-11:00pm EST. There aren't too many places to watch trains in the



area, but one spot where the yard traffic can be seen well is *RU Cabin* and the *Russell Train Station*. I've been lucky to see yard jobs there before. There are overpasses and crossings in the area. Overpasses offer a visual warning as to when trains are coming. Grade crossings usually offer both an audio warning and a visual warning as to when trains are approaching. NJ Cabin, west of Russell, is also a good spot as this is where the Northern Sub splits from the Cincinnati Sub. Another spot to watch trains is over the impressive Sciotoville Bridge, also called the Limeville Bridge. This bridge carries the CSX Northern Subdivision over the Ohio River and the Norfolk Southern Kenova District on the Ohio side. One may get lucky and witness a CSX and NS train meet here. More on the NS will be covered in a future article.

Overall, Russell is a decent area to railfan. It has several lines running out of the yard located in town. It can be challenging to find a good spot to photograph trains; however, with some searching on Google Maps and other websites similar, you shouldn't have much trouble finding a spot you like. Although the lines running out of the yard may not see a whole lot of action, the ends of the yard can provide more action concentrated in one area. I hope you enjoyed my second *Railfanning on Location* article!

Directions: Since I there are several places to watch trains in the Russell area, I can't really explain how to drive there as there are so many different ways to get into Russell. My recommendation is to use Google Maps, Mapquest, or something similar.

Weathering Cars and Engines on Your Railroad

Author: Jim Burke

Instagram: None

Let's start with what you will need:

1. An airbrush and related accessories are recommended. I use the Aztec airbrush by Testors. I like the adjustable spray, ease of cleaning, and acrylic (water based) paint. It also cleans up well. Use Windex with Ammonia for cleaning up.



2. A spray booth (cut the side out of a cardboard box for this). Practice with your airbrush before you start to see what distances give you what kind of effect.

The key to success is learning to use the airbrush and by starting very lightly. You can always add more to it but if the paint is applied too heavily it is very difficult to remove. Just imagine where the dust is coming from and spray from an approximate angle that would



represent it properly. Dust usually runs from the lower side of the piece, to the sides, then to the top. Look at photos to help you get started.

Basic weathering paint: I use Badger acrylic paint. The colors are: Engine Black, Weathered Black, Grimy Black, Rust, Earth, Clear Flat, Aged White, Rail Brown.

Engines: If you use smoke fluid, do not weather the smokestack area! The smoke fluid washes the weathering off. If you want

to weather an engine that has had smoke fluid used in it, you must clean that off first. I use

Windex and paper towels to do this. Again use photos if you can. (Google the engine you want to do and ask for photos of that engine).

Rolling stock: The same ideas apply to rolling stock. There are many things you can do with this, including just a light spraying to make it look faded or a heavy application of dirt and rust colors to make it look like it's on it's last run. Again, look at photos to help you. Once you get comfortable doing this, have fun with it. *REMEMBER THIS IS AN INDIVIDUAL PREFERENCE! IF YOU LIKE IT, THAT IS ALL THAT MATTERS.*

From the President

Evan Cihlar

Instagram: @nkp765enginecrew

Unfortunately, two of our articles were unable to be present in Edition 3. The series, “Building Your First Model Railroad” was unable to be completed due to school starting for me, and the article on the U.S. Sugar Locomotive #148 was unable to be completed due to a scheduling conflict. All of our other articles that have been completed and are present in this edition. We are sorry for any inconveniences or disappointments. Thank you for your patience.