

THE MID-SOUTH FLYER



March 2021

Entering a New Decade of Service

A Publication of the Mid-South Chapter of the Railway & Locomotive Historical Society, Inc

IN THIS ISSUE:

MARCH PROGRAM

March 27, 2021 Zoom Teleconferencing Meeting

Historic Watermills of North America

Presented by Ken Boyd

Chapter News

Chapter Update James Lowery, President

Member Moment Still Adding to Fond Memories George and Jeannie Wearn

Heart of Dixie Railroad Museum

Operations and Practices of Trains and Railroads The Roman Empire, Gauge Wars and Modern Rail Spacing! Ken Boyd

A Regional Day Trip on Your Own

Train Watching from the Historic Downtown Birmingham Viaducts Ken Boyd

HISTORIC WATERMILLS OF NORTH AMERICA Ken Boyd

ZOOM TELECONFERENCING MEETING

March 27, 2021 Saturday, 2:00 pm **CENTRAL TIME**

The scenic beauty, historic significance and fascinating mechanical technology of the watermill are undeniable. The weathered wood, ancient masonry, rusting iron and, of course, the waterwheel, render an almost magical charm and presence that have inspired generations. Add to this the vision of peaceful millponds, the smell of fresh country air, and the sound of cascading water to more fully appreciate the intrigue and allure of the watermill.

As recently as the turn of the twentieth century, watermills stood on countless creeks, streams and rivers across the land. Wherever there was grain to grind, timber to saw, cotton to gin, fibers to weave, ore to smelt or produce to process, the faithful mill was an institution. For 300 years, these iconic structures represented the energy and vitality of the American people.



Further, the history of the watermill and the railroad were closely intertwined for many years. Trains transported raw materials to the mill and delivered products from the mill to market. The railroads were also major customers for the mill, consuming substantial quantities of flour, meal and produce in passenger service and textiles, metals, and other products across their operations.

Like a classic locomotive, the watermill has that special something that draws us in and keeps bringing us back. We just have to see and experience that magic and captivating allure again and again!



Ken and Dori Boyd at Bagnall Mill, Prince Edward Island.

The March program will feature Ken Boyd, Mid-South Chapter Board member and editor of the *MD-SOUTH FLYER*. In 2020, his latest book, *Historic Watermills of North America*, was released by the University of Alabama Press. He had previously published two very popular and internationally distributed books on historic locomotives, entitled *The Art of the Locomotive* (Voyageur Press, 2014) and *Historic North American Locomotives* (Kalmbach Media/*Trains*, 2018). Ken is a frequent speaker, and his work, techniques and reviews have been published in numerous magazines and journals. He is currently developing materials for publication on historic fire apparatus.

CHAPTER NEWS

WELCOME NEW CHAPTER MEMBERS

We extend a hearty welcome to the following new Chapter members:

James Simms (Tuscaloosa, Alabama)

George and Jeannie Wearn (Marietta, Georgia)

TWO CHAPTER MEMBERS IDENTIFY TRAIN STATION

Keen-eyed Mid-South Chapter members John Troulias and Andy Key identified the photograph in the Winter 2020 issue of the national R&LHS *Quarterly Newsletter* "Guess the Station" as the station in Bridgeport, Alabama. That station had been served by Southern Railway and by the Nashville, Chattanooga & St. Louis. The restored depot and artifacts on display outside are located beside active Norfolk Southern tracks. John was the first R&LHS member to identify the station in the photo, and member Andy Key also sent in an identification of the station. When in northeast Alabama, a nice side trip would be to visit that historic depot in Bridgeport as well as the depot in Stevenson and the Scottsboro Depot Museum.

JANUARY CHAPTER MEETING PROGRAM AVAILABLE ONLINE

The Chapter meeting in January was held using Zoom teleconferencing, and it was recorded. If you would like to view the recording of that meeting, it is available at the following link:

https://www.youtube.com/watch?v=nhKbKRofIKw

TOPIC: A New Colorful Look at Old Railroad Photos PRESENTER: Tom Alderman

BOARD MEMBERS AND OFFICERS ELECTED

Congratulations to the following members of the Chapter Board of Directors and Chapter officers who were elected at the January Chapter meeting:

- Board Members Ken Boyd Nicholas Costas Peggy Lowery
- Officers

Vice President – Dr. Carl Marbury Secretary – John Troulias Treasurer – James Lowery

Member Moment

The Member Moment this month features George and Jeannie Wearn. If you would like to be featured and tell your story, please contact Warren Jones (*wjones1302@gmail.com*). The story should total 400 words or less and ideally include a photo or drawing.

SIGN DONATION

Railroad signage is one of the many historical artifacts prized by fans and collectors. Mid-South member Adam Key, who keeps a barn full of antique railroad, automotive, and farm artifacts on his property in Carbon Hill, Alabama, happened upon this nice example of a Southern Railway sign while browsing an antique store in West Point, Mississippi. According to knowledgeable sources, this style of sign was typically placed on railroad bridges to denote ownership. How this particular sign was "misplaced" we'll never know, but thanks to Adam it has found a new home in the Leeds Depot. Now if only someone could locate the original "LEEDS" signs for the depot!



MID-SOUTH FLYER

The *MD-SOUTH flYER* is published bi-monthly by the Mid-South Chapter of the Railway & Locomotive Historical Society (R&LHS), Inc. The R&LHS is a non-profit educational organization dedicated to the study and preservation of railroad history. National and chapter dues are \$50 annually and include subscriptions to the Society's twice-yearly magazine <u>Railroad History</u>, quarterly newsletter, and the chapter's e-newsletter and the *MD-SOUTH flYER*. Contributions, article ideas and reader comments are welcome.

Ken Boyd, Editor kenboydphotography@yahoo.com



CHAPTER UPDATE

James Lowery, President

Grant Request Submitted

Recently, the Mid-South Chapter provided information to the Vulcan Park and Museum for submitting a grant request to the National Trust for Historic Preservation to fund planning and installation of the Terminal Station Exhibit in the Exhibits Room at the Leeds Depot. The Chapter expresses it appreciation to the Vulcan Park and Museum personnel who wrote and submitted the grant which, if funded, will be used by the Mid-South Chapter for installation of the exhibit.

Recent Installations of Historic Birmingham Mineral Railroad Signs

As you may be aware, the Mid-South Chapter continues to install historic railroad location signs as part of the Chapter's Historic Birmingham Mineral Railroad Signs Project. We thought you might like to see the list of locations where the most recent installations have been done. In addition to the recent locations listed below, descriptions of all the sign locations is at the following website address: https://bham-mr.com/sign/installed-signs-by-location/.

159. Sign Location: Oneonta — Champion Mines two miles east of downtown Oneonta. Sign is located where the siding to ore washers and loading facilities connected to the mainline BMRR (originally known as "Oneonta & Attalla Railroad" and later changed to be part of the BMRR Huntsville Branch No. 2). NOTE: This sign is on private property that must not be entered without permission of the owner. Latitude/Longitude: N 33 56 35 W 86 26 17 BMRR Branch: Huntsville Branch No. 2.

160. Sign Location: Oneonta — Champion Mines entrance road on Highway 231 at mile marker 252 east of downtown Oneonta. NOTE: The private property here is gated and must not be entered without permission of the owner. Latitude/Longitude: N 33 56 21.8 W 86 26 36.7 BMRR Branch: Huntsville Branch No. 2.

161. Sign Location: East Birmingham area — Medical Park Drive East north of intersection with Gadsden Highway (US Highway 11). Sign is located near Sadler Gap. Latitude/Longitude: N 33 35 18 W 86 40 16 BMRR Branch: Gate City Branch Extension to Trussville.

162. Sign Location: Pinson Valley — Pawnee Village Road between Cleage Drive and the train tracks west of Highway 79 (Sign is located near current active CSX railroad tracks. These active tracks are on the original BMRR roadbed.) Latitude/Longitude: N 33 37 27 W 86 44 33 BMRR Branch: Huntsville Branch No. 2.

163. Sign Location: Vanderbilt Road at intersection with Highway 79 (Tallapoosa Street). This location is after the Gate City Branch had passed through the property that is currently the Birmingham-Shuttlesworth International Airport and is just before the Gate City Branch ended as it entered the south end of Boyles Yard. **Latitude/Longitude:** N 33 33 7 W 86 47 1 **BMRR Branch:** Gate City Branch.

164. Sign Location: West Jefferson County — Flat Top Road north of intersection with Lacy Road. Site is at "spur" which served the Labuco Mines. Latitude/Longitude: N 33 37 33.6 W 87 5 29.1 BMRR Branch: Labuco Branch.

165. Sign Location: West Jefferson County — Birmingport Road north of the bridge over Locust Fork River. Site is at "spur" which served the Powhatan Mines. Latitude/Longitude: N 33 35 34.6 W 87 6 28.4 BMRR Branch: Powhatan Branch.

166. Sign Location: Oneonta — South of intersection of Industrial Park Boulevard on east side of Highway 75. Industrial Park Boulevard is built on the former railroad roadbed of the spur from the mainline BMRR to the limestone quarry at Graystone . (The name of the community may have been derived from the color of limestone quarried there — "Graystone") (See also sign number 167.) **Latitude/Longitude:** N 33 55 44 W 86 29 55 **BMRR Branch:** Huntsville Branch No. 2.

167. Sign Location: Oneonta — Across from the intersection of Industrial Park Boulevard on west side of Highway 75. The farm road here is built on the former railroad roadbed of the spur from the mainline BMRR to the limestone quarry at Graystone. (The name of the community may have been derived from the color of limestone quarried there — "Graystone") (See also sign number 166.) **Latitude/Longitude:** N 33 55 50.8 W 86 29 52.3 **BMRR Branch:** Huntsville Branch No. 2.

STILL ADDING TO FOND MEMORIES George and Jeannie Wearn

Jeannie is a rare person, a native of Atlanta, and I'm from Charlotte. Jeannie is retired after more than 20 years in administration at Kennesaw State University; I'm retired after more than 45 years as a media executive, including nearly 25 years in public broadcasting. When we travel, we consider getting there a part of the experience, and, when possible, rail is the preferred mode. We've ridden the *Crescent* to many points from New York to New Orleans and in-between, we've ridden the *Palmetto* out of Savannah, and we've used rail in the northeast and on the West Coast. Perhaps our favorite trip was on the Pioneer from Denver to Seattle in a Superliner bedroom, 36 hours of some of the best scenery America has to offer: mountains and tunnels including the Moffat, beautiful snow in the Blue Mountains, rivers including the Snake and the Columbia, khaki deserts, cities and towns, and lots of wilderness. Our experiences also include Britrail.



George and Jeannie Wearn in Central Park on a Crescent Trip.

My interest in railroading was nurtured by a family neighbor in the 1940s, a civil engineer for the Southern Railway. My brother and I experienced a tour of the Charlotte yards, including a cab ride in an 0-8-0 switcher, a diesel cab ride from Charlotte to Salisbury with the return in coach, and—best of all—a tour of Southern's Spencer shops while steam was still extant. My memory of Spencer is one of awe at how huge everything was and wonder that they had cranes that could lift locomotives; I was probably seven at the time.

On Sundays, the family often went to the Charlotte Southern or Seaboard stations to watch trains at the end of the steam era. My fascination at the Seaboard station was the elevator that constantly carried coal to the top of the coaling tower. Oh, and we also got Chessie calendars each Christmas.

Jeannie and I have visited museums and ridden tourist trains in many states from Alaska to Florida. For long trips, flying is the way to go; cruises are fun, but they become the destination; for us, we will always be rail fans. Thanks to you (and Cousin Warren Jones), we are looking forward to further expanding our love of railroading with the Mid-South Chapter of the R&LHS; we only hope we can give as much as we will receive.



HEART OF DIXIE RAILROAD MUSEUM

OFFICIAL RAILROAD MUSEUM FOR THE STATE OF ALABAMA

We have received several requests for a map of the Calera area with local points of interest included. We hope this map and information is beneficial. Please continue to provide us with feedback into other information you would like to know about our museum and surrounding area.

Calera, Alabama - I-65 Exit 228

<u>Railroad Museum</u>: If you are traveling on I-65, take Exit 228 to Hwy 25. Proceed west on Hwy 25 into Calera. After only about 4/10ths of a mile, you see a bank, grocery store, and police department at the intersection of 9th Street, just before the CSX railroad crossing. Take a left on 9th Street and the museum is a short two blocks down. Unlike many major railroad museums, we are unlocked and accessible even when the gift shop, depot, shops and library are closed.

Ozan Winery: This time when you exit off of I-65, turn east on Hwy 25. The first landmark is the entrance to the Timberline Golf facility on the right. Drive past their entrance, and watch for the next road to your right, which is Co Rd 306. Turn right onto Co Rd 306, travel approximately 6/10th of a mile to Co Rd 301 on your right. You will cross our museum tracks and the winery entrance is just up the hill on the left. Turn into Ozan Winery and keep left.

<u>Calera Historic Downtown</u>: This small, historic downtown was recently selected as a "Mainstreet Program," which provides expertise and resources for cities looking to redevelop their aging downtowns. Restoration work continues on many of the historic buildings, but numerous shops have already opened, including a coffee shop, bakery, and many more. This area is just across the CSX tracks from the railroad museum and is highlighted with the red star on the map below.

<u>Nearby Eats</u>: Our museum volunteers can provide additional details, but within the downtown area you can find a Hardees, Subway, Mexican, and a future pizza shop. A popular BBQ restaurant is a short drive south on Hwy 31. Also, 3 miles north, at Exit 231, you can find many fast food restaurants, Cracker Barrel and a Wal-Mart.



THE ROMAN EMPIRE, GAUGE WARS AND MODERN RAIL SPACING! OPERATIONS AND PRACTICES OF TRAINS AND RAILROADS Ken Boyd

Often called "standard gauge" or "Stephenson gauge," more than 60 percent of the world's railroads operate with a spacing between the rails of four feet, eight and one half inches (hereafter written as 4 ft 8½ in for readability), or 1,435 mm. As many *MD-SOUTH flYEP* readers know, this standardization is essential in transferring goods and passengers over distances where various railroads, multiple states or even several countries may be involved. But why such an odd and strange-sounding combination of numbers? Some find it almost laughable. Why not just 5 feet or some even metric number?

Beginning in the 1930s, an interesting theory or "urban legend" began to develop around how modern railroads arrived at this spacing. The theory takes us back to the days of the Roman Empire. The Romans were the first to develop longdistance roads, so they too needed some standardization and consistency in transportation. They also understood the importance of a solid roadbed. Horses, oxen, carts and wagons travel better over a solid and uniform surface than through mud, sand and rough terrain.

In measuring the space between ruts and wear on ancient Roman roads, archeologists have determined that the average distance is about 4 ft and 8 or 9 in. Remarkably, excavations at Pompeii as early as the 1870s revealed 4-ft 9-in spacing for Roman road vehicles during the era leading up to the Vesuvius eruption. The Romans occupied Britain for about four centuries and established roads across much of the island. Within a few centuries, early horse-drawn mining tramways and railways began to emerge in some of the same areas of Britain. So, obviously the rail spacing is derived from the Romans. Right?

Well, some believe this account, but most historians do not agree. Apparently, research in Britain shows that there was never a standard rail spacing at the individual mines and tramways across the island in the period leading up to the first locomotives. The various mine operations just used whatever arbitrary spacing they came up with and for whatever local reasons, and their horse-drawn rail carts and wagons were made to fit there at the mine or at least nearby.

To further support the historian's argument, a properly designed wagon, to be pulled by a pair of horses or oxen walking side by side, will often be about 5 feet wide with wheel spacing somewhere in the vicinity of the 4 ft 8 in. This is true regardless of whether the wagon is Roman, British or whatever.

George Stephenson began designing locomotives for mining operations in Britain during the early 1820s and completed his first successful engine, *Locomotion No. 1*, in 1825. This



Rutted Roman Road. (Image Public Domain)

locomotive was based on driver spacing of 4 ft and 8 in with flanges on the wheels. For his design, he simply adopted the rail spacing used by horsedrawn wagons on the mine tramway, known as Willington Way, where he worked near Newcastle, England.

Now, what about that half inch? What is that all about? The extra half inch of rail spacing was added by Stephenson to provide leeway and reduce flange pinching as locomotive wheels with 4ft and 8-in spacing navigated through tight turns on the rails. As Stephenson continued locomotive and railway design work, he used the same spacing throughout his distinguished career. This included the Liverpool & Manchester Railway, the world's first rail-



The 2-2-2 Star Class, 7-ft broad-gauge *North Star* Locomotive (full-size replica with original parts), Swindon, UK. (Photo by Ken Boyd)

way between major cities. Other locomotive designers working in the central Britain region from Liverpool to Leeds to Darlington also came to use the Stephenson rail spacing by the early 1830s, as they worked to produce locomotives. The designs only varied if purchasers requested different specifications for wheel spacing.

Then a major issue and conflict developed. In 1835, The Great Western Railway (GWR) was chartered by Parliament. This railway in southwest Britain was engineered by the brilliant Isambard Kingdom Brunel. He chose not to use what he called the "narrow-gauge" rail spacing of Stephenson and instead opted for a "broad gauge" 7-ft spacing on GWR operations.

Brunel argued that the broader spacing was safer and faster

than the 4-ft, 8½-in spacing used elsewhere across the island. With the broader gauge, Brunel's trains were indeed much faster and this attracted a great deal of public interest and excitement. Although infrastructure could be more costly as tunnels and trestles were scaled up for a sevenfoot operation, the region where GWR operated was relatively flat with the open terrain of southern England. In this region for Brunel, the additional infrastructure costs were not a major economic consideration.

The GWR mainlines ran from cities including Swindon, Bristol and Liverpool into London's Paddington Station. The locals loved the GWR and called it "God's Wonderful Railway." Folks came out just to see the record-breaking speed of the trains as they whizzed past their towns and farms. The *Flying Dutchman*, the *Cheltenham Flyer* and *The Zulu* became extremely popular and famous. Even today, these early GWR mainlines are sometimes still described as master pieces of engineering, and a tribute to Brunel and his genius.

For the GWR to be so successful, it needed good locomotives. For a 7-ft railway, the locomotives were large and heavy, adding to their cost but also to their stability and safety at speed.

In digressing for a minute from the story about Gauge Wars, the most famous broad-gauge engines of the early GWR were the *Star Class*. These *Star Class* 2-2-2 "Patentee-type" engines were designed by Robert Stephenson (son of George Stephenson) and introduced beginning in 1838. A total of 12 were built and given astronomical names.

The *North Star* is the best known. The first *North Star* train steamed out of Paddington Station headed west in 1838. Interestingly, the locomotive was not built for the GWR but for the 5-ft 6-in gauge New Orleans Railway in Louisiana. When the New Orleans Railway broke their contract with Stephenson, the gauge was revised to seven feet, and the locomotive went to the GWR.

In addition to a seven-foot gauge wheel design, the *North Star* featured large 7-foot drivers and inside cylinders for striking presence. With a later rebuild, it continued in service for 33 years. The historic locomotive was then preserved in Swindon until it was vandalized and subsequently scrapped in 1906. As an atonement to railroading history, the GWR built a full-sized replica in 1925 and used as

many original parts as possible. The replica is not operational but is featured today at the Swindon Railway Museum in a section of the old Swindon Locomotive Works, which back in the day was one of the largest locomotive factories in the world.

Almost from the outset, the GWR's broad gauge was opposed by competing interests from across Britain. In 1845, a commission was established to evaluate the relative merits of the 7-ft gauge versus standard gauge. Although the Commission considered broad gauge superior in every way, the standard gauge was much more widely used and was selected as preferred, based on simple economics. Initially, a third standard-gauge rail was added to broad gauge tracks. The 7-ft gauge was ultimately abolished by Parliament effective May 1892.

Even with this hallmark decision, the 4 ft 8½-in spacing remained something of an oddity and only one of a number of spacings used in other countries. In North America, certain railroads adopted the spacing, in part because British locomotives were imported. At the same time, some 20 other rail spacings were in use by the outbreak of the American Civil War. The lack of a standard railroad meant that goods and passengers had to be unloaded and reloaded every time a track change was encountered. This included the movement of troops and supplies during the war.

In 1860, 5-ft rail spacing was by far the most prevalent gauge in the South; it was also used in some areas of the North and was originally planned for the Transcontinental Railroad. So, if the Confederacy had won the war, the standard rail spacing in the U.S. might have been set at five feet. In a manner of speaking, the Civil War was also a "gauge war" in the U.S.! Following the war and through the cooperative efforts of industry brought together initially by the government, commercial railroad track gauges in the U.S. were at last standardized to 4 ft 8½ inches by 1886, and rail traffic was free to move without disruptive unloading and reloading.

The Canadian lines standardized to the same spacing in 1872 and 1873, except in some isolated regions. In Newfoundland, 3-ft 6-in rail spacing remained the standard. When Newfoundland became a province of Canada in



Early standard-gauge (Stephenson-gauge) railway at the 1830s locomotive shops in Shildon, UK. (Photo by Ken Boyd)



The Mount Washington Cog Railway is built to 4-ft 8-in (1,422 mm) gauge, which is 1/2-in narrower than standard gauge and technically a narrow gauge. Locomotive No. M2, *Algonquin*, is shown approaching the peak of the western slope of Mount Washington. (Photo by Ken Boyd)

1949, Canadian National (CN) set up a facility at Port aux Basques where the railcars arriving or departing by ferry could have their wheels changed. This continued until CN ended rail service into Newfoundland in 1988, a decision that is still unpopular with Newfoundlanders.

Today, about 40 percent of the world's railroads operate on other gauges. Across North America, narrower gauges are used where economics and practical consideration do not favor standard gauge. This includes, for example, 3-ft gauge through the Rocky Mountains on the old Denver & Rio Grande Railway. In Wales, even narrower gauges are used on the famous Ffestiniog Railway and other historic railways. For tourist lines around the world, narrow gauges are and will remain the choice, because the historic locomotives are small, costs are lower, lines are already in place and these lines do not typically interchange with commercial standard-gauge railroads. For the future, some further standardization is likely as countries work to improve international networks. The European Union, the African Union and the United Nations are involved in some of these efforts. High-speed rail in Europe and Asia, as well as Africa, calls for cooperation and a better inter-operability of systems. Russia, and perhaps several former Soviet republics, seem less interested in standardization. Hopefully, all these efforts will continue to move forward without further gauge wars!





The 1-ft 11¹/₂-in (597 mm) narrow-gauge Heritage Ffestiniog Railway (Welsh: Rheilffordd Ffestiniog) at the Porthmadog, Wales, station. (Photo by Ken Boyd)

Note the dual-gauge rails beneath *Denver, South Park and Pacific Railroad No. 191*, at the Colorado Railroad Museum. (Photo by Ken Boyd)

SOURCES:

Boyd, Ken, The Art of the Locomotive, Voyageur Press, 2014.

Boyd, Ken, <u>Historic North American Locomotives</u>, Kalmbach Media (*Trains*), 2018.

Hilton, George W., "A History of Track Gauge," Trains, May 2006.

Lowell, Steve, "Roman Chariots, Railroad Tracks, Milspecs and Urban Legends," *Defense Standardization Program Journal*, August 2001.

Garratt, Colin, "The Battle of the Gauges," <u>The World Encyclope-</u> <u>dia of Locomotives</u>, Hermes House, 1999.

Railway & Locomotive Historical Society

TRAIN WATCHING FROM THE HISTORIC DOWNTOWN BIRMINGHAM VIADUCTS *A REGIONAL DAY TRIP ON YOUR OWN Ken Boyd*

Since the COVID-19 pandemic became a way of life for all of us, this Regional Day Trip column has made "safe" visits to a number of interesting railroading stops across the Mid-South. In this issue, we visit the most popular train-watching stop in the Birmingham area and one of the most popular in the Southeast – the three historic viaducts across the Norfolk Southern (NS) and CSX mainlines in downtown Birmingham. These viaducts provide the perfect viewing platform for mainline action through the city. As one writer put it, "It's almost like they let a railfan design the place."

On just about any day of the week, and regardless of the weather, families, downtown workers, folks from nearby, photographers, joggers, and, of course, railfans, young and old, from far and near stand, lean or sit and watch the endless flow of trains passing just below the viaducts in an area once designated as "Reserved for Mechanical Enterprises" and more recently called "Railroad Reservation."

Both NS and CSX lines are double-tracked through downtown, and there are additional sidings and such, so a fairly wide path through the city is devoted to the railroads. At all three viaducts – the Rainbow Bridge (Richard Arrington Jr. Boulevard South (formerly 21^{st} Street), 22^{nd} Street Viaduct and 24^{th} Street Viaduct – the surface streets cross over the tracks with friendly pedestrian sidewalks.



View from the Rainbow Bridge viaduct looking west as Amtrak prepares to depart to the north/east. Although the Birmingham Amtrak station is new, the concrete platform and overhead shed date to the 1930s and are still in use. (Photo by Ken Boyd)



View looking east from the 22nd Street Viaduct toward the 24th Street Viaduct and Sloss Furnaces. (Photo by Ken Boyd)

On the Rainbow Bridge and the 22nd Street Viaduct, parking could not be easier with spaces lining both sides of the bridges. On a typical day, train watchers can simply park, step out of their vehicles and within a few feet have a ringside view of railroading action. Because these parking spaces are not especially near any businesses or other venues and activities, plenty of parking is typically available. It is even possible to sit in the car and wait for something interesting to appear on the horizon. The viaducts are fairly busy with vehicular traffic, so remain vigilant at all times and be aware of potential traffic hazards. Make sure children are carefully supervised.

After a few minutes on one of the viaducts, it becomes apparent why this location is so popular. With four busy tracks, NS, CSX, BNSF, Union Pacific, Kansas City Southern, Amtrak and contract/leased locomotives and all manner of equipment can be observed regularly with a full spectrum of railcar consists. In addition, Sloss Furnaces, Morris Avenue, "The Heaviest Corner on Earth," the colorful Rainbow Wall, Rotary Trail, the downtown skyline and other nearby historic sights are a part of the experience.

The new Birmingham Intermodal Facility is located just west of the Rainbow Bridge. The Amtrak *Crescent* stops at the facility less than a city block beyond the bridge. With reduced passenger travel during the pandemic, almost all Amtrak routes, including the *Crescent*, have cut service. Under the current schedule, southbound trains are scheduled to arrive at about 11:50 am on Mondays, Wednesdays and Saturdays. Northbound trains arrive at about 2:24 pm on Tuesdays, Thursdays and Sundays. Hopefully, daily service will return when passengers again feel safe traveling by train.

The viaducts themselves are quite interesting. They connect the famous Southside of Birmingham (featured in the 1987 No. 1 hit song "Jacob's Ladder," by Huey Lewis and the News and several popular movies) with the bustling commercial and financial district just to the north.

The Rainbow Bridge on Richard Arrington Jr. Boulevard South (21st Street) was constructed in 1918 and is dedicated to the decorated veterans of the 167th Infantry Regiment who fought as part of the "Rainbow Division" during World War I. This viaduct is 962



(Above) Mainlines through Birmingham as seen from the 24th Street Viaduct. Most of the buildings in the background date from the early 20th century.

(Below) The 19th Street Overpass Dates to 1930.

(Photos by Ken Boyd)



feet long and averages about 13,000 vehicles per day with four one-way lanes of traffic going north. The viaduct has attracted national attention in recent years from historic and preservationist groups. For safety reasons, the ornate bridge needs to be replaced. Fortunately, the city is federally required to maintain the historical integrity of the bridge and will incorporate its design features into a new structure. This viaduct provides the best observation of the Amtrak platforms with an unobstructive view to the west and past Railroad Park, a large urban recreational park about three blocks away. Sunsets are spectacular from this location.

The 22^{nd} Street Viaduct was the first bridge built to cross the mainlines. The old, original viaduct dated to 1884 - 85and was a wooden bridge constructed by Elyton Land Company so mules and dummy lines on rails could cross unhindered by the railroad tracks below. The current viaduct was built in 1915, and it provides excellent views to the east toward Sloss Furnaces and the split in the mainlines just before the furnaces. This viaduct is four-laned for southbound traffic. It is about 715 feet in length and handles about 14,000 vehicles daily.

The 24th Street Viaduct is newer and was designed without parking on the bridge. A single sidewalk on the west side is protected from traffic by a concrete barrier. This viaduct offers the best views of the turn-of-the-century buildings along Morris Avenue, and other historic buildings just beyond. The scene harkens to an earlier, nostalgic era in railroading. (Urban historians recount that Birmingham has preserved more of its historic skyline than many U.S. cities because the local economy was somewhat depressed during the era when other cities were demolishing their older



(Clockwise from above)

CSX maintenance equipment passing beneath the 22nd Street Viaduct, looking east from the Rainbow Bridge.

Train watching from the 22nd Street Viaduct with stacks of historic buildings in the background. Most of these buildings have been restored as residences or professional and tech offices.

A Samford University photography class shooting portraits at the Rainbow Wall along Morris Avenue as a CSX auto carrier passes above their heads. The 22nd Street Viaduct is visible in the upper left of the image. Note the elevation of the tracks at this location and the tight clearance under the viaduct.

BNSF locomotives on parade as photographed from Railroad Park. The 18th Street art deco bridge can be seen at the right of the image.

(Photographs by Ken Boyd)







buildings to make way for newer developments. Today, almost all of these early Birmingham buildings have been beautifully restored.)

Although the rail lines below the viaducts may appear to be at about grade level, they actually begin to rise just east of the 24th Street Viaduct and by the time the tracks pass the Rainbow Bridge and reach 20th Street, they are actually elevated above the street level. In the span of a few blocks, the tracks have transitioned from below the viaducts to passing over 20th, 19th and 18th Streets. Each of these three railroad overpass bridges date to about 1930 and are detailed in beautiful art deco styling from the period with gold highlights. In recent years, the bridges have been illuminated with LED lighting that changes colors and patterns at night.

Like any train-watching location, rail activity can vary. I have waited for an hour and never seen a train. More often, I have seen multiple trains over the course of an hour and frequently observed trains passing and meetings just a few feet below the viaducts. For an additional view of the trains, drive down Morris Avenue and park; the tracks run just behind the buildings on the south side of the Belgium-blocked street. (This area is home to thousands of young professionals and retired folks who live in the restored buildings and lofts nearby. The area is also the work place for numerous office employees, so the area is generally considered to be safe for visitors. Even in the midst of the pandemic, Morris Avenue is usually busy and vibrant as people look for something to do outdoors. Be sure to stop by The Peanut Company on Morris Avenue for a bag of hot roasted peanuts to complete your experience!



Amtrak passes under the 22nd Street Viaduct and then the Rainbow Bridge as seen from below the 24th Street Viaduct. (Photo by Ken Boyd)

> If you would like to share a day trip with readers of the MD-SOUTH fLYER, please contact the editor. We would love to share your story!

SOURCES:

Boyd, Ken, <u>The Art of the Locomotive</u>, Voyageur Press, 2014. Boyd, Ken, <u>Historic North American Locomotives</u>, Kalmbach Media (*Trains*), 2018. https://blog.adaptershack.com/2015/03/01/downtown-birmingham-railfanning/ https://www.bizjournals.com/birmingham/news/2018/04/24/historic-downtown-birmingham-bridge-to-be-replaced.html

 $\underline{https://www.bhamwiki.com/w/22nd_Street_viaduct}$

https://bridgehunter.com/al/jefferson/bh48327/





The Rainbow Bridge in the 1920s, Downtown Birmingham, Alabama.

(Image Public Domain, Postcards Available.)