

# Carolina Conductor



Volume 10 Number 3

Monthly Newsletter of the Carolina Railroad Heritage Association, Inc.

© March 2023

## Preserving the Past Active in the Present Planning for the Future

**Web Site:** hubcityrrmuseum.org  
**Facebook:** Carolina Railroad Heritage Association & Hub City RR Museum

### Hub City Railroad Museum and SOU Rwy Caboose #X3115:

Spartanburg Amtrak Station  
298 Magnolia Street  
Spartanburg, SC 29301-2330  
Wednesday 10-2 & Saturday 10-2

### Meeting Site:

Fountain Inn Presbyterian Church  
307 North Main Street  
Fountain Inn, SC 29644  
3rd Friday of the Month at 7:00 p.m.

### Officers:

**President:** Wayne Gallman -  
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### Newsletter Editor:

**Bruce Gathman** -  
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Articles can be submitted anytime.

# Charleston & Hamburg Railroad



"Best Friend of Charleston" 1930

**Acronym,** C&H RR; **Year Chartered or Incorporated,** 1827; **Year Line Operational,** 1830; **Year Service Ended,** 1837, 1844, 1899; **Original Starting Point,** Charleston; **Original Ending Point,** Hamburg.

**1837** - Acquired by the Louisville, Cincinnati & Charleston Railroad. Retained line name.

**1844** - Merged into the South Carolina Railroad. Retained line name.

**1899** - Merged into the Southern Railway. Retained line name until this merger.

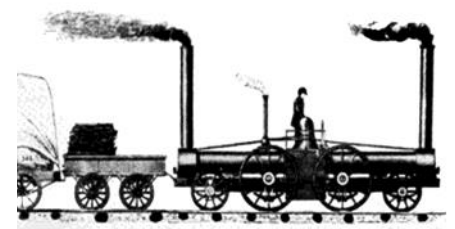
The South Carolina Canal & Rail Road Company was a holding company that controlled both the Santee Canal and the Charleston & Hamburg Railroad, which it built.

In the fall term of 1827, Alexander Black, a member of the SC House of Representatives, at the suggestion of a friend, obtained the charter of the South Carolina Canal & Rail Road Company, and in doing so was permitted to address the SC Senate to get the bill through that body, there being no one in the Senate sufficiently acquainted with

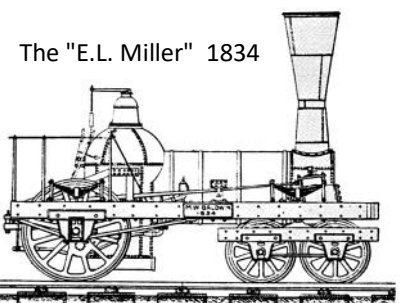
the subject of railroads at that early date.

This charter was significantly altered and amended at an

extra session of the General Assembly in January of 1828, making the capital \$700,000 and securing this charter 3,500 shares of \$100 each. On March 21st, the entire amount was made up and \$10 per share was paid, all in Charleston, not a share taken in Hamburg, Columbia, or Camden, where books were also opened.



"South Carolina" 1831  
First 8-Wheeled Locomotive



The "E.L. Miller" 1834

# Museum Happenings



Ballast cleaning machine passing the caboose.



Eating before a meeting with the members. Sometimes our eyes are bigger than our stomachs.



It is not only the young visitors that have fun ringing the bell at the museum.



Recent large donation of model railroad "stuff" to the caboose gift shop. We will be sorting through things for the next month.

## Wanted—Articles for the Carolina Conductor

Submit an article of 200 words or more with some photos and captions and see them in print. Every one of us has some unique railroad experience that would make interesting reading for our membership. Your editor always needs more contributions of railway history and news.

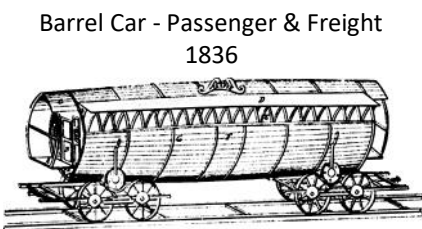
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"Sumter,"  
"Marion" and  
"Ohio" 1835



"Cincinnati,"  
"Allen," and  
"Kentucky" 1835



Barrel Car - Passenger & Freight  
1836

The amended charter required that the railroad should be commenced within two years and be completed for transportation within six years. 1,000 tons of iron were imported immediately. Dr. Howard, U.S. Engineer, and Horatio Allen, Civil Engineer made examinations of the planned route and their findings resulted in the final route chosen.

On January 9, 1830, construction began at Line Street (outskirts of Charleston) by driving piles of light wood, 8" x 8" square, 6'-6" apart along the line, and 6'-0" apart laterally, caps of ties morticed on the piles 6" x 9" by 9'-0" long, and rails the same size, notched on to the ties and wedged on the inner side. This construction continued through nearly the entire line. When the work was over fifteen feet high, three piles abreast were driven and a sill placed on them near the ground, which supported a framed work (an inverted W) on which the ties and rails were secured as before described.

This work cost roughly \$2,000 per mile including all materials except for the iron on level ground, and between \$2,500 and \$4,000 per mile over swamps ten to twenty feet high. The excavation was done at six to ten cents per yard, on average.

In 1830, only six miles were finished; in 1831, nearly the entire road was put under contract; and, in October of 1833, the road was connected from Charleston to Hamburg, a total of 136 miles. When opened for business, the Charleston & Hamburg Railroad cost a total of \$951,148.39.

In 1836, the tracks were in such need of repair

that the line was almost entirely rebuilt, and this rebuilding included heavy flanged iron (40 tons per mile) laid directly on the road (previously, it was all on stilts) with an embankment added to support the piles and rails. These improvements were completed in 1839 at an additional cost of roughly \$1.6 million, with over \$400,000 being paid out of track income rather than an increase in capital.

The grades on the original line were easy, not exceeding thirty feet in a mile, on the 120 miles west of Charleston. At that point (in present-day Aiken County), the company had chosen to construct an inclined plane that descended about 180 feet in half a mile, and beyond the inclined plane the road again leveled out to approximately thirty-five feet of fall per mile.

This inclined plane has been regarded as a great mistake in the location of the railroad, as it might have been avoided by increasing the length of the road about six miles. However, this would have made a continuous grade of thirty feet in a mile, where the trains would have been much retarded by frost, or when slightly wet, which is nearly as bad as frost. And the cost of maintaining an additional six miles of track on side hills with many additional curves would have been more than the average costs of the rest of the road.

On March 1, 1830, the management of the South Carolina Canal & Rail Road Company reported that they had accepted an offer by E. L. Miller to construct a locomotive engine in New York at the West Point Foundry. Mr. Miller asserted that this new engine (the first one to be built in America) should perform at the rate of ten miles an hour, instead of eight as first proposed, and carry three times its weight, which was required the year before on the Liverpool & Manchester Railroad in England, which Mr. Miller went out to witness the year before.

Mr. Miller's engine was brought to Charleston by himself in the fall of 1830, and on December 14th and 15th had its first trial. Its power and efficiency were proven to be double what was contracted for - running at the rate of 16-21 miles per hour with 40-50 passengers in some four or five cars, and without any cars it ran between 30 and 35 miles per hour.

This engine carried passengers up and down the line until the complete road was finished, at one time going 72 miles out and back in the same day and carrying at one time 100 passengers. After the road was completed, this engine conveyed passengers between

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Aiken and Hamburg for years, and probably ran as many miles as any engine ever built. It performed equal to any of her size - about four tons in total weight.

This was the first steam locomotive engine built in the United States to run on a railroad. It was first named the *Best Friend*, but her boiler burst in June of 1831, and it was completely rebuilt in Charleston, afterwards being renamed to the *Phoenix*.

In 1837, two new engines were ordered; in 1839 another two engines were ordered; all four from Philadelphia. Seven new engines were received in 1837 and 1838. Between 1839 and 1843, the company built four engines in their own workshop and rebuilt several others.

The other interesting facet of this new railroad in America is the fact that its early passenger cars were built as "barrels" instead of as squared-off cars. First, they cost about one-half as much to make, and secondly, they were much stronger and required less repairs. However, the interiors looked quite awkward, and they were frequently condemned by strangers at first sight, with many resolved never to be reconciled to them.

The Charleston & Hamburg Railroad commenced at Charleston, pursued a northwest course, and crossed the headwaters of the Ashley River about twenty-eight (28) miles out of Charleston. Seven miles farther, it crossed the Four Holes Swamp. At a distance of sixty-five miles from Charleston, it passed the Edisto River, then by a direct course after another fifty-eight miles it entered the valley of Big Horse Creek. From there, it ran a few miles then turned westward and terminated at the fairly new town of Hamburg, just across the Savannah River from Augusta, GA.

Several other new town and villages were created along the new line - among them were Beesville, Summerville, Branchville, Midway, Blackville, and Aiken.

The profile was gently undulating, frequently almost level, and the maximum ascent never exceeds thirty feet per mile. The summit of the dividing ridge, between the Savannah and Edisto rivers, is elevated 513 feet above sea level, and one inclined plan provided with a stationary steam-engine was used at this location, which is 114 miles from Charleston.

The superstructure is composed of flat iron bars, attached to wooden string pieces 6" x 10", supported generally on piles, the latter supported by ties. They

have been driven to considerable depth in some of the marshes, and in other parts they substitute for embankments, which have not been used except in limited situations. The railway resembled a continuous and prolonged bridge. The exposed parts of the woodwork were protected by a coating of heated tar and oil.

On December 28, 1837, the Louisville, Cincinnati & Charleston Railroad purchased the Charleston & Hamburg Railroad, and it reduced the line's running time from twelve hours to ten hours, as well as eliminating stationary steam engines at all inclined planes by going to a counterbalanced steam locomotive system.

The Louisville, Cincinnati & Charleston Railroad also purchased the stock, road, and railroad privileges of the South Carolina Canal & Railroad Company, and in 1844 the two charters were united by an act of the South Carolina General Assembly under one corporation, known as the South Carolina Railroad Company.

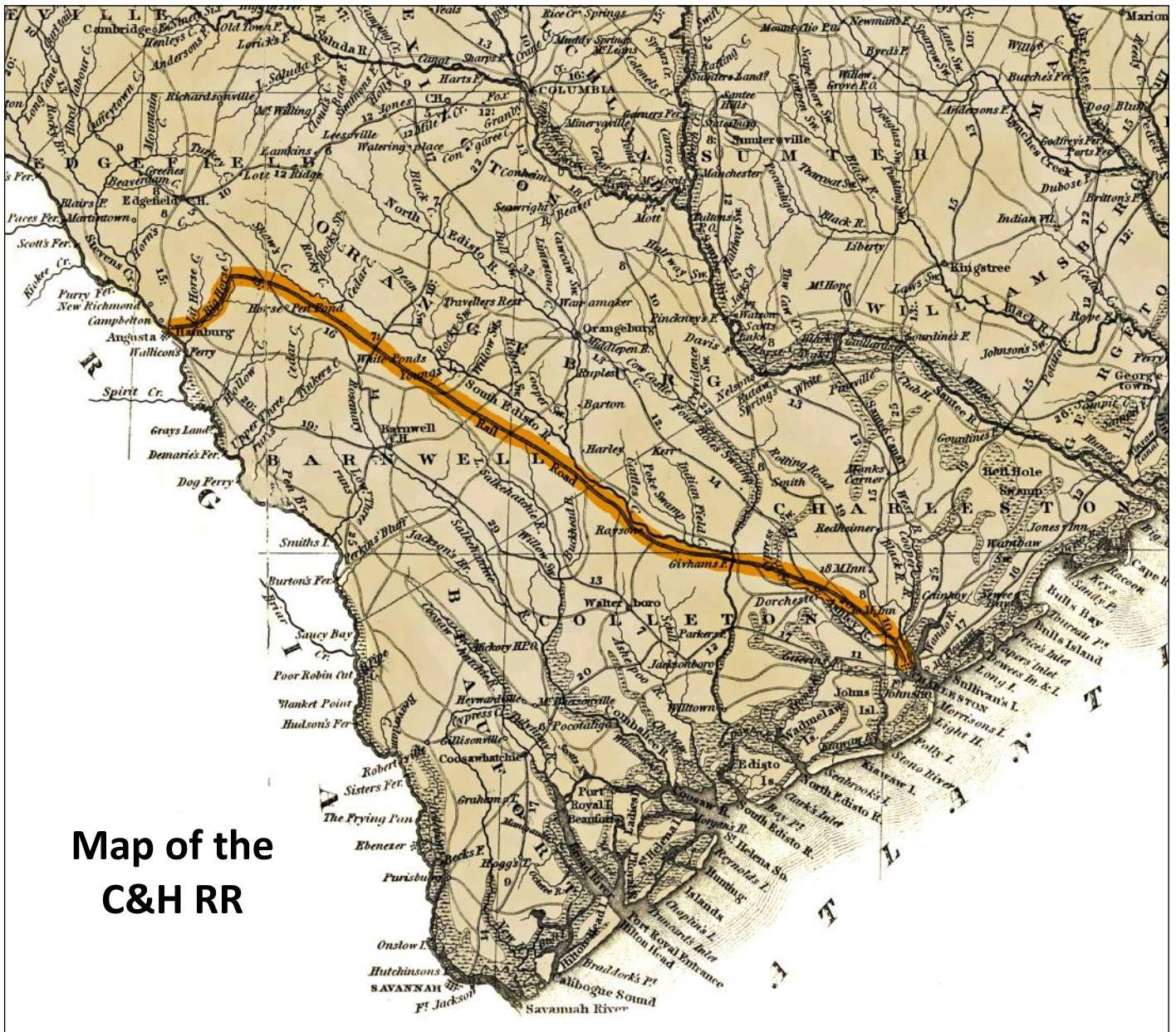
*Excerpted with edits from "Centennial History of South Carolina Railroad" by Samuel Melancthon Derrick, 1930.*

#### Towns on Route

Hamburg, North Augusta (1900), Clearwater (1901), Bath (1852), Marshes (1850s), Langley (1871), Warrenton (1898), Graniteville (1848), Aiken (1834), Roseland (1890), Woodward (1853), Johnson (1860), Mont Morenci, Oakwood (1893), 110 Mile Turnout (1850s), Windsor (1856), White Pond (1880), Williston (1830), 96 Mile Turnout (1850s), Mims (1857), Elko (1871), Clinton (1833), Blackville (1834), Lees Station (1873), Lees Turnout, Lees, Grahams Turnout (1838), Grahams, Denmark (1892), Lowery (1850), Bamberg (1854), Midway (1833), Edisto Turnout (1893), Edisto, Embree (1913), Branchville (1835), 58 Mile Turnout (1850s), Badham (1901), Reevesville (1854), St. George, Byrds (1888), 41 Mile Turnout (1850s), Rumph's Bridge (1856), Rumphtown, Pregnalls, Ross Station (1850s), Dorchester (1903), Latimer (1850s), Timothy Creek (1843), Ridgeville (1844), 26 Mile Turnout (1850s), Jedburgh (1852), Summerville (1835), Lincolnville (1883), Ladsons (1850s), Anneville, Ladsons, Ashley Phosphate (1889), Midland Park (1909), Sineaths (1850s), Ten Mille Hill (1879), Ten-mile, The Farms (1913), 7 Mile Pump (1850s), Horse Pond (1916), Myers (1894), Charleston. ✓

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Map of the C&H RR

**“Our First Locomotive”  
Anderson Intelligencer  
May 3, 1893**

The claim of the New York newspapers that the old engine “John Bull,” built in England in 1831, now on its way to the Chicago Exposition, is the first locomotive engine ever used in America, is successfully controverted by W. G. Mazyck, of Charleston, who writes to the New York *World* as follows:

In 1830 the South Carolina Railroad Company, con-

tracted with Mr. E.M. Miller, of this city, to build a locomotive for the company. This engine, which was called the Best Friend, was *put into service* in November, 1830, and was *the first* locomotive ever built or used in America for active service upon a railroad.

By entries in the minute book of the board of directors of the South Carolina Railroad and Canal Company, it is shown that the best friend, after due trial *in service*, was formally “accepted” December 20, 1830; that at the meeting of the board held January 3, 1831, rates of speed and number of passengers to be carried were

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Best Friend of Charleston in operation.

point establishment. The exact maximum speed it can attain has not been ascertained, *there being no railroads in this vicinity* upon which it could be tried.”

Dr. Bishop, in his “History of American Manufactures,” vol. II., p. 846 says that the locomotive Phoenix was built in 1830, and adds that a second one, the West Point, was built by the same foundry for our road in the same year., and a third, the De Witt Clinton, in the following spring for the Mohawk and Hudson Railroad, which road “about the same time,” spring of 1831, imported the Stephenson locomotive John Bull Dr. Bishop’s statement regarding the West Point probably explains the use of the plural “engines” above noted.

“A locomotive called the South Carolina, designed by Horatio Allen

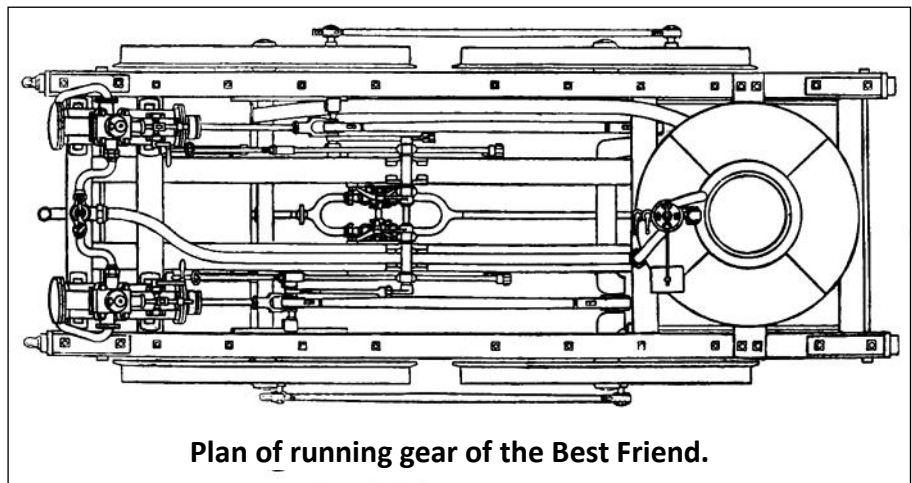
fixed, and that on April 4, 1831, a rule was adopted that “no person be allowed to go on the engines” (mark the plural, please.)

On Friday June 17, 1831, owing to the ignorance of a negro fireman, the Best friend exploded. She was afterwards repaired and called the Phoenix.

In the Charleston Courier of June 30, 1830, we find this extremely interesting notice:

“We find the following account of a locomotive steam engine ordered by our railroad by the New York *Journal of Commerce* of 18<sup>th</sup> inst.:

“A new steam locomotive engine has *just been completed* (italics mine) at West Point Foundry, of this city. In its external contour it bears some resemblance to the celebrated London engine, the Novelty, but it is totally different in its arrangements and details. [Here follows a description too long for quotation here.] It has been got up by the enterprise and under the particular direction of Mr. E.L. Miller, of Charleston, S.C. and constructed by Mr. Hall, engineer of the West



Plan of running gear of the Best Friend.

was built for the South Carolina Railroad by the West Point Foundry Association in the year 1831.”

The York, built by Davis and Gartner, of York, Pa., for the Baltimore and Ohio Railroad, was placed on the road between Baltimore and Ellicott’s Mills August 30, 1831, and in the same month the John Bull “was received in Philadelphia for the Camden and Amboy Railroad and transportation Company.” (M.N. Forney, *Scribner’s Magazine*, August, 1888, p. 175) So that, you see, the John Bull had at least four, and probably, five,

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predecessors, which were in actual service when she was “received in Philadelphia,” three of them built in your city for the South Carolina Railroad Company, and one of the three, the Best friend, completed before June 18, 1830, (her shipment South, as shown by Mr. Miller’s letters, was unavoidably delayed on account of sickness of the season,) antedating the John Bull’s “reception” by fourteen months.



Lionel even had a model of the Best Friend.

# The Reconstructed Best Friend

**Memories of the Best Friend of Charleston by:  
CRHA member Charles Powell**

My first encounter with the BF was around 1965 in Chattanooga. I saw it on display in Terminal Station when my mother and I rode the "Royal Palm" to Cincinnati to visit her brother. It was placed there for display because at the nearby Union Station, the L&N had the Civil War "General" on display. I guess Southern was not doing anything with the BF and since it had to be somewhere they put it in competition with the L&N.

My first hands-on encounter was 1970 or 1971 when the Tennessee Valley Railroad Museum opened its site on Tunnel Boulevard to the public. The BF was brought in for the show and I was one of the museum members assigned to help unload and prepare the train for the show. That is when I met Johnny Smith and probably started the process that ended in me replacing Johnny when he retired in 1984.

I replaced John A. (Johnny) Smith as Engineer – Coordinator of the Best Friend of Charleston in February 1984 and was responsible for its maintenance and operation until November 1987 when Norfolk Southern discontinued the program.

The reproduction of the Best Friend and train was built by Southern Railway in 1928 to commemorate the 100<sup>th</sup> anniversary of the original train. This was a system project with the locomotive components being constructed at Finley Shops in Birmingham, the coaches at Hayne Shop in Spartanburg, and final assembly at the shop in Charleston.

The new Best Friend was introduced to the public

on November 19<sup>th</sup> and 20<sup>th</sup> 1928 in Charleston after which it was run under its own steam from Charleston to Augusta, Ga, then to Columbia, and later toured additional Southern Lines in South Carolina.

According to the December 1928 *Southern News Bulletin*: “The reproduction of this historic locomotive and its train by the Southern serves to call attention to the extraordinary part which the businessmen of Charleston played in the development of the early railroads of the South.”

Over the next 50 years the train was occasionally brought out for various events including operating in the Chicago Railroad Fair in 1948 but mostly as a static display. In 1969 Southern President W. Graham Claytor decided to restore the Best Friend for the South Carolina Tricentennial celebration in 1970.

Johnny Smith was at the time System Engineer for special projects in the Southern Engineering & Research Dept, but his railroad career started out as a shop laborer in 1940 followed by a machinist apprenticeship on steam locomotives. He was picked for the project to get the Best Friend in shape for the Tricentennial. This included a new boiler made by Lucy Boiler in Chattanooga and equipping a flat car and box car to be the transport equipment to move the train between show locations.

Southern realized the benefit of the positive public relations the little train had brought the company, so they decided to keep it operational after the end of the Tricentennial. After the 1982 merger with the Norfolk and Western the new Norfolk Southern toured the train

over the former N&W lines as well. In August of 1987, the two companies merged much of the operations together and granted early retirement to much of the supervisory management. It was decided that forces were spread too thin to provide the support to keep the program going and it was decided to conclude operations at the end of the 1987 season in November.

On a personal note, I think the highlight of my four years with the train was attending the 1986 World's Fair Exposition in Vancouver, British Columbia. The Fair's theme was transportation and as a part of it they set up a "Steam Expo" with nearly 30

steam locomotives from the US, Canada, and even a couple from Great Britain. The keynote event was a steam parade from the expo site along the waterfront and a reviewing stand. I felt like I was making the winning touchdown in the Super Bowl as the route was lined with people all cheering and waving!



**SOU #722 made its first public excursion debut in September 1970 with Nos. 630 and 4501 for the National Railway Historical Society (NRHS) convention in Charleston, South Carolina. The Fireman on the Best Friend locomotive is Ray Mauney, System General Road Foreman of Engines, and the gentleman on the tender is Bob Gause, a Mechanical Department Supervisor from Columbia. Johnny Smith was the "Engineer - Coordinator" for the Best Friend and he is not in the picture, probably just out of the picture talking to the crowd.**



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