Carolina Conductor BREE

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Monthly Newsletter of the Carolina Railroad Heritage Association, Inc.

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Preserving the Past Active in the Present Planning for the Future

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

Meeting Site:

Fountain Inn Presbyterian Church

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

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

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CSX Transportation

Acronym: CSX RR Year Incorporated: 1986 Year Line Operational: 1986 Year Service Ended: Still Operational

1986 - Merger of Seaboard Systems Railroad (part of which was the Seaboard Coast Line Railroad) with Chessie System Railroad.

1986 - Acquired the Clinchfield RR. 1987 - Sold assets to the South Carolina Central Railway.

1990 - Sold assets to the South Carolina Central Railway.

1995 - Sold assets to the Carolina Southern Railroad.

2000 - Acquired the Central Railroad of South Carolina.

2006 - Sold assets to the Greenville & Western Railway.

CSX Transportation (reporting mark CSXT), known colloquially as simply CSX, is a Class I freight railroad operating in the eastern United States and the Canadian provinces of Ontario and Quebec. The railroad operates approximately 21,000 route miles of track. The company operates as the leading subsidiary of CSX Corporation, a Fortune 500 company headquartered in Jacksonville, Florida.

CSX Corporation (the parent of CSX Transportation) was formed in



1980 from the merger of Chessie System and Seaboard Coast Line Industries, two holding companies which controlled a number of railroads operating in the Eastern United States. Initially only a holding company itself, the subsidiaries that made up CSX Corporation were gradually merged, with this process completed in 1987. CSX Transportation formally came into existence in 1986, as the successor of Seaboard System Railroad. In 1999, CSX Transportation acquired approximately half of Conrail, in a joint purchase with competitor Norfolk Southern Railway.

CSX and its chief competitor, the Norfolk Southern Railway, have a duopoly on the transcontinental freight rail lines in the Northeastern and Southern Unit ed States (South Atlantic and East South Central states).

Early Years

CSX Corporation was formed on November 1, 1980, as a merger between Chessie System and Seaboard Coast Line Industries.

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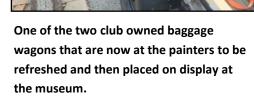
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Museum Happenings



Picking up, really heavy, club parts from Republic Locomotive and moving to new storage unit. We got to play while at Republic. Pat O'Shields running the new switcher with three joysticks.





The yard sale was a success and raised much needed funds for the repainting of the caboose.

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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FREIGHT CAR SHOPS

Streamline Car Repair

No major event, comparable to the intro-duction of the diesel locomotive, has come along to revolutionize, overnight, the Southern's methods of rebuilding and repairing cars.* There has been, nevertheless, notable steady improvement, marked by the gradual adoption of new tools, machines and

As in motive power, the trend is toward centralization, with heavy repairs and rebuilding concentrated in just a few shops. This, of course, permits the Southern to take full advantage of mass-production techniques, and provide modern types of shop equipment and machinery. Three shops—at Spencer, Hayne, and Coster (Knoxville)—now do all the program repairing and rebuilding of freight cars. They also rebuild cabooses and wrecked cars and manufacture some fabricated parts and assemblies, both for their own use and for outlying rip tracks. Southern hasn't entered the car building business however; for it does not build any new freight or passenger cars.

The Spencer and Hayne freight car shops are in steel-frame sheds with overhead cranes and separate fabricating, blacksmith, pipe, airbrake and other related facilities. The Coster operation has only recently been converted to a heavy repair shop. It occupies, in addition to the old car shed (equipped with overhead crane), a former steam locomotive erecting shop and the machine shops which have been converted for production car work. The main building, of the longitudinal type, is 750 ft long and has space for four through tracks, all served by overhead cranes. Sub-assembly

shops and the wash and locker rooms are on the balcony and directly below it. The adjacent boiler and blacksmith shops are now devoted to fabricating and forging operations. Improvements in these sub-shops, intended for better and more economical production, are now in the planning stage.

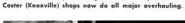
All three heavy repair shops use assemblyline methods for program work. The cars are first stripped on track outside the shop, sandblasted and given a coat of primer. As they enter and move through the shop itself, the side and end assemblies, floors, trucks and appliances are added progressively until the rebuilt cars reach the end of the shop where they're painted and stencilled.

These "mass production methods" have helped reduce "per car" cost. Concentrating the program rebuilding at just three shops has also helped cut costs, as compared with the former procedure of dividing each program among a number of shops.

Consolidating shops and concentrating the program work has also enabled the Southern to discontinue heavy repairs at several car shops, which are now used only for running repairs. Three new rip tracks have recently been completed in connection with the new yards at Knoxville, Birmingham and New Orleans.

Wheel shops, too, have been consolidated and modernized. Freight car wheel work is concentrated in efficient shops at Spencer and Knoxville; while steel wheel work for diesel locomotives and cars is performed at Spencer and Chattanooga.

All of these shops have high speed hydraulic wheel mounting presses, axle lathes and boring mills of the latest types using carbide-tipped tools; burnishing lathes with opposed rolls and Magnaglo test benches. The storage tracks Continued on next page





STAINLESS STEEL fluting is straightened in

ADJUSTABLE "retarder" slows down the speed of wheels



Continued on Page 4 - Hayne

*Although as previously noted, the triumph of the diesel itself has had an indirect effect on car main-tenance planning and procedures, and the presence of steam locomotive shop facilities, no longer needed, resulted in converting the Coster car shop at Knoxville to a heavy program car repair shop.

MODERN RAILROADS, APRIL, 1953

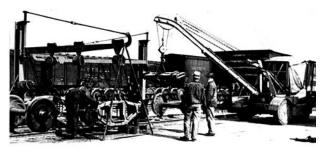
An article supplied by C. Myers collection from Modern Railroads April 1952.

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FREIGHT CAR SHOPS Continued



MECHANIZATION has extended to Southern's rip tracks, too. The mobile crane truck and jib frames with chain hoists take hard work out of making wheel changes



BOTH the scaffolds and the "swing bridge" from which freight cars are sand blasted at the Spencer car shop are counterweighted. Car puller positions the cars

and methods of handling wheels and axles have been revised to eliminate lost motion and step up production. Mono-rail and jib cranes, fork lift trucks, gravity ramps and other new handling machines take a lot of the hard work out of machining and mounting wheels and axles

Reducing the number of shops—most of the consolidations have come since 1946—has in itself been a big factor in improving over-all shop efficiency on the Southern. And, equally important, it has opened the way to an unprecedented modernization of the tools and equipment of the fewer remaining shops—highlighted by a total investment, since 1946, of \$3,000,000 in new shop machinery.

To take advantage of carbide tools, the Southern has been able in a very few instances to increase the operating speeds of some of its older machines. Usually, though, it has proved more economical to replace obsolete machinery with new, modern units. Many of these new machines have been purchased for the System's wheel shops, including fou Watson Stillman mounting presses, two Niles No. 4 profiling car whee lathes, five Consolidated axle lathes, four Consolidated opposed-rol burnishing lathes, and a new Consolidated car wheel boring mill to supplement the four modern units acquired during the war. The principal wheel shops are also equipped with Hammond roughing and finishing grinders so that carbide tool bits can be ground accurately with a minimum of effort.

Car shops, too, have received many new types of machines to help them speed their work. In 1950, a 150-ton press brake was installed in the Hayne car shop in conjunction with a Travograph cutting machine for fabricating steel car parts. A Unionmelt submerged-are automatic welding machine, recently placed in the Spencer shop, has been so successful that three more are now in the major car shops.

Most of the tools and machines in the System's diesel shops are o necessity new, although in a few cases equipment formerly used for steam locomotive work was successfully adapted. Most of the diesel shops have Magnus Ajadip parts cleaners, Farr or Paxton-Mitchell filter cleaning machines, valve face and seat grinders, power and impaction of the continued on next page.

MODERN RAILROADS, APRIL, 1953

FREIGHT CAR SHOPS Continued

wrenches, hydraulic lug presses, electric testing equipment and portable tools and fixtures.

Material handling methods have also come in for attention at Southern's shops. Not only the wheel shops but all shops—large and small—are using new overhead cranes and electrical hoists as well as crane, fork lift and platform trucks and tractors. The larger diesel and car shops also have their own highway trucks.

Both gas and electric welding have helped the Southern produce more work at lower cost in its shops. Its recently-acquired submerged-arc and Heliarc machines, in combination with cutting machines, have made it possible to use sub-assemblies in locomotive and car programs. Automatic followers and profiling attachments have also proved successful on vertical milling machines, car wheel lathes and axle lathe.

Mechanical Staff Develops Short Cuts

Sometimes, even the addition of just one new machine or a minor change in shop procedure can materially increase production or effect worthwhile economies. Discovering such instances is one of the main duties of Southern's Mechanical staff, some of whom are almost continually "on the go," periodically visiting various shops to discuss new ideas for improving shop efficiency with local supervisors.

With the Southern's shops located in the Deep South, a land that still honors old-fashioned self reliance and individual initiative, it's not surprising that many shopmen have taken a real interest in working out ways to do their jobs faster and better. Nor is it surprising that the Southern's management encourages shop personnel to develop such things as new gages, jigs or fixtures. When a new device proves satisfactory, drawings are prepared for distribution to other System shops. This approach has stimulated the development of new devices and has led to a spirit of friendly rivalry between shops.

A typical time-saving shop-developed device—one of hundreds—is the jumper cable test board developed by an Electrician Foreman at Citico diesel shop, Chattanooga. It permits making open, short circuit, ground and load tests on each of the 27 wires in a diesel locomotive jumper cable in less than three minutes. The two ends of the jumper are plugged into receptacles on the test panel and a rotary switch is turned to send the current through each wire in turn. A light bulb indicates whether the wire is open, grounded, or shorted to another wire. Pressing another switch passes a 25-ampere load through the wire.

Every phase of diesel locomotive maintenance and repair has been the subject of improvements by ingenious shop supervisors and employees. They've invented many of the special gages for liners, heads, connecting rods and baskets. Small drill presses have been converted for reaming valve seats in cylinder heads; stands and fixtures have been built for traction motor repair work.

Various Types of Non-Destructive Testing

The Southern has found non-destructive testing to be an economical method of preventing road failures of locomotive and car parts. Magnaflux power units for dry-powder testing have been placed in all shops and diesel houses on the System; and Magnaglo test outfits for crankshafts are in service at Spencer and Atlanta. The same method is also used for production testing of engine parts at Birmingham, Chattanooga and Knoxville; and of axles at the wheel shops. Portable black lamp outfits test pinions and gears using a hairpin coil. For checking diesel valves the Southern prefers a dye penetrant test, developed by its Test Department.

"Keeping a good house," the Southern has found, pays off through better quality work and an improved shop safety record. All shop interiors and machinery are painted in accordance with a nationally known color plan. Structural steel is aluminum, with gray for walls and columns. Yellow, orange and red are used to mark aisles, railings, switches and fire protection equipment. Machinery is painted vista green with focal areas, switches and hand wheels in ivory, orange, yellow or beige depending on their function.

Cleanliness is also stressed in and around rolling equipment. All the large shops and many of the smaller ones have washing tracks and equipment to keep locomotives and cars clean both inside and out. Supervisors take special pains to eliminate leaks or defects which might result in water or oil on locomotive floors.

MODERN RAILROADS, APRIL, 1953

Continued from Page 1 - CSX

The name came about during merger talks between Chessie System and SCL, commonly called "Chessie" and "Seaboard". The company chairmen said it was important for the new name to include neither of those names because it was a partnership. Employees were asked for suggestions, most of which consisted of combinations of the initials. At the same time a temporary shorthand name was needed for discussions with the Interstate Commerce Commission. "CSC" was chosen but belonged to a trucking company in Virginia. "CSM" "Chessie-Seaboard Merger") was also taken. The lawyers decided to use "CSX", and the name stuck. In the public announcement, it was said that "CSX is singularly appropriate. C can stand for Chessie, S for Seaboard, and X, which actually has no meaning." However, an August 9, 2016, article on the Railway Age website stated that "the 'X' was for 'Consolidated' ". A fourth letter had to be added to CSX when used as a reporting mark because reporting marks that end in X means that the car is owned by a leasing company or private car owner.

The originator of SCL was the



Original logo for the CSX Corporation, emphasizing the "multiplication symbol" X.

former Seaboard Air Line Railroad, which previously merged with the Atlantic Coast Line Railroad in 1967 to form the Seaboard Coast Line. In later years, it merged with the Louisville & Nashville Railroad, as well as several smaller subsidiaries such as the Clinchfield Railroad, Atlanta & West Point Railroad, Monon Railroad and the Georgia Railroad. From the late 1970s onward, these railroads were known collectively as the Family Lines. In 1982, they were merged into a single railroad, the Seaboard System Railroad.

The origin of the Chessie System was the former Chesapeake & Ohio Railway, which had merged with the Baltimore & Ohio Railroad, and the Western Maryland Railway.

Despite the merger in 1980,



CSX headquarters in Jacksonville, FL.

CSX was a paper railroad (meaning no CSX painted locomotives or rolling stock) until 1986. In that year, Seaboard System changed its name to CSX Transportation. On April 1987, the B&O merged into the C&O. With the Western Maryland having already merged into the C&O, this left the C&O as the sole operating railroad under the Chessie System banner. Finally, on August 31, 1987, C&O/Chessie System merged into CSX Transportation, bringing all the major CSX railroads under one banner.

Conrail Acquisition

On June 23, 1997, CSX and Norfolk Southern Railway (NS) filed a joint application with the Surface Transportation Board for authority to purchase, divide, and operate the assets of 11,000-mile (18,000 km) Conrail, which had been created in 1976 by bringing several together ing Northeastern railway systems into a government-owned corporation.

On June 6, 1998, the STB approved the CSX-NS application and set August 22, 1998, as the effective date of its decision. CSX acquired 42 percent of Conrail's assets, and NS received the remaining 58 percent. As a result of the transaction, CSX's rail operations grew to include some 3,800 miles of the Conrail system (predominantly lines that had belonged to the former New York Central Railroad). CSX began operating its trains on its portion of the Conrail network on June 1, 1999. CSX now serves much of the Eastern United States, with a few routes into nearby Canadian

In actuality, not all of Conrail was eliminated. There were a few parts of Conrail that both CSX and NS wanted, and neither wanted to allow the other to have total control over. Those small pieces remained owned by the renamed "Conrail Shared Assets," (later "Conrail Shared Assets Operations") so that the pieces were effectively owned and operated by a separate railroad owned by both railroads, thus neither railroad would control those pieces.

Into the 21st Century

The company introduced its

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current slogan, "How Tomorrow Moves", in 2008.

In 2014, Canadian Pacific Railway approached CSX with an offer to merge the two companies, but CSX declined, and in 2015 Canadian Pacific made an attempt to purchase and merge with Norfolk Southern, but NS declined to do so as well.

Ιn 2017, CSXnounced Hunter Harrison would become its new chief executive officer; a settlement with activist investor Paul Hilal and Mantle Ridge. CSX added five new directors to their board, including Harrison and Mantle Ridge founder Paul

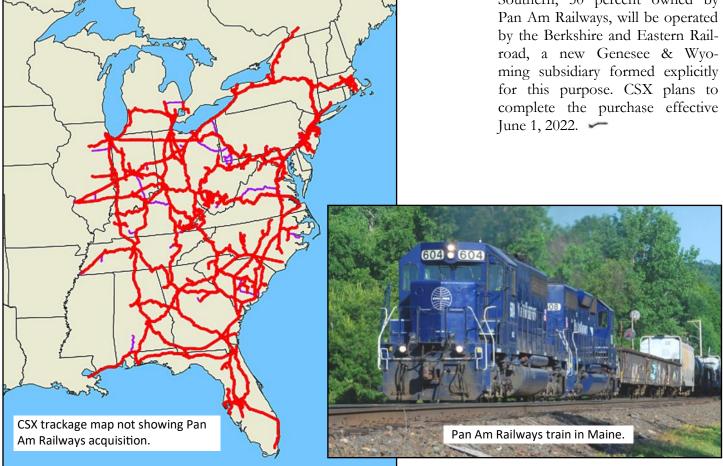
Hilal. Mantle Ridge owns 4.9% of CSX. Harrison quickly moved to convert CSX rail operations to precision railroading. On December 14, 2017, CSX announced that Hunter Harrison was on medical leave. Two days after the announcement, Harrison died, one day after being hospitalized for complications of an ongoing illness.

CSX initially saw a 10% drop in its stock price but turned around to hit a new 52-week high less than a month later (January 2018). Harrison's successors have continued the shift to precision railroading, with most hump vards converted to flat vards, low volume shipping lanes eliminated and reductions in rolling stock and work force.

Pan Am Railways

November 30, 2020, CSX Transportation's parent company CSX Corporation announced on social media that they had come to an agreement with Pan Am Systems to purchase New England based Class II Pan Am Railways, pending regulatory approval from the Surface Transportation Board.

The STB approved the purchase on April 14, 2022. As part of the acquisition, Norfolk Southern Railway will gain trackage rights over several CSX lines, and Pan Am Southern, 50 percent owned by



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CSX Paint Schemes













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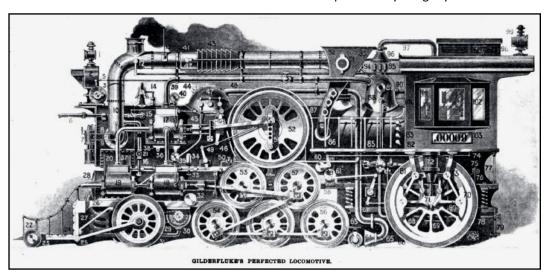
Subdivisions Out of Spartanburg

The Spartanburg Subdivision is a railroad line owned by CSX Transportation in the U.S. state of South Carolina. The line ran from Spartanburg, South Carolina, to Greenwood, South Carolina, for a total of 61.8 miles. It goes through the only active railroad tunnel in the state. At its north end the line continues on the Blue Ridge Subdivision at its south end the line continues as the Monroe Subdivision and at its west end the line continues on the Belton Subdivision.



Photo provided by Craig Myers.

Would someone like to explain how this loco works and what it's advantages are over a normal steam loco?





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