

New England Electric Railway Historical Society

Bay State Street Railway #4175

The “Nine Lives” of 4175

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Seashore’s car 4175 was one of 50 double-truck semi-convertible cars with 28-foot bodies, numbers 4150-4199, ordered by the Bay State Street Railway from the Laconia Car Company on 4 April 1913 and delivered late that year or early 1914. Initially it was assigned to the Chelsea Division and was based at the Revere Carhouse on 30 June 1914 as well as on the same dates both in 1915 and 1916. By 30 June 1917 it was in Newport R. I. and was still there when the Bay State was placed in receivership in December, 1917.

While at Revere, 4175 was operated on the busy 6.57-mile route from the Scollay Square Station (Brattle Street Loop-Boston) to Beachmont via the Tremont Street Subway, North Station, City Square (Charlestown), Chelsea Square and Winthrop Avenue. It was a busy line, particularly in summer, but not a very fast one, the schedule speed being only 8.44 miles and hour. After being transferred to Newport, the semi-convertible was run mostly on the Newport-Fall main line via Tiverton, Portsmouth and Middleton.

Whether 4175 was converted to a prepayment type while in Revere or Newport is not clear but it is known that on 15 October 1917, the Bay State issued a general order containing instructions for the operation of such equipment. Among other things, the order stated that passengers must enter via the rear door and exit via the forward door **except** in the case of a crowded car when, if more expedient, they may leave by the nearer door. It noted that the prepayment cars had buzzer signal systems, with push-buttons on the window posts, so passengers could notify motormen that they wished to alight at the next stop.

Even in the early 20th century, technology was on the move and 4175 was constantly being modified by its various owners. It is interesting to note, the two longest periods of its existence are its period as a cottage and its restoration period! So let’s look at each one of these “lives” as 4175 commences with its creator to its re-creator, Seashore.

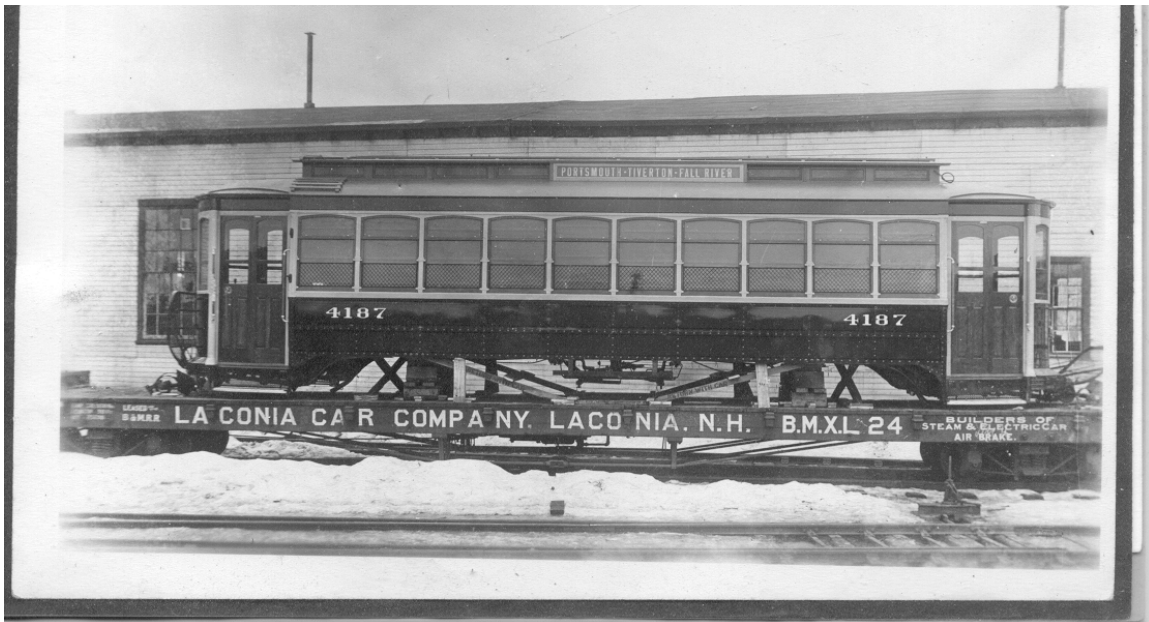
“The Nine Lives”

1. 1914 4175 Delivered from Laconia Car Co. as two-man car
Operated on Bay State Street Railway. Originally assigned to Revere, Ma. for Boston-Beachmont line.
2. 1917 In Newport, R. I. by July 1.
3. 1918 12 October. First identified as Prepayment car but still two-man operation.
4. 1920 Sold to Newport (RI) County Electric Company,
(one of 6—numbered 14-19) Converted to one-man operation some time thereafter
5. 1926 Sold to Coast Cities Railway Co. Asbury Park, NJ, numbered 703

6. 1929 Removed from service, it became a cottage in Egg Harbor, NJ.
7. 1976 Acquired by Seashore Trolley Museum
8. 1985 Restoration commences
9. ????

Notes: on each “Life”

1. This represents the truly classic New England deck-roofed semi-convertible car (Laconia Car Company’s version, as specified by E. W. Holst, the Bay State’s Chief Engineer). The two-panel cherry vestibule doors were kept closed except in warm weather and the passenger entrance/exit was in the rear. The unheated vestibules¹ were separated from the body by a pair of sliding cherry pocket doors at each end of the body. The conductor collected fares as best they could by roving the car and ringing them up pulling on the leather cord suspended over the aisle and connected to a large brass fare register mounted inside the bulkhead over the doors. Signals from the conductor were relayed via cords running through cast bronze castings mounted under the clerestory along both sides and connected to a small bell mounted over the motorman’s head. The only warmth in the car was from electric resistance heaters mounted under each seat—none for the motorman! The car came equipped with “Root scrapers” mounted in front of the wheels on each end. They looked like small cultivating plows and were lowered by a chain arrangement. These kept the flangeways and the rail clear where the tracks were in dirt streets. They were operated by a small wheel mounted on a shaft near the hand brake gooseneck shaft. To keep people from being run over, the car was equipped with a very large ‘fender’ made of strap and angle iron and could be folded up against the front of the leading end.



¹ O. R. Cummings questions that the vestibules were unheated. We have seen no evidence in any photographs but they aren’t clear either. So—we’re waiting for someone ‘who was there’ who can tell us!

2. Initial operation in Newport under Bay State management probably was in the car's as-built condition.
3. Prepayment involved rear entrance-front exit. The passengers generally boarded at the rear door and paid their fares to the conductor (or dropped them into a fare box) as they passed his station prior to seeking seats or finding standing room in the trolley. They exited the front door. To make this possible, required the most major modification to the car during its service existence. With this configuration the motorman was no longer forced to stand in an unheated, closed vestibule but received warmth from heaters mounted horizontally in front of the step from the platform into the car body. To indicate their status, a sign "PREPAYMENT" in large letters was placed on the side of the car in front of the rear door and over the right-hand front window.

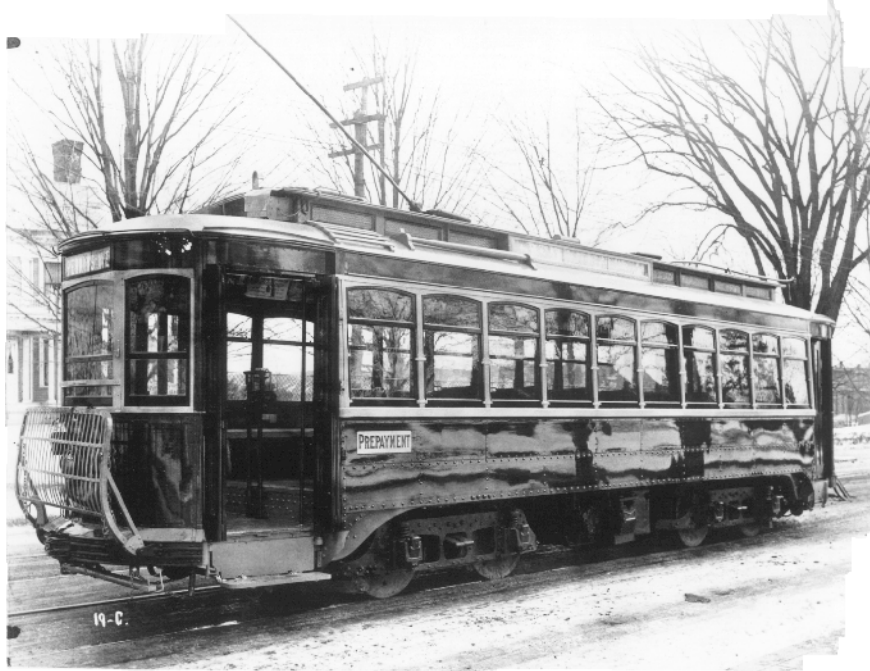
4.



Gone were the inner bulkheads and their sliding pocket doors as well as the wide cherry vestibule doors. The fare box was mounted on a special stand in the center of the newly opened arched bulkhead. In this stand also were the levers controlling the pneumatic door engines. (Our Eastern Mass 4387 has these stands but the door controls in it were disabled long before it arrived at Seashore. Those which do work are on the front on each side of the motorman.) To make passage easy and avoid injuries, the corners of the longitudinal seats were rounded. Another safety feature made possible by the pneumatic doors, was that the car could not be operated with the doors open. The circuit for operating the main power contactors, located under the car, had to flow through interlock switches located on each door engine. (Interestingly, 4387, a newer car, does not have this feature!) It was now more difficult for kids to hitch a ride on the outside of the car now that it had folding steps. Passengers could signal their intention to debark by pressing a button mounted on the window post by each seat causing a buzzer to sound in each vestibule. (The remains of the carved-out grooves and a mount for the button housing still remain in the original posts.)

The original plan of the Bay State, was trumpeted in the 17 March, 1917 *Electric Railway Journal* (p. 502-3) "Bay State Car Remodeling: Inclosed (sic) Vestibules and Pneumatically Operated

Doors and Steps Added to 200 Cars in City and Suburban Service.” Unfortunately this was not to be. As best can be determined only 37 of the 28-foot semi-convertibles were given the “full treatment” in converting them to prepayment, the major reason being the high cost of the work. The Bay State was in serious financial straits during much of 1917 and the company was placed in receivership on 13 December of that year, no funds whatsoever to continue the prepayment project were available. 4175 was one of only 37 of the 28-ft. semi-convertibles (including some of the other 4100’s) given the “full treatment” in converting the work.



The plan was then continued for some semis but they were revamped for prepayment fare collection in a much less elaborate manner by installing mechanical door “engines” in each vestibule. The “engine” was the motorman or conductor, moving levers attached to the doors. The bulkhead doors were secured in the open position and the fare boxes were hung from some sort of bracket or stanchion in the vestibules. The conductor simply stood beside the box and made certain each boarding passenger paid his fare before giving the motorman the “two bells” signal to proceed. (Connecticut Company car 1160 and Manchester 38 came equipped in this manner 1160 will be kept so. However in 38, which was not a prepayment car, the sliding doors were removed but Seashore backdated it to its original interurban configuration, removing all the prepayment and safety equipment and reinstalling the sliding door.)

4175 was equipped with the folding doors and steps that remained on the car until they were removed for ‘backdating’ the car by Seashore. The remains of the doors and some of the step mechanisms were placed in storage on 29 September 2002.

5. While six 4100s of the 4150-4199 series were assigned to the Newport Division of the Bay State upon delivery in 1914, 4175 was not among them. In addition, there were 11 other double-truck cars that would prove sufficient to provide base service requirements for the system. The agreed purchase price for the lot was \$76,877.54 which was considered a bargain. Maintenance had been good, and all were ready to roll.

When the Newport county Electric Company was organized to take over the Newport Division, six of the Laconia semis: 4165, 4175, 4184, 4185 4187 and 4188 were conveyed to them, very likely by the Bay State. The Newport Electric Corporation succeeded the Newport county Electric Company in October, 1921 and shortly thereafter the six were renumbered 14-19, not necessarily respectively. (Thus we do not know what number 4175 carried in Newport.) As the double-truck closed cars were repainted in the new color combination of red and white, each received a new number from 1 to 19, replacing the former three and four-digit system introduced by the Old Colony two decades previously.

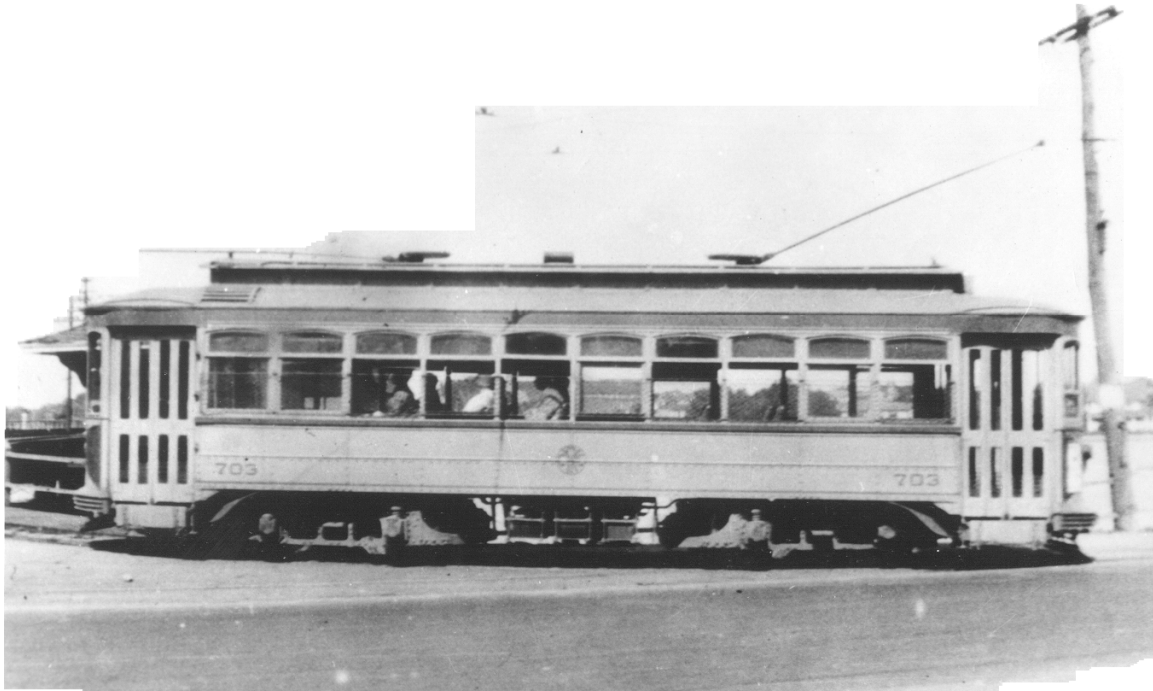
We found evidence of an emergency valve in the floor under one of the cross seats, when the car was rebuilt by STM, indicating it had been converted to one-man operation at some time, likely in Newport. It is also very likely that the door controls and fare box were moved to positions more convenient for the motorman to operate and observe, but we don't have any evidence of this. Passengers would then enter through the front and exit from the rear and possibly also front doors. There would also have been an emergency stopping valve installed with a cord easily accessible to the passengers. (As in EMSRy 4387) Somewhere along the way the Root scrapers and the large fenders disappeared.

5. With trolley service ending, the cars were available for sale. On 10 April 1926, power was restored to the Island Line in Newport and their big double-end nose plow was brought out to Bristol Ferry over the Newport & Providence to a point where the track closely paralleled the New Haven Railroad. Plows and trucks were removed and the component parts were loaded aboard flat cars for delivery to the Coast Cities Railway at Asbury Park, NJ. Two days later the six Laconia semi-convertible cars, only twelve years old, were moved from Vernon Avenue Yard to Bristol Ferry for the trip to the Jersey shore.

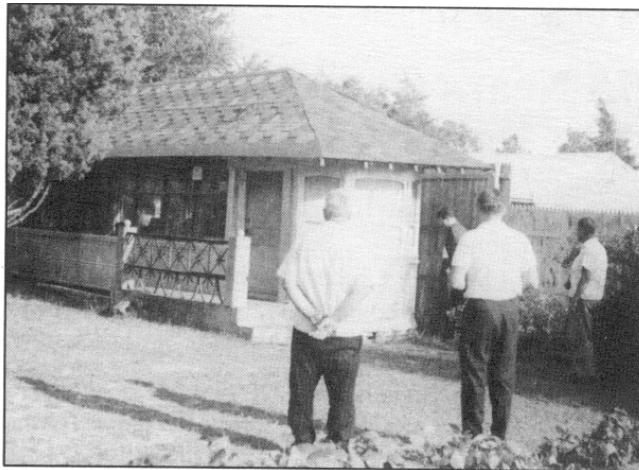
Starting in June, 1926 the Coast Cities Railway* was able to cut the headway of trolleys on their Long Branch line from 20 to 15 minutes with the purchase of the six Laconia semis. The cars were repainted white with a greenish cast with an olive sunburst but the whistles were left on the cars. As whistles were a novelty, the motormen enjoyed using them to the discomfort of the neighbors! They did remove the distinctive three-window-long side signs from the clerestory area.

Our car was then numbered 703. We also note from a picture of it in Asbury Park that it was equipped with an HB lifeguard, having long before lost the distinctive large fender which folded down from the front. The lifeguards were totally under the platforms. There is a photo of the rather forlorn looking semis jammed into the yard outside the Vernon Avenue Carhouse in Newport without the fenders.

*Interestingly, a predecessor of Coast Cities Railway was the Sea Shore Electric Railway Company!



6. The 700 series cars ended up as summer cottages and chicken coops. Fortunately 703 became a cottage. During that period it was placed on some sort of foundation but apparently very close to marshy ground as there was considerable corrosion of its steel framework, especially the platform knees being the lowest part.



Here is a picture of the car when it was a summer residence in New Jersey. The photo dates from the 1950's.
Photo by Stephen D. Maguire.

Conversion to a house involved many changes, most significant being the removal of virtually all equipment: trucks, motors, controllers, electrical equipment, seats and most light fixtures. (Actual end of service on the Coast Cities was in 1931.)

On one side the original sash were removed and the window area covered with horizontal pine boards nailed to the outside using rather large common nails. The original cherry post caps were removed and replaced with some sort of cheap slatting. The headlining remained intact but the entire inside was painted first some sort of light green and later white.

The body of the car was preserved by the installation of a peaked roof over the car. For some reason they cut off the overhanging sides of the clerestory area but did leave on the roof canvas and trolley boards. The car was painted silver on the outside and in the vestibule area and had ‘modern’ lights wired with b-x cable. Fortunately original 27-ft. long cherry moldings in the headlining area and the clerestory sash were left intact. The headlining was all there.

7. The body of 703 was donated to Seashore largely through the efforts of noted trolley historian Steven D. Maguire of Belmar, NJ. After the car arrived, at Seashore it was obvious that the platforms were structurally unsound and required passing a heavy rail through the length of the body to act as a ‘strongback’ to prevent the platforms from falling off.² Thus it entered Town House Shop on temporary trucks in the winter of 1984 with one platform practically dragging on the rails.



Boston Elevated electric crane 0551 swung it to its present position, over track “zero” adjacent to the visitors gallery where it was set on the wooden carbody horses upon which it currently rests. (On 18 December, 2002, it was moved eastward two tracks, so it now resides, still on horses, next to the pit.)

8. The car’s restoration was a memorial to another trolley historian, Richard L. Wonson of Fall River, MA, who had met a substantial part of the cost of moving 4175’s body from New Jersey to Maine and who also contributed to a restoration fund established at the same time. Mrs. Laura Wonson, Richard Wonson’s mother, participated in a “champagne launch” of the car’s restoration work in the Shop in December, 1984. The restoration was formally commemorated with a dinner and ceremony on 20 June, 1985.

² From Cecilia Clapp—One small matter of fact—to the best of my recollection, George Burdick and I were responsible for putting the rail inside the car in an attempt to hold the vestibules up after its arrival at the property. Jointly we were responsible for much of the yard switching at that time and I guess we were worried that one more switching move, no matter how gentle, of that car would result in leaving one or both of its vestibules behind. I think I was guilty of the idea to put the rail in in the first place, and I do remember working on a crude arrangement of span wire and clamps in an attempt to attach the vestibule platforms to the ends of the rail which didn’t work as well as hoped, but did at least keep the vestibules with the car until its arrival in the Shop.

9. The goal of the restoration is to have a car that can operate on a limited basis to demonstrate what a car of its type—a typical New England trolley of the first decade and a half of the 20th century—returning to its first ‘life’. The quality of its new finishes and the relatively delicate construction and condition of the body mean it will be used only for special occasions.

At the present time (October, 2002), the interior has been largely reconstructed, the platforms and underframe rebuilt, roof rebuilt and many small components in the process of completion. Seating is on hand awaiting rebuilding. Trucks will come from a surplus Boston work flat 2003 and will receive an overhaul.

At the present rate of progress, the car could be finished in about five more years, but it would be great if it could be done on its 90th birthday in 2004.

Sources:

Rollsign September-October, 1988. “The Bay State’s 4100 Class: 1912-1937” by O. R. Cummings
BSRA

Newport-By Trolley! By Donald M. O’Hanley BSRA, 1976

Trolleys in the Coast Cities, by Joseph Eid, March, 1979.

Electric Railway Journal, various issues.