

New England Electric Railway Historical Society

Owner and Operator of the

Seashore Trolley Museum and the National Streetcar Museum at Lowell

Please Help Us Preserve Boeing-Vertol Standard Light Rail Vehicle No. 3424 from Boston



Boston's Massachusetts Bay Transportation Authority (MBTA) has retired the last of its fleet of Standard Light Rail Vehicles (SLRVs), built by the Boeing-Vertol Company in the 1970's. As the MBTA took delivery of its new fleet of Breda-built Type 8 Low Floor Cars (LFC), it systematically withdrew SLRVs from service. Problems with the Type 8s necessitated keeping the SLRVs in service longer than intended. Now that the problems have been resolved and the deployment of the Type 8s is complete, the MBTA has withdrawn the remaining SLRVs from service, and is in the process of scrapping them.

The Seashore Trolley Museum wants to save one of these historic cars. The SLRVs were the first streetcars built in the United States since the last PCC car was built in 1952. Although the SLRVs were initially troublesome, their procurement and development motivated resurgence in light rail transit in the United States. The SLRVs, which replaced most of Boston's PCC trolleys, were the first articulated cars since 1912 to run on Boston's light rail system. They were also the first streetcars in Boston to use a pantograph, a multi-link hinged apparatus that collects current from the overhead contact wire for use by the vehicle propulsion and auxiliary electrical systems, and completely replaces the trolley pole. The SLRVs were an important milestone in the development of Boston's subway/surface light rail line, the Green Line, and, in their role as the first United States standardized light rail vehicles for the industry, set the pace for mass transit systems all over the world.

The development of a United States Standard Light Rail Vehicle, denoted by the acronym "SLRV", was mandated by the Federal government's Urban Mass Transportation Administration (UMTA). Several American cities were looking toward replacing their PCCs with modern cars, and the San Francisco Municipal Railway (SFMR) had gone out to bid for new articulated cars. However, as there was a simultaneous downturn in the military and aerospace industries in the early 1970s, UMTA, as the funding agency for the new cars, saw an opportunity to utilize these industries' vast technical resources. UMTA rejected the bids and then, funded and supported an effort to develop a specification for a light rail vehicle that could be standardized in design and manufacture, and could be operated in several different cities with as few deviations in equipment configurations as possible. Three urban transit authorities, including the MBTA, SFMR, and the Southeast Pennsylvania Transportation Authority (SEPTA), and their respective consultants, participated with transit equipment industry representatives in the specification development.

The design was mandated to incorporate basic dimensions and other features that would enable common operation on all the participating properties. Operationally unique features were allowed, but they had to be minimized. One example was that MBTA SLRVs had air conditioning, but those for San Francisco did not. Another is that while MBTA SLRVs had fixed steps for only street-level loading, SFMR required steps that would adjust to both street-level and high platform subway loading. While each property could have its own step configuration, high-low level loading precluded folding doors. The fundamental requirement that the body structures be identical required the use of plug doors that opened out and then slid along rails on the car sides.

A specification was prepared and MBTA and SFMR together entered into a joint procurement partnership as the BSF Committee (the Boston-San Francisco Committee), which solicited bids for the detailed design and construction of the SLRVs. SEPTA decided to drop out of the process at that time and develop their own car design later. The procurement was publically bid, and the Boeing-Vertol Company of Philadelphia, Pennsylvania was identified as the lowest responsive and responsible bidder, and was awarded the contract in 1973.

Boeing-Vertol was the foremost builder of civilian and military helicopters, and a subsidiary of The Boeing Company. The SLRVs were the only light rail vehicles ever built by Boeing-Vertol, although they did build people-mover cars for the Morgantown, WV Personal Rapid Transit (PRT), a fleet of rapid transit cars for the Chicago Transit Authority, and the two UMTA State of the Art Cars (SOAC), which are on display at our museum. The SOAC cars were the test bed for many of the technologies used in the SLRV's and other vehicles.

The MBTA has set aside car No. 3424 for us, and we need to proceed with this acquisition immediately. Moving this car whole to the museum from Boston would be prohibitively expensive, about \$35,000. While this is certainly the preferred method, it will be much less costly to disconnect the two sections of the car and move them separately, at an estimated cost of \$3,000 each. Add to this about \$3,000 for disassembly and \$3,000 more for reassembly, and the total amount needed is \$12,000, a much easier sum to raise. These cars are designed so that the two sections can be separated at the articulation, and we have the knowledge and volunteer labor to do this. What we lack is the money, and this is why we are asking you, our members, to donate to this worthy project.

But time is very short, and a lot must be done to complete the fund-raising, arrange for a trucker, prepare the car for shipment, and coordinate all of these tasks.

The Boston Chapter of the National Railway Historical Society (NRHS) has kicked off this fundraising effort with a \$1,000 donation. Please join with them and your fellow members by making a donation to the moving costs of No. 3424 and making a true American icon, Boston SLRV 3424, the significant addition to our collection that it truly is. Thank you!!!

(Please use coupon below)

***YES! I want to contribute toward the acquisition of the MBTA's Boeing SLRV No. 3424!
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