

*"The Museum of Mass Transit"*



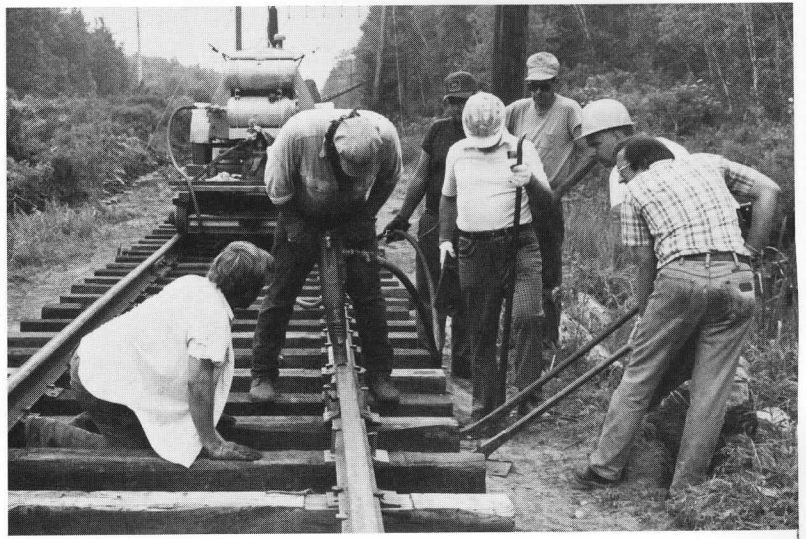
# NEW ENGLAND ELECTRIC RAILWAY HISTORICAL SOCIETY, INC.

OWNER AND OPERATOR OF THE SEASHORE TROLLEY MUSEUM

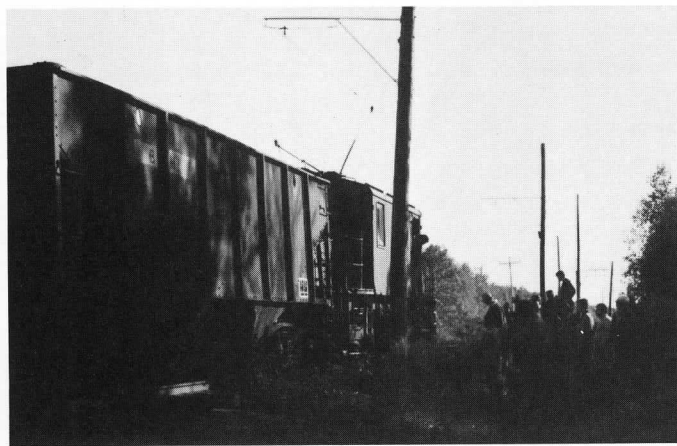
Kennebunkport, Maine



Before tracklaying could begin in earnest, the roadbed below and above Tower 8 was in need of extensive drainage and ditching work. It was considered more expeditious to remove completely 300' of track to accomplish this work. WOOLNOUGH



The track gang is shown doing final spiking with the compressed air spiker. The rail being laid from Tower 7 to some 100' beyond the future location of Tower 11 is a continuous section of 100# rail salvaged from the Swenson Quarry and donated by the Swenson Granite Company of Concord, New Hampshire. WOOLNOUGH



CENTER — Ballasting was performed by a conventional 40' railroad hopper car hauled by Oshawa Baldwin-Westinghouse locomotive 300. The Hopper Car, formerly B&M No. 2, was sent to STM by the MBTA on temporary loan while our Differential Bottom Dump Car 3617 remains on lease to the Transit Authority for rebalasting the rapid transit tunnels in the Boston area. Temporary wooden poles and bracket arms permitted extension of trolley wire so that the new extension could be stone ballasted to the last foot. TSDeB

BOTTOM LEFT — Philadelphia Suburban 62 poses on an interesting section of the old Atlantic Shore Line roadbed recovered in the current push northward of STM's main line. TSDeB

BOTTOM RIGHT — The central portion of the main line, looking south from Meserve's Crossing, with track rerailing completed. 85# A.S.C.E. rail now replaces the worn out 70# Atlantic Shore/York Utilities/Sanford & Eastern rail. Along with almost the entire main line, the curve was tamped by the Plasser Roadmaster, which by computer had set, banked and spiralled it. Final dressing of the roadbed was performed by the ballast regulator. TSDeB

## 1984'S HIGHLIGHT — TRACK BUILDING — IN PROGRESS & RESULTS



COVER PHOTO — Chicago, North Shore & Milwaukee 420, fresh out of the paint shop in N.S.'s latter day paint scheme, tests out the newly extended and resurfaced main line at the Seashore Trolley Museum. The car is appropriately signed SKOKIE VALLEY ROUTE as this portion of STM's main line, with catenary supported by bridges or towers and paralleled by a power company hi-tension line, most resembles that of the North Shore Line's Skokie Valley cut-off. WOOLNOUGH



*President's Message*

While 1984 set no new records for attendance or for revenue from visitor attendance the final contribution from this source towards the maintenance, operation and growth of the museum was far from disappointing. Two factors that helped stem the decline were the stepped up marketing drive and the increasing contribution made by museum store sales due to its excellent management that have climbed from approximately 60% of visitor attendance revenue to between 70% and 80% of it. Adding to this the continued enthusiastic responses to the numerous fund drives, the Seashore Trolley Museum was able to achieve and even surpass many of the goals set for 1984. Strategic planning attempts to boost the visitor attendance level will be implemented in the 1985 season by a newer "State of the Art" flyer, the placing in service of the long needed restrooms in the Visitor Center, and, with an eye to the all important repeat visitor, a very noticeable addition to the length of ride offered.

So ongoing has been the activity of the museum this winter that it is only with some difficulty that one can separate the accomplishments of the previous year from the ones now in progress. One of the principal factors contributing to this dates back to last spring when STM's management was encouraged to apply for a new type of matching grant from the Institute of Museum Services in Washington that was considerably more liberal in its scope. A carefully orchestrated plan was submitted involving renovation work on six pieces of rolling stock significant to our collection and restart on car barn construction to conserve work already performed on the museum's exhibits by preventing further deterioration.

With the grant finally obtained and scheduled to run for the period October 1, 1984 to September 30, 1985 with all projects applied for to be completed by that latter date, intensive planning was necessary to insure an adequate shop force as well as for the most efficient use of the relatively small heated area in the car shop, especially during the mid-winter months. Thus it was that fuller utilization of our Museum's excellent shop facilities on a year round basis, just barely achieved in the last several winters, certainly became more than a reality as 1984 came to a close.

This hitherto unexpected activity at the Museum helped somewhat to offset the disappointment of our having to accept the resignation of STM's full-time paid Director who had helped SEASHORE to attain full museum status. Severe budgetary restraints made the work of an interim committee appointed to find a replacement for Mr. Lane a most difficult one. Fortunately the recommendation of appointing on a voluntary basis, Frederick J. Perry, long time member and trustee and one, though young in years, managed to experience the last few years of operation of many of the electric railways represented in our collection. Our congratulations to Mr. Perry for his successful efforts in keeping STM's primary projects moving forward, and to Mr. Lane for having dedicated so many years to the Museum. At such time as finances might improve, we would once again seek a full-time Director.

One of the most rewarding achievements of 1984 was brought about by the Track Department whose efforts culminated in both the complete replacement of all sub-standard rail in the middle section of the main line and the construction of a significant extension to the passenger line. The many years of planning, advanced drainage and grading work, and stockpiling of basic materials set the stage for the grand finale that finally all came together by late October. The need for catching up with deferred maintenance and the lack of proper rail had held up any advance beyond Tower 8, although the Central Maine Power line had been moved leaving no further physical obstacle to be overcome. The donation of the Swenson Quarry rail and the purchase of much of the Kennebunk yard rail from the Boston & Maine finally had provided the missing key items.

As the work advanced opportunities that could not be turned down offered themselves. The two that had to be acted upon in their entirety or not at all and were timely toward the upgrading of the existing main line and to the extension underway were met by generous donations from and squeezing a little more out of the already tight budget. The Boston & Maine Railroad had amassed a 900 ton pile of used crushed stone on the right of way within a mile of our

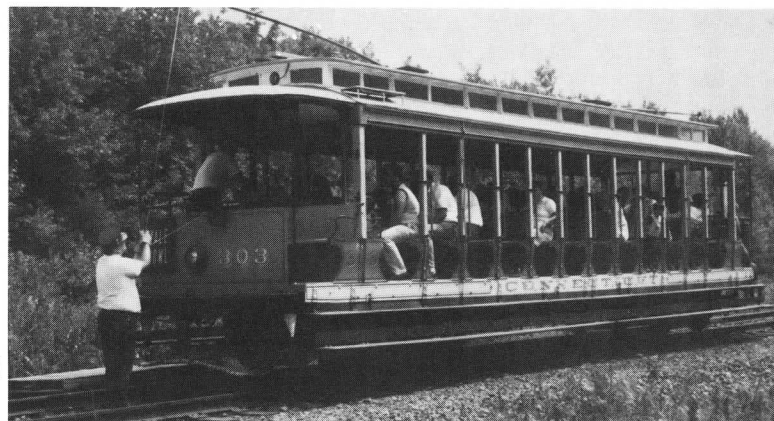
property which could be purchased by STM at a bargain price, but had to be purchased and removed all at once to avoid interference with their main line freight operations. Coupled with this came the rare availability of obtaining the services of contractor doing industrial siding work in the Biddeford area, who could bring in a Plasser tie-tamper and a ballast equalizer to go over the entire main line. Neither opportunity was lost and the Museum's main line looks like a section of the Northeast Corridor — benefiting both the riders and the Trolley Museum's vintage rolling stock as well!

Two Major rehabilitation projects of the car shop, the Brooklyn and Eastern Mass. St. Ry. convertibles, were considerably advanced: the first with major body work and interior nearly finished, but with its trucks still in the process of being rebuilt, while the latter, conversely, was restored to excellent operating condition, but lacks completion of interior finish, doors, and window sash. Restoration work on both cars was somewhat eclipsed by a project calling for minor roof repairs and repainting of Chicago, North Shore and Milwaukee interurban No. 420. Unfortunately as the work progressed and portions of the roof canvas were removed, repairs to the wood sheathing underneath became a job of major proportions, and much body work was required before 420 could go into the "paint shop". Beautifully refinished finally in the new IMRON paint, 420's refurbishing would have done credit to the North Shore Line's Highwood Shop.

Nearly a dozen other cars received varying amounts of mechanical, electrical and body work. A new roof is in process on the Third Ave. car, installation of a new letterboard on the Wheeling curve side, an ex Dallas P.C.C. car from Boston is being returned to its original configuration as built for the Dallas Railway & Terminal plus the all important maintenance of the running fleet. As 1984 drew to a close, shop work would normally have slowed down to winter's pace, but instead it became the scene of great activity as it geared up for rehabilitation and conservation work on the six cars covered under the IMS grant. The principal star of this scenario was to be Boston 6131 undergoing the metamorphosis from a rusty hulk of a sand car to a Center Entrance passenger car in as close as possible to its condition when it emerged new from the Kuhlman plant in Cleveland in 1919.

Setting forth specific plans, and making predictions for the coming year is always a risky undertaking as unforeseen situations and opportunities frequently arise sidetracking previously made plans. It is a fair certainty, however, that work going forward under the IMS grant will continue to receive top priority until the fall of 1985. Long range planning is an essential factor nonetheless in the future growth of the Museum and is often best achieved by setting goals that have to be reached out for, attainable but not without extra effort and constant guidance. As our fiftieth anniversary approaches, two such goals already being talked up by the Track Department and the Rolling Stock and Shops area respectively — firstly to have the main line reach the area once referred to in Atlantic Shore Line days as the Summit and now referred to as Talbot Park in honor of the family donating the land, and secondly to arrive there in a handsomely rebuilt TWO car Boston El Center Entrance train.

A far different goal without any specific deadline but of tremendous import to the future and longevity of our Society is to find a better way and more specific program for the indoctrination of newer generations both into involvement in the activities of the Museum and into the underlying significance of what our collection represents both geographically and technically in the history of MASS TRANSIT.





LEFT — Detailed restoration of Brooklyn Rapid Transit 4547's interior continued in 1984. In this era of metal and plastic transit vehicle interiors, 4547's, with its carefully restored brass-trimmed varnished wood, will make it still another "Jewel in the Crown" in the Museum's collection.  
WOOLNOUGH



RIGHT — 4547 was acquired by the Museum in work car status with summer time window guards long discarded. A brand new one is being fitted, made by our shop from a blueprint furnished STM by the Branford Electric Railway Association, who have been most helpful in many phases of this restoration project.  
WOOLNOUGH



### SHOP REPORT

During 1984 no major restoration projects were completed, but a number have been advanced considerably. In-depth restoration requires time and resources which always seem to be in short supply.

In cooperation with the National Trust for Historic Preservation, under their Yankee Intern Program, the museum received a \$1500.00 grant to help sponsor a student who is pursuing historic preservation as a career. Mousam River Railroad Box Car No. 8 was selected because of its local historic significance and that it was a small project, easily handled by one person. In the 12 weeks of the grant it was transformed from what was nearly a shed into a significant piece of rolling stock. New doors were made, sheathing and floor repaired and the platforms, which had been removed by York Utilities many years ago, were restored. Thanks to original plans found in the Maine Historical Society archives in Portland, details of the missing platforms, brake rigging and other parts were accurately replaced. These details could never have been found through existing photographs. 1985 should see completion of brake wheels, journal bearings, brake shoes and lettering.

As shown on the cover, North Shore Interurban 420 was completely transformed during 1984. Because of prolonged outdoor exposure necessitated by use of this car as the entry to the Dining Car, the roof canvas split, allowing moisture to pocket underneath, causing extensive rot. Both vestibule hoods were rebuilt; all tack moulding replaced and a 24-inch strip of canvas at the edge of each side renewed. All green paint was stripped from the body and major areas of rusted steel sheathing were cut out or welded in and the body surfaced. The entire body was then repainted, numbered and lettered. Since the roof was previously canvassed about ten years ago by the museum, this car provides a dramatic example of how outdoor storage damages a car very quickly — even though the car has generally been stored inside during the months when the dining service is not available.

Brooklyn Convertible Surface Car 4547 has moved ahead considerably with a combination of shop and volunteer labor. One truck has had considerable welding and building up of badly worn pedestals, and new leaf springs for both trucks were made by an outside

firm. Preparatory to setting the car on shop trucks to permit movement within the shop, most underbody work was completed. The transite fire retarding covering was attached to the remaining third of the car underside, and the air piping was totally renewed. The grids and overhauled compressor, brake cylinder, ribbon fuse holder and a hydro-tested air tank were mounted beneath the car. The controllers were overhauled, and, after replacing the curved underfloor conduits, approximately 10 feet of new wire was spliced onto each end of the 20 motor and control leads to the controllers and pulled through the new specially bent 2 1/2 and 3 inch conduits beneath the vestibule floors.

New interior headlining panels were sprayed white and striped, while the original curved side headlining panels were refurbished, painted and gold-leafed. All were then installed. The complete rebuilding of all seat frames was completed, and they were primed, spray-painted gold, and most have been installed in the car. A major project was laying new aisle floor strips based on a layout drawing made prior to removal of the old floor. The floor then received 2 coats of paint. A damaged headlight was rebuilt, new galvanized sand boxes were made, the bulkhead windows were worked over, as were the vestibule doors, including one door made totally new. The heaters were disassembled, the covers sandblasted and painted, with most then reassembled preparatory to installation to the seat frames. The heater junction boxes were similarly processed. The longitudinal brass hand-strap rods, which also control the clerestory windows, were refinished and virtually all interior molding is now in place. The first pair of block destination signs, which appear in the right front window at each end, has been repainted and lettered with locations appropriate to lines the car actually serviced in Brooklyn. The signs, themselves, and the route information as well, were kindly provided by the Branford Electric Railway Association in Connecticut. One cloth route sign was also rehabilitated by our volunteer car sign expert, who also lettered the block signs.

New steps were built and installed, all gate parts were sandblasted or otherwise de-rusted and primed, and we are in the process of making all new window guards. Several of the large removable side window panels, to be retained in the end corners of the car, have been rebuilt, reglazed and primed. Rebuilding of the beltrails was completed and their metal protective strips were cleaned, primed and screwed in place. On the exterior side plates, the bolts fastening them to the side posts were ground smooth and the plates stripped and de-rusted, extensively surfaced and primed. Additional surfacing remains to be done prior to painting the car in finish colors. Thanks to the continuing generosity of our contributing members we are very hopeful that we can complete this car in 1985.





Eastern Mass. 4387's air brake system and piping were reinstalled. The PC-5 control unit, after overhaul, was also reinstalled along with associated wiring. Photo shows car fully operational on Members' Day. TSdeB



With new steelwork supporting the once drooping vestibules, work could be concentrated on rebuilding the car's interior. Headlining, as shown in photo, had been restored as part of 1984's work. WOOLNOUGH

Eastern Massachusetts Street Railway Semi-Convertible Car 4387, after several years of restoration work, operated very successfully on Members' Day; far more dependably than in the memory of our active members. All air brake piping and control wiring was renewed or reinstalled, as necessary, and much trouble-shooting by our shop technician produced excellent results. The main headlining was replaced and the curved side sections were sanded and repainted. The maple floor was finished by routing the grooves; vestibule and clerestory canvas replaced, seat bases and heater covers sandblasted and painted, longitudinal seat bases rebuilt and installed, and heaters wired in. The door and step mechanisms were completely disassembled and given new ball bearings and reinstalled on the car. A set of doors has been put together from doors on the car and others salvaged when the balance of these cars were awaiting scrapping. Much of the interior paneling and moulding was stripped of old paint and varnish and then primed in preparation for final painting. Many window sash were rebuilt, with the remainder awaiting total new fabrication in 1985. If we receive sufficient financial support for the car we anticipate that the car can be completed in 1985.

We experienced the failure of another GE 203 traction motor in Philadelphia & West Chester Center Door Car 62. This was rewound by an outside contractor as it does not seem practical, at this time, to undertake such a specialized task. While the car was out of service all doors and sash were repainted and defective seat cushions were re-caned.

1984 was the year of the armature! In addition to the failure on Car 62, Milwaukee Car 861 also lost a traction motor, while one in the compressor of Oshawa Locomotive 300 also burned out. Alternate spares are being investigated for Car 861, while a substitute compressor was installed on No. 300 pending rewinding of its own compressor's armature, since we could not spare this unit from active service for a prolonged period.

Excessive gear noise prompted an investigation into the conditions of the armature bearings in Connecticut Open Car 838. Poor conditions were found, requiring building up of the bearing housing as well as the outside of the bronze bearing shell, which was followed by re-babbitting. Excessive vibration had caused the field coils to rub on the motor case, almost wearing them through. Nearly all of them required reinsulating followed by vacuum-pressure impregnation in polyester baking varnish.

With the receipt of a grant for collection conservation by the Federal Institute of Museum Services (IMS) calling for varying amounts of work to be performed on several cars, a shift in the car shop program occurred in November. Work commenced on the complete rebuilding of Boston Center-Entrance Car 6131. This car had been converted to a sand car and required the removal of large sand hoppers, as well as revised control wiring and air piping. In addition the flooring and sash or window covering and many other fittings had to be removed preparatory to rebuilding the body structure.

Once the car was stripped it was readily determined that nearly everything from about one foot above the beltrail, down, required

replacement. With the aid of original builder's drawings and careful measurements, new structural and sheet steel and rivets (some specially made) were obtained. At this writing, all new sills have been fabricated, new T-posts, beltrails and side sheets formed and riveted in place on one side.

Pressed steel cross members to support the floor were hand fabricated. Work will continue on this project as long as funds are available. Our goal is to complete this car and mate 6270 by the 1989 centennial of the first electrification of Boston's street railway system.

Three other IMS conservation projects are well underway. The first involves Quebec Interurban Car 454, on which new doors have been made to replace the disintegrated remaining fragments. Work has also started on rebuilding the roof where split canvas had allowed deterioration of the roof wood. Major portions of canvas will be replaced and the entire body will be repainted. Also involved is Oshawa Locomotive 300, for which new sash and doors are being made. In addition it will be stripped and painted in the spring. Lastly, Cleveland Center-Entrance Car 1227 has had its sash and doors removed preparatory to complete rebuilding. Over 200 new mahogany sash pieces have been fabricated. Reconstruction of the roof will be undertaken during the summer. One other car, Montreal ex-Springfield Double-Ended Lightweight 2052, has not received any IMS work yet. Its conservation effort will include repairs to the roof.

In addition to no less than 53 volunteers who accomplished work outlined separately, our summer paid crew consisted of a maximum of ten full-time persons, including the Yankee Intern, a work-study student from the University of Maine and a member from Rome, Italy. In order to develop and maintain a competent and experienced staff, wage rates were raised to be as competitive as practical for our area. A winter crew of 4 full-time and 3 part-time people kept the projects rolling. In order to improve efficiency and make the environment more attractive, a new hot-air oil furnace was installed to heat the area under the loft and the adjacent tent containing one car. At the same time better lighting was placed in the tent, and the enclosed downstairs shop area was given a coat of white paint to brighten the area.

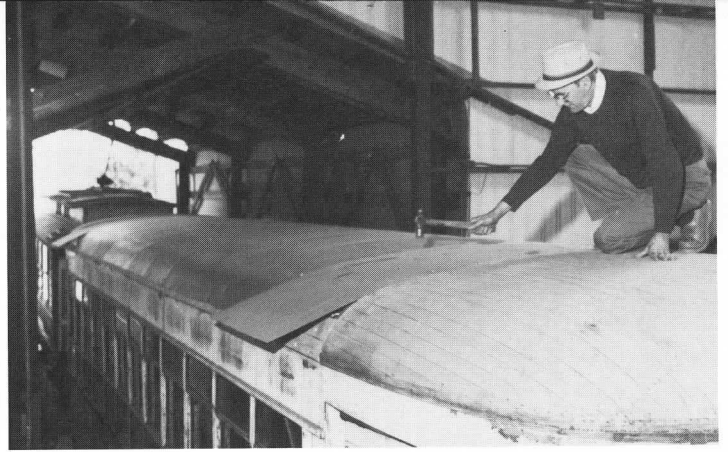
A continuing problem has been obtaining sufficient quantities of ash and maple for restoration, ash being the primary framing wood on cars. After many inquiries, a source in northern Maine was found for excellent quality wood at a very good price. A trailer load of logs was brought south where it was rough sawn and is stacked to dry.

With cash on hand and a major anticipated pledge, combined with a matched two-for-one grant by the employer of the pledging member, we expect to have sufficient funds on hand in 1985 to extend the concrete floor in the shop by another car space. To determine the best way to accomplish this, careful engineering and cost studies are in progress. If possible, a second between-the-rails inspection pit will be constructed, including installation of hydraulic car body jacks obtained years ago from the main streetcar repair facility in Pittsburgh.



ABOVE — Extensive deterioration of the central section of Third Ave. 631's roof, constructed of hardboard (Masonite) covered with canvas necessitated its removal and rebuilding from carlines up. TSdeB

RIGHT — One of 631's primary sponsors in process of installing new transverse panels. The car is now debt-free thanks to members of the President's Club and Boston University. WOOLNOUGH



### VOLUNTEER CAR RESTORATION ACTIVITIES

During 1984 much work was accomplished on a number of vehicles by our volunteer members. None were completed, but important progress occurred on several ongoing projects. The greatest and steadiest progress took place in the conversion of Boston MBTA PCC Car 3342 back to its Dallas No. 608 configuration. Replacement sash was stripped, cleaned, painted and re-glazed in preparation for later installation. Original type narrow rear doors were rehabilitated, treated with wood preservative, primed and installed. Similar work on original style front doors was in progress by year end. Areas of the roof formerly covered with rubber matting had corroded, so these areas were stripped and needle-gunned in preparation for welding new steel sheets to appropriate areas. Window areas were also needle-gunned, treated with rust inhibitor and primed.

Many interior details were also attended to, largely involving removal of later additions, replacement of proper fittings, latches, windshield wipers, etc. The light fixtures were dropped for renewal and restoration, as necessary. The sponsor of the car hopes to complete the car during 1985.

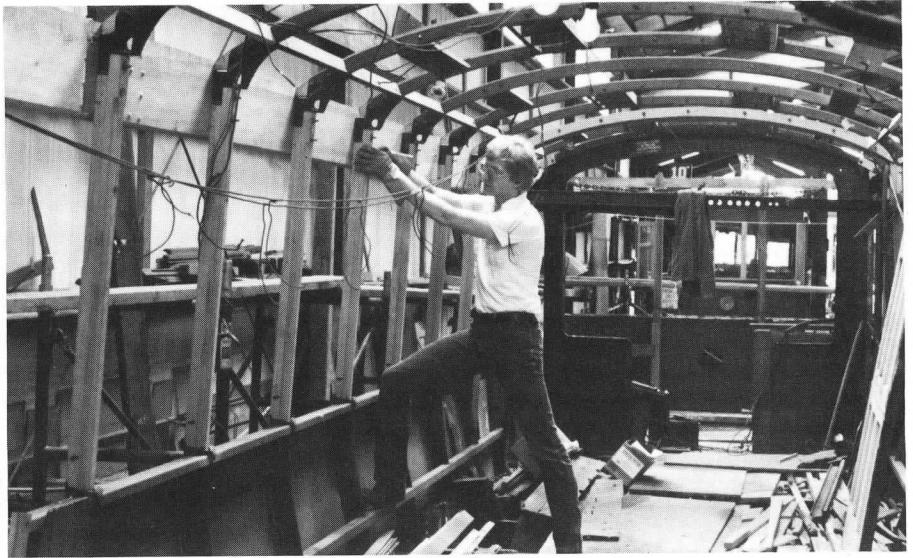
Vigorous activity took place on Chicago Pullman Car 225. The passenger compartment was completed with the sanding, priming and painting of the second row of seat frames and the cleaning and varnishing of the rattan cushions. Also, the backs of the four longitudinal end seats were re-caned and installed. The refinished side sign boxes were reinstalled, as were the swinging bulkhead doors, which had also been re-glazed. In addition, the six end vestibule sash, refinished during the previous winter, were installed. New hand straps were made and installed. The final touch was treating the floor with a semi-transparent black oil stain.

Work has continued on Third Avenue Railway System Car 631. It was found that the Haskellite roof had serious depressions in some areas, in addition to deterioration and cracking at the edges. The roofing was removed and the carlines cleaned and primed. The wood tacking strip, which is bolted to the steel letterboard was in poor condition so new boards were made by shop personnel. These strips were then fitted, primed and bolted to the car. A search for the original  $\frac{3}{8}$ -inch roofing material in  $6 \times 10$  foot sheets was unsuccessful. A substitute material in the form of  $4 \times 10$  foot  $\frac{1}{8}$ -inch tempered masonite was obtained. This will require laminating three sheets together to obtain the desired  $\frac{3}{8}$ -inch thickness. The first layer has been attached to the car in preparation of the fitting and gluing of the two additional layers. It is anticipated that as a result of this process a stronger proof will result. Other activity included preparation for the relocation of the side route sign boxes from their Vienna location at the upper sash of the window next to the rear door to the window next to the front door. This involved an exchange of location of lift sash and hardware with the stationary center sash from side to side on each end of the car. The sponsors of the car hope to complete the roof and to prepare the surface of the car body for painting in the Third Avenue Railway paint scheme in 1985.

One of our more vital work cars, Chesapeake & Ohio Railway Burro Crane BC-27, is undergoing an extensive rehabilitation by our track construction volunteers, who find the non-electric crane so vital to conducting track renewal and repairs. The boom and cables were removed preparatory to carrying out work on them, and to shorten its length while in the shop. Replacements for damaged cab roof panels have been fabricated while good panels and some other parts of the cab were stripped of paint, treated with rust inhibitor and primed. BC-27's six-cylinder Hercules gasoline engine was removed for rebuilding by our volunteers, but after running into problems they sent it out for commercial rebuilding at a Continental dealer. Unfortunately it was diagnosed as being too badly worn for rebuilding, so that a replacement had to be acquired, which was located at a source in Ohio. A start was made in rebuilding the machinery tower in the crane. Work on this ambitious project is continuing as we go to press.



MBTA 3342 being converted back to Dallas 608. TSdeB



Wheeling 39 is emerging as an almost totally new Cincinnati "curved-side" car. TSdeB





*Installation of new roof canvas on Boston PCC car 3127 was virtually complete when this photo was taken.* POLLMAN



The Boston PCC cars acquired in 1982 again each had more work performed. The most extensive project concerned Car 3127. The roof was stripped of gear and old canvas and it then received new canvas, three coats of paint and reinstallation of roof equipment. The advantages of not waiting until deterioration sets in were vividly apparent in that it took a short period of time to perform this job. Screws and bolts readily turned out, no rot had set in to roof boards, and as a result the job was free of complicating time-consuming added repairs. Naturally, some new boards were required for cleats, ventilator mounts, etc., as well as one main side of the roof ladder. Other work on the car included welding, grinding and filling repairs to the cracked steel cornerpost by the front doors, some floor tile removal and making of new sections of steel floor wire ducts, welding and painting of the double cross seat frames, extensive touch-up of the ceiling because of earlier roof leaks, and fabrication of a new front left side skirting panel. This remains to be installed, along with further floor work and pneumatic repairs to make the car operational.

Ex-Dallas Car 3340 was touched up where some failures had occurred in the new exterior white paint. Inside the car the recently refurbished reversible cross seats were completely installed and some additional paint touch-up work was done. The roof was stripped and cleaned where rubber mats had corroded the roof, in preparation for welding new sheets of steel in these locations. Unfortunately, late in the year the car was involved in a switching collision, and the dash panel must be replaced as a result.

The roof canvas on Car 3083, which is in good condition, was repainted, along with the trolley boards, roof ladder, etc.

The long-term restoration of Boston Type 3 Snow Plow 5154 is continuing. A main wood side beam, running 22 feet, was fabricated and the appropriate areas of the car were prepared to receive the beam. This included rebuilding of the pilot block for the center snow shear blade pressure control and reinforcing the floor.

A major goal is restoration of the car as a fully operational snow plow, so that as the body is rebuilt, the mechanical features in the affected areas are similarly rebuilt.

Our newly acquired Philadelphia Bridge rapid transit cars 1018 and 1023 were recipients of a great deal of volunteer activity in preparation for their movement from Philadelphia by rail, and further when the cars arrived at the museum. Examples include disconnecting of motor leads, brake rigging and truck center pins, covering of all glass, general lubrication, and rearrangement of braking to conform to railroad configuration for the move on their own wheels in a freight train. In addition, many spare parts were both purchased and physically procured by an extremely diligent and generous contingent of Philadelphia area museum members and friends.

Once on the property, windows were uncovered with a minimum of breakage having occurred and repairs were made on Car 1023 to the lighting and control system. Reconnecting of motor leads, brake rigging and trucks to the body were also carried out. Wood and steel pads were fabricated to mount trolley poles to the roof of this car, though not yet installed.

Work continued on the completion of San Francisco California Street Cable Car 48. The exterior and interior repainting is mostly done. In addition, repairs to the roof and letterboards, together with rewiring the lighting system were also accomplished. To make the car more mobile and give it a greatly improved appearance the rubber tire dollies on which the car has sat since its acquisition were removed and the car set on a pair of PCC car trucks, which were modified to accommodate the cable car. They are nearly invisible behind the running boards and gratings. We plan to mount the car on a pair of proper trucks acquired from the San Francisco Municipal Railway after their overhaul and painting.

The restoration of Johnstown, Pennsylvania, trackless trolley 713 resumed in 1984. The interior ceiling was repainted, followed by the sides down to the window sill level. Most of the seat cushions were removed for the duration of the painting job.

On Seattle trackless trolley 627, the roof was repainted and the exterior was touched up. Missing hardware was installed using parts obtained from Seattle and from the museum's parts collection. In hopes of making the coach operational, the motor was heated to dry it out and the control group was cleaned. However, we have so far been unable to make the coach operational.

Wheeling Curved-Side Car 39 advanced another step with milling out of side wood letterboard panels, with those on one side preliminarily fitted to the car. Steel plates to join the sections were either made new or the originals, if usable, were sandblasted and all were primed preparatory to being attached to the car.

MBTA Cambridge-Dorchester Rapid Transit Car 0719 received some control work and a good start on getting the long-inoperative side doors to work. Two of the worst doors have been rebuilt and now work well.

Boston Everett-Forest Hills Elevated Cars 0997 and 01000 now sparkle at night with the end marker lights made operational with newly purchased resistors, and the interior lighting system repaired. Some additional interior paint removal was done in 01000 in preparation for eventual repainting in the two-tone green.

Cambridge-Dorchester Rapid Transit Crane Car 0551 also had some paint removal, followed by de-rusting and priming, at one end, together with a start being made on the boom. The large base gear was steam-cleaned and a cracked journal box was repaired.

To allow deferral of roof rehabilitation of Chicago Aurora & Elgin Interurban Car 434, the previously tarred roof was given a new coat of tar. This car, which has been stored inside at all times had to serve as the customer holding area for the North Shore Dining Car because North Shore Car 420 was in the shop for general refurbishing and roof rebuilding.

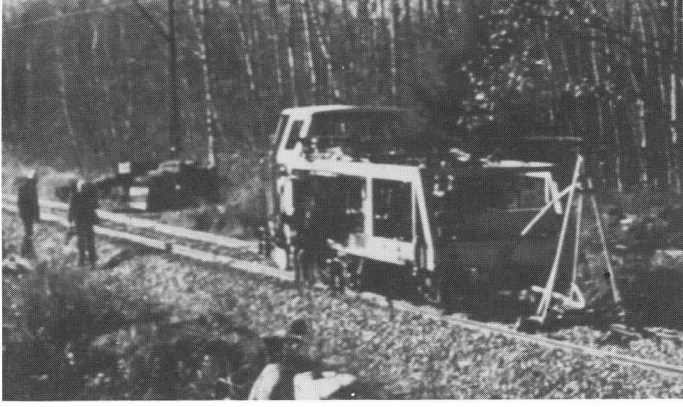
With the start of the restoration of New Orleans Car 966 pending, volunteer activity centered on disassembly of interior woodwork and molding.

## TRACK DEPARTMENT

1984 had promised to be and in fact did become the year of the great push forward on the main line. It had been preceded by several years of redoing to better standards and with better materials work previously done and making a concerted effort to prevent a build up of deferred maintenance. All of this work was well documented in a recent publication being sent to the members, **BACKTRACKING**. 1983 had seen a tremendous amount of preparation and stockpiling of materials for the two pronged attack planned for the main line — replacement of the last of the light rail in the center section of the passenger line and the long awaited extension farther out on the Atlantic Shore Line Right of way.

Before the main objectives could be tackled, however, attention had to be turned early in the spring toward Central Yard, which at the moment had been left clear of cars. Having received no major maintenance since its construction in the late sixties, tie condition had deteriorated over the course of the last few years. To correct this almost sixty ties were replaced under three of the four body tracks.

In December of 1983 Seashore had approached the Boston & Maine to purchase two of three tracks it planned to abandon in Kennebunk. Over the course of winter the transaction was negotiated



such that the track would be removed by the first of May.

Undoubtedly the most favorable conditions in many years prevailed when the Seashore forces removed the rail from the two tracks at Kennebunk. Both of the roughly 700 foot long tracks were straight and required little clearing of brush. Vehicles could be driven to almost every place on the site. The museum was only a matter of minutes away. With the exception of a small amount of digging, all that was needed was to pull spikes and load the rail. Site preparation had only required a few days.

Weather on the appointed weekend proved to be ideal. Consequently the crew was able to work very efficiently and had all the rail removed to the property and the site policed in only a day and a half. The operation gained the museum more than enough rail to complete the curve reconstruction and a substantial amount to apply toward the main line extension, as the cost of the Kennebunk rail acquisition had been borne by both the main line extension and general funds.

Another fifty ties were replaced in the outer portion of the main line as a continuation of a program started the year before.

The major event of the year for the track department was the construction of the first main line extension in seven years. Having torn out the last 400 feet of track in late 1983 and then running into problems which required postponing rebuilding until 1984, the crew resumed work at the end of the main line. Member Jim Hamlin with his backhoe and two other local contractors with their equipment performed required earthwork between Rochester, Syracuse & Eastern towers 7 and 8, including ditching and culvert installation. Once the earth movers were finished, an additional short stretch of rail was removed and then the visible trackwork started in earnest.

With three teams working, one placing ties ahead of the advancing rail, one hauling rail, and the third bolting joints and spiking to gauge, progress was rapid. It took only two days to recover the distance lost the year before and reach tower 8. A second pass followed during which remaining ties were placed under the rails and then a third with the compressor and the air spiker to complete the spiking. The track was structurally safe at this point but no operation was permitted until the ballasting could be completed. The crew pushed on in this manner until the Swenson rail was exhausted shortly beyond the site of the future tower 9.

The initial ballasting was performed with car 3617, including one load of gravel to partially compensate for a sag in the embankment at one point. In mid-summer however, 3617 was returned to Boston at the request of the MBTA. A forty-foot railroad hopper car, formerly B&M 2, was provided as a replacement. The hopper is a wider car than 3617, so the dumpcar track had to be moved to allow it to fit against the loading ramp.

For years our almost exclusive source of ballast had been R.H. Brown of Kennebunkport. Based upon the successful completion of the Kennebunk rail removal, Seashore approached the Boston & Maine with the intent to purchase approximately a thousand tons of rock ballast they had left in a huge pile near their track in nearby Arundel. Little of this material had been used in a number of years. As it was to the railroad's advantage to sell it because of the cost to them of loading it, the B&M accepted the museum's offer. In late August a haul operation was instituted to truck the ballast to the museum for stockpiling.

A second trackbuilding session took place during late September and October to extend the main line once more, this time to the site of tower 11. A ballasting demonstration was presented to the inter-

ested members who visited the construction site over Members' Day in October.

The main line was still not in service north of tower 7. A tie tamper was needed to surface the quarter-mile of new railway and to resurface much of the other main trackage. Contrak, a contractor from Vermont, had a crew building industrial trackage in nearby Saco. They agreed to bring a tamper and ballast regulator to Seashore at the end of their work there. In mid-November the tamper was delivered: a Plasser Roadmaster production tamper-liner. Even though a ten-year-old machine, the tamper proved to be quite capable of surfacing 700 feet of track per hour. Several passes were required for much of the main line extension due to the relatively deep ballast section in some places. Several additional carloads of rock were needed in places. A carload of ballast was dumped on the lower tangent to apply the second lift of stone it had never received when rebuilt several years earlier. The tamper operator was instructed to start at M&SC Junction and not stop until he had surfaced everything laid in stone. The lining equipment was then set up to bring the track into exact alignment.

The regulator was delivered and redistributed and reshaped the ballast around the track and swept the excess from the track itself to give a finished appearance. The mechanization of the tamping and ballast work saved an enormous amount of hand work.

About mid-November the tamper operator left for several days. There was 562 foot long stretch of 70# rail remaining on the long curve. Assessing the quantity of the rail, ties and other track material on hand and the availability of volunteer manpower, the track crew considered taking a major risk: to tear out and replace the rest of the 70# rail and rebuild with 85# and rock ballast so as to have a chance that the Plasser could tamp it, thereby saving considerable hand labor. If they failed, the tamper was going to depart the property without completing its work, since it was needed on a job in western Massachusetts after finishing at the museum. The track crew thought the benefits were worth the risk.

Rail and ties were set out as appropriate. During the long Thanksgiving weekend they attacked the curve. By noon all spikes were pulled and the old rail had been dragged away. Jim Hamlin scooped out the ties and then reshaped the roadbed with his backhoe. With the Burro crane running back and forth hauling rail and ties, they used the same methods for the curve as they had for the extension. Light sets were used after dark. By 10 PM on the first night they had closed almost half the gap. Next day was spent on production spiking and ballasting what had been done already before continuing with rail laying. Shortly after noon it started to rain but the crew kept working. Slowed by the rain which only got worse as the afternoon wore on, it became clear that the track would not be reconnected by the end of the second day. An attempt to continue under lights failed as the driving rain destroyed the bulbs. The soaked crew had been thwarted with 150 feet of track to go. The tamper operator showed up late on the third day but was needed on another job, giving the relatively few remaining people additional time to complete the connection. By Monday night the gap was closed. Shortly thereafter the last load of ballast was dumped and the tamper made its final pass.

With no particular fanfare, the first revenue passengers were carried over the new extension during the special Christmas event on December 2. A subsequent time trial revealed that even though the main line is now 900 feet longer, the higher operating speed allowed, particularly due to the reconstruction of the curve, permits a reduction of over two full minutes from a round trip. The higher speed also meant that visibility around the the curve needed to be greatly improved. Consequently much of the brush and trees between McKay's Crossing and Meserves's crossing has been cut back.

The Burro crane, having worked hard all year, was removed from service for major repairs to its engine and mechanical works. Throughout the summer and fall, it had demonstrated its worth as an ideal rail-laying machine. The fastest responding crane the museum owns, its independence of trolley voltage allowed it to maintain full rate of production beyond the end of wire.

As the year drew to a close, the track department could look back on some major accomplishments, and start making plans for the five year build-up that would coincide with STM's fiftieth year and lead to Talbot Park!



## ACQUISITIONS

The major acquisition of 1984 was of 1936 Brill-built heavy steel subway cars 1018 and 1023 from the Southeastern Pennsylvania Transportation Authority (SEPTA), and donated to the museum by the City of Philadelphia. The cars were operated for many years on the Delaware River Joint Commission line across the Benjamin Franklin Bridge linking Philadelphia and Camden. After this line was absorbed by a new authority and extended to Lindenwold, using an all new-fleet, the older "Bridge cars" were transferred to the Broad Street Subway.

These cars are important in a number of ways. They are unique in that they were built in the "Art-Deco" style with unusual curved ends, and originally featured a striking blue and silver color scheme with three contrasting raised stripes running the length of the cars. The interiors carry the same decor, featuring green leather bucket style seating and "Art Deco" lighting fixtures. Because the cars climbed the steep grades of the Benjamin Franklin Bridge, the cars are each equipped with four powerful motors, unlike most subway cars which have only two motors. These cars come from a period when the transit industry was in transition and when very little rail equipment was being produced. They are the only cars in our collection which are representative of this period of development.

Both cars are in excellent body and mechanical condition. The near absence of body corrosion is a major advantage of these cars. SEPTA very kindly performed considerable overhaul, equipment exchange and modification work to assure the cars being in good condition and to prepare them to be moved on their own wheels by rail to Maine.

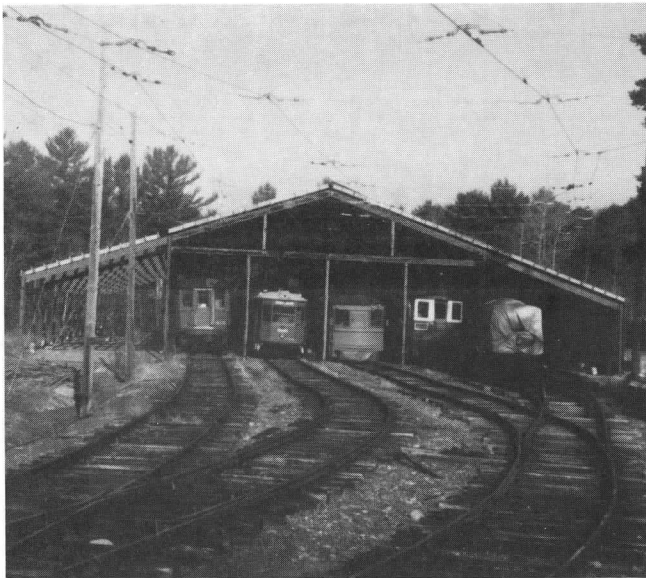
A major fundraising effort over a period of three years has financed the costs of this project. Over one-hundred individuals and organizations from many locations, but, in particular, the Philadelphia area have contributed towards the expenses of obtaining these cars.

Soon after the cars arrived, museum volunteers reassembled and test-ran Car 1023. The car will be equipped with trolley poles in a manner to minimize their visual impact and not detract from the sleek lines of the car, while still allowing it to be a living exhibit.

The other addition to our collection was a streetcar from Cleveland. In the early 1950's your Society formulated a policy to represent distinctive street railway properties with the leading car type most identified with each city. Since that time we have assembled a trans-continental collection of vehicles which are symbols of the cities which they represent. The cars range from the San Francisco cable car, the Los Angeles Huntington Standard and the Dallas Stone & Webster standard, to the Twin Cities gate car and the Chicago Pullman, to the Philadelphia nearside, Baltimore Brill semi-convertible and Boston center-entrance cars, among other important cars from across the country.

During 1984 we further enriched this collection within our collection by the addition of Cleveland Railway Company Kuhlman-built single-end center-entrance Car 1227 (now Shaker Heights Rapid Transit System Car 27). Built in 1914, the car represents the largest single type of motor car on the huge Cleveland system. The car includes several prominent Cleveland features, including the high domed arch roof with its Scullin roof ventilator louver, high narrow front destination sign and great length. At 51 feet it is our longest city streetcar. These cars, often hauling trailers, ran on nearly every trunk line, and served the Cleveland area longer than any car type. Some survived for forty-five years until the last cars were removed from regular service on the suburban Shaker Heights lines about 1960.

After two unsuccessful preservation attempts elsewhere, the car was acquired by Ohio member Ronald L. Jedlicka, who donated the car to the museum. Thanks to heavy member support, the car is now in the first phase of its forthcoming complete restoration. We were most fortunate to have received this final opportunity to represent the Cleveland Railway on the thirtieth anniversary of the end of surface streetcar operations by the successor Cleveland Transit System.



View of Central Barn showing current work on construction of a southern lean-to. Previously the one on the right had housed two lanes of rubber-tired vehicles, the inner one of which has now been converted to rail storage. When complete the lean-to to the left will provide similarly for an additional track and bus lane.  
PERRY

Price  
Waterhouse

FORTY WESTMINSTER STREET  
PROVIDENCE, RHODE ISLAND 02903  
401 421-0501

April 11, 1985

To the Officers and Trustees of  
New England Electric Railway  
Historical Society, Inc.

In our opinion, the accompanying balance sheet and the related statements of income, expenses and changes in fund balances and changes in financial position present fairly the financial position of New England Electric Railway Historical Society, Inc. at December 31, 1984, and the results of its operations and changes in its financial position for the year, in conformity with generally accepted accounting principles which, except for the change, with which we concur, in the method of accounting for reporting current restricted contributions as described in Note 2 to the financial statements, have been applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse

## BALANCE SHEET

(With Comparative Totals for 1983)

December 31, 1983

Assets	Current			Plant Fund	Total	Total
	Unrestricted	Restricted	Plant			
Current assets:						
Cash	\$ 400	\$ 15,301		\$ 15,701	\$ 9,996	
Savings account		20,201		20,201	37,815	
Accounts receivable, net	1,037			1,037	1,599	
Grant receivable		25,000		25,000		
Loan receivable					1,600	
Due from current restricted fund					1,558	
Due from current unrestricted fund				13,562		
Short-term investments	30,964	34,199		65,163	54,483	
Inventories	30,870			30,870	40,887	
Prepaid expenses	1,325			1,325	255	
Total current assets	64,596	108,263		172,859	148,193	
Fixed assets - net			\$ 508,752	508,752	501,498	
Total assets	\$ 64,596	\$ 108,263	\$ 508,752	\$ 681,611	\$ 649,691	
<b>Liabilities and Fund Balances</b>						
Current liabilities:						
Current portion of long-term debt			\$ 9,435	\$ 9,435	\$ 10,800	
Loan payable	\$ 638	\$ 1,200		1,838		
Accounts payable and accrued expenses	10,989	1,722		12,711	16,574	
Due to current unrestricted fund				13,562	1,558	
Due to current restricted fund	13,562			13,562		
Deferred income	1,128	23,235		24,363	71,516	
Total current liabilities	26,317	26,157	9,435	61,909	100,448	
Long-term debt, less current portion			59,697	59,697	79,650	
Total liabilities	26,317	26,157	69,132	121,606	180,098	
Fund balances:-						
Plant fund			439,620	439,620	422,383	
Restricted		82,106		82,106		
Unrestricted:						
Designated by the Board of Trustees	20,740			20,740	20,622	
Undesignated, available for general activities	17,539			17,539	26,588	
Total fund balances	38,279	82,106	439,620	560,005	469,593	
Total liabilities and fund balances	\$ 64,596	\$ 108,263	\$ 508,752	\$ 681,611	\$ 649,691	

The accompanying notes are an integral part of the financial statements.

## STATEMENT OF INCOME, EXPENSES AND CHANGES IN FUND BALANCES

(With Comparative Totals for 1983)

	Year ended December 31, 1984				Year ended December 31, 1983	
	Current Unrestricted	Current Restricted	Plant Fund	Total	Total	Total
Support and revenue:						
Contributions and bequests	\$ 41,729	\$ 89,549	\$ 1,341	\$ 132,619	\$ 111,213	
Contributed services	59,855		2,100	61,955	66,306	
Grants	812	4,126		4,938		
Membership dues	12,296			12,296	7,433	
Admissions	74,117			74,117	74,606	
Investment income	6,939			6,939	5,761	
Miscellaneous	4,135			4,135	26,285	
Revenue, auxiliary operation	60,360			60,360	67,006	
Total support and revenue	260,243	93,675	3,441	357,359	358,610	
Expenses:-						
Program expenses:						
Curatorial and exhibits	131,572	24,940	7,648	164,160	143,626	
Support expenses:						
Membership	8,323		232	8,555	26,657	
General and administrative	78,737	6,468	3,255	88,460	92,864	
Fund raising	3,572			3,572	4,231	
Total support expenses	90,632	6,468	3,487	100,587	123,752	
Auxiliary operation	57,166	6,683	4,119	67,968	68,113	
Total expenses	279,370	38,091	15,254	332,715	335,491	
Excess (deficiency) of support and revenue over expenses	(19,127)	55,584	(11,813)	24,644	23,119	
Transfers for retirement of debt	10,696	(20,679)	9,983			
Transfers for property and equipment acquisitions	(500)	(18,567)	19,067			
Excess (deficit) of support and revenue over expenses after transfers and before cumulative effect of a change in accounting principle	(8,931)	16,338	17,237	24,644	23,119	
Cumulative effect on prior years of change in accounting principle		65,768		65,768		
Fund balance beginning of year	47,210	-0-	422,383	469,593	446,474	
Fund balance end of year	\$ 38,279	\$ 82,106	\$ 439,620	\$ 560,005	\$ 469,593	

The accompanying notes are an integral part of the financial statements.

DECEMBER 31, 1984

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:-

The New England Electric Railway Historical Society, Inc. (the Society) is a not-for-profit museum dedicated to the purposes of providing a source of information of a scientific and educational nature relating to the historical and mechanical use and development of electric street railways and collecting, preserving and maintaining, for study and exhibition, electric street railway cars of the various periods and all types, forms and examples of electric street railway equipment; and doing all things necessary and properly pertaining to the accomplishment of the above mentioned purposes.

## Basis of accounting:

The Society follows the accrual basis of accounting in accordance with the principles of fund accounting.

## Income recognition:

Current restricted contributions are recognized as revenue in the period received (see Note 2). Unrestricted revenue derived from membership dues is recorded over the period to which the dues relate. Membership dues received that relate to future years are recorded as deferred income.

## Contributed services:

The significant amount of time contributed by unpaid volunteers which is controlled by the Society and necessary for the development, maintenance and operation of its functions is valued at amounts which would have been spent had the volunteers not been available. The value of the contributed services is recorded in the statement of income, expenses and changes in fund balances as support and revenue and allocated to the expenses of the program, support and auxiliary functions which were benefited.

## Functional expenses:

Certain overhead and indirect costs are not allocated to the program service, membership and fund raising services and the auxiliary operation because the Society has not determined a formula for allocating these costs. All such costs are recorded as general and administrative expenses.

## Short-term investments:

Investments are carried at cost, which approximates market value.

## Grant receivable:

Grant revenue is recognized to the extent expenditures are made which can be charged against the grant. The grant receivable balance reflects the grantor's entire obligation under the terms of the grant. Deferred income in the current restricted fund represents funds receivable which have not been expended.

## Fixed assets:

Purchased and donated operating fixed assets are recorded at cost and their fair market value at date of receipt, respectively, and depreciated on a straight-line basis over their estimated useful lives ranging from ten to forty years. Donated and purchased collections or exhibits are not capitalized or depreciated.

## Inventory:

Inventories are stated at the lower of cost or market, cost being determined on the first-in, first-out basis.

## Pledges:

The Society has received certain pledges for its capital fund from members and friends. Because they are not legally enforceable, these pledges are recorded only when related cash payments are received by the Society.

## Account reclassification:

Certain accounts included in the December 31, 1983 comparative totals have been reclassified to be consistent with the December 31, 1984 account classifications.

## NOTE 2 - CHANGE IN ACCOUNTING PRINCIPLE:

During 1984, the Society changed the method of accounting for current restricted contributions. Previously, current restricted contributions were reported as deferred income until expended, at which time they were recorded as revenue. Under the newly adopted method, current restricted contributions are reported in full in the year received. The Society believes that the recognition of current restricted contributions in the period received more clearly reflects total support and revenue in the period being reported. The December 31, 1983 comparative totals have not been restated to reflect this change in accounting.

## NOTE 3 - FIXED ASSETS:-

A summary of fixed assets and the related accumulated depreciation at December 31, 1984 follows:

	Cost	Accumulated Depreciation	Net
Land	\$ 47,970		\$ 47,970
Land improvements	33,499	\$ 13,001	20,498
Building and improvements	338,242	69,521	268,721
Track and wire	100,440	37,058	63,382
Machinery and equipment	91,572	84,547	7,025
Construction-in-progress	101,156		101,156
	\$ 712,879	\$ 204,127	\$ 508,752



STATEMENT OF CHANGES IN FINANCIAL POSITION - TOTAL FUNDS

(With Comparative Totals for 1983)

NOTE 4 - LONG-TERM DEBT:-

Long-term debt at December 31, 1984 consists of the following:

Mortgage loan payable to the Ocean National Bank secured by land and a building, with interest at 12%, payable in monthly principal and interest instalments of \$1,435 through June, 1990	69,132
Less - current portion	9,435
	<u>\$ 59,697</u>

During 1984 the Society paid \$10,696 of the remaining principal balance of \$11,334 of a long-term unsecured note payable to a member. Under the original terms of the agreement, the unsecured note was payable in quarterly instalments through December 1991. Under the new terms of the loan, the remaining \$638 is payable in equal quarterly instalments through December 1985, and is reported as a loan payable.

Annual principal repayments to be made by the Society during the next five fiscal years are as follows:

Year ending December 31,	Amount
1985	\$ 9,435
1986	\$10,632
1987	\$11,980
1988	\$13,500
1989	\$15,212

NOTE 5 - DESIGNATION OF UNRESTRICTED FUNDS:-

At December 31, 1984, unrestricted funds have been designated by the Board of Trustees for the following purposes:

Car Barn fund	\$ 4,808
Restoration of cars	13,195
Endowment fund	2,737
	<u>\$20,740</u>

Sources of working capital:-

	Year ended December 31, 1984	Year ended December 31, 1983
Excess of support and revenue over expenses before cumulative effect of a change in accounting principle	\$ 24,644	\$ 23,119
Add income items not affecting working capital in the period:		
Depreciation	15,254	15,135
Contribution of operating fixed assets	(3,441)	(18,974)
Cumulative effect on prior years of a change in an accounting principle	65,768	—
Total sources of working capital	<u>102,225</u>	<u>19,280</u>
Uses of working capital:		
Retirement of long-term debt	19,953	10,820
Acquisition of operating fixed assets	19,067	31,566
Total uses of working capital	<u>39,020</u>	<u>42,386</u>
Increase (decrease) in working capital	<u>\$ 63,205</u>	<u>\$(23,106)</u>

Analysis of Changes in Working Capital

Increase (decrease) in current assets:		
Cash and savings account	\$(11,909)	\$ (3,214)
Accounts receivable	(562)	(866)
Grant receivable	25,000	(16,000)
Loan receivable	(1,600)	1,600
Due from current unrestricted fund	13,562	—
Due from current restricted fund	(1,558)	615
Short-term investments	10,680	18,185
Inventories	(10,017)	(11,377)
Other assets	1,070	(1,068)
Total	<u>24,666</u>	<u>(12,125)</u>
(Increase) decrease in current liabilities:		
Current portion of long-term debt	1,365	(1,024)
Loan payable	(1,838)	—
Accounts payable and accrued expenses	3,863	(7,110)
Due to current unrestricted fund	1,558	(615)
Due to current restricted fund	(13,562)	—
Deferred income	47,153	(2,232)
	<u>38,539</u>	<u>(10,981)</u>
Increase (decrease) in working capital	<u>\$ 63,205</u>	<u>\$(23,106)</u>

The accompanying notes are an integral part of the financial statement



NEW ENGLAND ELECTRIC RAILWAY HISTORICAL SOCIETY, INC.

ADDITIONAL INFORMATION

STATEMENT OF FUNCTIONAL EXPENSES

(With Comparative Totals for 1983)

Program	Year ended December 31, 1984					Auxiliary Operation	Total Expenses	Total Expenses
	Curatorial & Exhibits	Membership	General and Administrative	Fund Raising	Total			
Salaries	\$ 31,012	\$ 556	\$ 20,276	\$ 1,111	\$ 21,943	\$ 2,429	\$ 55,384	\$ 58,767
Employee benefits			1,021		1,021		1,021	1,311
Payroll taxes	3,037	39	2,114	78	2,231	248	5,516	5,630
Total salaries and related expenses	34,049	595	23,411	1,189	25,195	2,677	61,921	65,708
Contributed services	36,685	1,646	12,099	1,020	14,765	8,405	59,855	66,306
Professional fees	3,336		9,572		9,572		12,908	10,224
Telephone	1,101	69	1,812	123	2,004	10	3,115	3,210
Electricity	10,564	405	1,767		2,172	756	13,492	13,045
Postage and shipping	553	384	623	364	1,371	882	2,806	3,099
Printing and publications	1,771	3,244	1,017		4,261	265	6,297	7,709
Restoration and maintenance	51,663		5,629		5,629		57,292	41,373
Taxes			571		571	103	674	764
Insurance	6,674		2,732		2,732	730	10,136	9,362
Rental fees			55		55		55	1,630
Public relations			12,100		12,100		12,100	13,904
Travel			718		718		718	648
Membership fees			1,034		1,034		1,034	990
Equipment rental			8,284		8,284		8,284	6,428
Supplies	1,259	1,212	1,132	876	3,220		4,750	5,202
Interest	2,451					6,683	9,134	11,497
Miscellaneous	6,406	768	2,649		3,417		10,751	17,001
Cost of goods sold						42,139	42,139	42,256
Total expenses before depreciation	156,512	8,323	85,205	3,572	97,100	63,849	317,461	320,356
Depreciation	7,648	232	3,255		3,487	4,119	15,254	15,135
Total expenses	<u>\$164,160</u>	<u>\$ 8,555</u>	<u>\$ 88,460</u>	<u>\$ 3,572</u>	<u>\$100,587</u>	<u>\$ 67,968</u>	<u>\$332,715</u>	<u>\$335,491</u>

## REPORT OF FINANCIAL OFFICER

Total Attendance in 1984 was 33,027 as compared with 34,700 in 1983 and 33,838 in 1982. Despite slightly better performance in 1983 that had been helped by the Postal dedication ceremony and the ARM Convention, the average rate of decline over the past six years has been 1,734 visitors annually with 1985 attendance estimated at 29,808. Total income from general museum admissions generally but not precisely reflected this trend amounting to \$74,117 in 1984, \$73,981 in 1983, \$77,938 in 1982 and \$81,402 in 1981.

Museum store revenues, although making an ever increasing contribution percentage-wise to total income nonetheless dollarwise have declined along with attendance. Furthermore, since from an accounting standpoint it has been allocated a share of the Visitors Center mortgage interest payments. As a result the net profits of 1983 and 1982, of \$3,012 and \$3,979 respectively because of 1984 expenses of \$63,849 caused the store to show a loss of \$3,489. It certainly is an added incentive to lift the burden of the mortgage payments so that the store's real contribution to total income can be evaluated.

On an optimistic note, the museum continues to experience substantial increases in cash support from museum members and friends. Cash contributions of \$94,631 were received in 1984 versus \$69,972 in 1983 and \$90,267 in 1982. While this may not appear to be a substantial increase on performance over 1982, it should be noted that \$24,942 in bequests were received in that year. Since these are usually one-time occurrences and not reflective of membership support, the net support from members and friends in 1982 was actually \$65,325.

In addition, the value of Contributions-in-Kind (contributed materials and other tangible items) and Contributed Services (volunteer labor) in 1984 was \$37,989 and \$61,955 respectively versus \$36,124 and \$66,306 respectively in 1983. While Contributions-in-Kind increased in 1984, the value of Contributed Services did not, the reason being that not all museum members are taking the time to fill out volunteer time sheets. This is fairly important; there is a value that can be placed on volunteer labor and accounting for that time effectively increases museum income and can be used for matches against grants. The I.M.S. Conservation Projects Support grant, for example, allows contributed services as a grant match.

Of special mention is membership support to the Restricted Fund where donors restrict their contributions to specific projects. In 1984, this support totaled \$88,253 versus \$62,920 in 1983 and \$54,418 in 1982. This increase is due mainly to the expanded membership fundraising and appeal effort that started in 1982 and reflects the membership's strong interest in the museum's collection and development. One of the museum's most successful continuing membership fundraising efforts has been the Visitors Center Mortgage Fund which has the goal of raising sufficient funds to meet the \$1,435 monthly mortgage payment for the Visitors Center on a continuing basis. This is necessary to keep scarce monetary resources available for other important museum programs. Indeed, since its inception in 1981, the membership and other interested parties have contributed a total of \$65,997 to this fund. This represents approximately 67 percent of the museum's mortgage obligation during this period and allowed scarce monetary resources to be used for other museum programs.

The museum's rolling stock restoration efforts received a major assist in 1984 with the receipt of a \$25,000 Conservation Projects Support grant from the Institute of Museum Services, a division of the United States Department of Education. The grant is to be used for conservation efforts on six cars and for car barn roofing and siding and the museum must match the amount of the grant with its own funds. However, these funds may be in the form of cash, contributed expenses and contributes services (volunteer labor). The grant application was prepared by the museum's Finance Committee.

Overall, as shown in the 1984 audited financial statement, on the page entitled "Statement of Income, Expenses and Changes in Fund Balances," total museum Support and Revenue was \$357,359 in 1984 versus \$358,610 in 1983 and \$307,271 in 1982. Total expenses in 1984, including \$15,254 for the depreciation of museum assets and \$99,944 for the expense distribution of the combined values of Contributed Services and Contributions-in-Kind, amounted to \$332,715. Functional expenses are detailed on the page so titled.

However, as shown in the statement of income and expenses, 1984 Unrestricted Fund expenses exceeded income available for those expenses and, as a result, the museum incurred a deficiency of \$19,127 of Support and Revenue over Expenses. A similar although lesser

deficiency, in the amount of \$1,774, was incurred in 1983 but in 1982 the museum experienced a surplus of \$34,265.

In 1984, the amount of \$9,983 was expended for the retirement of debt and \$19,067 was expended for the purchase of capital equipment and property. These expenditures are treated as inter-fund transfers and, therefore, are not reflected as functional expenses. Rather, they appear in the balance sheet as a decrease in liabilities and an increase in assets respectively.

The Unrestricted Fund balance at the end of 1984, which reflects the difference between fund assets and fund liabilities, including long-term debt, was \$38,279. Of this amount, \$30,870 represents Museum Store inventories and the remaining \$7,409 is cash available for expenses. However, the Board of Trustees had previously designated \$20,740 in Unrestricted Funds for certain purposes, including \$4,808 for car barn construction, \$13,195 for restoration of rolling stock exhibits and \$2,737 in an Endowment Fund. These funds are referred to as Museum Restricted Funds and are museum commitments, but due to the abovementioned overexpenditures, only \$7,409 of this amount is currently available. Restoring these funds requires that, in future years, income must exceed expenses by at least \$13,331.

Because of the declining trend of income from the public and deficits incurred, the museum's budget for operating and capital expenses for fiscal year 1985 had to be severely reduced to meet projected income levels. Balancing the budget, a difficult task at best, can be and often is further complicated by the very nature of STM's projects as well as the frequently indeterminate sources of supply for both materials and labor. As previously stated, a minor shop repair to car 420 developed into a situation requiring major surgery. A sudden opportunity for the purchase of 900 tons of ballast and the services of a "Hi-Tech" tamper are primary examples of unanticipated cost overruns.

The real challenge facing the museum is to reverse the trend of declining patronage by encouraging increasing numbers to make STM a must on their list of places to visit and bring their families. This certainly requires making the museum better known and more interesting and attractive to prospective new and return visitors. Efforts along these lines have been and are being undertaken, but cannot be looked upon to bring overnight results. First of all more strategic distribution of flyers implemented by a more "state of the art" design may have already been a factor in some slight momentary improvement in attendance as we go to press. In addition two major projects pushed along in response to replies from visitor questionnaires have been slow in being achieved and will take even longer to bear fruit — The significant extension of the passenger ride already completed and the installation of rest rooms well underway.

In addition to this effort to rebuild attendance levels we must continue to push forward on those fronts already successful, of seeking other sources of income, including private and public grants, increased support from the membership and a greater number of special events. An additional duty that falls on the Financial Officer's shoulders is, of course, the monitoring of all projects that have been funded to see that they are carried out to a successful conclusion, kept within budget and attract future contributions and grants.



Filling a few more seats per trip or increasing our load factor by a mere 10% could ease STM's financial burdens considerably. WOOLNOUGH



## PROGRESS CONTINUES AT THE NORTH TERMINAL

Although twenty years has elapsed since STM ceased its experimental passenger service at the North Terminal, work that had been resumed at that location in later years continues to progress, with two objectives in mind: to convert the area and track layout into an ideal terminus for a potential long run all the way from Arundel Station rather than the isolated operation as originally set up, and to construct the missing section of roadbed required to connect this segment to the Atlantic Shore Line roadbed.

During the year 1984, a new concrete unloading ramp was built which will permit easier transfer of cars between the operating ends of STM's interests, and may permit the shop to perform restoration work on equipment stored in the insulated fireproof car barn located at the Biddeford Station site.

In late 1984, a local blasting contractor successfully "shot" the loaf like ledge which blocked the right of way easterly of the Richardson creek crossing. This pile of fractured rock will be removed during the 1985 construction season. It is the next to last major barrier before open access will be possible along the entire roadbed; from Arundel Station to Biddeford Station. (The last, will be to construct a bridge across Richardson Creek.)

Major earth moving projects are underway also. The approach road from Route One to the Station site has been totally rebuilt, and should no longer be affected by mud conditions. The final grade in front of the car barn end of the station has been created, making it possible for track additions to be constructed during 1985.

Blasting and other improvements are underway, which will improve the eventual front parking lot, and permit extension of the present steel building.

The north terminal, known as Biddeford Station, is a joint effort between private interests which are financing station improvements, and the TERMINAL IMPROVEMENT FUND, a Seashore restricted fund, which raises funds for the development of those parts of the total project which are owned by the Museum. Seashore has deeded rights of way and use agreements with the private owner, guaranteeing free use of the Biddeford Station Terminal, its parking lot, and all necessary access.

The membership is encouraged to drive over to the Station site, and inspect the various progress items. For those inclined, the walk from Biddeford Station to Arundel Station is just 200 feet more than four miles, over an improved RR grade, and through picturesque New England woodlands.

## RICHARD T. LANE RESIGNS AS MUSEUM DIRECTOR

The year 1984 saw a significant transition in the museum's administration. It is with regret we note the resignation of the Society's first full-time, paid Museum Director, Richard T. Lane, Jr., after 11 years on the job. A long time member and former Trustee from the Philadelphia area, he had relocated to Maine in 1973 to assume the Director's position.

During his tenure, Dick Lane considered his top priority the improvement of Seashore's image in the local community, with the general public, and with the museum professional community. To that end he spent considerable time meeting with local groups to help promote the museum, and to bring a personal character to the museum in local eyes. Similarly, he was a promoter of the substantial and successful efforts to improve the appearance of the Museum over this period, and was active in implementation of the Development Program, including construction of the Visitors' Center.

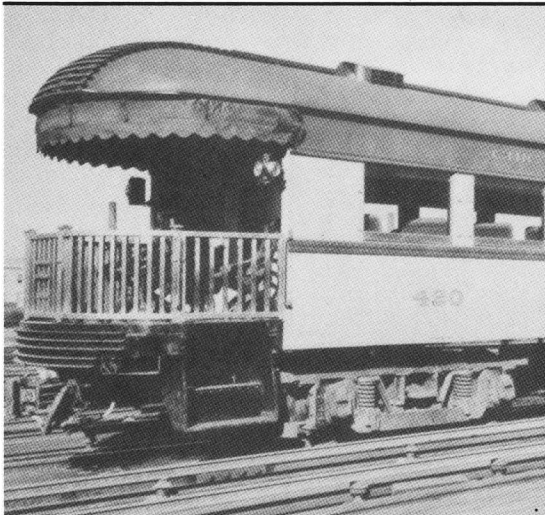
In the late 1970's efforts of Dick and the Society's Curator led Seashore to become the first electric railway museum accredited by the American Association of Museums, and subsequently resulted in the award of the first Institute of Museum Services grant. Fortunately, Dick still lives in the Kennebunkport area and remains a familiar figure at the Museum. Equally fortunately, Fred Perry was able to assume the Gen. Mgr.'s portion of R. T.'s duties on a voluntary basis.

## LEASE OF DIFFERENTIAL BOTTOM DUMP CAR TO MBTA

In February, 1984, the MBTA approached the museum with a request for the use for several years of our bottom dump car, former Boston Elevated Railway 3617. The car in recent years has been heavily used by our track department for ballasting, and by other departments for shifting cars in and out of our barns.

The museum wished to accommodate the MBTA, however, and we arranged a lease of the car to the Authority in exchange for repair work on the vehicle itself, the rebuilding of several traction motors and the loan of a 50-ton standard railroad hopper car, entirely suitable for STM's requirements, but too wide to clear the third rail in Boston's tunnels.

The exchange of equipment took place in the fall of 1984. Car 3617 arrived at Wellington September 24, and was quite professionally refurbished there at the MBTA Orange Line shops. The car entered maintenance of way service on the Orange Line February 26, 1985, and later on the Red Line on April 19, where it now runs in the wee hours of the morning ballasting the line.



ABOVE — 420 as it originally appeared in the orange and maroon paint scheme of the Insull era. The open platform with brass railing was ideal for political campaigning at whistle stops.

Geo. Krambles collection — C.E.R.A. Bulletin 107



ABOVE RIGHT — Chicago, North Shore & Milwaukee 420 shown after roof and body work that was followed by its repainting with the new IMRON enamel in that road's latter day green and red paint scheme. It contrasts with its appearance when outshopped by Pullman in 1928 as the last and most deluxe of the four observation cars built for the interurban, the only one to be outfitted with swivel armchairs. With the depression setting in shortly thereafter, by 1932 this prestigious parlor car service was eliminated. An added saving was the doing away with the running of trains hauling these single end cars all the way south on the Chicago "L" to 63rd St. to wye them.

In dead storage until 1943, war-time demands saw them converted to conventional double-end coaches, equipped with two motors each, salvaged from de-motorized Merchandise Dispatch cars. Of less power and lower than main-line gear ratio, they were generally assigned to Adlai Stevenson's line, the Mundelein Branch. Today, easier on power, 420 is more economical for STM's operation than four-motored 755.

WOOLNOUGH

NEW ENGLAND ELECTRIC RAILWAY HISTORICAL SOCIETY, INC.

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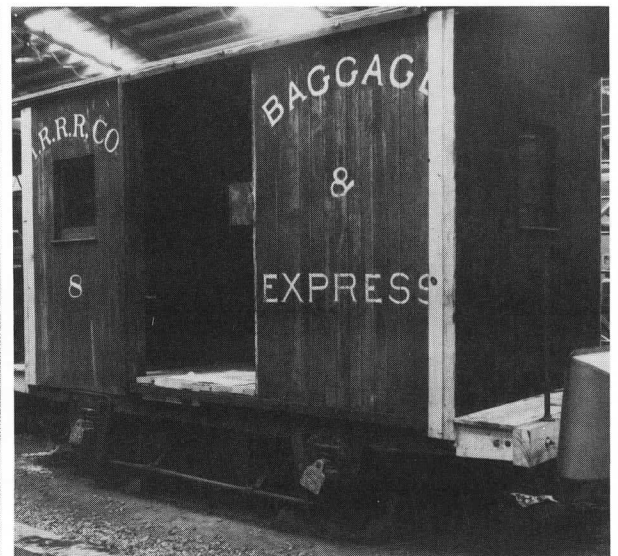
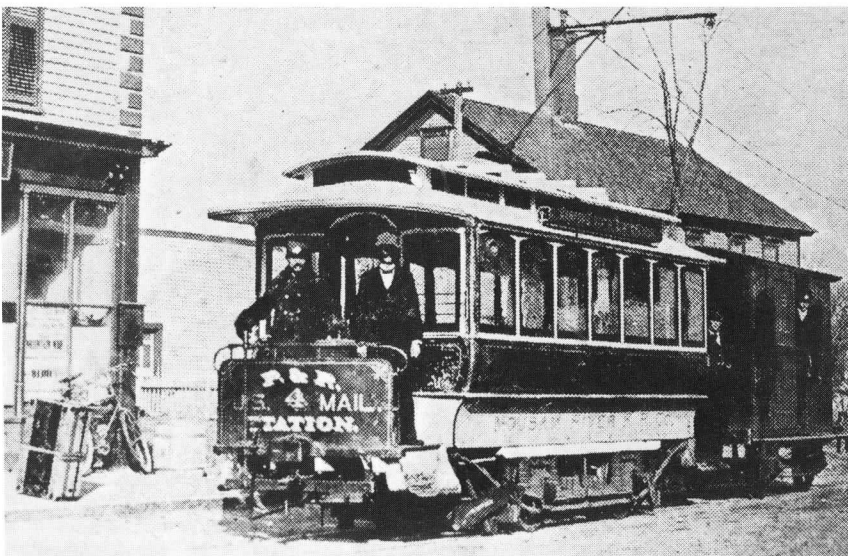
SEASHORE TROLLEY MUSEUM —  
 THE MUSEUM OF MASS TRANSIT

ADMINISTRATIVE OFFICERS\*

*Museum Director, Curator &*  
*General Manager (to mid August)* . . . . . Richard T. Lane, Jr.  
*General Manager (after mid August)* . . . . . Frederick J. Perry  
*Director of Exhibits* . . . . . George Burdick  
*Bookkeeper/Office Manager* . . . . . Dorothy Warner  
*Museum Store Manager* . . . . . Mary Elizabeth Cott  
*Co-Superintendent Passenger Operations* . . . . . Foster C. Leavitt, Sr.  
*Co-Superintendent Passenger Operations* . . . . . C. Murray Cott  
*Electrical Engineer* . . . . . Thomas M. Brigham  
*Sup't. Car Restoration & Maintenance* . . . . . Donald G. Curry  
*Supervisor Track* . . . . . James E. Tebbetts  
*Sup't. Communications & Signals* . . . . . Lyman B. Hurter  
*Section Foreman* . . . . . M. Dwight Winkley  
*Editor Dispatch* . . . . . Marjorie M. Walker  
*Historian* . . . . . O. R. Cummings  
*Museum Photographer* . . . . . Charles Woolnough  
*Public Relations Representative* . . . . . C. Murray Cott  
*Public Relations Representative* . . . . . Henry Dickinson, Jr.  
*Public Relations Representative* . . . . . Ron Palmquist  
*Motor Coach Tour Coordinator* . . . . . Barbara R. O'Brien  
*Motor Coach Tour Coordinator* . . . . . William A. O'Brien  
*Manager Brochure Distribution* . . . . . Dorothy Braun  
*Manager Brochure Distribution* . . . . . George F. Braun  
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\*UP TO ANNUAL MEETING

New England Electric Railway  
 Historical Society, Inc.  
 Seashore Trolley Museum  
 Drawer A  
 Kennebunkport, ME 04046  
 (207) 967-2712

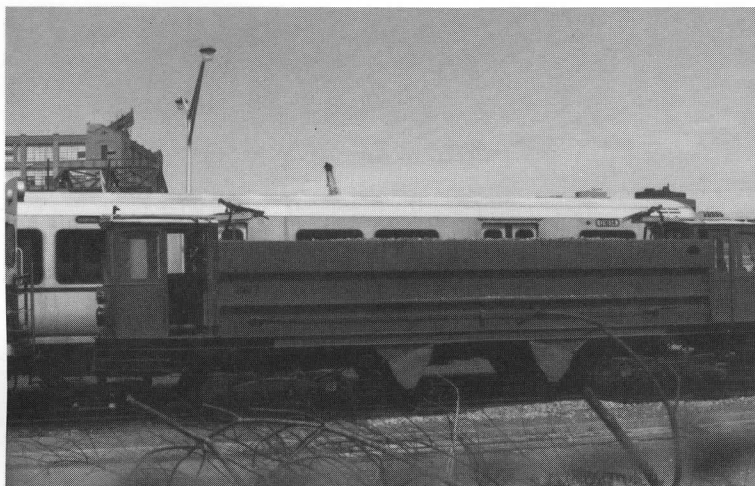


Until 1984, restoration of Mousam River Baggage trailer No. 8's long missing platforms would have been virtually impossible. The photo on left, showing No. 8 being hauled by Mousam River No. 2, reveals only the side of the car. Spurred on by the grant given by the National Trust for Historic Preservation, original Portland Company drawings from which the car was built, were made available. O.R. CUMMINGS

Photo on right shows work well along in restoring No. 8 from seventy years as a storage shed to its original pre-1900 configuration. Ironically the two-mile line that it originally ran on between Sanford and Springvale saw the rise and fall of the great Atlantic Shore Line and survived to be the State of Maine's last trolley line. WOOLNOUGH



# BOSTON COLLECTION UPDATE



Bottom Dump Car 3617 in MBTA Red Line Cabot Yards after being refurbished by MBTA. The car is equipped with East Boston Tunnel non-motorized Taylor trucks to be towed by a pair of passenger cars while doing ballasting work on the third rail lines. The lease of this car and the renewal of the lease on STM's No. 5 Semi 5734 are continuing examples of the superb long standing cooperation that has characterized relations between the MBTA and the Museum. POLLMAN



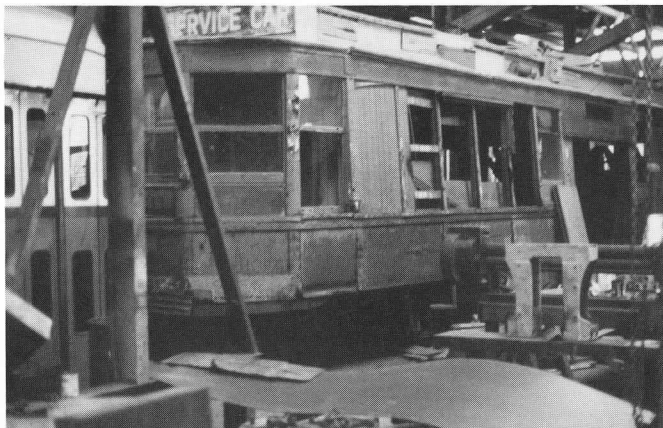
Seashore's Type 5 Semi, 5734, poses at the all-new Reservoir Carhouse while on a popular System-wide fantrip on the MBTA system. The car continues to be leased by the Transit Authority and is housed at Watertown Carhouse. POLLMAN

## RECONSTRUCTION OF FIRST CENTER ENTRANCE CAR COMMENCES

While no one type of car can lay claim to having been Boston's standard surface car the Center Entrance motor car was one of the most important types that spanned the period of time from World War I to World War II.

In Seashore's earlier days 6270, one of the last still equipped as a passenger car was acquired. Later 6270 was joined at STM by 6131, which had been converted to a sand car.

The ultimate plan is to convert the second car back to a passenger car to train with 6270. The help obtained by an IMS grant and the improved shop facilities and skills accumulated by STM have made this start auspicious.



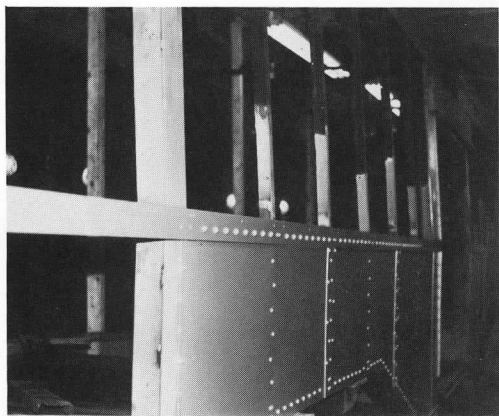
1.

1. Car 6131 just after start of initial removal of sand car retrofit materials and window coverings. POLLMAN

2. New side sill being pre-drilled in preparation for riveting on of side sheets. WOOLNOUGH

3. View of major portion of car as totally rebuilt by shop personnel. WOOLNOUGH

4. General view after structural rebuilding of both sides and the first front end with yellow prime coat applied to new work. WOOLNOUGH



3.



2.



4.

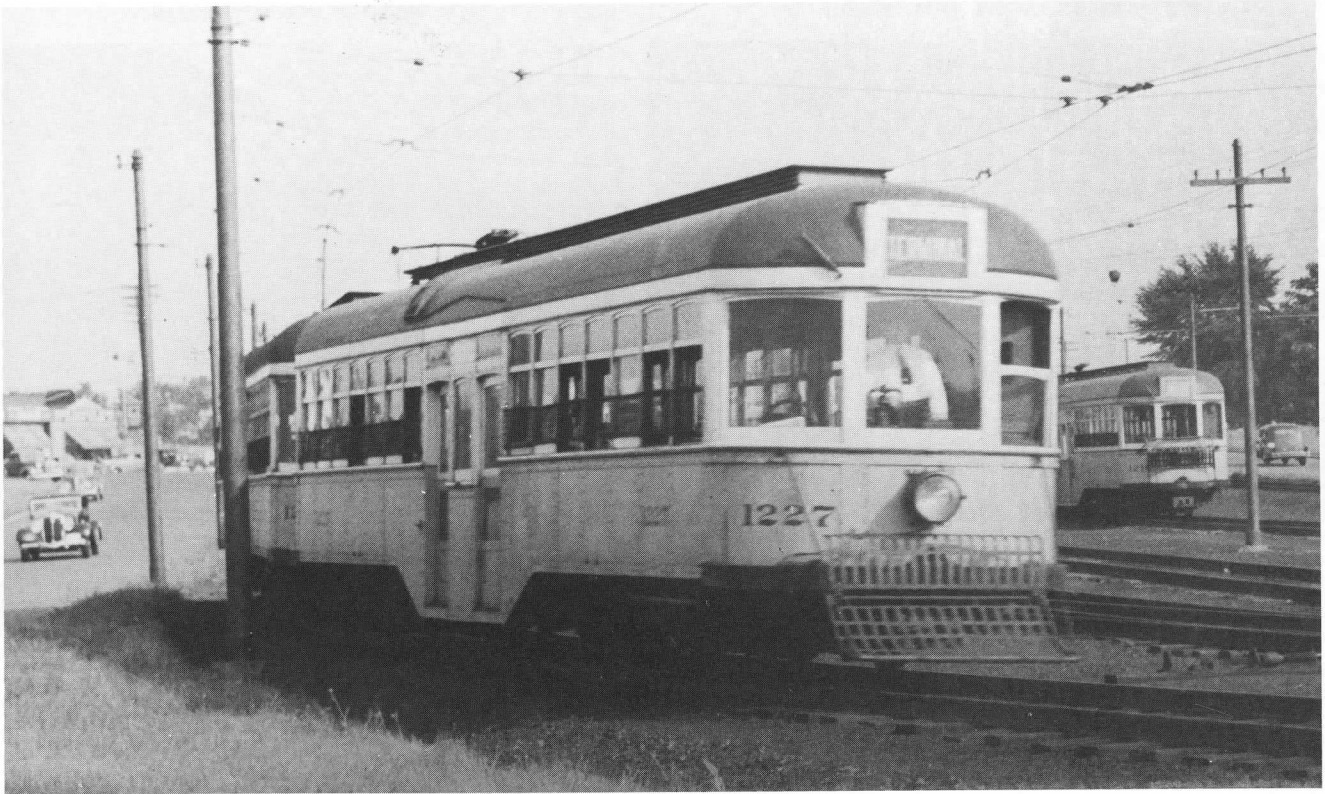
### BACK COVER

TOP — During its career of forty-five years Car 1227 operated on three systems in greater Cleveland. After serving Cleveland Railway city lines for a decade, the car was leased and later sold to the suburban Shaker Heights Rapid Transit System — a pioneer light rail streetcar rapid transit operation — where it ran until 1959. Earlier in its career, in 1922, the car was fitted with deluxe cane seating and ran in trial service on the Cleveland Southwestern Railway branches to Wellington and Grafton.

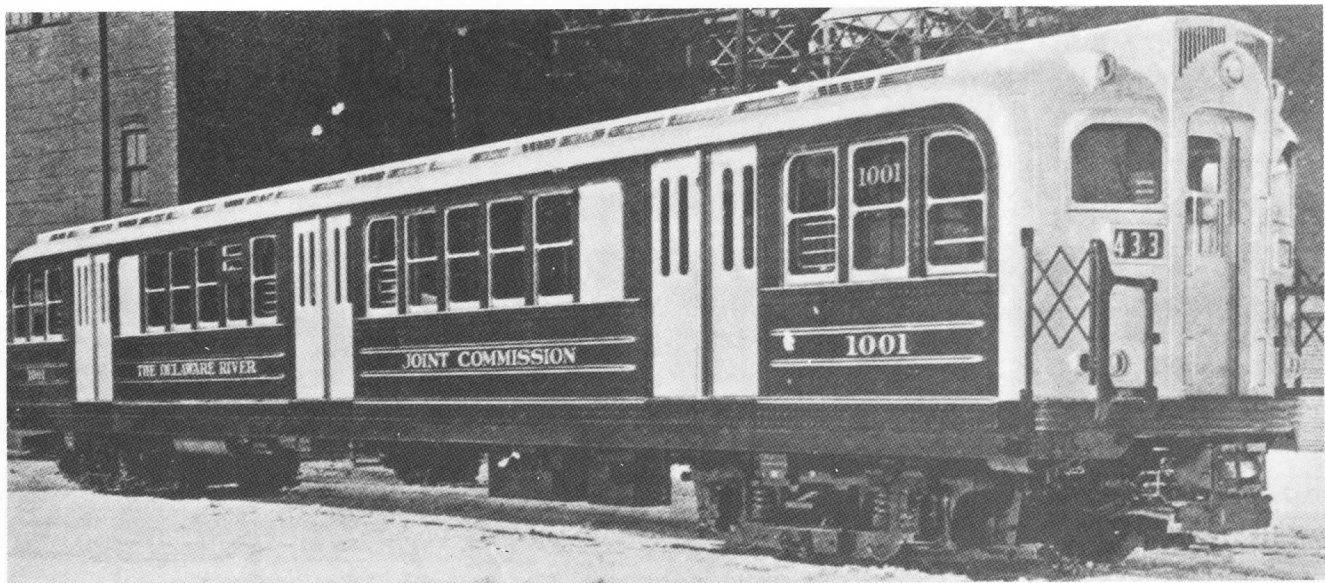
DICK RUMBOLZ PHOTO

BOTTOM — The striking art deco lines of the "Bridge Cars" show well in this picture of Car 1001 — a mate to Seashore's 1018 and 1023 — reproduced from a 1941 booklet, "Westinghouse Equipped Cars". Clearly shown are the General Steel Castings' Commonwealth trucks (with double clasp brake shoes), standard latter day interurban car equipment as used on Indiana R.R. Hi-Speeds and the North Shore Line's Electro-liners.

WESTINGHOUSE PHOTO



**Cleveland Railway 1227 Operating on the  
Shaker Heights Rapid Transit System**



**The Delaware River Joint Commission  
Philadelphia, Pennsylvania  
67-Passenger Multiple-Unit Subway Rapid Transit Car**