

TROLLEY FARE

Volume 65 Number 4

October-November-December 2018



Access Road Ribbon Cutting, October 23, 2018

Ed Lybarger photo

Access Road complete! ... Fairgrounds Siding Progress

By Scott R. Becker, Executive Director

On October 23, 2018, we celebrated completion of a new entrance driveway off North Main Street that utilizes 2.75 acres donated by neighbor, Eaton Crouse-Hinds. This 875 foot access road is an important initial step towards completing a comprehensive plan to expand the East Campus and was funded by a grant from the Allegheny Foundation. Elected officials, Museum trustees, volunteers, staff, and supporters of the Museum rode a vintage 1950s bus from our current Museum site at 1 Museum Road, to the new road where remarks were made and the ribbon cut. Attendees then rode the bus over to Wexford Station where they transferred to antique streetcars for the ride back to the current Museum site. Use of the antique bus was donated by Antique Coach Excursions, locally owned and operated. Special thanks go to Eaton Crouse-Hinds for making the

land available to us, Allegheny Foundation for funding the project, Larry Lovejoy and Bill Piper for volunteering countless hours in design and project oversight. Thanks also go to key partners on the project: Cast & Baker Corporation, Green Acres Contracting, Peacock Keller, LLP and Widmer Engineering.

Continued progress is being made in other areas of the Capital Campaign. We have received a \$100,000 grant from the Katharine Mabis McKenna Foundation and a \$50,000 education grant from the Grable Foundation to be paid over 2 years. Hayes Design Group has been assisting us in finalizing our detailed application for the RACP State Grant announced in the last issue of Trolley Fare. We have had a number of meetings with the Carnegie Science Center as part of their efforts to design new exhibits for both the Welcome & Education Center and the Trolley



WCCF Gives Award 10-18-18. *Marlina Hays Photo*

Display Building (TDB). I am pleased to report that a \$12,500 Mini-Grant has been approved by the Rivers of Steel Heritage Area for 3 information kiosks and portable partitions in the TDB. This will be matched by PNC Charitable Trust and Allegheny Foundation grants for a total project budget of \$25,000. We plan to have these kiosks and partitions installed later in 2019 and expect they will further improve the visitor experience!

Tremendous progress has been made in the past few months regarding our Fairgrounds project! Demolition started shortly after 2018's County Fair with the trolley wire removed by our Power & Signal volunteers. Thanks to the help of contractor CH&D, and subcontractor Frontier Railroad Services, the old track and platform were removed in the early fall and the right of way improved with new drainage and sub grade. Frontier Railroad Services delivered the ballast stone needed for the project which



November 14, Evan Frazier, Candace Baranski, Neil Parham and Tom Sterling from Highmark Blue Cross Blue Shield stopped by to check out our new Trolley Operator Simulator

Bob Jordan Photo

has been stockpiled on the Museum's portion of the parking lot at Eaton. Installation of the stone will be collaboration between Frontier and the Museum, with Frontier loading the stone into PTM ballast car 3618 and the Museum transporting the stone to the site and spreading it in place. Bernie Orient just completed extensive servicing of 3618, so it's ready to commence work. P&S volunteers took advantage of good weather to install signal foundations, feeder and span wire. At this writing, the entire overhead electrical system, including signal primary power

TROLLEY FARE

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Mission Statement

The Mission of the Pennsylvania Trolley Museum is to communicate the story of Pennsylvania's Trolley Era to a diverse audience through the preservation, interpretation and use of its collection of electric railway and railroad equipment, associated artifacts and photo/document archives, to ensure that visitors have an enjoyable and rewarding educational experience.



Ace Bus at Wexford Station.

Bruce Wells' photo

lines, trolley feeder cable, pole back guys, cross span wires and trolley wire are in place. On the contractor side, Frontier Railroad Services has completed the construction of the skeleton track. With the overhead wiring in place, ballast placement will soon commence. Special thanks go to the Port Authority of Allegheny County for donating their surplus bucket truck #715. This 1997 GMC 3500 truck is in serviceable condition and our volunteers have already made great use of it putting in trolley overhead at Fairgrounds.

We were fortunate to welcome over 31,000 visitors in 2018 and look forward to another great season in 2019. New volunteers are always welcome!



At the Fall Conference of the Heritage Rail Alliance, Scott Becker and Bruce Wells represented PTM to receive the Heritage Rail's Significant Achievement Award, November 10, 2018 for the restoration of West Penn Railways 832. Tim Crain photo



For the second year in a row Pennsylvania Trolley Museum is the recipient of First Place for the Best of the Best Awards in the Museum and Local Tourist Attraction categories.

Madelon Cline photo

“What a Ride! What a Year!”

Well, it has been and continues to be a wild ride here on the Progress Street Railway line. The year 2018 saw us complete our fifty-fifth year of public operation, and 65 years as an organization. Over the past two years it's been my honor to have some small role in piloting this rail vehicle through the twists and turns. We made a lot of stops and picked up a lot of passengers along the way. I'm sure you've been following the progress in Trolley Fare so just to summarize briefly, many of the things you've seen include our near 100% conversion to LED lighting in all of our buildings, installation of a new back-up power system at our West Campus, the rehab of crane M283, roll out of another total car restoration, completion of Phase I at Fairgrounds -- the bridge -- and beginning of Phase II -- the platform and new track alignment, to name a few. More details to follow.

PTM continues to be the top heritage attraction in Washington County welcoming over 31,000 visitors and we were again recognized by the Observer-Reporter's 'Best of the Best' Event as the Best Museum and Best Local Tourism Attraction. Along with the rollout of West Penn Railways car number 832, we unveiled a new West Penn Railways exhibit and published the Allegheny Valley Trolleys book culminating many years of research. A new Trolley Operator Simulator was also introduced, funded in part by Highmark Blue Cross Blue Shield, and I applaud our outstanding volunteers and paid staff alike in their efforts to welcome our visitors and make every visit to PTM a memorable one!

We again enjoyed record setting participation in our Scouting Merit Badge program under the able direction of Jim & Carmen Herrington and Armand Latour. Also, as we covered in detail with photographs last issue, another very important milestone was reached this year as we recognized Scott Becker for 25 years of faithful and creative leadership as our Executive Director, and we hosted yet another Roast/Toast of one of our local governmental leaders, State Representative Jason Ortity.

Huge on the 2018 progress list was the public kick-off of our major capital funding campaign, the “On Track for the Future” in June. This campaign has been very successful with major contributions secured from various foundations and the award of a major \$2,500,000 Redevelopment Assistance Capital Program (RACP) grant from the Commonwealth of Pennsylvania, which has brought us to more than 85% of our goal.

Many thanks to our Capital Campaign Steering Committee chaired by Ray Betler, with fundraising counsel from Teeter Associates. PTM also received a significant land donation from our neighbors at Eaton Corporation and this allowed us to complete a new entry and access road to our East Campus in October. We have been working with Hayes Design Group on architectural planning of the Welcome & Education Center and related East Campus improvements, and with the Carnegie Science Center and The Magic Lantern to develop exhibits for this new facility.

Twenty-eighteen also saw the undertaking of an overall Strategic Planning Initiative. As part of this process, a lot of input has been gathered through small group listening sessions and two large group sessions. Final results and recommendations are being studied by the steering committee as they consider how best to implement what we've learned and make recommendations to the Board of Trustees.

Board of Trustees elections were tabulated in November and I'd like to thank J. Bracken Burns, Sr., Lee Gregory, and Tom Rooney for their outstanding leadership and service to the Board and at the same time welcome Arthur W. Ellis to the Board for the first time. Returning to the Board is Operations Manager Kevin Zebley, as well as Fr. Jack Demnyan who was elected to a full term after being appointed to complete a term previously vacated. I also want to welcome Ed Moraczyk and Tom Sterling who were appointed to our board in 2018.

As for myself, unlike other governing bodies, our bylaws set term limits and I have served the max allowable as President, so I'm passing the coveted gavel to Christopher Golofski. Chris has a professional background in public transit and railroading and has been a part of PTM for many years serving in the Operations Department as Motorman and Instructor and has recently headed our Safety Committee. As Chris shoulders the tremendous responsibility of keeping this thing on the rails, I know you'll support him as you have me and for that I thank you. I'd also like to congratulate Laura Wells as she steps into her new role as Vice President.

So for now, on behalf of the entire crew of the Pennsylvania Trolley Museum, I'd like to thank you for riding with us. Please remain behind the yellow line until the car comes to a complete stop and watch for approaching streetcars and runaway baggage carts when disembarking. 

Fall Back and Spring (Summer and Fall!) Forward By Madelon Cline & Sarah Lerch



All Four seasons at



The Trolley Museum



October-November-December 2018

Dreams of sugarplums are no longer dancing in our heads and we are beginning to dream of bunnies hopping about! For us at the museum, that means that the 2019 season is soon upon us. But before we look to our future, we must remember our past. Each year our museum grows, our growth has truly taken off and 2018 was very momentous for us. We announced our Capital Campaign, we introduced a new event, finished construction of the roadway to

January and February

We are hard at work planning for 2019!

While the museum is closed to the public, staff and volunteers are busy working and preparing for the opening of the 2019 season.

March

Operator Requalification: We welcome back returning operators to gear up for another great season.

April

New Operator Training: Interested in learning to operate a trolley? Members are invited to sign up for operator training to learn how to operate trolley cars in the museum collection and give guided tours to the public. Upon completion of the training, you'll be able to join the incredible team of operators at the museum! Contact educator@pa-trolley.org for more information.

Bunny Trolley: Everyone's favorite bunny is hopping on down to the museum. Come ride a trolley to visit with the Easter Bunny, play games, eat snacks, and visit some furry bunnies. Come celebrate spring with us! Friday-Sunday April 12-14; Friday-Saturday 19-20

Field trips and group tours are offered April through November. Check the website for more information on how to book an exciting visit!

May

Join us May 10-12 and May 17-19 as we welcome Daniel Tiger, from the hit PBS KIDS series "Daniel Tiger's Neighborhood," to the Pennsylvania Trolley Museum for his special weekend!

June

Scout Merit Badge Workshop: The first of three Scout Days will be held at the museum on Saturday, June 8, 2019.

Anything on Wheels: Visit the Trolley Museum for a fun-filled summer weekend! Enjoy a Truck Show on Saturday and a Car Show on Sunday along with other fun activities for the whole family. Saturday-Sunday June 22-23

July

Scout Merit Badge Workshop: July 6, 2019

August

Washington County Fair: The Trolley Museum will be offering its annual park and ride service to the fair. Grab a ticket and climb aboard! Sunday-Saturday August 11-17

September

Dinosaur Train: Our newest event is back and Buddy the T-Rex from the hit PBS show "Dinosaur Train" will be visiting with all his friends this fall. Visit with Buddy, play dinosaur theme games, and drink lava juice with dino popcorn. Saturday-Sunday September 28-29

October

Pumpkin Patch Trolley: Come celebrate fall with our annual pumpkin patch trolley. Ride a trolley to pick the perfect pumpkin, enjoy children's activities, and snacks. Saturday-Sunday October 12-13; 19-20; 26-27

November-December

Scout Merit Badge Workshop: Saturday, November 2

Santa Trolley: HO,HO,HO! Santa Claus is coming to the Trolley Museum! Enjoy a special trolley ride and pictures with Santa. Catch the Yuletide Shuttle, view the toy train and Lego® train displays, make a craft, and enjoy hot cocoa and cookies. November 29-30; December 1; 7-8; 14-15

Trolley and Toy Trains: Visit the toy train display, ride the trolleys, and tour the Trolley Display Building. A perfect holiday family outing! Friday December 6 & 13

It is certainly gearing up to be an exciting 2019. If you haven't been to the museum in a while, we invite you to stop in and go for a ride. Whether you're visiting or volunteering we hope to see you soon!

our new facility, and opened our Trolley Operator Simulator. All of these things could not have been accomplished without our members, volunteers, and staff, so thank you! Your support and dedication is truly appreciated.

As 2019 begins we are beyond excited to see what our future holds, so make like a bunny and hop down this list of activities we have planned for the year ahead:

Archives Update

It's been a good ride... December 31 wrapped up more than a quarter century for the writer as Chair of Archives and Publications. I assumed that responsibility upon the passing of Oliver W. Miller, who had in turn taken over from PTM's original Librarian, Mac McGrew.

When I started with Archives, we occupied one small donated room on the second floor of what is now the Eaton-Crouse Hinds building. Almost instantly outgrowing that space, we acquired a second room next door to the first, and after that, four vacant rooms on the first floor.

As the collection burgeoned, two more adjacent rooms were added, along with more space on the second floor for our engineering drawing files and large format scanner. And more recently, we were permitted to occupy a suite of carpeted offices which had been renovated after the 2004 flood but had never been rented out, along with a large workroom. The building itself has changed hands several times since we began there, and we continue to be grateful for each successive set of managers' support of PTM's effort to build a strong history of small artifacts, documents, photographs and publications relating to the Trolley Era.

Through the years, we have been fortunate in finding reasonably-priced, or free, furnishings

by Edward H. Lybarger

for the Archives. PTM is approved to purchase in the Federal Surplus Property program, and many vertical files and flat files were sourced there, along with numerous chairs and office supply needs. Other major sources of free furniture have included Adtranz (now part of Bombardier), Eyemark (part of CBS), West Penn Power, Metso Mineral Industries (formerly Dravo), Wyatt Corp. (who renovated a Bayer building for spinoff Covestro) and PTM Archives volunteer Ken Leonardi (unfortunately for us, now relocated in Montana), who brought many tables and bookcases, not to mention a few vertical files.

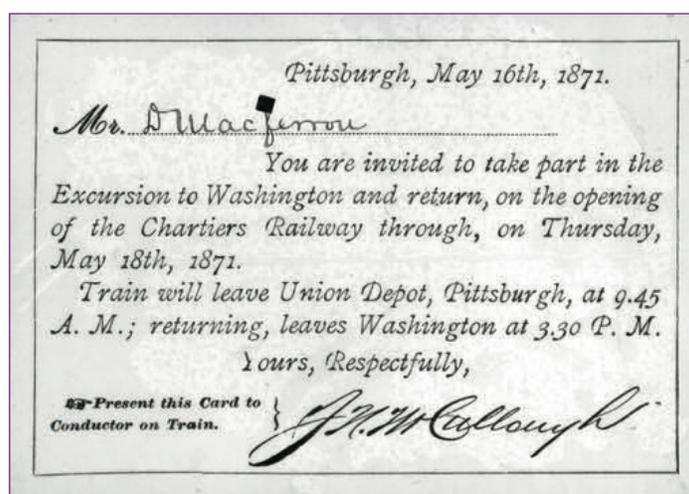
In 2018 we had numerous additions to our holdings. Many related to Port Authority; we thank Dave Fisher, Ed Hyland, Bill Millar (former Port Authority and APTA chief executive), Richard Ober (much Division 85 history and PRCo badges and service pins), Philip Sauerlander, Joanne Schmoutz and Peter Zimmerman (engineering drawings) for these. Others who contributed were Wayne Cole, Ed Springer, EPIC Metals (who converted the loan of historic materials discovered in the former Rankin Car House into an donation), Rockhill Trolley Museum (30 various Moody's and Poor's financial directories), and Connellsville Area



Dedicated Archives Volunteer Scott Ambrose.



Oakwood Park Carousel Tickets



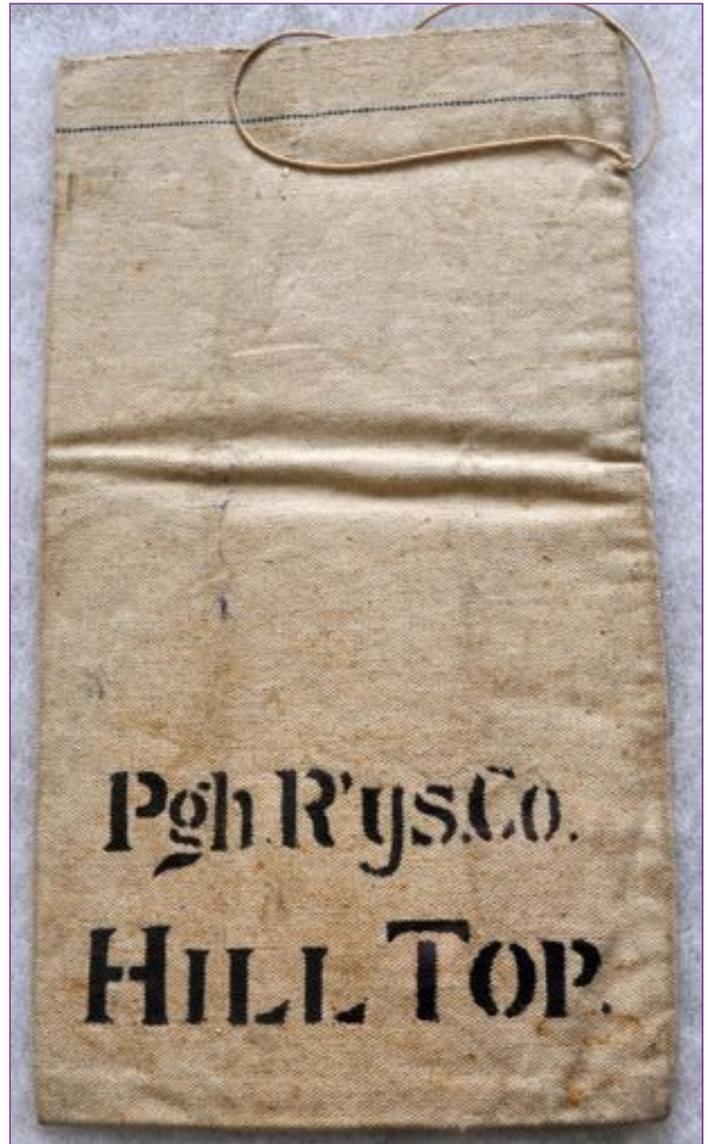
First Ride Chartiers Valley Railroad 1871.

Historical Society (which has allowed us unfettered access to a large collection of West Penn Railways historical documents and photographs).

Another source of primary Pittsburgh Railways Company documents and photos during the last few years has been longtime member Russell Cashdollar. Fifty years ago, when most of us were focused on equipment, Russell acquired from the estate of museum co-founder Harry Bartley a wealth of company photographs, varied documents and scrapbooks of transfers and tickets. This material is truly one-of-a-kind, and Russell has been transferring it in bite-size doses to PTM to help maximize our interpretive possibilities. We thank him not only for the donations but also for having the foresight to preserve the material in the first place. A few of the unique items are shown in the accompanying photos.

We have been graced with excellent volunteers through the years; 2018 was no exception. Chris Walker, Joe Boscia, Scott Ambrose, Jeff Coyne, Ken Leonardi, Chuck King, Janis Lybarger, George Gula, Katie Imler and Ray Hatfield, along with Russell Cashdollar (when he's able to be in town) and regular newcomers Gerry Kotlinski and Dave Buechler have, along with the writer, been responsible for the progress in the past year, and we extend our most sincere thanks for their good efforts.

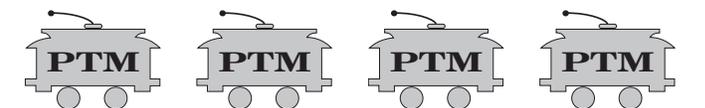
This will be my final Archives Update, as Chris Walker assumes the Archives Manager mantle on January 1. Those of you who know Chris are impressed by his research, writing and organizational skills, not to mention his real-world vocation as a transit planner. He will be an excellent leader as Archives prepares for the next major step – a new purpose-built facility on the East Campus – following completion of the new visitor center soon to be started. I want to thank all those who have supported our cause, either by donating or volunteering, and am sure that you will give Chris your wholehearted support in years to come.



Hill Top Car House Cash Bag.

I'm not going anywhere in the immediate future, and will still be on hand for Tuesday workdays when I'm in town, and will continue to contribute my 50 years' worth of knowledge of the subject to future museum projects. Happy New Year! 

We thank our Sponsors for their Support!



Which fare is fair? Excusing the age-old pun, it's an actual question being asked by various community groups in Pittsburgh.

In the fall of 2018, Pittsburghers for Public Transit, a non-profit transit advocacy organization, began a campaign raising awareness in regards to how transit fares work in Allegheny County. The group's central premise behind the campaign is a call to make transit fares (what they have described as) more equitable.

The group has called for an elimination of the current practice of making cash users pay higher fares than ConnectCard users. Currently, a patron paying with cash is charged \$2.75 per ride, with no transfer privileges. A card user pays 25 cents less with each tap, along with the option of a \$1.00 transfer fee if switching vehicles.

PPT has also called for the elimination of transfer charges altogether, so card or ticket users could transfer for free at will. They have also brought up the idea of implementing the concept of "fare capping" in Pittsburgh – e.g., after so many uses a pay-per-ride ConnectCard would simply convert into a pass.

On at least one of these issues, fare capping, PAAC has provided a response in terms of outlining what a road to that result might look like. While the ConnectCard is capable of operating under a fare capping system, the software is not currently

configured to do so, and would need re-calibrated to operate in such a manner. While making cash fares the same as card fares, along with elimination of transfers may move the needle on the Authority's equity index, both of those changes would come at a cost and will require more study before any plans could be developed.

Speaking of value, a new report has highlighted the value of transit in general and in Pittsburgh in particular. What is that value? To put a fine point on it..about \$929 million.

A study by a Philadelphia consulting firm has estimated that homes along a transit route have a higher value, and Port Authority's services boost the county's economy by almost a billion dollars a year. The study shows that while Allegheny County's population comprises 9% of the state's total, it is responsible for 12% of overall employment and 13% of economic output. Eleven percent of the state's general fund revenues come from right here at home along the three rivers. The transit system has a great deal to do with all of those figures, allowing access to many job centers that keep us competitive.

The study also highlighted the increased number of building permits that have been issued along both the North Shore connector and East Busway in the last half-decade. Even today, more than a century after their construction, the South Hills rail lines boosts home values by as much as 14%.



In early October, WPVI-TV reported that SEPTA was holding a contest and asking people what its mascot should be and why. Prizes were to be awarded to the top eleven most creative entries. The Grand Prize is a November Anywhere TrailPass and the ten runners-up will each receive a SEPTA t-shirt. The contest ended on October 24.

October 12, 2018 new SEPTA Siemens ACS-64 electric locomotives 914 and 915 were seen traveling eastbound through Terre Haute, Indiana. A single Union Pacific engine was in charge of the train. The new locomotives are part of a fleet that is phasing out the 30-year old AEM-7 electric engines that are used on Push-Pull trains. On December 1, SEPTA held a special “Farewell to the AEM-7” excursion, which left Paoli Station at 10:25 a.m. The noteworthy crew included Jackie Pettyjohn, the first woman promoted to Engineer at SEPTA back in 1985, at the helm of the train and Pat Riley, the first woman promoted to SEPTA Conductor in 1986, as part of the on-board crew. The special train made stops at Wayne, Radnor, Bryn Mawr, 30th Street and Suburban Station, where train riders had an opportunity to visit the western-themed holiday decorated train located on Track 0, shop and stretch their legs. The

return trip departed from Suburban Station at 12:10 p.m. and returned to Paoli about 12:38 p.m.

During the late morning of Tuesday, October 23, six Regional Rail routes were suspended due to power problems near Suburban Station. The affected lines, all on the former Reading Railroad, were Chestnut Hill East, Fox Chase, Lansdale/Doylestown, Manayunk/Norristown, Warminster and West Trenton. Other regional lines experiencing delays included Airport, Chestnut Hill West, Media/Elwyn, Paoli/Thorndale, Trenton, Wilmington/Newark. Service was restored later that day, but trains operated with residual delays of up to 30 minutes.

Holiday Trolley Season returned as SEPTA Operators Gary Mason and David Musgrave used hundreds of lights, yards of garland and tons of ornaments to make the season brighter for their passengers. Gary decorated PCC II 2331 that operated on Route 15 and David decorated Kawasaki LRV 9055 that operated on Route 36. December 22, 2018 SEPTA had a Holiday Celebration at Trolley Portal Gardens. The Holiday Trolley operated from 40th Street to 13th and Market Street giving out free rides to children 4-16 years of age. This event was sponsored by SEPTA, the University City Arts



Gary Mason poses with his creation at Sugar House Casino Loop, a cutback on the Girard Avenue line

.Bill Monaghan photo

League and the Trolley Car Station. Santa's elves also decorated a Media/Sharon Hill Line LRV to celebrate the holiday season and commemorate

the world champion Eagles. The car was on display for several days between rush-hours at the end of Route 101 in Media, Delaware County. 



Dave Musgrave poses with 9055 at the 40th Street Portal. Bill Monaghan photo



SEPTA Locomotives-old + new. On the left Siemens ACS-64 #903 next to AEM-7 #2301 Bill Monaghan photo



Decorated PCCII at Girard Avenue Market Frankfort Elevated Station. Bill Monaghan photo

The temporary closure of our trolley line at Fairgrounds eliminated the use of single ended cars and also reduced the roster of available spare cars as double-enders were the cars du-jour. Fortunately at least one spare remained available down to the very end of the season. I've written this article as a car-by-car report.

Boston (hopper dump car) 3618:

Initially parked in the shop to provide maximum availability for service cars for the Fair, remained in until the close of the operating season. As earlier reported one of the pole bases was rebuilt due to damage to the inner bearing race plus replacement of virtually all other parts except the springs. While servicing the controllers, Fred noticed that several of the reverse fingers had broken shunts, other had mis-formed shapes, and virtually all of the mounting bolts were rusted. The shunts I refer to are thin copper strips, four per finger, that easily flex and collectively carry the heavy currents around the heavy copper or brass bar that tensions the assembly. When enough shunts fail, normally due to fatigue, more current passes through the spring material, eventually heating and annealing it, thus reducing the contact force between the finger and the drum segment, and making things even worse. Reverse fingers in reverse drums are typically very low maintenance. Having no spares I trekked to the APB in search of a donor controller and found two units (K43-GG) having the same type fingers but most were in worse shape than the ones I wished to replace. Also all of the fasteners were really rusted. Fortunately one of our suppliers could fabricate new fingers for a good price so we'll renew the ones in 3618 plus replace the borrowed ones from the APB. We had enough plated fasteners



Fred Cooley puts the finishing touches on the controllers of Boston 3618. Bruce Wells photo

in stock to replace the rusted ones. The car was returned to service on Dec 16.

Red Arrow 14: We had the car moved to the shop on Oct. 3 for scheduled maintenance plus replacement of the MG brushes that caused the breakdown during County Fair. On Nov. 9 I picked up a supply of 19 new bronze slider inserts from DeWald Machine, West View and we installed two of them on the car the following day. Midway through our Santa event the heat failed in the car. After some fuse replacements while in the car house the car was moved to the shop on Dec 12 but the heat began to work enroute and throughout several tests thereafter. The underlying cause of the problem was not discovered.

Pittsburgh crane car M283

Received scheduled maintenance on October 13, first since the rebuild. One seemingly positive action taken during rebuild was re-profiling the wheels. The flanges were cut or reduced then the tread of the wheel cut to reveal a proper flange. The wheel diameter reduction led to brake adjuster interference and insufficient clearance from the motor bottoms to the pavement in certain areas. The new offset-style brake adjuster rods installed on #2 end in June proved successful so we installed them on the other end. Although we raised all of the motors last year the inboard motors still hit the ground in the Carhouse yard area. So we hiked up motors 2 and 3 another inch. We also modified one motor lead support bracket to relieve interference with a brake rod. You may recall we had an overheated motor support bearing during initial testing in 2017 which has yet to be resolved.

Trucks for Pittsburgh side dump car M551:

The second truck was towed into the shop on Oct 31. On this truck there was a "unique" bolster configuration having a hollow tube from the top to the bottom for the center pin. Other trucks have openings part way so one can fasten the center pin. This feature created a challenge for a tow-bar adapter. Although hollow, the center passage varied in diameter and was clogged with grease and road dirt. After several iterations I machined a shaft that would travel through from top to bottom of the bolster and the truck was, first, moved by forklift to track 34 at the TDB, then towed to the shop by GE 89 loco. So far we've relocated the inboard traction motor to the outboard axle, where it was prior to 2010, to achieve a better fit between the support bearings and the axle. The former inboard motor, which failed in 2010 when the bolts holding an interpole coil became loose

and were machined off by the axle, was returned to the inboard axle. We had to overcome a problem with the MSBs being way loose on the worn axle. This was solved in a timely manner by having Artie Ellis machine 0.030 from both sides of one bearing to reduce the clearance and by stumbling upon a container in the APB containing the used support bearing shells extracted from the former M551 motors, which offered at least four usable bearings. Other challenges are the fabrication of brake beams, brake rods and a gear case, all still in progress.

Pittsburgh Railway Company 4398:

At first, sporadically then more frequently throughout the season, one of the end door pivot shafts came loose at the top taper fitting, losing the intended motion from the door engine. The repair for this is to replace the shaft and the taper



4398 is in the process of the make-over Bernie describes above. In addition it is having all of its doors and sash refinished thanks to the efforts of Ken, Eric and Brett. Bruce Wells photo

fitting, both items In stock. This car also had repetitive light bulb failures this and last quarter with the only solution being to change them out one at a time. Then there is the damaged copper rain deflector and peeling paint on the roof boards and most of the windows. Lastly there have been continuing complaints from Ops over the rope tensions from the pole bases. Happily all of these issues will be dealt with during the down time this winter and 4398 is already in the prescribed location in the shop as Ops did a lot of shifting for me on Dec 16. Work has already begun on some of these items.

Rio de Janiero Open Car 1758:

Pole bases replaced November 3. Both spring bases had been on the car since it entered regular service in 2011. These bases were common on PCC cars and we've seen in other cars that the bases will function with significant wear. This

however makes repairs more costly. The bases from 1758 and with the one removed on car 1711 required \$350 each for new roller and needle bearings and swing arm repairs. We also replaced both pole hooks with ones we fabricated having deeper throats to hopefully prevent the poles from bouncing out. The open car will spend at least some of the winter parked in the shop as it's short length relative to other cars allows room for the M551 truck and later on M880 tamper.

Philadelphia & West Chester Traction 78:

Suffered a derailment on Dec 9 in the TDB yard with axle #3 splitting the switch leading to (future) Trolley Street. The required inspection revealed a strange situation in that the brakes on the #4 axle were quite loose while those on axle #3 were quite tight (real tight). Once adjustments were made the brakes applied properly but released with a slightly skewed #3 brake beam. We had released the car for service the morning of December 15 but it was not required for operation..

Red Arrow lines 66: Suffered a severe motor problem during the last hours of operations for 2018. The #2 traction motor spewed smoke and there was a marked loss in power. Once the car was limped back to Richfol I did a visual and digital inspection of the armature and field coils (or at least what I could get to from the motor cover), and found things cool and clean. The armature bearing box was quite a contrasting story having much heat and the unpleasant odor of burning waste but a correct level of oil in the reservoir. We'll get the car into the shop this winter and extract the motor for repairs.

Miscellaneous items:

The Louie car brake shoe holder project is closed out. Eight holders are ready to go with pivot pins having grease passages. There have been no failures on PST 14 since the initial two failed in



Ken Ringer has been a tremendous addition to the Trolley Maintenance crew. Bruce Wells photo

2015. In this case affirmative action seemed to eliminate the problem, but we are prepared. Ohio brass form 11 pole bases: Eight units rebuilt, six of which have been installed on cars, two to go (4004 and M210) that we know of. We intend to have three complete units available for spares and one spare set of consumable items in stock

In closing you see that the Trolley Maintenance Department had a busy and productive quarter, and year for that matter. If you are keeping score on the motor problems, we've experienced four failures this year, a record for PTM, one I'd rather not have. Two failures were electrical, one of which was catastrophic and the other minor damage. The other two were mechanical failures, one minor and the other undetermined

at this point. Regardless of the problem the cars still need jacked and trucks pulled for the motor removal and the process repeated when the motors come back from repair. On the outsource side (read: motor shop) normal expenditures to open and reassemble a traction motor begins at \$2500. Our shop work force has expanded with the addition of Wayne Wicks this year and the occasional visit from Mike Buchta and Quinn Blasche, but there is still room, tools and projects for more interested parties. Contact our local Volunteer Coordinator for details. And in closings, thanks to our *regular* team of Fred Cooley, Bob Powischill, Ken Ringer, Eric Weinbrenner, Wayne Wicks, and Brett Freithaler. 

Power and Signal Report

By Robert Scott Davis

Progress on the Fairgrounds project is moving at an advancing pace. Since the last report, the right of way has been graded, poles set and framed with cross arms spans, and backguys. In addition, the signal primary, and dc feeder were reconnected to the power network.

The initial phase of the track construction was completed in early February, which allowed the P&S crew to string the trolley wire hot with line car M210. On the same day, the wire frogs were

installed and several inspection trips to Arden were successfully made with M210.

Once the track is tamped the joint bonds must be welded to the rails, the overhead adjusted and installing the signals.

As always many thanks to all those who made all this progress possible:

Jeff King, Kevin Zebley, Doug Zebley, Armand Latour, Laura Wells, Sarah Wells, Larry Lovejoy and Scott Davis. 



By early February work on the Fairgrounds siding progressed to the point where wire could be strung hot using Pittsburgh line car M210. In this scene the crew is installing a new trolley wire frog, with the John White House in the background. Scott Becker photo



In early October grading for the Fairgrounds siding was coming to a conclusion. As illustrated in the last issue the next step was to install signal bases. Bruce Wells photo



PAT bucket truck 715 was acquired in December and was immediately pressed into service re-stringing feeder and communication cables at Fairgrounds siding. Kevin Zebley, Doug Zebley and Laura Wells are seen here making attachments to the new line poles on December 16. Sarah Wells photo



December 22 work on Fairgrounds siding overhead wire work started with the line crew hanging span wires and placing down guys to support the contact wire. Sarah Wells photo



Track construction progressed throughout January and was closed out by the end of January 2019. Bob Jordan photo



Jeff and Scott pose with our SEPTA hi-rail bucket truck at the Fairgrounds siding December 26. Bruce Wells photo



Larry Lovejoy piloted 396 motorcar on the first voyage of the new year along the track to Arden returning to take this photo at the new Fairgrounds Platform. Larry Lovejoy photo

In Memorium Jim Ott

Jim Ott passed away in early January. He was a very dedicated volunteer working inspite of his illness right up to this September. Jim was particularly helpful with electrical wiring on projects such as West Penn Railways 832 and Philadelphia Transportation 8042. On page 16 we present a collage of photos from those who worked with Jim. His masterful knowledge of electrical wiring and the codes involved was priceless as were his skills in problem solving and fabrication of those solutions. In the restoration shop he will be sorely missed! In addition, Jim contributed in many other ways to the last 10 years at PTM including Special Events (especially with Santa Trolley), Operations and Scout Merit Badge (see photo on collage). He will be well remembered for his unique personality, he was fun to be around!





JIM OTT
*Pennsylvania Trolley Museum
 will miss your:
 Humor, Hard Work and
 BIG SMILE!*

