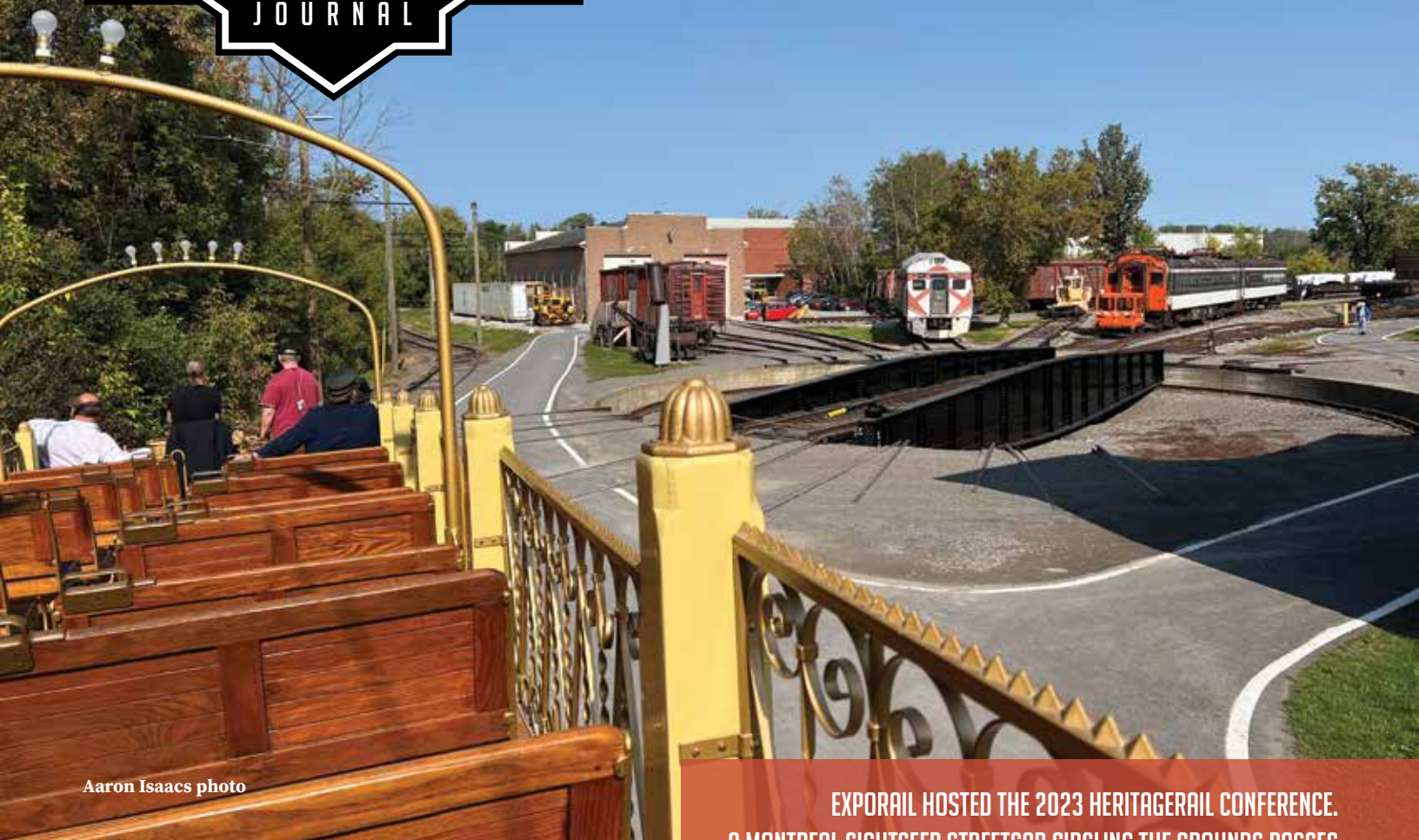


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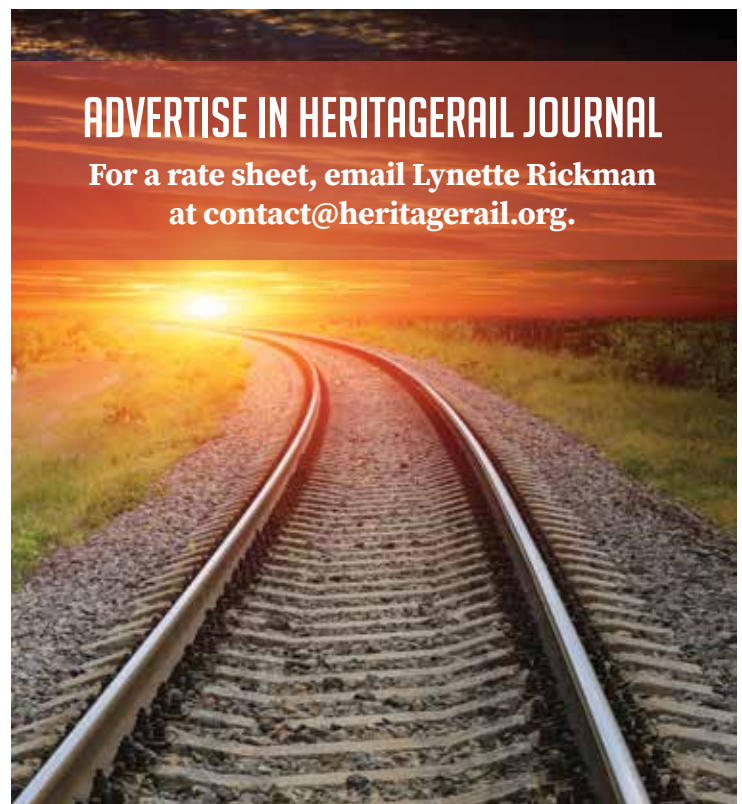
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FROM THE FRONT END

By Terry Koller, HRA President



Dear HeritageRail Alliance Members,
Sponsors and Vendors,

I am honored and humbled to have been elected by the Board of Directors as the next President of our fine organization. I have very big shoes to fill in following the generations of leadership of ARM, TRAIN, ATRRM and now

HeritageRail Alliance. My particular appointment to this position marks the beginning of a significant shift in the leadership of our respective organizations.

Our field of railway heritage preservation and its vast network of museums and tourist railroads has been built by those that saw the end of the steam era, those that remember riding on trolleys and street railways before their demise and those that were raised in blue collar railroad worker families. I have none of these experiences and this first-hand knowledge will continue to become more and more rare within our membership and leadership. I came to railway heritage preservation through a calling of stewardship. I recognized the significance and importance of this part of our nation's history and answered the growing need for its preservation and have dedicated my career to this effort.

I can't tell you stories of riding Santa Fe's Texas Chief as a young boy or remembering the end of the Southern Steam program or running the Chessie Steam Special. The closest I can come is a vague recollection of the last PCC streetcars running in Pittsburgh where I was raised. My first experience being on a real train was taking Amtrak from Seattle to Pittsburgh in 1996.

I can tell you that my relative success, or call it survival in this field, I did not accomplish alone. I have a litany of mentors. Outside of my organization the first railway museum professional that I met was John Hankey, who was working for Coastal Heritage Society as a consultant. In our railroad museum's fledgling years John taught us how to be a "grown-up" museum. John and I had many adventures and learning experiences over the years that formed my vision of what a railway museum should be.

John introduced me to the staff at the California State Railroad Museum. I made the journey across the country to CSRM and met Paul Hammond and Kyle Wyatt. They have been mentors and open resources ever since. Then began my grand tour of tourist railroads and railway museums around the country, I am sure like most of you far too many to list.

When I first met Aaron Isaacs, he visited Savannah to write an article on our museum and the Central of Georgia's repair shops. During our tour I had criticized a restoration detail on one of our locomotives stating that a past group of volunteers completed the work and they got it wrong. I will forever remember that Aaron quickly and sternly reminded me that if it hadn't been for these types of volunteers that our equipment may not have been saved. It was at that moment I realized that our collective museums were built by the passion of a certain faction of our population, not some academic endeavor.

When Georgia State Railroad Museum took the step into live operations and the allure of steam we engaged Steam Operations Corporation and I became a veritable sponge of learning from Scott Lindsay and Mark Ray. This has been a 20-year relationship that I cannot begin to place a value on. I learned diesel mechanics and operations from Patrick Stapleton when we purchased a pair of GE 44-tonners from the Claremont and Concord Railroad. Patrick has been my go-to for diesel wisdom for 17 years.

Enter Trolley World. In 2007 Savannah made a stab at invigorating interest in reconstructing its lost trolley lines with the rehabilitation of a Melbourne streetcar, self-propelled running the extant freight rails of our waterfront. This project provided the opportunity of learning from Gary Landrio, Harvey Stone, Randy Gustafson and Timothy Borchers on the startup of such an endeavor. Although it was short lived the experience gained offered the opportunity to source vehicles for the St Louis Loop Trolley project requiring a nationwide search for available vehicles. During this effort I spent a lot of time on the phone with Scott Becker, Jim Schantz, Bill Wall and many others culminating numerous trips to traction museums learning the endless details of makes and models of streetcar. These guys never

hesitated to drop what they were doing to help me find what I was after.

In 2011 I attended my first conference in Chattanooga and haven't missed one since. The networking, educational seminars and experiential learning opportunities that our conferences offer is invaluable. I cannot even begin to quantify how much I have learned and how I have directly applied that knowledge and experience to my day to day at Georgia State Railroad Museum. The great people that I have met and learned from over the years are what sews our industry together. Many have called it a family.

In our strategic planning session in Hartford in 2022 I made a statement that was partially a joke but it seems to have some truth and applicability behind it. When you visit a natural history museum to see the bones of the great dinosaurs the educators and curators at these museums don't talk about how they remember when these great beasts roamed the earth. They may have never even been on a paleontological dig site, obviously too much time has passed, these beasts are extinct.

These museum professionals and other museum workers are simply stewarding the information, collections and centuries of research that has been accumulated. Over time our railway museums will be similar, there will be less and less first-hand knowledge and we will rely on the succession of knowledge and experience. Fortunately, we have the opportunity to keep our beasts alive into perpetuity as long as we can continue to preserve, learn and apply the knowledge that is out there.

I am not detailing my experiences to be self-serving, my experiences have only scratched the surface of what is out there. This is the future of Heritage Railway Preservation and HeritageRail Alliance; Advocacy, Learning from our mentors, teaching the generations to come, networking, sharing information and having real in-person experiences at one another's museums and tourist railways. Railway tourism is alive and well, maybe even on the upswing, but the interest in volunteerism or choosing a career in it seems to be diminishing. Here is our challenge.



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RECOMMENDED PRACTICES FOR RAILWAY MUSEUMS

PART 11. ACCESSIBILITY

By Aaron Isaacs, HRA editor

Museums must make facilities and operating equipment accessible to all, to the extent this can be done without compromising historical integrity, collections security, and visitor safety.

Accessibility can be a challenge for railway museums, because we preserve rolling stock that was designed before anyone ever considered it. One must approach the challenge in three parts-- grounds and buildings, rolling stock and accessibility beyond wheelchair access.

Grounds and buildings

In the USA it's a simple matter of complying with the Americans with Disabilities Act (ADA). It's somewhat more complicated in Canada, where provincial laws were passed first and national legislation is still catching up. It varies from province to province and during the HRA conference at Exporail, Canadian museum staff told me that the rules can be unclear.

The onus is on the museum to make its parking lots, grounds and buildings (including restrooms) conform to the law. The ADA is a civil, not a criminal law, so failure to retrofit an inaccessible building doesn't attract the police, but could prompt a lawsuit. Accessibility standards are mandatory for any new construction.

Rolling stock

In the United States, historic rolling stock is specifically exempted from being modified to create accessibility. Nonetheless, museums are under pressure to provide as much access as possible, and that requires a case-by-case approach that leads to piecemeal accommodation. Without modifying anything historic, the most common approach is an off-car wheelchair lift or ramp into a vestibule or baggage car door that at least provides access to the train. This is somewhat easier to accomplish if the rolling stock is on static display. The ramp or lift can be semi-permanent. To enter an operating train it often must be portable.



Maine Narrow Gauge Railroad Museum uses a wheelchair lift to access the baggage door of Sandy River & Rangeley Lakes caboose #553, built in 1904.

Once on the train, narrow aisles and a lack of wheelchair parking spaces are an issue. One solution is to modify rolling stock that is used for operations but is not part of the historic collection. Seats can be removed for wheelchair parking. On-train restrooms can be modified. On-train wheelchair lifts can be installed. It may not conform to new-build accessibility codes, but a kind of basic accessibility is achieved.

Vintage streetcars are a particular problem because of the additional step up from the end platforms into the passenger compartment. PCCs lack that step. The Baltimore Streetcar Museum is experimenting with a lift that projects into the PCC's rear doorway. The stanchion in the middle of the doorway would normally obstruct a wheelchair. By modifying it to be temporarily removable, they're achieving accessibility with little impact on the historic fabric.

Beyond wheelchairs

Accessibility means more than just physical access. There are obstacles to overcome to serve the blind and

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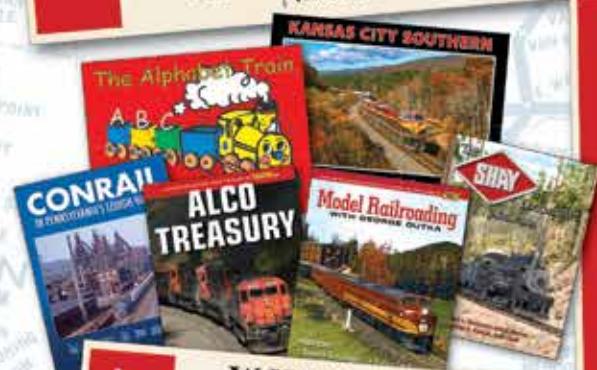
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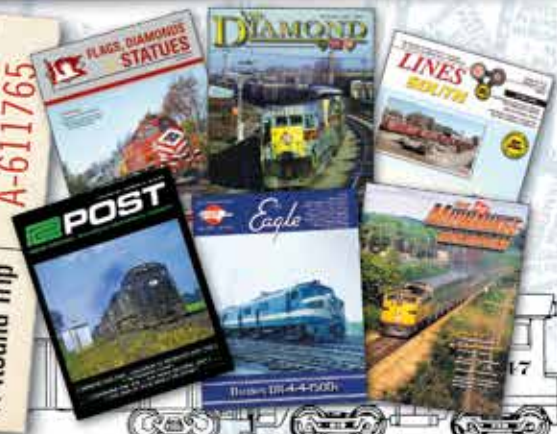
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hearing impaired as well. I visited Tokyo's central railroad station and the floor of every conceivable pedestrian route had textured strips for the blind to follow. Textured station platform edges are standard everywhere and are an important safety feature. Both measures should be considered at museums, along with talking displays accessible by cell phone. Any display that talks for the blind can also transmit text to a device for the hearing impaired.

In recent years we've come to realize that railroads

hold a particular fascination for persons on the autism (neurodiverse) spectrum. Quite a few museums, recognizing that over-stimulation can be an issue, are now tailoring events for these folks.

A prudent museum should consult an expert in the field to inventory any accessibility issues and create a plan to address them.

To download a copy of Recommended Practices, go to heritagerail.org and log into the Members section.

EXPORAIL HOSTS 2023 HRA CONFERENCE

By Aaron Isaacs, HRA editor

HRA last met in Montreal in 2012, so it was interesting to return and see what had changed. A pre-conference field trip visited the shops of EXO, the Montreal commuter rail operator. Participants rode the new REM light rail line that just opened this year, the first of several, including through the historic Mount Royal tunnel. They toured VIA rolling stock at Central Station.

Ingenium

The second pre-conference trip traveled to Ottawa to visit Ingenium, the expanded and completely re-done Canadian Museum of Science and Technology. There are two buildings. The original structure has been rebuilt and reconfigured with all new displays. Inside its railroad hall are 4-8-4s Canadian National #6400 (Montreal 1936) and Canadian Pacific #3100 (CP 1928), as well as CP 4-6-0 #1107 (CP 1911).



CP and CN 4-8-4s inside the redone Ingenium exhibit building.

Next door is a new, huge building that hadn't yet opened for the public when we visited. About the size of a football field, it's ten stories tall but has only four floors. That's because it houses two tracks of railroad equipment in a high ceilinged room, including Grand Truck 4-4-0 #40 (Portland 1872) and CP CPA16-4 C-Liner #4065 (Canadian Locomotive 1951). Unlike the gleaming Northern's in the exhibit building, these pieces are conserved as received, with no intent to restore them.



Among the pieces preserved in unrestored form in the new building is the "Blue Goose", an experimental diesel-hydraulic (GM Diesel 1956).

Through the wall from the trains is a cavernous large artifact room. Not yet organized, it's a technology feast, filled with excavating machines, buses, electrical generating equipment, steam traction engines, sleighs

and other delights too numerous to mention. Among them are horsecars, single truck Toronto streetcar #306 (Toronto Railway 1892) and BC Electric interurban #1235 (St. Louis 1913).



Not yet open to the public, the large artifact room had not yet been organized. In this photo alone are an excavator, a ship funnel, a turbine, a horse car, and a triple expansion steam engine. A treat for tech heads.

The south end of the new building houses a two-track shop. Inside I found volunteers of the Bytown Railway Society working on Merrill & Ring Lumber Shay #3 (Lima 1925). The Society has been a longtime tenant. Its rolling stock is parked outside and runs periodically on the museum's spur track.



The Bytown Railway Society has been a longtime Ingenium tenant. Its rolling stock collection is housed out back.

Upstairs are extensive archives, including the Canadian National corporate records. We also visited a very large room with small artifacts on rolling stack-type shelving.

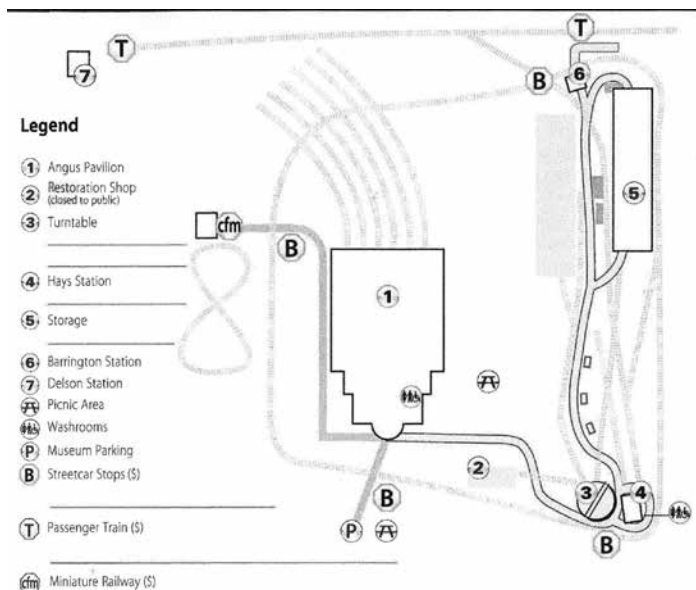


The bell of Merrill & Ring Lumber Shay #3 gets attention from Bytown Railway Society volunteers in the museum shop.

Exporail

The Canadian Railroad Historical Association was founded in 1932. Its magazine *Canadian Rail* began publication in 1937 and continues today. The first rolling stock, Montreal streetcar #274 (Newburyport 1894) was acquired in 1950. The Canadian Railway Museum was founded in 1961 and the first storage building was erected. More storage was added between 1965 and 1970. In a major step forward, the 12-track Angus Pavilion opened in 2004, and the museum was branded Exporail. In 2007 the House of Commons designated Exporail as the National Railway Museum.

We travelled to Exporail in the suburb of Delson by EXO commuter train, whose station is a block from the museum. A streetcar line loops the perimeter of the 30-acre grounds and diesel coach shuttles leave the grounds for a 2-mile round trip on the museum's demonstration railroad. Dominating half the site is the Angus Pavilion. Nearby is a second, older display barn and a storage barn which isn't open to the public. At two corners of the property are the 1882 Canadian Atlantic Barrington Station and the Grand Trunk depot from Hays. There's also a miniature railroad.



The collection is big, some 180 pieces of rolling stock and 14,000 small artifacts. Included are:

- 21 steam locomotives
- 17 diesel locomotives
- 21 electric cars and locomotives
- 18 passenger cars
- 10 accessioned freight cars (there are more used for storage)
- 12 non-revenue cars

There are 30 pieces from Canadian National and its subsidiaries and 23 from Canadian Pacific.

The centerpiece of the pavilion's entry is a wood replica of the pioneer locomotive *Dorchester* on a tiny turntable. The redone hall leading to the pavilion has been filled with a dense 2D and 3D collage of depot signs, small artifacts, photos and graphics. Lacking informational labelling, its intent is to bombard visitors with the scope and variety of Canadian railroad history--a more cinematic approach to display.

As an indoor static display hall, only the California State Railroad Museum and Railroad Museum of Pennsylvania rival Exporail, and neither approaches its count of 50 pieces. Since the collection exceeds the hall's capacity, pieces on display are periodically changed.



The wood Dorchester replica rides a turntable in the entryway.



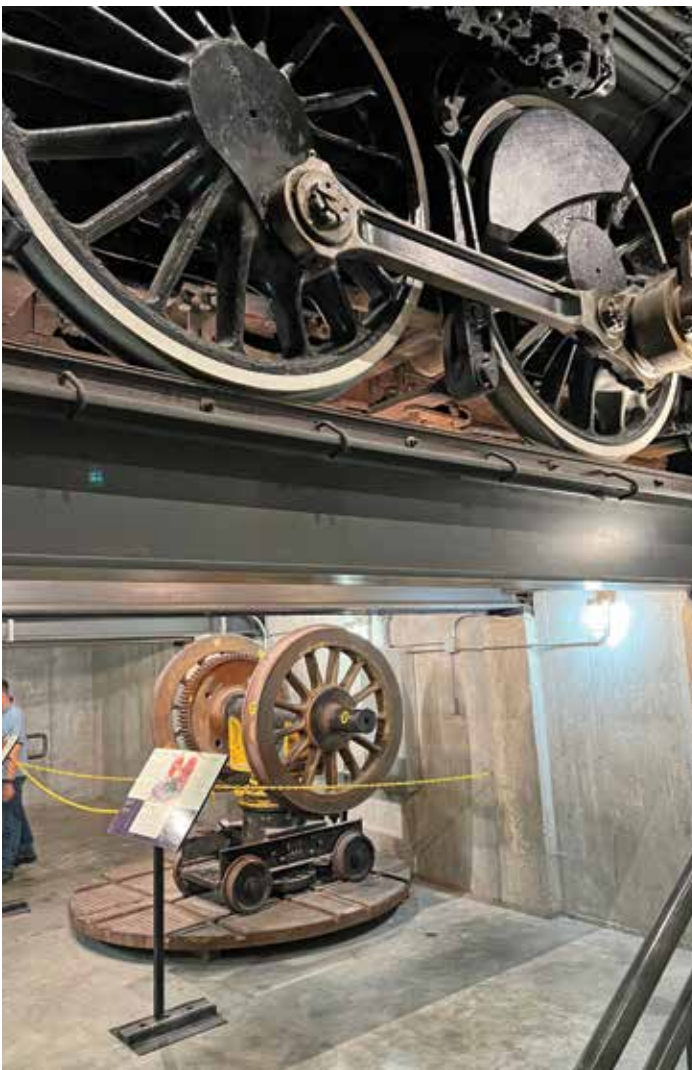
The hall leading to the Angus Pavilion bombards the visitor with rail artifacts and images.

All have at least cosmetically restored, but there's currently an exception. The restoration of VIA (ex-CP)



It takes three photos to encompass the view of the Pavilion from the second floor mezzanine.

dome-observation Sibley Park (Budd 1954) is taking place in the hall where the public can walk through and watch it happening.



Visitors can view the underside of two locomotives in the drop pit.



The CP/VIA dome-obs Sibley Park is being restored where the public can view the process.

Another active project is building an open air car to be pulled by the museum's replica of the 1848 locomotive John Molson. The new car's design is inspired by the Grand Trunk's 1860 ceremonial car used by the Prince of Wales on the occasion of the opening of the Victoria Bridge across the St. Lawrence River. Money has also been raised to cosmetically restore Canadian National 4-8-4 #6153 (Montreal 1929) and Canadian Pacific 2-10-4 #5935 (Montreal 1949).

Exporail has acquired the enormous Canadian Pacific archives and has undertaken the long term project to catalogue and digitize it (see Mylene Belanger's article below). Completed in 2022 was a major project to redo the lighting in the Angus Pavilion (see Nadine Cloutier's article on page 14).

It's a large operation, with 13 full time employees, about 25 part time (mostly summer), and about 135 volunteers. Museum membership is 850. According to President and HRA Board Member Robbie Robinson, "Attendance is currently running at an annual rate of 1.2% more than last pre-covid year (2019) when museum attendance was 66,000. We like to add in the people who rent the facilities for functions, training, etc., (which boosts the numbers) which is typically in the 10,000-range."

In addition to Exporail, CRHA has eight active "Divisions" across the country: Kingston, Niagara, Toronto & York, Calgary & SW, Esquimault & Nanaimo (Vancouver Island), Pacific Coast (Vancouver), New Brunswick and Charny (Quebec City). The divisions are simply rail-oriented organizations who are authorized to use the CRHA name, but there is no formal or legal linkage, and no financial relationship. At least 10% of the members of a division

have to be individual CRHA members to qualify for the division status.



The diesel shuttle lays over at the Hays station.

PRESERVING THE CANADIAN PACIFIC ARCHIVES

By Mylene Belanger, Archivist, Canadian Railroad Historical Association

Acquiring private archives is a difficult and lengthy process; even more so when it comes to corporate archives. The challenge of acquiring a collection such as Canadian Pacific's was difficult, as it has been coveted by many. In order to obtain this donation in 2013 and 2016, we went through a delicate process with the Canadian Cultural Property Export Review Board to have the archive designated as being of outstanding significance and national importance in 2014.

The CP's holdings illustrate not only the construction of the railroad by one company, but also the pivotal moments in our history that helped shape Canada into the country we know today. The period covered by these documents ranges from 1846 to 2007. The archive demonstrates the management and administration of an international company that played a major role in many fields including railways, telecommunications, shipping, immigration, settlement, agriculture, tourism, engineering, natural resources, insurance, trucking, the war effort, aviation and real estate. It was also registered in Canada's Memory of the World Register from UNESCO in 2018.

In a few figures, the CP archive contains:

- 561.75 linear meters of textual documents
- 167 books of letters
- 491 registers
- approximately 67,000 technical drawings, survey plans and cartographic documents
- approximately 625,000 photographs and negatives
- approximately 800 advertising posters
- 154 audiovisual documents
- 30 works of art

During 2022 we received a total of 313 research requests. Over 65% of them are related specifically to the CP archives. These sometimes come from researchers with personal interests, but often we are dealing with authors of historical books and history textbooks. We have also responded to international requests: to name just one, the National Library of Argentina presented an exhibition in 2017 in which reproductions of posters from our CP archive were highlighted. We are proud of the fact that the Archive Centre has become known beyond our borders.

We make a point of disseminating the contents of our archives, as it is essential to provide the public with access to these valuable resources and to continue our educational mission. In addition to collaborating on various external projects, we have been posting archival materials on our Facebook page for the last 7 years.

Here are some of the past and current projects we have worked on in order to process, preserve and disseminate the CP archive. In 2017-2018, we presented a temporary exhibition entitled *Of Steel and Paper: Tales from the Canadian Pacific Archives*. Putting together this exhibit has been a very rewarding adventure for me, having only joined Exporail in November the year before. And I can tell you that at the time, I had only scratched the surface of all that the CPR archive holds. I tried to highlight some of the gems of the collection, such as the map illustrating a portion of the Port Moody to English Bay branch line in 1886, signed by Van Horne himself. The exhibition was divided into seven main themes and we wanted to give the visitor the feeling of entering and being immersed in the little-known world of the archives; hence the insertions of enlargements showing you exactly what the CP's holdings look like in the repository.

One of the big challenges with the CP archive was the discovery of a worryingly large amount of cellulose nitrate film negatives. Nitrate is highly flammable and unstable. In some cases, these negatives - due to their ageing and deterioration - have started to emit gases that endanger the preservation of nearby negatives and prints. In addition, even if some seem in good condition, they may deteriorate at any time due to the unstable nature of their support. In order to minimize the negative effects of these types of negatives, we periodically identify nitrate negatives in our archives for subsequent digitization. Once digitized, nitrate negatives are put in special packaging and stored in freezers, according to the Critical Moisture Indicator method of the Centre de Conservation du Québec. To date, we have been awarded two grants from Library and Archives Canada's Documentary Heritage Communities Program - in 2017-2018 (\$45,302) and in 2019-2020 (\$41,598), to assist us in this task. Although the majority of the nitrate negatives have been processed (roughly around 10,000), we are still discovering a number of them as processing continues.

In 2020-2021, we were thrilled to be, yet again, recipient of a \$68,226 grant from the same LAC program, this time for a two-year project aimed at the Heckman photo

albums. Heckman was hired by the railroad to photograph every depot and bridge. This multi-year project aimed to increase the level of preservation of these records to high archival standards, describe them, and digitize them with the appropriate equipment so that their condition does not worsen. The grant was in part used to buy a planetary digitizer, which cost around \$50,000. The movable trays allow us to balance the bound books and thus minimize the negative impact on the binding, which a flatbed scanner would damage and ultimately break. We affectionately nicknamed it THE BEAST. The digitized images will be disseminated to the public and used in a variety of cultural outreach projects. Doing so will make the content of the albums better known and more easily accessible. Moreover, Heckman's photos are regularly requested by researchers. We were also assisted in this work by a volunteer, Mr. Ralph Beaumont, author of the book *Heckman's Canadian Pacific: A Photographic Journey*.

We had another project underway that ended in 2022. Here again, the Documentary Heritage Communities Program gave us \$23,493 to further the processing of the CP archive. Following research conducted in 2004 and 2005, we wish to complete a project on Sir W.C. Van Horne by producing a travelling exhibition to be presented at Exporail before being offered to other institutions across Canada. This research included many works of art, but very few archival documents. Having acquired the CP archive in 2013, we wished to further explore its contents - particularly Series 1, which is entirely dedicated to Van Horne - in order to enhance the project and allow for a more personal immersion in Van Horne's private and professional life. The result of this project will be to introduce the public to another facet of railway heritage, to reveal little-known facets of Van Horne, and to present the results of research designed to verify the theses of art historian Allan Pringle (Concordia, 1984) on the role played by Van Horne and the Canadian Pacific Railway in the history of the Canadian landscape. In addition, it was an opportunity to further process the CP archive and increase its accessibility to the public. This exhibition should be opening in a few months.

We hired a full-time archival technician in 2021 to work on the CP archives exclusively in order to speed up the process of this remarkable archive. The many grant applications we have succeeded in getting have allowed us to hire technicians to dedicate themselves to specific areas of the archive.

A DIFFERENT APPROACH TO LIGHTING

By Nadine Cloutier, Executive Director, Canadian Railroad Historical Association

Lighting a large railway museum display barn or building has always been challenging. First, it takes a lot of lighting to penetrate the dark canyons between rolling stock storage tracks, especially when the tracks are closely spaced. When Exporail's Angus Pavilion opened in 2004, that problem was partially solved by wide walking aisles that admitted more light. Furthermore, the walkways are concrete, and its light color reflects light. An unintended consequence was that the walkways were very well lit, but not the pieces of rolling stock. This was the era before LEDs, so big 1000 watt metal halide floods were used, and lots of them. As a result, darkness and gloom were vanquished. The lighting was bright and uniform throughout the pavilion, but it didn't serve the collection well. It was a challenge to take good pictures. We saw what proper lighting did for other museums and knew it could enhance the Exporail experience.

Fast forward to 2021. We received a grant from the Department of Heritage Canada to replace the lighting with LEDs. The goal was not simply to reduce electricity costs, but to greatly improve the visitor experience. We hired a renowned local company LIGHTEMOTION to do the work. They worked with us to plan the project, including the color of light, and the number of spotlights used to convey the theatrical atmosphere we wanted. Project sustainability was important to us, so the designer and electricians were local and the hardware was locally fabricated.

They came up with a completely different approach compared to what was already there. Rather than lighting everything uniformly, they proposed lighting selectively. Each vehicle has a customized lighting pattern. At the start of the project, we discussed what kind of lighting atmosphere and visitor experience we wanted. While the walkways would be sufficiently lit to be safe, rolling stock would be the main focus and properly highlighted. To take that a step further, significant features of each piece of rolling stock would be highlighted even more. The lighting draws attention to the colors, different materials and textures, as well as specific features like builder's plates, bells, whistles, wheel arrangements, side

rods, etc. Even the parts that would not be accessible with the original lighting system were now visible.



This is the original lighting. Note how bright the concrete walkway is. Compare it to the theatrical lighting in the three photos on page 11.

Achieving this effect required the use of focused spotlights, rather than lights designed to spread light over the widest possible area. In all, more than 700 fixtures were installed. Each one is aimed to highlight a significant feature of the vehicle placed below it. Electricians installed the mounting tracks (it was imperative that they be straight). We hired a company that works in theaters to install the fixtures. It took a lot of time and experimentation to get it right. Since the displayed rolling stock is periodically changed, the process of aiming the lights has to be repeated when that happens.

The capital cost to install such a system is high. We spent \$35,000 CAD for the conception, design and management of the project and \$311,850 CAD for the installation, although it should be recognized that our indoor space is much larger than at most museums. That said, the low energy consumption of the LEDs has lowered our electricity bill.

Lately, we completed the change of the remaining 26 1000-watt metal halide light floods to LED. When volunteers or suppliers work in the museum, the theatrical lighting system doesn't provide adequate light. We needed proper working lights that were also connected to our generator in case of power outages. When we turn the theatrical lights on, the floods are automatically turned off. For these costs, we can apply for a grant from our electricity provider that will pay close to half the costs. Now we have a wonderful museum environment and we can attest that the new lighting system is a big wow factor for visitors.

Note how the rotary plow blade is highlighted, rather than the walkway.

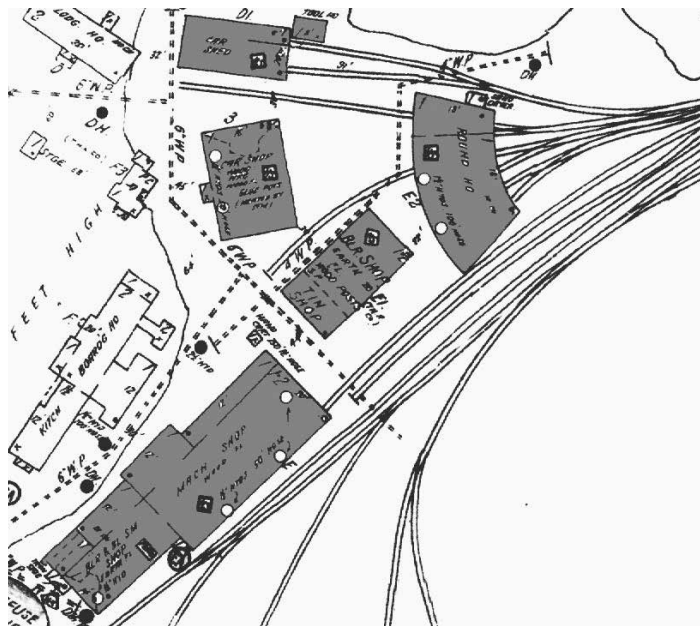


2023 HERITAGERAIL AWARDS

The conference concluded with a banquet on September 23rd, where the HeritageRail Alliance announced its annual awards for significant achievement in railway preservation. Here are the categories:

Significant Achievement-Infrastructure

To the Timber Heritage Association for its restoration and acquisition of the former Hammond Lumber Company Samoa Shops complex.



The Samoa complex includes the five buildings highlighted in grey.

The Association is located in the lumber company town of Samoa near Eureka, CA. Acquiring the site has been a grueling and expensive undertaking. It began in 2007 when the museum leased the complex of five wood buildings (totaling 36,580 square feet) from the Humboldt Bay Harbor District. THA treasurer Michael Kellogg recounts how it happened.

“Annual rent was \$39,600 but the owners offered credit for work on the buildings such as repairing or replacing failing roofs. The roundhouse roof was finished in five months of weekends and evenings and the work moved on to the next building. During this time we were moving cars and locomotives from temporary storage or that were recently donated to THA (9 passenger cars, 8 locomotives) all hauled by truck from as far as 350 miles away. We also began twice a month crew speeder car rides during the summer, which proved very popular and raised money for our expenses, but that’s another story.

While roof and other work continued for several years, we realized we were not moving forward towards creating a permanent museum; it seemed essential to get a long term lease or ownership of the property. A committee of THA representatives and the Harbor district was formed.

In 2015 we entered into an Option Agreement to purchase the 8 acres with these historic buildings, for only \$5.00,

if THA would pay to clean up all environmental hazards or contaminants on the property or in the buildings. This was later estimated to cost \$1,035,068. The first task would be to prepare an environmental evaluation and remediation plan to determine what hazardous and environmental contaminants existed and need to be removed. An Environmental Site Assessment done for Humboldt County in 2013 was the basis of the clean-up. But, first a grant application to the U.S. Environmental Protection Agency (EPA) for a Targeted Brownfield Phase II Assessment would be needed.

The agreement with the Harbor District also required approval of zoning changes to permit use of the property as a museum and approval of lot line adjustments by the county; some of these things still have not been completed.

While we waited, THA began to deal with mostly lead based paint problems. Inside the Machine Shop and Roundhouse this required scraping off loose paint, properly bagging it and encapsulating what remained by painting, often with several coats; it was done by Cal-Fire crews. To simplify the painting inside the roundhouse, some of the locomotives were moved outside on snap track.

THA hired a project manager and renewed working with the Harbor District and County to secure funds from an EPA grant to complete the work. In April 2020 THA took a new course of action.

THA gave written notice to the Harbor District that it was exercising its option to purchase the property. THA also hired an attorney to help with the details. The option agreement required remediation of any brownfield hazards. THA had completed almost half of the engineering firm's Phase II cleanup estimate. In June of 2020, at a virtual news conference of the Harbor District, an EPA grant of \$187,000 and a no interest loan to THA of \$166,500 were announced. The grant made it possible to complete the cleanup.

One remaining issue was whether enough work had been completed that the district would no longer be at risk, or did they still needed a performance bond; the district insisted on the later. THA substituted an Irrevocable Letter of credit (\$147,000), which was acceptable. After

considerable work was done, THA hired an inspection company to review their work. After a few minor changes, the inspector approved all the work and the Harbor District accepted. The escrow document became effective and the title was transferred December 30, 2022."

Significant Achievement-Steam

To the EBT Foundation for the restoration of East Broad Top 2-8-2 #16 (Baldwin 1916), which had not turned a wheel since the common carrier shut down in 1956. It was restored in workaday black, no white tires or polished brass boiler bands.

Significant Achievement-Diesel

To the Fort Wayne Railroad Historical Society for the restoration of Nickel Plate SD9 #358.

Significant Achievement-Traction

To the Fox River Trolley Museum for the restoration of Chicago Aurora & Elgin interurban #458 (St. Louis Car 1945). This was significant because it was the last new standard interurban car built in the US (not counting the Illinois Terminal streamliners). It came to Fox River from the Trolleyville sale. It never ran there and was a parts robber for other cars.

Significant Achievement-Freight Car

To the Nevada County Narrow Gauge Museum for the restoration of home-built wood-framed West Side Lumber tank car #2.

Significant Achievement-Non-revenue car

To the Illinois Railway Museum, for the restoration Pennsylvania bobber caboose #476199. Although it's a small car, it required major work. It's also a good example of a car that benefitted from a change of ownership. The Pennsylvania Trolley Museum deserves credit for saving it, but it didn't fit into their broad-gauge traction collection. It went to IRM, who finished the job.

Significant Achievement-Archives

To the Canadian Railroad Historical Association, for the continuing project to catalog and conserve the Canadian Pacific archives.

Friend of Railway Preservation

To the Amherst Railway Society for its financial support of railway preservation.

The Society, located in Massachusetts, holds a large train show every year and uses the proceeds to give grants to railway preservation. Since 1991 it has donated \$829,000. Though best known in New England, museums anywhere can apply for grants. For 2023, grants went to:

- Connecticut Trolley Museum
- New England Steam Corporation
- Shelburne Falls Trolley Museum
- WW&F Railway Museum
- Railroad Museum of New England
- Old Colony & Newport Railway
- Danbury Railway Museum

Lifetime Achievement

To Jim Schantz, for his career at Seashore Trolley Museum, service to the Association of Railway Museums/HeritageRail Alliance, and his support for new heritage trolley lines nationwide.



Jim Schantz with his Lifetime Achievement Award. Tom LaRoche photo.

To Rod Fishburn, for his career at Southern California Railway Museum and service to the Association of Railway Museums/HeritageRail Alliance, including running the national Parts List.



Rod Fishburn with HRA President Bob LaPrelle (left) and Awards Committee chair Aaron Isaacs. Cate Kratville-Wrinn photo.

To the late George Walker, for his career at Tennessee Valley Railroad Museum and his influence on railway preservation in the Southeast.



George Walker.

Jim Wrinn Award for the biggest railway preservation story of 2023

To Railroading Heritage of Midwest America, for the purchase of Silvis Shops and acquisition of important rolling stock from the Union Pacific and elsewhere.

ACQUISITIONS

The Western Maryland Scenic Railroad has acquired Western Pacific California Zephyr dome-lounge Silver Palace (Budd 1948) and former Western Maryland heavyweight business car #204 (Pullman 1918).

Retired New York City Transit R-32 subway cars #3432 and 3433 (Budd 1965) are now at North Carolina's Craggy Mountain Line. It has also recently acquired SEPTA rapid transit cars #482 and 483 (St. Louis Car 1951). They were built for Chicago Transit Authority and sold to SEPTA in 1986 for use on the Norristown High Speed Line.

Fort Wayne Railroad Historical Society has acquired from the Rochester & Genesee Valley Railroad Museum seven Budd lightweight cars built in 1941 for the New York Central's Empire State Limited. Six were originally 56-seat coaches (NYC 2566, 2567, 2568, 2571, 2572 and 2578), converted to 108-seat commuter cars. The seventh is NYC RPO 5021.

Durbin & Greenbrier Valley Railroad has acquired a 1929 Heisler that was built for Arkansas' Fisher Lumber Company.

The Philadelphia Chapter of the National Railway Historical Society has sold former Reading Co. FP7 No. 903 to SMS Rail Lines for use on their Woodstown Central tourist railroad in New Jersey. No. 903 and sister 902, now leased by SMS from the Reading Co. Technical & Historical Society, have been stored at Steamtown in Scranton, Pa., since 2010.

After years of trying to fund the restoration of Pacific Lumber Company 2-8-2T #37 (Alco 1925) by contractor Strasburg Rail Road, the Timber Heritage Association has decided to abandon the effort, citing other financial priorities. Instead, the locomotive will be sold to the Age of Steam Roundhouse.

Virginia Museum of Transportation has acquired a 90-foot turntable that had previously been at the West Virginia Railroad Museum in Elkins, but not installed.

Arizona Railroad Heritage Park has acquired Magma Copper Company 25-ton diesel switcher #6 (GE 1964).

Canadian National has sold E9 #102, formerly CB&Q/BN #9940A (EMD 1950) to the Monticello Railway Museum. It was built as an E8, rebuilt as an E9 by Morrison-Knudson in 1974. CN acquired it as part of the Illinois Central merger.

A pair of Montreal EXO electric MR-90 MU cars (Bombardier 1995) have arrived at Exporail. They ran on the ex-Canadian National Deux Montagne line through the Mount Royal tunnel, which is being replaced by the new REM light rail line.

Waterloo Central has entered into an agreement to purchase Canadian Pacific G5c 4-6-2 #1293 (Montreal 1946), currently stored at the Prairie Dog Central.

The Altoona Railroaders Memorial Museum has been given Conrail SD60i #5582 (EMD 1995) by Penn State University, where it was used as teaching tool for the Railroad Operations & Safety course. It will continue to serve that purpose at Altoona. It's also representative of a diesel that was assembled in the Altoona Shops, although #5582 was not.

Illinois Railway Museum has been donated heavyweight sleeper-buffet-solarium lounge car Palm Lane (Pullman 1929). Part of the Pullman pool, it ran on the Illinois Central's Seminole between Chicago and Florida. In 1956 it was sold to the James E. Strates Shows. Largely unaltered, it will be restored to its Pullman appearance.

The Valley Railroad has purchased Frisco 2-8-2 #1352 (Alco 1912) from the American Steam Railroad Preservation Association. The engine is currently located on the Chicago & Illinois Midland at Taylorville, IL.

HERITAGERAIL NEWS

On November 9 Pennsylvania Trolley Museum held a ribbon cutting to celebrate the completion of its new 21,000 square foot Welcome & Education Center. This marks the completion of a series of major projects to expand the museum's infrastructure. We'll cover it in a full article in the next issue of HeritageRail Journal.



The Saskatchewan Railway Museum has restored Canadian National caboose #78687 (rebuilt 1949 from boxcar #341730, CC&F 1911).

Woodstown Central has restored Central of New Jersey commuter coach #1319, the first of five acquired from the Green Mountain Railroad.

The National Capital Trolley Museum has completed the exterior restoration of Capital Traction streetcar #522 (American Car 1898) and the car is now operational.

The Railroad Museum of New England's Naugatuck Railroad subsidiary has acquired a quarter mile of the former New Haven Watertown branch north of Waterbury to provide freight service to a metal recycling shipper.

Western New York Railway Historical Society has restored Lehigh Valley SW8 #252 to its as-built appearance.

United Railroad Historical Society of New Jersey has completed the cosmetic restoration of New Jersey Transit U34CH (GE 1971). It will eventually be made operational.

The Maui fire destroyed the Lahaina, Kaanapali & Pacific's depot and turntable.



Oregon Railroad & Navigation (Union Pacific) 4-6-2 #197 (Baldwin 1905) rides the newly installed turntable from the Southern Pacific Brooklyn roundhouse at the Oregon Rail Heritage Center.

The Nevada County Narrow Gauge Museum has restored its West Side Lumber Company snowplow, badly damaged in a 2020 forest fire.

Shortline holding company Patriot Rail has acquired the Hobo Railroad and the Winnepesaukee Scenic Railroad in New Hampshire. Together they operate 54 miles of state-owned former Boston & Maine trackage. Included is the Rail Bike Adventures operation in Laconia. Patriot Rail also operates the Blue Ridge Scenic Railway in Georgia.

The Fox River Trolley Museum has hired its first paid executive director.

Federal grants

\$2 million to Napa Valley Railroad to replace its seven diesels with low emission units.

Up to \$9 million to Seminole Gulf Railroad for track improvements.

The Kentucky Steam Heritage Corp. has received a \$1.9 million grant toward the restoration of Chesapeake & Ohio 2-8-4 No. 2716, as well as development of the railroad-centered attraction "The Yard" that includes the shop where the restoration is happening. The funds come from

an Abandoned Mine Lands Economic Revitalization grant through the Division of Abandoned Mine Lands and the state's Energy and Environment Cabinet.

\$10,000 to EBT Foundation for the East Broad Top archives project.

More grants

The South Baltimore Gateway Partnership has granted \$1 million to the B&O Railroad Museum in support of the museum's new master plan to restore the South Car Works Building and to create open community space as part of the redevelopment. The museum plans to restore the 33,000 square foot South Car Works building, which from 1869 to 1990 was the oldest, continuously operating railroad repair facility in the United States. It will become the new entrance to the museum, reconfiguring its campus flow to face Southwest Baltimore.

Norfolk Southern has donated \$250,000 to the Pullman

National Historical Park to restore rail access to the site, so rail cars can be brought in for display. There will be yard tracks and a display building to house visiting rolling stock.

The State of Wisconsin has granted \$7 million to the National Railroad Museum in Green Bay for a 32,000-square-foot addition to the museum's Lenfestey Center. It will include additional enclosed rolling stock exhibits and space for educational programming and events.

Three private individuals have contributed a \$300,000 matching grant toward restoring Santa Fe 2-6-2 #1010 (Baldwin 1901) to operation at the California State Railroad Museum. In addition, the CSRM Foundation has received over \$1.6 million in bequests during the last six months.

The estate of the late Ronald C. Hill has donated \$1 million to the Center for Railroad Photography & Art.

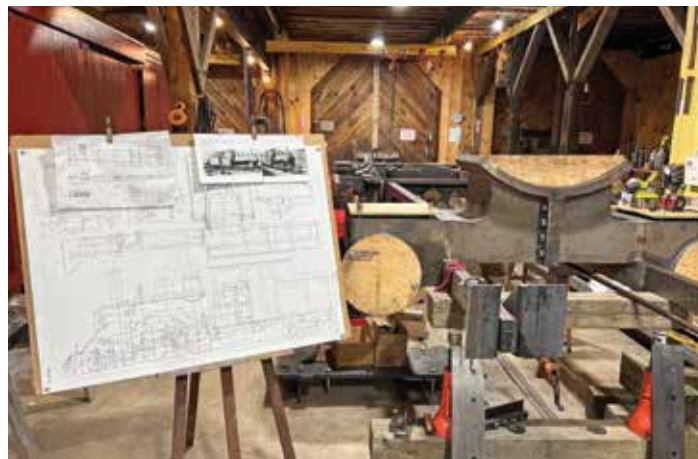
THE LATEST FROM WISCASSET, WATERTOWN & FARMINGTON

By Aaron Isaacs, HRA editor

Most railway museums take on one or two restorations or large capital projects at a time. The WW&F is doing much more. On a recent visit your editor saw its new roundhouse approaching completion. A new replica coach is under construction, as is a new replica steam locomotive. If that wasn't enough, the museum is in the process of equipping its fleet with Eames vacuum brakes, an early technology that survived on the Maine 2-footers because it works on short trains. Reviving the system requires casting new components.

Vacuum brakes worked very similarly to early "straight air" brakes, except where the latter used air pressure to *push* against the brake mechanisms on each car, the vacuum brake created a vacuum that allowed atmospheric pressure to do the pushing. Instead of a pump on the locomotive, the vacuum brake had an "ejector" that sucked air out of the system, allowing atmospheric pressure to push a piston or cause a diaphragm to collapse. This motion in turn was transmitted to the brake gear and caused the train to stop. Fred W. Eames established the Eames Vacuum Brake Company in 1876, and began

manufacturing the brakes in his father's machine shop at Watertown, New York. Although they worked fine on short trains, vacuum brakes proved too weak for long trains and air brakes became the standard. Eames himself was shot to death during a strike at his factory. In 1890 the Eames Company reorganized as the New York Air Brake Company.



They're building to new replica of the locomotive in the plans at left.



The roundhouse is close to completion. The turntable preceded it by a couple of years.



WW&F is building an exact replica of a Maine 2-footer coach. The includes casting new seat bases and window latches.

UPDATE FROM AMERICAN HERITAGE RAILROADS

By Jarrette Ireland, Rail Events

In 2022 we set all time ridership records on the Durango & Silverton and Great Smoky Mountain railroads, reopened old Tucson, and set an all time ridership record with the Polar Express train ride. Collectively we welcomed nearly 800,000 guests to an AHR-operated or owned property across the United States.

- D&SNGRR had 227,000 total riders
- GSMR had 276,000 total riders
- Old Tucson had 101,000 total guests
- Rail Events Production had 193,000 total riders

Rail Events Productions is a subsidiary of Rail Events Inc. we created in 2016 that charters trains in larger cities and produces the Polar Express train ride. When Polars are operated by Rail Events Productions, we charter the train at a venue and then operate the event ourself while the host just runs trains. In this case all of the marketing, ticketing, staffing (non-railroad) is handled by us. The other Polar Expresses are events where we license the collateral, guidelines, retail, scripting, design, and marketing to a host railroad and they do everything from run the train to hire the cast.

In 2022 Rail Events Productions operated on the Morristown & Erie Ry in Whippany, NJ, Oklahoma Railway Museum in Oklahoma City, Southern California

Railway Museum in Perris, CA, and on Brightline Florida, in Miami, FL. Next year we will be back to operating at Chicago Union Station onboard Amtrak but had to sit 2022 out due to staffing issues with Amtrak from their recovery of the pandemic. In 2022 1,430,000 guests rode the Polar Express train ride at 52 locations in 4 countries, The United States, Canada, United Kingdom (both England and Scotland), and Australia. Between our licensing of events with Rail Events and our excursion business we had an impact reach to over 2,000,000 guests in 2022.

For comparison, our best Polar season prior to this was 2019 with 1,351,000 and AHR's total reach back then was about 1,750,000. Our overall ridership on excursion business has grown over 35% since 2018 and other than the pandemic year itself has grown every year since 2019. We continue to grow and find new ways to engage guests in the interest of trains. Our motto that we tell new enterprises is that as a company we see ourselves as educators, preservationists, and entertainers.

In other news, the Durango & Silverton will begin the rebuild of locomotive 478 which will include its conversion to oil as it hasn't run since 2016. The rebuilding the Southern 2-8-0 #722 (Baldwin 1904) continues at Great Smoky Mountain Railroad. This would bring our current steam fleet between the two railroads to 10 total locomotives.

FOR SALE

Porter diesel-electric locomotive 1311, built 1942 for the U.S. Navy. 45-ton center cab with two 150 HP Cummins H series engines, installed 1958. Westinghouse electric transmission with two Type 189R5 main generators and two Type 1443A traction motors with side rod drive to the second axle of each truck. WABCo Schedule 14-EL brakes with train air. PTM has kept 1311 in operating condition since acquisition. Currently needs new batteries. \$20,000 as is where is. Contact Scott Becker, Pennsylvania Trolley Museum 724-228-9970, sbecker@pa-trolley.org

DIRECTOR OF OPERATIONS WANTED

This position will be responsible for train operations, maintenance and shop operations, facilities and safety, volunteer management and support/purchasing.

Submit cover letter and resume to David Wilson, dwilson@cvsr.org, Cuyahoga Valley Scenic Railroad

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ETIX

Etix.com
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