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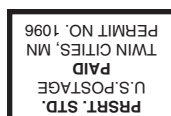
Number 8

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and the Association of Railway Museums

Spring 2012



Oh, yeah. Union Pacific E8 #942 shines in new paint at Orange Empire Railway Museum, following a multi-year restoration. Trailing it is a newly painted 4-car consist of Pullman sleeper National Scene (Pullman-Standard 1956), diner-buffet-lounge #4051, (Pullman, 1928), later modernized, parlor car #1530 (Pullman 1924), modernized 1954, and chair car #542 (Pullman, 1926), rebuilt 1950. Marty Bernard photo.



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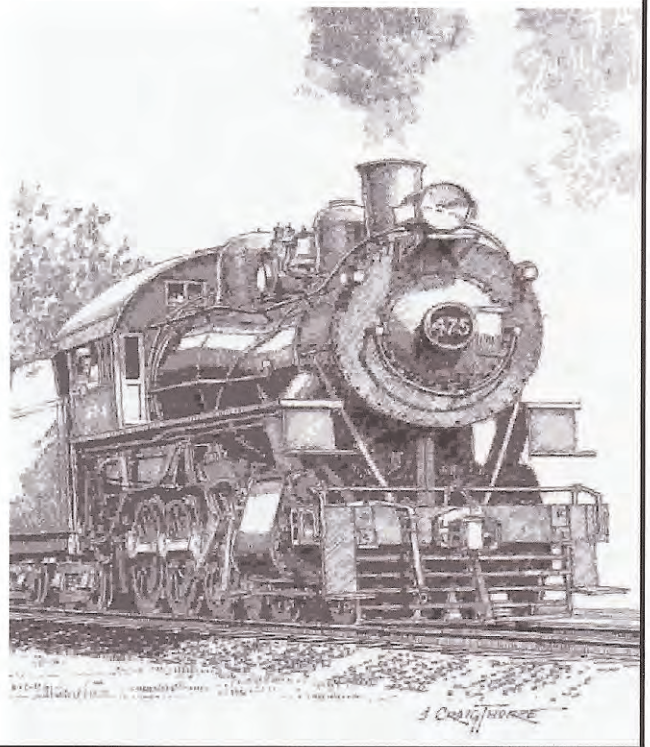
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The purpose of the Association of Railway Museums is to lead in the advancement of railway heritage through education and advocacy, guided by the principles set forth in "Recommended Practices for Railway Museums" and incorporated in other best practices generally accepted in the wider museum community.

ARM Membership

Membership in the Association of Railway Museums is open to nonprofit organizations preserving and displaying at least one piece of railway or street railway rolling stock to the public on a regularly scheduled basis. Other organizations, businesses and individuals interested in the work of the Association are invited to become affiliates. For more details, or to report address changes, please contact the Association of Railway Museums, P. O. Box 1189, Covington, GA 30015, or email to scg@lagniappeassociates.com.

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The Association of Railway Museums is a Professional Affiliate Member of the American Association of Museums.

TOURIST RAILWAY ASSOCIATION

The Tourist Railway Association, Inc. is a non-profit corporation chartered to foster the development and operation of tourist railways and museums.

TRAIN Membership

Membership is open to all railway museums, tourist railroads, excursion operators, private car owners, railroad related publishers, industry suppliers and other interested persons and organizations. TRAIN, Inc. is the only trade association created to represent the broad spectrum of what is called "creative railroading".

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PRESIDENTS' REPORT

By Bob LaPrelle, ARM and
Rick Burchett, TRAIN

The boards of both ARM and TRAIN met in St. Louis in March to work through the final steps needed to prepare for the merger of our two organizations; the presentation and vote will be held at the November conference in Montreal. A full communication and documents package will be provided to all members of each organization in the summer, with another opportunity for input and questions prior to holding the vote. Both boards are unanimously recommending that the merger proceed, and have followed through on the support given at last year's conference in Chattanooga.

During our two days together, a number of key issues were completed. Thanks to the effort and work of Bob Opal and the Organization Working Group, we were able to conclude plan of merger documents for the new organization and a set of new bylaws. We really appreciate Bob's hard work in helping put these together and collectively the boards were able to bring these to a state of readiness. We also concluded a new attractive dues structure in readiness for 2013 and a plan for integration of the two boards into a single transition board comprised of an equal number of directors from each to the two predecessor organizations. Thanks again to Don Evans for facilitating us through the process.

A considerable amount of time was allocated to the naming of the organization. After much work, debate and discussion, the decision was to go straight forward and simple, and to reflect what we really are all about.....the name Association of Tourist Railroads and Railway Museums was chosen. Our joint publication will become Tourist Railroads and Railway Museums, also reflecting our industry sector and member base.

As members of ARM and TRAIN, you have already seen many of the benefits of our groups working together, and these will continue. You have experienced the success of joint conferences, the combined publication, working together on advocacy and more. Next up will be a new integrated website with more functionality and power, providing new tools and information for our members, targeted for readiness this summer. This will bring yet more support and services to you, our members, and to our industry.

A tremendous amount of work was

accomplished, and now the final details are being prepared. We ask you to watch for the information package this summer and for your active support as we move forward together for the good of all those involved in the field of railway preservation. By joining together ARM and TRAIN into a the new Association of Tourist Railroads and Railway Museums, our goal is to provide better value (more services for less cost) to our members and contribute to the long term sustainability of our industry.

MARKETPLACE

By James Porterfield

The New Center for Railway Tourism

The press release headline read, "Davis & Elkins Unveils Center for Railway Tourism." A one-page document, it was sent March 14, 2012, from Davis & Elkins College in Elkins, West Virginia. Full disclosure: I'm the director of the new Center and this column will describe what we're trying to accomplish with it.

About D&E

Davis & Elkins College is a coeducational liberal arts school with 750 students and a student/teacher ratio of 12:1. Opened in 1904, it has a railroad connection: it was founded by Henry Gassaway Davis and Stephen Benton Elkins, two United States Senators who built the first railroad into the area. And, it offers a major in Recreation Management and Tourism.

Elkins, the adjoining community, is the Randolph County seat. Once a busy Western Maryland Railway hub, today it is served by the West Virginia Central, which interchanges with CSX, and the Durbin & Greenbrier Valley Railroads, which provide freight and excursion service. A city of 7,000, it is also a trailhead on the 25-miles-and-growing Allegheny Highlands rail trail

along WM's former route to Hendricks and Thomas. The West Virginia Railroad Museum is to be located in nearby Beverly, and the D&GV is working to establish a 90-mile, 2-day excursion loop originating in Elkins. Further, West Virginia has designated railroad heritage as one of the state's three critical tourism draws (the other two are natural resources and outdoor recreation). In other words, Elkins, West Virginia, is an appropriate place to put a Center dedicated to advancing the railway heritage and tourism industry. Little wonder there was immediate and strong support for the concept from the College and community alike.

The Center has been invited to offer programming at D&E's Augusta Heritage Center (<http://augustaheritagecenter.org/>) in Summer 2012. Augusta's mission to "encourage wider understanding and practice of artistic expression found in local, regional, and ethnic traditional folk cultures" offers a number of opportunities to showcase the life and work of railroaders. Likewise, there is an invitation to provide content for alumni mini-courses offered during Homecoming in October 2012. And John Smith, president of the Durbin & Greenbrier Valley Railroad, has generously provided introductions to others and invitations to events in Elkins and throughout West Virginia, as well as becoming the Center's first donor.

Serving Three Purposes

The Center for Railway Tourism will focus its attention on three activities:

- Providing a cadre of college-educated specialists in railway heritage tourism.
- Developing programs of interest to the general public that can be replicated elsewhere.
- Providing leadership, guidance and materials to the railway heritage community that focus on bottom-line results.

BRIDGE DEADLINE APPROACHING

By Bob Opal, ARM/TRAIN FRA liaison

The 800-pound gorilla lurking just around the corner is FRA Bridge Safety Standards. Under this rule, the deadline for tourist roads (including insular, non-insular and general system) to have bridge management safety programs in place is September 13, 2012. This isn't just a matter of writing a paper. As I read the rule, this is also the deadline for tourist railroads to determine the "safe load capacity" of their bridges (by the way, a turntable or transfer table is a "bridge" under this rule). This is a task that has to be done by someone with the credentials provided in the rule, and it could be a really BIG job for some organizations (if they have many bridges, or a major bridge). Most tourist roads probably lack the in-house expertise to do this with their own personnel, so it may require a contractor.

To encourage and prepare students for a career in railway heritage, preservation and tourism management, the Center will offer specialized undergraduate courses through the D&E Business Administration Department's Recreation Management and Tourism major. These include a 3-credit course in Railway Heritage, followed by 3-credit courses in Heritage Tourism and Heritage Marketing in Spring 2013 and Fall 2013 respectively. Visiting lecturers of national prominence will augment instruction provided by D&E faculty. Each course will be supplemented with a 1-credit module wherein registrants develop a business plan for a specific railway heritage application. Completing these courses, plus one additional elective from among the 20 offered in Recreation Management and Tourism, will result in a student earning 15 specialty credits. This will be recognized with a Certificate in Railway Tourism Management. A similar approach is planned for courses beginning in the 2013-14 school year that focus on railway heritage preservation.

Course content will then be reworked to enable offering it nationally through distance education. Completing this program will likewise earn the participant certification. In this way, railway heritage operations throughout

ANNUAL TRAIN AWARDS

TRAIN has a long-standing tradition of annual awards. In this last year of TRAIN as an independent organization, we once again call for nominations for the these awards:

Crook-Freeman-O'Brien Award: To recognize an individual or organization that has made a significant contribution to the tourist railroad industry or an individual TRAIN member. This might include a major donation of materials, transportation, rolling stock, funding, or other goods or services; or the development of a major concept or issue of concern to tourist railroads and follows through from concept to implementation.

Distinguished Service Award: To recognize TRAIN officers, directors, committee chairpersons and committee members for service to the organization. This can also be used to recognize other individuals or organizations that have contributed to the tourist railroad industry.

Walter P. Gray III Pioneer Award: To recognize an individual or organization that has contributed unique or outstanding leadership in the tourist railroad industry.

Equipment and Facilities Awards:

Structures: Buildings, right of way and other infrastructure.

Locomotive: Steam, electric and diesel

Electric Traction: trolleys and interurban equipment

The deadline for nominations is September 1, 2012. Awards will be presented in November at Montreal. Mail your nominations to Suzanne Grace at the TRAIN office, PO Box 1189, Covington, GA 30015.



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North America can encourage and support promising young people, military veterans, people considering a career change, and those pursuing "encore" careers, in acquiring the knowledge and experience needed for success in this important but challenging, demanding and changing field.

Another component of the Center's work with students is an internship program. Structured, for-credit, multi-week field experiences at participating railway heritage venues will immerse a student in one or more aspects of railway tourism. Supervised by the college, each will consist of a pre-arranged schedule of learning experiences, a journal to be kept by the student, a written evaluation of the student's work by the sponsoring organization, and a student-developed plan to address a specific issue at the sponsor's site. These internships will not only further equip participants for a position in the industry, they will test and confirm - or disprove - the student's genuine interest in the field.

Finally, funds are being raised for scholarships to enable the Center to attract and retain highly qualified and motivated students.

To stimulate the interest of the general public, the Center offers a

number of activities. Beginning in 2013, the annual Railway Heritage Conference, once offered through Penn State Altoona, will be revived. An annual Railroad Film Festival, showcasing feature films, documentaries and historic films, railfan videos, and on-line footage (think YouTube and the like), is in development, complete with screenings, workshops, lectures and an awards banquet. Working with the Art Department, the Center will offer an artist-in-residence program, as well as annual workshops for railroad artists. Also 2013 will see the first of a series of customized rail tours for D&E alumni and friends of the Center. Working with a well-known national rail travel agency, and perhaps later with a private car excursion company, these tours will expose participants to the pleasures of rail travel at the same time they provide unique learning experiences at rail heritage sites throughout North America.

In partnership with an educational publisher, the Center is developing an oral history project patterned after National Public Radio's StoryCorps. Materials that encourage a local, trans-generational dialogue - the sharing memories about rail travel, about working for the railroad, and about how

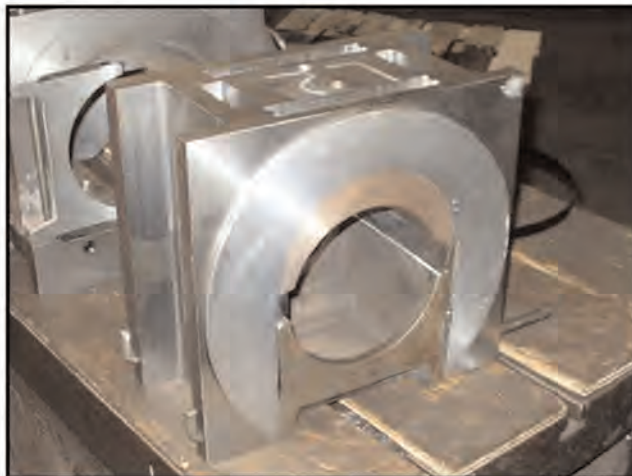
railroads affected lives in other ways - will be available for use by the railway heritage community.

Similarly, traveling thematic kits are being developed that will enable local museums and excursion operations to stage events that call attention to, demonstrate and celebrate the ways in which railroads did and continue to affect national culture and life. One of the first two kits is devoted to rail dining (that shouldn't surprise you), while the other concerns railroading and natural resources. These and other topics under consideration have a proven track record of generating attention and revenue for railway heritage sites among a broad audience.

Center activities described above, both those that prepare the next generation of heritage tourism professionals and those labeled as "for the general public," also serve the third audience: the railway heritage community. Additional events scheduled specifically for this third audience include a revival of the dinner train operator's conference, first offered in the 1990s. Other workshops and conferences will address specific needs and issues as suggested by the community. These will assemble individuals and teams to conduct research into critical issues facing the



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community, create strategies and materials suitable for use in expanding attendance and volunteerism, provide guidance into how to further professionalize the railway tourism industry, and facilitate interaction among noted academic, business and railway tourism authorities whose work addresses topics and issues of importance to the entire community.

In all of this, the Center for Railway Tourism has been shaped by the move within ARM/TRAIN, the National Railway Historical Society, and elsewhere, to confront and tackle head-on the challenges facing the railway heritage community. Its focus on educating young people, especially, for a career in the field, on developing strategies to encourage volunteerism and increase attendance, and on adapting to changes occurring among both audiences and participants by embracing a widening view of what constitutes railway heritage tourism, led John Hankey to describe it as “a potential game-changer”. Meanwhile, the Center provides a creditable, third-party, not-for-profit organization with academic credentials and roots in railway heritage, a resource for the industry to turn to for ideas, guidance and materials to help figure out what to do in a dynamic setting.

For the Record

Davis & Elkins College; The Center for Railway Tourism; James D. Porterfield, Director; Robert C. Byrd Conference Center; 100 Campus Drive; Elkins, WV 26241; 814.574.5586 (cell); porterfieldj@dewv.edu. A website is under development and will be found at www.dewv.edu. For further information, or to offer suggestions, please contact me.

CONVERGING INTERESTS

By John Hankey

Let's be blunt: Things have changed a great deal in the thirty-odd years since TRAIN was founded. We thought things were rough out there way back then. Today, the railroad operating environment is even more challenging, generally unfriendly, and sometimes downright hostile. But there may be hope.

In a pleasant but nondescript Washington, D.C. office building a block from Union Station are the offices of the American Short Line and Regional Railroad Association. The building—at 50 F Street—once also housed the Association of American Railroads. AAR and ASLRRRA perform all the tasks expected of contemporary industry associations.

They coordinate the policy positions of their respective members, do advocacy, monitor regulatory issues, work with the FRA to craft rules and regulations that flesh out statutory goals, and generally do the complex “Washington work” that must be vigilantly attended to. The National Trust for Historic Preservation and American Association of Museums do the same kind of work for cultural resource management communities (including railway heritage).

Despite similar roles, AAR and Short Line are very different. The AAR is dominated by the 7 Class I railroads, with another 13 corporate members in the first rank. There are an additional 18 Affiliate railroad members, and 76 Associate members—mainly from the railway supply industry. AAR works on the industry regulations and administrative law that governs almost anything that turns a flanged wheel. There are Canadian and Mexican counterparts, but AAR takes the lead.

“Short Line” (as ASLRRRA has been casually known for much of its 100 years) has over 450 railroad members, a number of affiliate members, and a more “service oriented” posture. ASLRRRA represents the shortline railroad industry (and it often seems like a separate industry) to the FRA, outside entities, and to the AAR itself. It offers a variety of services and programs that small railroads could not afford on their own, and even has a membership category specifically referencing “Tourist and Excursion” railroads.

That is one way to make a distinction and understand the opportunity. For the most part, the railroad industry represented by AAR barely acknowledges that railway heritage exists. Big diesels in classic colors are a lovely gesture, and steam-powered excursions for employees and the occasional private special at least give a few people the chance to experience traditional railroading. But heritage doesn't impress Wall Street or move share prices. It is largely irrelevant to the industry, despite the occasional references to a storied past. The short line side is somewhat different. Many heritage and historic railroad operations are, by definition, short line railroads. Aaron Isaacs counted 40 ASLRRRA members running excursion trains, and some ARM/TRAIN members are also Short Line members. Some short line and regional railroad operators are personally interested in railway heritage, and express that interest in ways not available to the executives of the AAR railroads.

Still, for better or worse, almost any railway heritage operation is “railway” first and “heritage” second. Before a

museum piece, historic operation, or excursion/scenic/branded/special-in-any-way train moves a foot, it has to conform with the laws, regulations, and standards governing the railroad industry as a whole. In the context of the overall transportation system, that mostly makes sense. For many in railway heritage, it can be an unholy mess and real obstacle. That is where a closer relationship with Short Line might help.

We are—or could be—a natural constituency for the American Short Line and Regional Railroad Association. Our trains serve millions of passengers a year. We move only a little freight—but enough to say it counts. Our excursions, demonstration trains, museums, and front-line experiences are almost the only ways people have to directly engage railroad transportation. At some point (perhaps during the next reregulation fight, or when a railroad seeks a public/private partnership or wants to do something that arouses public notice), the railroad industry may realize it is helpful to have a reservoir of goodwill and friends in the community. ARM/TRAIN members are experienced at marketing and community outreach, arguably more than freight shortlines. We could be quite helpful representing ASLRRRA to the general public and local politicians and officials.

Short Line can be our voice in the other direction—our seat at the table in Washington and our advocate in the contact sport of contemporary railroading. TRAIN has done a fine job of watching for traps and snares, and Bob Opal's recent efforts to keep ARM/TRAIN up to date regarding FRA and other regulatory issues are especially noteworthy.

But I'll suggest it is time to sit with Short Line and seriously talk about what they can do for us, and we for them. The railroad environment is only going to get more complex, restrictive, and risky. A word here, a rule there, or an otherwise unremarkable mandated operating practice intended for the Big Boys could have unintended—and seriously negative--consequences for us.

And isn't it time for us to more forcefully assert that we have legitimate concerns? That railway heritage is, in profound ways, different from moving stack trains, coal, and commuters? That railway heritage deserves greater standing, more serious consideration, and perhaps even an alternate regulatory regime? Washington is a tough neighborhood, and we've been bringing knives to the gunfight.

Short Line has said they would be happy to listen if we want to talk. We know their address. I think we ought to drop by.

THREE POWERFUL (AND FREE) TOOLS FOR INTERNET MARKETING

By Eric Housh, WhistleTix

The information in this article is derived from a presentation given at the 2011 Railway Heritage Preservation Conference in Chattanooga, TN. For a full copy of the presentation email me at ehoush@whistletix.com.

At last year's Railway Heritage Preservation Conference, a prevailing theme emerged inextricably linking successful preservation with profitable operation. A key component of operating profitably is spending your marketing dollars wisely. Lucky for us all, the internet has opened up a whole new realm of inexpensive or free, highly measurable tools that are extremely effective at driving real ticket sales.

Email

A recent survey of tourist railroads indicated that well over 60% use email regularly to market their events. That's great news, and dramatically higher than when we first started working with railroads six years ago. If you're a part of the 40% that is not quite there yet,

it's easy to get started. First, make sure you're using every possible customer touch point to capture the email address. Online ticketing is a great place to start, but your efforts should not be limited there. Also try capturing email addresses at the ticket window, or use a contest or giveaway to grow your list.

Once you begin building it, carefully curate it. This means respecting your subscribers and not deluging them with too many messages. Once monthly or prior to big event onsales is plenty of email communication. Use a free mass mailing service like MailChimp (www.mailchimp.com) to manage your CAN SPAM compliance and provide you with campaign statistics.

Facebook

Unlike email, Facebook doesn't quite have widespread adoption in the tourist railroad community. This is a missed opportunity, as Facebook currently has about 800 million registered users, half of which log on daily. The fact is, your Facebook page is arguably as important as your website in terms of internet marketing. If you don't yet have one, go to www.facebook.com/pages and get started today. And yes, it's free.

You can use Facebook in a variety of ways to connect with fans. Create games and contests to generate interest

or drive traffic to your website. Offer special discount codes to Facebook Fans. Encourage Fans to take and post pictures of their visit to your railroad on your Facebook Page. Some railroads are even selling tickets directly on their Facebook Fan Page. There really is no wrong answer, unless you're not participating at all.

Event aggregator websites

Event aggregators like Eventful (eventful.com), Zvents (zvents.com), and Yahoo! Upcoming (upcoming.yahoo.com) are easy, free ways to exponentially increase the visibility of your events on the internet. Bookmark these three sites, and use them for each of your scheduled big events. Upload pictures where possible, include plenty of description, and most importantly, include links back to your website or clear instructions on how to purchase tickets.

The next step

If they are available to you, use analytic data from your website and referral sources during the checkout process (How did you hear about us?) to identify what's working well for you and further fine tune your efforts. As time passes, your email list, Facebook followers, and website traffic will grow, and as a result your marketing spend will be much more cost effective.

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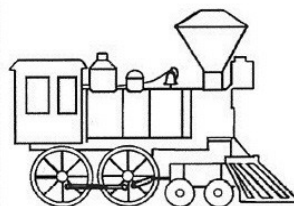
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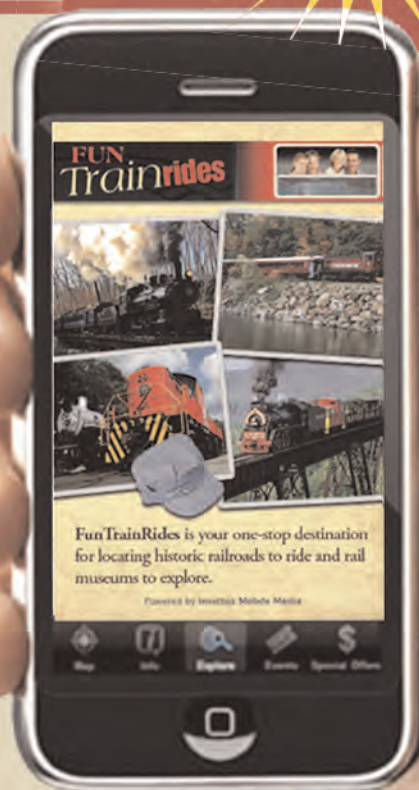
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DEBUGGING SOUTHERN 401

By Kent McClure,
Monticello Railway Museum

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2011 was the first full year of operation for Southern 2-8-0 #401 (Its restoration was described in the Summer 2011 issue of RMQ/Trainline). The locomotive continues to run well, but as is common we continue to find things to improve, and bugs to fix. During the operating season we found the right rear cylinder head leaking. The rear heads were not removed during the rebuild as there was no visible need to. However, after being run some, it became clear we had a leak coming from the right rear head/cylinder joint. The offending head was removed during latter June and early July, the problem corrected and reassembled in time for July's operation.

During July's operation we noted the right front knuckle pin was beginning to graze the inside of the main rod. This was due to too much lateral motion in the #2 driving axle, most likely due to some math error on my part in setting up all those clearances some years back. While we could have trimmed a little off the face of the knuckle pins to temporarily take care of the issue, we would rather just fix it right. So, during the July/August period between operating steam weekends, we stripped all the rods off both sides of the locomotive, and dropped the #2 pair of drivers out from under it to attend to repairs. It turned out a good thing as we found the welds holding the left hub liner to the wheel center nearly all cracked. These had been OK upon cleaning, inspection and machine work, including facing of the hub liners while the wheels were in the lathe back in 1995. Further investigation revealed the cause as well. At some point, someone had added additional hub liner plates to the #2 wheel centers, but had neglected to remove the originals. The originals were of cast iron construction with brass patch bolts holding them to the wheel centers. Arc welding to



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cast iron in this type of service is not a good idea, for the very reason we found. It must have been OK for the slow speeds around the gravel pit in its previous life, but it wasn't holding up in our service. (During our rebuilding of the loco, we had replaced four other sets of hub liners during the wheel and tire work, due to them being cast iron, and the need to weld in new liners.)

The left boiler check has been a nearly continuous cause of annoyance due to its propensity to weep hot water/steam from the boiler. This keeps us busy re-lapping the valve and seat regularly to keep it tight.

After our annual Railroad Days event in September was over, we took the opportunity, while NS GP59 4610 was on the property, to "stress test" 401. Since our run is as short as it is, and the load small, we've never really had an opportunity to see how well 401 is set up for doing real work at its capacity. The dynamic brakes of the GP59 allowed us to make the railroad "all uphill" for the full distance we can run at 20 mph. We made two separate "pulls", the second being the most useful of the two. All of the running gear ran cool with the exception of the left main rod bearing, which given not too much further would have been in some serious distress. We think we've taken care of that problem, but won't

know until we have an opportunity to do another stress test. The other item borne out of the test was the need for a slightly larger fuel line. (When you've got the firing valve wide open and can't make any smoke to speak of, you don't have enough fuel available.) Right now, after the fuel valve, the fuel line reduces down to 1" from the 1 1/2" line used from the tank through the valve. We were unable to work the loco as hard as it should have been capable of, due to not being able to maintain steam pressure against the demands of both the cylinders and an injector. This winter we'll increase the last portion of fuel line from 1" to 1 1/2", and add an inline fuel heater.

This winter we've also been refining the exhaust system to make it a little more efficient, as the new nozzle stand we threw together to replace the original was not very efficient insofar as steam flow inside it was concerned. We also plan to add additional combustion air to the firebox end to help reduce the drumming that frequently occurs. We've also taken the time to add drains to the live steam ports in the cylinder saddle. These passages, unlike the exhaust side, have no provisions for draining, and a leaky throttle will fill them with condensed steam. To this end, Russ Fischer has designed and built a set of automatic saddle drains for these

passages. The automatic valves will close when steam is admitted to the cylinders, and open when the throttle is shut, preventing the accumulation of condensed steam in the live steam ports. While not a large issue, in the long term it will likely prevent someone from inadvertently storing the locomotive with water standing in the cylinder casting.

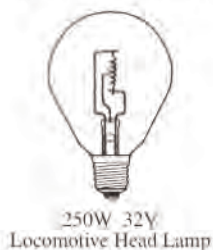
A GIFT OF LIFE INSURANCE

By Jeff Levenson,
Orange Empire Railway Museum

Reprinted with permission from the OERM Gazette

Making a gift of a life insurance policy to one's favorite charity appeals to a variety of donors because it is a flexible, cost-effective, and in many cases tax-advantaged way to make a major gift that will benefit the nonprofit institution after the donor dies. Life insurance can also be used as an asset-replacement strategy. Under this strategy, a donor makes a gift of an asset (such as real estate or appreciated securities) to the nonprofit and replaces the value of that asset to benefit his/her heirs with a life insurance policy owned in a way that eliminates estate taxes on the benefit that inures to the donor's heirs.

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Gifts of life insurance: The basics

There are two basic ways to make a gift of life insurance: an irrevocable gift of a new or existing policy where the donor gives up all incidents of ownership, or by naming the nonprofit organization as the outright or contingent beneficiary of a policy. Each approach has advantages and disadvantages.

Irrevocable gift of an existing policy.

If a donor owns excess life insurance (perhaps purchased for a reason that no longer exists), he, she or it (if a corporation) might consider making an irrevocable gift of the policy to a charity. If complete ownership is transferred to the nonprofit and the charity is named as the beneficiary, the gift will generate a charitable income tax deduction.

If the policy is "paid up" (i.e., no premiums remain to be paid), the deduction is generally equal to the policy's replacement value or the donor's basis, if the replacement value exceeds the basis. If premiums remain unpaid on the policy, the deduction can be calculated based on the policy's interpolated terminal reserve value—a value that might be slightly in excess of its cash surrender value. If the donor continues to pay the premiums on the policy (either directly to the insurance

company or as a gift to the nonprofit organization that pays the premium), each such payment is tax deductible as a charitable gift. If the cash surrender value—or, in the case of a paid-up policy, its replacement value—exceeds \$5,000, the donor must seek an independent appraisal and file a Form 8283 with his/her tax return.

Irrevocable gift of a new policy.

A donor may take out a new policy and irrevocably name the nonprofit organization as the owner and the beneficiary of the insurance contract. This can be an attractive strategy for a younger donor, because the premium cost is usually low compared with the ultimate death benefit that will accrue to the charity upon the donor's death. Whether the donor makes one single premium payment for the policy or pays premiums annually, each payment produces a charitable income tax deduction.

To maximize the tax advantage of this gift, the donor should consider making annual gifts of appreciated securities to the nonprofit organization, which will then make the premium payment. This will produce a charitable deduction based on the fair market value of the gift of the securities on the date the stock is transferred to the charity, and all capital gains tax that would have been paid had the securities

been sold, will be avoided.

Pros and cons of an irrevocable gift of life insurance.

The primary benefit to the donor of making an irrevocable gift of the policy to the nonprofit is the charitable deduction that results for the value of the policy on the date of the gift and for each subsequent insurance premium that is paid. The downside is that the gift is irrevocable—the donor can't take it back. Nevertheless, if there are premiums to be paid, the donor always has the option to discontinue paying those premiums; but the nonprofit, as owner of the policy, has the right to (1) continue making the payments, (2) take advantage of a cash surrender option (if there is any cash value in the policy), or (3) seek a life settlement solution.

Naming the charity as a primary or contingent beneficiary.

If the donor wants to retain maximum flexibility, the charity can be named as either the primary or contingent beneficiary of the policy. This will not produce an income tax charitable deduction for the payment of future premiums on the policy, but it does afford the donor a full estate tax charitable deduction when the donor dies. The concept of naming one's favorite charity as a contingent beneficiary of a policy could be a good

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strategy for a childless married individual who wants to assure maximum protection for his or her spouse while both spouses are alive, yet wants to provide a benefit to the charity if the primary beneficiary predeceases the insured or both perish in a common disaster.

Life insurance:

A wealth-replacement strategy

As part of a comprehensive philanthropic, estate and financial plan, it might be more advantageous to donate a highly appreciated asset to a charitable organization, because the donor will usually be able to take a charitable deduction for the fair market or appraised value of the asset. Once the asset is in the hands of the charity, there will be no capital gains tax on the subsequent sale. The donor, in effect, gets a double benefit—a substantial deduction and elimination of the capital gains tax. The charity receives its benefit when it might be most beneficial rather than having to wait until the donor dies. However, the loser in such an arrangement may be the donor's heirs because the asset will no longer be available for inheritance. This is where life insurance can play an important role.

The donor can purchase a life insurance policy and irrevocably either (1) name an heir or heirs as the owners or (2) create a special trust that will become the owner of the life insurance contract. The insured might use the tax savings from the charitable gift to purchase a single premium policy or choose to pay premiums annually. In either case, if the policy is irrevocably owned by either a trust or some third party(ies) outside the insured's estate, the eventual death benefit will pass tax-free to the named beneficiaries. (3) When the insured makes the premium payments on a policy that is owned by another, whether or not it is in trust, there may be gift tax consequences. Therefore, as with any estate, tax, or financial planning matter, the insured should seek the advice and counsel of his or her tax planning professional.

DIESEL RELAY LOGIC CONTROL SYSTEMS

How obsolescence may impact you

By Preston Cook

The electrical control and distribution systems hidden in Diesel locomotives and passenger cars never get much notice from the customers who ride on the equipment at operating museums and tourist railroads. Hidden in inconspicuous cabinets the power

distribution equipment is largely ignored – until the day when it does not work properly. And then you can have a trainload of very irritated passengers, particularly if the result is a locomotive that cannot “take power” or passenger cars that cannot be heated or air conditioned.

For many decades the control systems used in electric locomotives, Diesel-electric locomotives, and gas-electric cars were what is commonly termed “relay logic” systems. These systems use electric relays with magnetic operating coils and movable auxiliary contacts to take inputs from manual switches, temperature and pressure switches, and other devices, and to convert those low current signals to usable outputs for controlling power contactors and other high capacity power transmission devices. In circuits that require a particular combination of events to take place in order for the final device to be activated, relays are used in networks to process inputs and check and recheck the positions of controlled equipment. This interlocking is intended to prevent the mistaken application of power at the wrong time, such as attempting to operate in power and dynamic brake simultaneously. For situations where a time delay is necessary in an operating circuit, mechanical Agostat time delay relays, resistor-capacitor timing, or similar control provisions can be used. And to

make current flow directional and provide further specialized control functions, rectifiers, diodes, zener diodes, and suppression diodes may be employed. The design of these control systems was something of an art, and the people who thought them out were very much specialists, hidden in the engineering departments of locomotive manufacturers and car builders.

As the capabilities of locomotive power generation systems increased and larger and more complex main generators were developed, the complexity of the relay logic control systems expanded as well. By the early 1960s at the peak of the capabilities of DC main generators in Diesel-electric locomotives, relay logic control had expanded to include magnetic amplifier excitation controls, multiple steps of transition to change the motor connections across the main generator, and numerous stages of field shunting to help counter the high voltage generated by the back-EMF (Electro Motive Force) that increased in the traction motors along with the speed. When the first AC traction alternators with DC rectified output appeared, the relay logic systems did not get much simpler.

A number of solid state devices started to appear in locomotive control systems in the 1960s, including wheelslip control systems, throttle response panels, rate controls, and



By the 1970s a typical locomotive electrical cabinet had several miles of control wiring. Aging wire in preserved locomotives poses a fire and safety risk, and replacement is an expensive and time consuming task. It is one area where "authentic" replacement is not a good idea. Any replacement of wiring should be done with the best locomotive grade wire currently available. Photos: EMD Public Relations

smaller magnetic amplifier units that were controlled by transistor switches. These solid state devices helped to automate many control functions and eliminated some mechanical timing devices, but did not reduce the relay logic system complexity very much. Nor did they reduce the need for control wiring, and a 1966 production EMD SD45 locomotive had several miles of control wiring. The early solid-state devices also got to be quite time consuming to change out, as some had lengthy strips of screw terminals on the device housing.

By the late 1960s EMD and GE, urged by increasing customer feedback about the difficulty of servicing the relay logic systems, introduced new control systems where most of the black box electronic devices had been redesigned into printed circuit boards housed in modules that slid into a retaining frame in the center of the locomotive electrical cabinet. These removable modules provided a number of major advantages. For troubleshooting, it was possible to quickly swap modules from a "good" unit to a "bad" unit to determine if any of the modules was to blame for the problem. Often this kind of "comparison" troubleshooting could be performed more quickly by less skilled electricians than a detailed step by step circuit search for a control problem. Since the modules all had standard plug connectors to the backplane, nothing had to be disconnected in the back to remove the module, and there was no risk of incorrectly connecting wires when the replacement was installed. They were a vast improvement, and saved space in the electrical cabinet, but much of the relay logic switchgear remained.

By the early 1980s industry interest had turned to microprocessor controls, which provided many advantages in manufacture, operation, and maintenance. The actual control "needs" of a locomotive were relatively limited compared with a typical home computer, and could be neatly handled in a very small installation that required considerably less control wiring than a relay logic system. With the microprocessor, many of the relays were unnecessary, with the computer controlling devices in the locomotive through IO (input/output) boards. Wheel-slip control, traction alternator excitation, routine control functions, and temperature and pressure sensing, could all be operated by the microprocessor, mostly by wires that each ran directly to a single device, then fed a signal back to the microprocessor to tell it that the device did what it was told to do. Early problems with control logic were

quickly ironed out, the field of companies producing the microprocessor systems whittled down to a few strong competitors, and the systems settled in for the long term. Today microprocessor controls are the industry standard in Diesel-electric locomotives, electric locomotives, and passenger cars. The microprocessor systems not only operate the locomotive main engine and propulsion, but also often run HEP units (whether static or Diesel), some air brake systems, communications, and event recorders.

When the microprocessor controls took over, the relay logic systems pretty much disappeared from new locomotive and passenger car production. The microprocessors were so successful, and so capable, that they spawned an aftermarket of retrofit applications on Class One railroads and Commuter Agencies that are gradually displacing the remaining relay logic installations. When an older locomotive with relay logic controls goes in for rebuilding today, the original electrical cabinet usually gets scrapped, and a new cabinet with a microprocessor system is installed.

The completeness of the transition to microprocessor control systems presents some challenges for operating museums and tourist railroads dependent on older locomotives as their primary motive power. The success of these new conversions is now eroding the parts support for older systems. Modules for the EMD Dash Two series locomotives are getting increasingly more difficult to find, pre-Dash Two solid state "black box" devices are in even shorter supply, and some of the 74 volt relays and switchgear are no longer being manufactured. In the future this points the way to substitutions and cannibalization of retired locomotives as being a necessity to keep pre-1980s power owned by museums and shortlines operable, with the only other option being a microprocessor upgrade which can pose a very expensive hurdle for a small operator on a limited budget.

Those who want to keep their equipment "original" need to be aware that some of the solid state devices used in older relay logic control systems are absolutely essential to locomotive function and cannot feasibly be bypassed. These include items like the "black box" and modular rate controls, throttle response panels, wheel-slip controls, and generator excitation system components. If your operation is absolutely dependent on a locomotive that uses any of these items, the time to start looking for spares is now. One possible alternative to buying them individually is to purchase an entire electrical cabinet from a retired

locomotive and cannibalize it for parts, but that is no guarantee that everything in the cabinet would be usable.

But even if you stockpile the parts you are going to need, there is another challenge on the horizon. That is the fact as the relay logic systems are approaching extinction on Class One railroads and commuter agencies, the training and experience of maintaining them is disappearing too. Railroad electricians are becoming increasingly oriented to servicing microprocessors, while the pool of talent entering the railroad industry from colleges and the military is also very much computer oriented. Classes on Dash Two and earlier locomotives are being held infrequently with fewer students, and the instructors that could teach relay logic systems are reaching retirement and leaving the industry. The workforce with the knowledge and experience base of maintaining complex relay logic locomotive control systems is becoming a thing of the past.

Recent graduates of technical schools specializing in electrical and electronic training are likely to be much more familiar with solid state electronic and microprocessor control systems than with old heavy duty relay logic controls. The modern meters they have been trained to use may actually be too sensitive for effective troubleshooting on older locomotives, sometimes reading circuits across accumulated dirt rather than giving a good indication of circuit continuity. A pack of batteries with a bell or light to check circuit continuity can be a much more reliable tool for troubleshooting seventy year old locomotives than some modern meters.

But that brings us to another problem in the maintenance of aging equipment, the viability and safety of old wiring. An untrained volunteer working on an old locomotive with aging control wiring can sometimes unintentionally do more harm than good, by trying to pull old wires out of bundles where the work can do additional damage to other adjacent wiring. In cases where troubleshooting reveals one bad wire in a bundle, it may be far less damaging to the equipment to install a new run of modern locomotive-rated control wire to bypass the defective circuit than to try to extract a wire from an existing bundle and install a replacement in the same bundle. This of course may not be "authentic" as replacement material, but in repairing electrical circuitry there are times when concerns for safety and maintainability should rate higher than authenticity.

Relay logic switchgear will still be out there for many years in older equipment operated by museums and shortlines, but don't expect the new

volunteers showing up at the museum to have a lot of experience with the technology. If you are lucky enough to have someone with this experience show up at your organization, it is a rare gift nowadays and their participation should be encouraged and valued. As the years go by there will be an increasing need for all of your organizations to locally educate your staff and volunteers on these old systems in order to maintain and troubleshoot them. There will be no operators left in the Class One or Commuter Railroad industry doing this for you. And in the long term you may need to consider re-wiring or replacing some systems if they have reached the point where they are a safety or fire risk.

WELDING OF OLD STEEL

By Bernie Bisnette,
Seashore Trolley Museum

Reprinted with permission from the Dispatch newsletter.

No topic can have more controversy than the metallurgical concepts of dealing with steels from the early 19th century. One reason is that there really is not that much old steel around anymore. Some of this topic has reared its head in the welding industry in architectural restoration. As old buildings are becoming landmarks and are being restored, some exposure to old steel is being seen. I will attempt to explain, based on my own research why this topic can really get one into a bind.

I guess it best to start with history. One of the biggest catastrophes to hit the world was the sinking of the Titanic. This ship was built with the best industry had to offer; including its steel. Remember, it was considered unsinkable! So why couldn't this ship withstand the force of an iceberg hitting its hull? It sank from weak and improper metal used in its hull. It had high levels of phosphorous and sulfur and low levels of nitrogen and manganese. If they would have used a little more manganese, things would have been totally different.

This tragic event triggered a realization of the importance manganese plays in steel. It began the Golden Age of steel making. Manganese levels were increased as an alloying agent to improve the strength of steel.

During all this trolley manufacturing was taking place. Steel was being purchased and used in building the streetcars that we are restoring. The car comes into the the Town House restoration shop and a piece is cut out and an attempt is made to weld in a new

piece of steel only to find that things get horribly worse. Hot cracking begins, the joint becomes brittle, it warps uncontrollably...you name it, it happens.

One of the most important questions I can ask is, "When was that trolley built?". I am not asking to make conversation but because I need to know what type of steel I am dealing with. I have found an endless world of types of steel and each carries a different story.

The Rochester, New York car loves welding. It accepts it. The Denver Birney Car despises welding; it has to be done in short bursts and the Metal Inert Gas process is used. Car 6618 is not a friend to welding but with a little witchcraft, it can work. Eastern Mass Street Railway car 7005 welds also but some practices have to be followed to deal with differential expansion.

So let's look at Birney 1, 6618, and 7005 and try to understand why three cars from three different corners of United States in three different eras all act different.

First, the composition of the steels:

Birney 1

Carbon content	.21
Manganese	.45
Phosphorous	.06
Sulfur	.04

Philadelphia 6618

Carbon content	.07
Manganese	.41
Phosphorous	.02
Sulfur	.04

Eastern Mass 7005

Carbon content	.10
Manganese	.38
Phosphorous	.02
Sulfur	.02

What this tells us is that the manganese/sulfur ratio changes. In the 6618 the ratio is 10 and in 7005 it's 19. The preferred ratio for welding should be greater than 22. So this shows that 7005 will weld more readily than 6618. The Birney car looks okay here but it is full of phosphorous which causes sulfur segregation. It's just a bad mix of steel.

Any one change causes a change in the dynamics of welding. Through trial and error, it has been found that using a 60,000 pound tensile strength electrode will induce less carbon into the joint, thereby not adding more carbon. More carbon will make the joint more martensitic; more brittle. What we want is a nice resilient weld that is elastic. Another trick is to gap the steel and allow for differential expansion. The old steel expands way more than the new steel and it will actually tear the seam apart. Using a small tungsten on the Tungsten Inert Gas (TIG) torch with

wide gas coverage allows the weld to stay cooler thereby reducing expansion. Sometimes welding a small area and spraying it with water to cool it allows one to observe which way the steel pulls and try to counteract it.

I have to add that there is one magic wand out there. It is a catch-all that allows all to be possible. It is the point that shows that welding and steel making have always been behind one another. It is the point where curation cannot be fulfilled. The magic wand is the stainless steel electrode. It can entrap and absorb the impurities.

I will follow up on this in the future because I could write forever. Electrodes are as varied as the steel that is in the world. The right application for the right job, then there is stress relieving. This article at least plants a seed and gives you an idea that not all things are created equal and one must be careful.

HERITAGE RAILNEWS

Age of Steam Roundhouse Sugar Creek, OH

The museum has purchased Morehead & North Folk 0-6-0 #12 (Pittsburgh 1905). Originally owned by the Southern, the engine was retired in 1963.

Berkshire Scenic, Lenox, MA

Berkshire Scenic's trackage rights agreement to run tourist trains over the Housatonic between Lenox and Stockbridge has been terminated. According to a news report, Housatonic was no longer willing to continue the arrangement. Ridership in 2011 was about 16,000. Berkshire Scenic will continue to give short rides on its yard trackage.

Black River & Western, Ringoes, NJ

Two derelict baggage cars have been spruced up and converted to support facilities. Central Railroad of New Jersey #420 (Harlan & Hollingsworth 1915) was purchased by the BR&W in 1965. It served as the gift shop from 1966 until the late 1990's, then sat unused for several years. It has been transformed into a museum housing a wide variety of railroad memorabilia illustrating the story of railroading in the Northeast, with particular focus on the history of the BR&W. It is open to visitors during most weekends when passenger trains operate.

New York Central #8424 eventually became the property of Amtrak. The BR&W purchased the car from Amtrak and moved it to Ringoes where it sat unused for several years. Repainted, it is now a workshop and storage space for restoration projects.

Bluegrass Railroad Museum Versailles, KY

The museum's "Back to the River" track work project is scheduled for completion during Spring 2012. 2011 saw trestle #3 rebuilt and a washout area fixed with improved drainage. Funded by a Transportation Enhancement grant, it will replace over 4000 ties, add 4000 tons of ballast, clean ditches, cut brush and surface and line the track in 2012. When completed, all 5.5 miles of the line to Young's High Bridge will be reopened. The bridge itself is standing, but is structurally deficient. In addition, a siding is being added at the Versailles depot.

California State Railroad Museum Sacramento, CA

As attendees at the 2006 ARM/TRAIN convention will attest, CSRM has multiple warehouses full of artifacts in addition to those that are on display. Those warehouses are located in a flood plain, not a good long term plan. Now California State Parks has committed to consolidate the entire collection, 59 truck loads, in a 265,000 square foot warehouse away from the flood plain. The building will be shared with Parks departments, resulting in considerable savings.

The museum has received a collection of over 60 objects excavated from the campsites of Chinese laborers along the Central Pacific in Nevada. Included are earthenware jugs, glazed ceramic bowls and teapots. The donation also included 19th century rail samples and California railroad documents from the 1850s and 1860s.

The ARM/TRAIN Board meeting was held in St. Louis and attendees visited the Museum of Transportation.

Top: On Feb. 29, 2012, MOT opened its new 13,000 square foot William R. and Laura Rand Orthwein Education and Visitor Center, featuring an exhibit hall, Creation Station space, gift shop and cafe. Though MOT faces budget cuts, the Center increases the available space for event rentals.

Middle: New York Central 4-8-2 #2933 (Alco 1929) being primed prior to repainting.

Bottom: Reading 2-2-2 inspection engine "Black Diamond" is being restored in the museum shop. Jim Vaitkunas photo.



Center for Railroad Photography and Art

Fred Springer, who started making railroad photographs in the 1940s in Colorado and New Mexico, has given his photographs to the Center along with a substantial donation to catalog and preserve them. His geographic reach of railroads continually expanded until today the collection covers most areas of the world. The gift includes about 80,000 color slides and 7500 black-and-white negatives.

The city of Temple, Texas, named a park in his honor in 2011, recognizing his contributions to the development of its Railroad and Heritage Museum. The park is next to the Santa Fe depot, where the museum is located. Springer and his wife, Dale, moved to Salado, near Temple, in 1980. Today, they live in Santa Fe, New Mexico.

When he donated his library and sizeable timetable and pass collection to the Temple museum, he personally funded an archivist for several years to ensure the proper cataloging and preservation of the material. He recognizes not everyone has the capability to provide such funding but to the extent possible he hopes all donors of collections would attempt to provide some funding to support their donation. For more, see <http://www.railphoto-art.org/springer.html>.

Colorado Railroad Museum Golden, CO

The Colorado narrow gauges are beloved for lasting beyond their time with antique rolling stock in some of North America's most difficult operating conditions. Among the narrow gauges, the Rio Grande Southern was arguably the most romantic survivor. It kept running until 1952 thanks to its Galloping Goose motor cars, unlikely home-built contraptions made from Pierce Arrow limousines and who knows what else. Seven of the eight Geese have survived, and the eighth has been replicated. The museum now holds an annual Goose Fest, featuring its three, plus however many others can be trucked in.

Although the Geese have received plenty of ink over the years, the museum has gone one better, publishing "Tin Feathers, Wooden Trestles and Iron Men", an 86-page soft cover Goose-only history. It tells the full story from their 1931 creation to the present day. It's notable for explaining in great technical detail how the cars were built, used, modified and later restored. It's a fine addition to any narrow gauge book shelf.

Conway Scenic Railroad North Conway, NH

The 470 Railroad Club has

purchased New Hampshire Northcoast GP9 #1757 (EMD 1956). Retaining its high short hood, it was originally Pennsylvania Railroad #7083. It will be based at Conway Scenic.

Cuyahoga Valley Scenic Railroad

Cuyahoga Valley National Park has received \$3.2 million in Federal Funds for five projects to improve the railroad, which is the park's alternative transportation system. They include:

- \$1.4 million to construct a bridge across the Cuyahoga River linking Rockside Station with the Lock 39 trailhead, which will improve access between the Towpath Trail and the railroad.
- \$575,000 to replace the 58-year-old power generation car.
- \$994,000 to rebuild former Atlantic Coast Line C420 locomotive #365 (Alco 1965) with green technology – resulting in a hybrid engine that will reduce exhaust transmissions by 90 percent and fuel consumption by 60 percent or more.
- \$145,000 to rebuild an older ADA car.
- \$137,000 to rebuild former Grand Trunk Western baggage car #9084 (ACF 1918?) which serves the Bike Aboard! program.

Farmrail, Clinton, OK

Farmrail has experienced a sharp upturn in freight traffic due to the Anadarko Basin oil boom. Major track-rehabilitation projects are underway. As a result, passenger excursions are suspended for 2012.

Fayette Central Railroad Uniontown, PA

The railroad had been leasing a Baltimore & Ohio RDC car from the B&O Museum. It was returned last year and two heavyweight Canadian National coaches, No. 5045 and 5061, were acquired from the Potomac Eagle Railroad. # 5045 (Canadian Car & Foundry 1923) is a coach with walkover seats and a capacity of 80 passengers. #5061 (Canadian Car & Foundry 1937) is a table car, opening up opportunities for dinner trains and other special events. The two cars have doubled the train's capacity of the FCRR.

Fort Smith Trolley Museum Fort Smith, AK

Fort Smith native Louis A. Marre has donated his collection of 13,920 color slides.

Friends of the East Broad Top

Temporary bracing has been installed to support the roof of the East Broad Top's blacksmith shop, which had separated from the east wall. The goal is to stabilize the building pending permanent repairs.

The 2012 restoration budget is

\$57,150. Goals for the year are to complete the restoration of the Robertsdale Post Office building, so it can become a museum; repairs to walls, siding and windows on the south end of the shop complex; additional improvements to the restored overhead line-shaft and belt power distribution system inside the shop, and continued restoration of combine #14.

Georgetown Loop, Silver Plume, CO

Former National Railways of Columbia 2-8-2 #28 (Baldwin 1928) has been acquired for service on the Loop.

Grand Canyon Railway Williams, AZ

The railway has announced its steam schedule for 2012. Trips from Williams to the Grand Canyon will run on Earth day (April 22), June 2, July 4 and September 15, which is the railway's anniversary. In addition, short 8-mile hourly Cataract Creek Rambler trips will run from Williams on May 12 and 13 and June 9.

As part of its campaign to be environmentally responsible, the railway now collects rain water for steam locomotive use, to minimize the impact on the local aquifer. In February the National Park Service gave an Environmental Achievement Award to the railway for its use of waste vegetable oil as locomotive fuel.

Halton County Radial Railway Milton, ON

The museum has acquired a 30-ton Plymouth industrial diesel locomotive. It will replace a trackmobile that has proven inadequate as a shop switcher and rescue power when the electricity fails.

Houston Railroad Museum Houston, TX

Faced with the termination of the lease on its existing site and the need to vacate in 2012, the museum has decided not to open for the public. Instead, it is preparing its collection for a move to another site. According to the latest newsletter, that is likely to be a temporary site, since a permanent one has not been secured.

Illinois Railway Museum, Union, IL

More acquisitions: A big surprise is the Milwaukee Road heavyweight sleeper/observation Lake City (Pullman 1915). Downgraded to work service in the 1950s, it was retired in the late 60s, passed through the hands of a couple of private owners and deteriorated badly. IRM's Nick Kallas looked at acquiring the car in 1989 and rejected it as too far gone.

That's when the late William Von Seht purchased it, erected a storage building and undertook a 13-year



An equipment swap briefly brought three sweepers together at Rockhill Trolley Museum. Capital Transit #09 (center) is about to leave for National Capital Trolley Museum. Iowa Terminal #3 at right has just arrived at its new home from Shore Line Trolley Museum, where it was restored for former owner NCTM. At left is Scranton Transit #107, originally built by the Chicago & Joliet Electric in 1907. NCTM photo.

complete restoration. The former basket case now looks like new. The restoration ranged from major structural components to replicated stained glass windows. Von Seht passed away recently and his heirs have donated Lake City and a replica open platform narrow gauge coach also built by Von Seht.

The Cedar Rapids & Iowa City has donated former Rock Island commuter coach #2612 (Standard Steel Car 1929). Retired by the Rock in 1978, it was used by the CRANDIC for employee specials. The car is complete but needs some work before it can enter service. It will join four sisters in IRM passenger service. This series of cars is valued for tourist railway service because they are lightweight, high capacity and simple.

Inland Northwest Rail Museum Reardan, WA

The museum has moved its Union Pacific turntable to its under-development Reardan museum site and placed it on its center pivot. It is also in the process of moving its rolling stock from the Spokane County Fairgrounds to Reardan.

Iowa Pacific

Iowa Pacific Holdings has acquired several locomotives and passenger cars from short line Carolina Southern, based in Conway, SC. Included were ex-Canadian National F7Au 9163, built in 1952, and former CN and VIA F9B 6622, built in 1957. Passenger equipment includes former Illinois Central observation car 3320 Paducah built as a coach and rebuilt to an observation in 1947; IC rebuilt heavyweight diner 4109 Auguste Chouteau built as a coach and rebuilt to

a diner in 1947; IC Pullman Greenville, built for the New York Central in 1940 and sold to IC in 1958; and three heavyweight coaches.

Issaquah Valley Trolley Issaquah, WA

The IVT is a project of the Issaquah History Museums, which joined ARM in 2011. The idea for a trolley grew out of the restoration of the historic Northern Pacific Issaquah Depot, which museum volunteers restored in the late 1980s as a museum. The railroad was abandoned, but City of Issaquah purchased the last remaining mile through town and agreed to allow IVT to run rail equipment on it.

Running full sized railroad equipment was too big of a challenge, so a streetcar seemed like a reasonable substitute. To test the idea, IVT leased a car from the Yakima Valley Trolley in 2001 and ran it for the summer season. The response was strong. Over 6,000 people rode the trolley even though it ran only on weekends during the summer and early fall.

The leased trolley was returned to Yakima, and a similar Portuguese narrow gauge car, #519, was acquired from Aspen, Colorado in 2003.

Three federal transportation grants and several local grants are funding refurbishment of the car by Gomaco, including double-ending and regauging of the truck. Completion is scheduled for September 2012. Half the track has been reconditioned and the rest will be if sufficient funds are available.

Monticello Railway Museum Monticello, IL

The museum has purchased the site of a former fertilizer plant in White

Heath, IL, near the eastern end of its track.

The University of Illinois Railway Engineering Department has installed a short test section of concrete ties on the museum's railroad near Nelson Crossing. Their goal is to study the wear of ties spaced at different intervals.

Mount Hood Railroad Hood River, OR

The railroad has placed a newly renovated club car in service. Built by Pullman in 1955 for the Long Island Rail Road, it was retired in 1999 to Mid-Atlantic Rail Car, which sold it to Mount Hood's parent company Iowa Pacific. It served on the Orlando & Mount Dora and the San Luis & Rio Grande before being rehabbed and sent to Mount Hood last September.

National Capital Trolley Museum Colesville, MD

The Rockhill Trolley Museum has deaccessioned and transferred ownership of former Capital Transit snow sweeper car #09 (McGuire-Cummings 1899) to the National Capital Trolley Museum. The car is one of only two former Washington, DC snow sweepers still in existence and remains in essentially the same condition as when it left Washington, DC, having been kept in protected storage for most of its 50 years in Rockhill Furnace. Its exterior was cosmetically restored by museum volunteers for its 100th birthday in 1999 and it has operated approximately once per year by the museum for special events since that time. This acquisition allows NCTM to replace sister car #07 which was lost in the 2003 car barn fire.

In exchange Rockhill Trolley Museum acquires former Mason City & Clear Lake snow sweeper #102 (McGuire-Cummings 1911), later Iowa Terminal #3. It was cosmetically restored and made operable again by Shore Line Trolley Museum following the fire. Cars similar to #3 operated in several central Pennsylvania cities including Altoona, Harrisburg, and Johnstown. Rockhill will also receive a pair of Brill 27F trucks from Shore Line suitable for use under former Valley Railways streetcar #12 (Jackson & Sharp 1895).

Niles Canyon Railway, Sunol, CA

The railway runs wildflower trains in the spring, and decided more wildflowers would be good for business as well as the canyon. Rather than raise a volunteer crew to walk the right of way and plant the seeds, the Mudball Express (MBX) was born. Seeds were inserted into mudballs made of clay, potting soil and water. Local Boy Scouts and Girl Scouts were recruited to



Heritage Park Historical Village in Calgary, Alberta operates former US Army 0-6-0s #4012 (Alco 1942) and #4076 (Lima 1944). After World War II the pair was sold to Pacific Coast Terminals in New Westminster, BC, where they ran into the early 1960s. Heritage Park photo.

ride the train and fling the mudballs from the two open air cars. What kid could resist that? Reportedly, a great time was had by all and this will become an annual event.

Northern Ohio Railway Museum Chippewa Lake, OH

The photo collection of the late Donald Boyd has been donated. During the period 1938-1941, Boyd took almost 500 streetcar and interurban photos, most of which were of Ohio subjects.

Orange Empire Railway Museum Perris, CA

December 10th saw a dual groundbreaking for construction of the new Harvey House Society museum and the Library and Research Center.

Oregon Coast Scenic Railroad Tillamook, OR

The Port of Tillamook Bay Board of Commissioners has approved a 20-year contract to lease 46 miles of Port of Tillamook Bay Railroad track to the Oregon Coast Scenic Railroad.

Lease payments don't start until the railroad has completed two years of operations. Oregon Coast operates a regular tourist train between Garibaldi

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and Rockaway Beach during July and August, and dinner trains throughout the year. The lease will allow the railroad to add a station in Tillamook and offer more dinner trains. 2011 ridership was 13,000.

Pacific Southwest Railway Museum Campo, CA

The museum has acquired Southern Pacific GP9 #5873, later 3709 (EMD 1959). The locomotive is notable for being one of the first GP9s built with a low short hood. It was later sold to the military and assigned to Camp Pendleton.

Pennsylvania Trolley Museum Washington, PA

The commercially restored body shell of West Penn curved side interurban #832 (Cincinnati 1930) has been returned to the museum from Brookville Equipment Company. The wiring, air piping and undercarriage equipment were all restored as part of the project. Meanwhile, the car's traction motors have also been overhauled. Since then, museum volunteers have installed all the windows and a new canvas roof.

Railroad Museum of Pennsylvania Strasburg, PA

The museum has deaccessioned Brooklyn Eastern District Terminal 0-6-0T #13 (Porter 1919). Its new owner is the Age of Steam Roundhouse in Sugar Creek, OH.

The museum's \$6 million geothermal heating and cooling system in the Rolling Stock Hall is complete. It uses the relatively constant temperature of the earth to provide an economical heat exchange through piping run in 108 400-foot deep underground wells. The system will save an estimated 35% of the operating cost of a conventional heating and cooling system, with a simple payback of about 10 years. A geothermal system is also planned for the future roundhouse, currently in design for the Museum. Other HVAC project work included adding insulation in the walls and roof, new insulated doors, new double-paned windows and ceiling fans to improve visitor comfort and the energy efficiency of the building. Re-paving of the Museum's visitor parking lot and re-landscaping work will be completed later this month.

In addition to the Railroad Museum of Pennsylvania, the Pennsylvania

Historical & Museum Commission has committed to energy conservation by utilizing geothermal systems and other green technologies at its historic sites and museums across Pennsylvania. The PHMC also has installed geothermal systems at the Erie Maritime Museum, Old Economy Village, Fort Pitt Museum, Drake Well Museum, the Pennsylvania Military Museum and Landis Valley Museum. A system is currently under construction at Washington Crossing Historic Site and another is in design for the Pennsylvania Lumber Museum.

Rio Grande Scenic Alamosa, CO

To the list of unusual special trains that appeared in the Fall 2011 issue, add this. The Rio Grande Scenic's "T-Rex Express" will transport children from Alamosa to a simulated archaeological site where they can dig for real Mammoth bones. U.S. Park Service Rangers from Great Sand Dunes National Park will provide instruction.

Reading Railroad Heritage Museum Hamburg, PA

The museum occupies the 7-acre site and buildings of the former

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ON THE ROAD TO CHATTANOOGA

On the way to the ARM/TRAIN conference in Chattanooga, the editor and friends found plenty of railway preservation.



Above left: The depot museum in Fort Payne, Alabama.

Above and opposite: We visited North Alabama Railroad Museum and rode the fall colors train from the Chase, depot. Note the boxcab diesel in the equipment line.



Left: The Linden (Indiana) Depot Museum is located at the crossing of the Monon and Nickel Plate and is home to the Monon Historical Society.

Below: In the back of the Kentucky Railway Museum's shop is this Louisville horse car. Inside, we found something we had never seen before, an original coin ramp fare collector. The double front doors are unusual--a Jim Crow feature? Jim Vaitkunas photos.





Above: The Tuscumbia, Alabama depot museum is installing track and a turntable. Jim Vaitkunas photos.



BRIDGE MANAGEMENT PROGRAM

Tick, Tick, TickTIME IS RUNNING OUT!

The Railroad Safety Improvement Act of 2008 has resulted in the FRA imposing new Bridge Safety Standards under 49 CFR Part 237. **All track owners must adopt a bridge management program by September 13, 2012.** Avoid a potential \$9,500 fine by bringing your railroad into compliance!

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Pennsylvania Steel Foundry. It has recently demolished two buildings that were deemed not suitable for museum reuse.

Rochester & Genesee Valley Railroad Museum and New York Museum of Transportation, West Henrietta, NY

The R&GV Museum has completed construction of a siding to store its seven former New York Central Empire State Limited passenger cars. That opens up yard space, permitting the relocation of four freight cars from neighboring NYMT's loop track. That in turn will permit NYMT to upgrade the loop track and complete the electrification of the last third of the loop.

SONO Switch Tower Museum South Norwalk, CT

The museum has published "The Classic Railway Signal Tower", which tells the story of SONO Tower, as well as other New Haven towers. The forward by William Withuhn contains this ringing endorsement, "Welcome to the best book, bar none, ever written about railroad signal towers and their skillful staffs. I offer that opinion with conviction – since I have spent half a century studying railway technology, in all its aspects, including the art and science of train dispatching, signaling, and signal towers." Your editor has read the book and can only agree.

Timber Heritage Museum Eureka, CA

The museum once again finds itself making an emergency move following the loss of a lease. In addition to the Samoa roundhouse and shops, a large number of logging artifacts, over 20 railcars and track materials was stored in the open at Field's Landing. It is being moved to another temporary site.

Toronto Railway Historical Association, Toronto, ON

TRHA has purchased VIA Rail LRC locomotive #6917 (Bombardier 1981). The low-profile locomotive, the last passenger power built with the Alco 251 engine, was retired in 2001.

West Coast Railway Association Squamish, BC

The association has received a \$30,000 gift toward the restoration of British Columbia Electric steeplecab #960 (Alco/GE 1912) from the Steveston Interurban Restoration Society. The society is ceasing operation this year and is disbursing its remaining funds. The locomotive was originally built for the Oregon Electric.

Attendance in 2011 was 48,735, a new record and a 53 percent increase over 2010. The increase is credited to the opening of the roundhouse event center.

Western New York Railway Historical Society, Buffalo, NY

The society's Buffalo, Rochester & Pittsburgh Orchard Park depot

celebrates its 100th birthday this year. A \$50,000 grant from the Empire State Development Corporation has been approved. The first half of the money will be used to install a new heating system, renovate the bathrooms, and conduct an "Existing Conditions" Study of the property. Once this work is completed, the other half of the grant money will be used to rebuild a BR&P caboose, and to continue ongoing roof repairs to the depot and freight house.

The Society has acquired a BR&P 4-wheel "bobber" caboose from the Museum of the American Railroad in Dallas.

Whitewater Valley Railroad Connersville, IN

Chesapeake & Ohio caboose #90299, built in 1949, has been acquired. It has been on display in Dillsboro, IN.

TRIVIA UPDATE

The list of locations where tourist trains run by different entities connect should be amended to include Scranton, PA. The Electric City Trolley Museum streetcars and Steamtown excursions leave and arrive at the same platform, on different tracks, although no effort is made to coordinate schedules. Thanks to David Noyes.

Also, excursions of the Arkansas & Missouri Railroad have been loading at the Fort Smith Trolley Museum and connecting with its streetcars.

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NRHS RAIL HERITAGE CALENDAR

June 2 & 3, 2012: Railroad Museum of Pennsylvania: Norfolk Southern Days
Location: Railroad Museum of Pennsylvania, 300 Gap Road, Strasburg, PA

Event Type: Program - 30th Anniversary Celebration of Norfolk Southern

For more information visit: www.rrmuseumpa.org

Event Status: Firm

June 3 - 6, 2012: Collis P. Huntington Chapter, NRHS: Round Trip to New York City on Private Cars

Event Type: Multi-Day Excursion - 3 nights/4 days, round trip to NYC by private cars

For more information contact: www.newrivertrain.com or by calling, 866-639-7487.

Event Status: Firm

June 6 - 13, 2012: St. Louis Chapter of NRHS Charter: To the Capitol...by Private Car

Location: Downtown St. Louis Amtrak Station

Event Type: Week long excursion

Train departs on Wednesday at 5:30pm. We will be traveling on the Pullman sleeper Cimarron River for a scenic and relaxing round trip from St. Louis. Fare is \$975 for a roomette (single occupancy) or \$1,900 for a

bedroom (single or double occupancy) and includes all rail transportation and six nights accommodations on Cimarron River. Reservations are on a first-come, first served basis. A deposit of \$400 per person is required with your reservation, with the balance due by May 11.

For more information, visit <http://www.stlouisnrhs.org/>

Event status is firm.

June 16 - 17, 2012: Colorado Railroad Museum Goose Fest

Location: Colorado Railroad Museum

Event Type: Event

For more information, visit <http://coloradorailroadmuseum.org/> or contact Holly Bass, 720-875-1234

Event status is firm.

June 17 - 25, 2012: NRHS 2012 Convention

Location: Cedar Rapids, IA

Event Type: Convention

For more information, visit www.nrhs.com

Event status is firm.

June 21 - 24, 2012: Southern Pacific Narrow Gauge Historical Society, Inc. 2012 Annual Convention

Location: Fremont, CA

Event Type: Annual Convention - Subject: Narrow Gauge Railroads Absorbed by the Southern Pacific Railroad. Activities include: NG RR history, clinics, field trips, NG steam train ride, and hands on NG railroad equipment.

For more information, email spngoffice@sbcglobol.net

Event status is firm.

June 23 - July 2, 2012: Train Collectors Association Convention - hosted by Dixie Division of TCA

Location: Atlanta, GA

Event Type: Convention

For more information, visit: www.dixiedivisiontca.com

Event status is firm.

July 3rd thru July 8th, 2012: Railroad Museum of Pennsylvania: Reading Railroad Days

Location: Railroad Museum of Pennsylvania, 300 Gap Road, Strasburg, PA

Event Type: Program - tours of Reading Co. equipment and a huge operating model railroad from the Reading Company & Technical Society

For more information contact: www.rrmuseumpa.org

Event Status: Firm

July 9 - 13, 2012: Railroad Museum of Pennsylvania: Barons & Builders Day Camp (ages 9 & 10)

Location: Railroad Museum of Pennsylvania, 300 Gap Road, Strasburg, PA

Event Type: Day camp for children ages 9 & 10

For more information visit: www.rrmuseumpa.org

Event Status: Firm

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Location: Snoqualmie Depot

Event Type: Excursion

For more information, visit,
www.trainmuseum.org.

Event status is firm.

July 21, 2012: BLuewater Michigan
Chapter, NRHS: Rails by Water Tour

Location: Departs from the Portofino
Restaurant, Wyandotte, MI

Event Type: Excursion

For more information, visit,
www.bluewater.com

Event status is firm.

July 23 - 27, 2012: Railroad Museum
of Pennsylvania: Barons & Builders Day
Camp (ages 11 & 12)

Location: Railroad Museum of
Pennsylvania, 300 Gap Road, Strasburg,
PA

Event Type: Day camp for children
ages 11 & 12

For more information contact:
www.rrmuseumpa.org

Event Status: Firm

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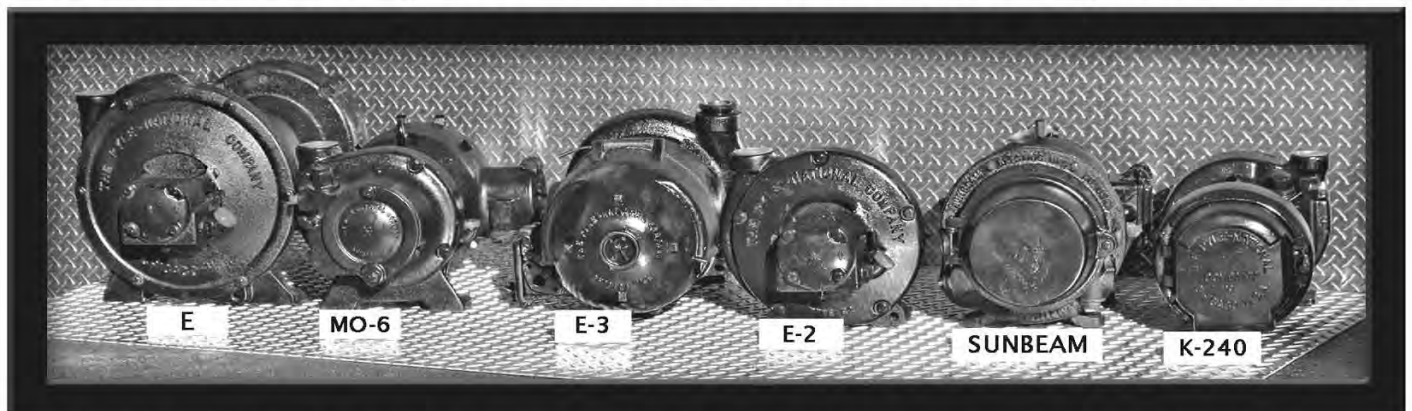
Seashore Trolley Museum has deaccessioned the body of Sioux City streetcar #46 (home built 1914). The roof has been kept fairly tight so the upper body structure is fairly sound. As one proceeds lower, the condition of the wood becomes less sound. In a restoration program, the bottom portion of the car is best used as a pattern only. There are no body sash, only one door remaining, virtually no interior fittings, and no electrical or mechanical components remaining. Present in the photo, the asbestos sheets were removed from the sides of the car at the end of the year in 2011.

Interested parties should contact the Seashore Trolley Museum at (207) 267-2712 and leave a message for Matt Cosgro or at Seashore Trolley Museum, Attn: Matt Cosgro, PO Box A, Kennebunkport ME 04046.



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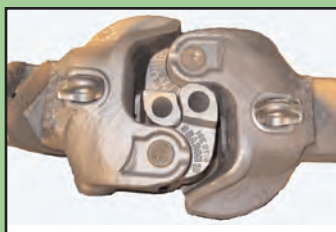
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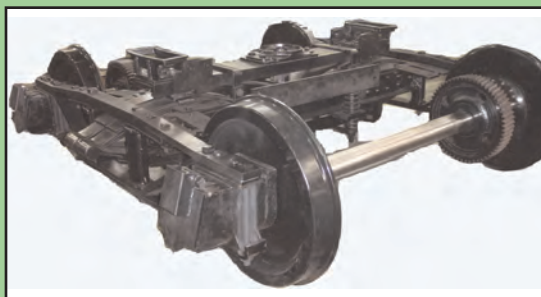
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Sheboygan Light, Power & Railway interurban #26 makes a special trip over the Mukwonago, Wisconsin end of the East Troy Electric Railroad. Forrest Johnson photo.



The Boone and Scenic Valley's latest restoration is 80-ton Air Force center cab #2254 (GE 1943). It was the railroad's first locomotive, and is now wearing the diesel color scheme of former interurban Fort Dodge, Des Moines, and Southern, on whose rails the railroad operates. B&SV photo.

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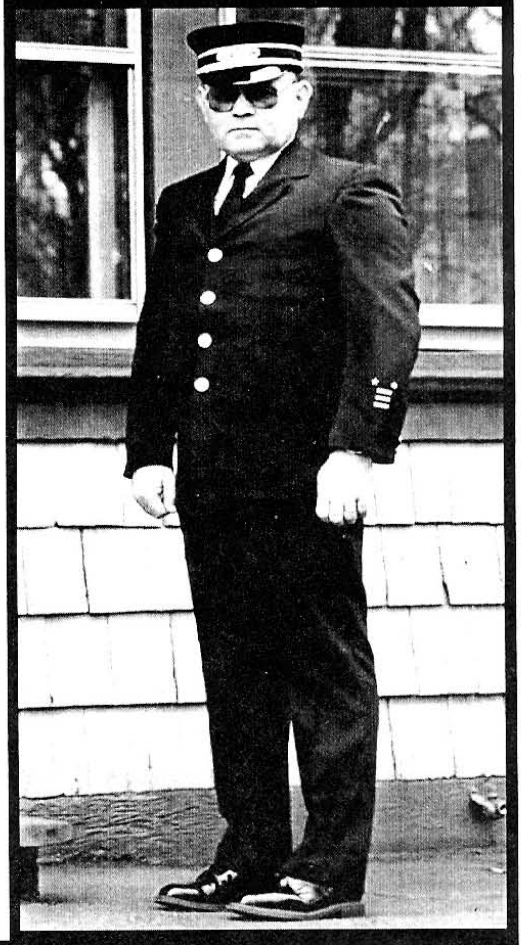
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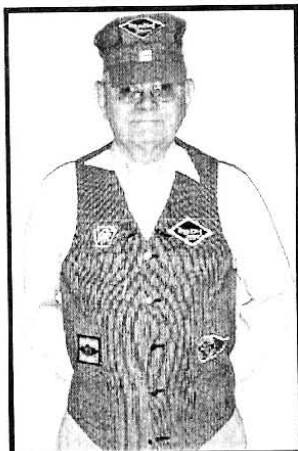
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