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Number 18 Fall 2014



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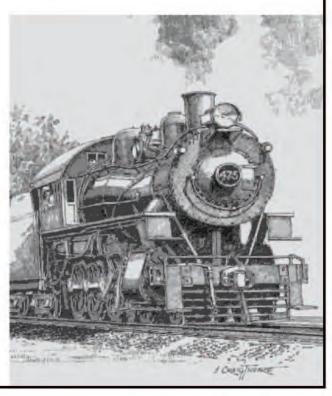
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ASSOCIATION OF TOURIST RAILROADS AND RAILWAY MUSEUMS

The purpose of the Association of Tourist Railroads and Railway Museums is to lead in the advancement of railway heritage through education, advocacy and the promotion of best practices.

For more details, or to report address changes, please contact us at:

ATRRM
P. O. Box 1189, Covington, GA 30015
www.atrrm.org
770-278-0088
Contact@atrrm.org

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

PRESIDENT'S COLUMN

By G. Mark Ray

One key component of ATRRM's governance structure is the committee. ATRRM has two types of committees: The Standing Committees (Executive, Nominating, and Finance), which are required by our Bylaws, and the Select Committees (Awards, Advocacy, Marketing, Parts, and Regulatory). Each committee has a defined function and its workload is determined by action items assigned through ATRRM's Strategic Planning process. Each committee is also responsible for submitting any budget needs as part of the ensuing year's budget preparations and then managing their budget as approved by the Board.

The ATRRM Standing Committees, which consist only of Directors, and their functions are as follows:

Executive – Has all of the powers and authority of the Board in the intervals between meetings of the Board, except as provided by law or the Bylaws.

Nominating –Responsible for recommending candidates for election to the Board of Directors.

Finance – Oversees financial procedures, the annual budget, financial reporting and investment and disbursement of association funds and makes recommendations on these matters to the Treasurer and to the Board.

The Select Committees may include individuals representing either Full or Commercial members. Thus, there are opportunities for you to participate in a committee which may interest you. The Select Committees and their functions are as follows:

Awards – Responsible for selecting recipients for the association's annual awards and the Stephen Patrick Scholarships.

Advocacy – Interfaces with the American Alliance of Museums, American Association of State and Local History, the American Short Line and Regional Railroad Association, and the National Trust for Historic Preservation and is responsible for influencing public policy and resource allocation decisions within political, economic, and social systems and institutions.

Marketing – Responsible for generating and retaining potential and current member interest and fostering the support and awareness of the railway tourist and museum industry. The marketing committee is permitted to use a range of methods to communicate ATRRM's mission including, but not limited to, newsletters, direct mail campaigns, electronic and social media.

Parts – Responsible for coordinating the bartering of items at the annual meeting, via the website, or other social media.

Regulatory – Interfaces with the Federal Railroad Administration and the Railroad Safety Advisory Committee.

If you're interested in becoming an active member of a Select Committee, then please let me know. I will be naming the 2015 Committee Memberships at the Fall Board of Directors Meeting.

HOW LONG IS THE RIDE AND HOW MUCH SHOULD YOU CHARGE?

By Aaron Isaacs

How long should the ride be?

One of the more common questions facing a tourist train operator is how long to make the ride. For this article I'm talking about the time duration of the ride, including both ontrain time and any off-train layover at the destination. Time is more of an issue than mileage. How much time are we asking people to invest to get the experience? Is it a quick shuttle trip of an hour or less, or does it require a meaningful time commitment, several hours or even an entire day? Is the ride worth setting aside that much time, especially since it will likely be pretty expensive? Does a long trip or a short trip provide a

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better return for the railroad?

Why do we run the length of train trips that we run? Is it because we have the track so we want to use it? Is it because of the sights to be seen from the train, or the need to reach a particular destination?

Certainly all these reasons enter into the railroad's decision to run trains a certain distance. How well then does the railroad's decision fit the customer's attention span and willingness to commit to a long trip? In this age of ever-shorter attention spans, are long trips viable? And how much are they willing to pay for the experience?

There's no simple answer to these questions, since tourist railroads differ so much from one another. For this article I went through all the websites of railroads and museums offering rides to determine how long the rides lasted, including layover. For railroads like the Grand Canyon, it's an all-day time commitment of 8.25 hours, even though the train ride totals 4.5 hours. The issue here is the willingness of customers to devote time to a train ride and whatever comes with it. Of course, we don't all have the Grand Canyon as a destination.

Dinner trains whose primary intent is to serve a meal were not included in this analysis. That's a different market, but trips where food was incidental are included.

I also concentrated on regular excursions, and avoided special events, which fall under a different set of rules and expectations. Because there are so many fare variations—kids, seniors, premium seating, etc.—I only looked at adult fares. Presumably the others rise or fall comparably.

First, some basic stats about trip length. Of 260 trip lengths found online, here's the breakdown.

Trip length		Percent
Under .5 hour	66	25.4%
.6-1.0	52	20.0%
1.1-2.9	70	26.9%
3.0-5.0	42	16.2%
Over 5	30	11.5%
Total	260	

What's immediately obvious is that almost half the rides are one hour or less, Almost three-quarters are under three hours and only 11 percent exceed half a day. There's a good reason for most of the really short trips—there isn't much track available. This group includes almost all the trolley museums, as well as the museums with short shuttle trips confined to the museum grounds. It also includes not-very-long railroads such as the Strasburg, whose 4.5 miles takes 45 minutes for a round trip.

Even the railroads who offer longer rides mix in some that are short, in

order to tap a different market. A good example is the Maine Eastern, with one hour turns out of Wiscasset in addition to its 4.5 hour round trips. Conway Scenic runs turns of under an hour in addition to the 5.5 hour Notch trains.

Trips under an hour provide the opportunity to sample some railroading inexpensively. Frequent departures increase the possibility of attracting spur of the moment passengers. Beyond those basic attributes, any scenery, online attraction or notable rolling stock is a plus, but not essential to a successful operation.

Once the trip exceeds an hour, however, other ingredients make a difference. Scenery is a big plus, especially if the train offers views not visible from a parallel highway. Premium seating, food service of some sort and on-train stores add value and interest, as do narration, docents and even musicians. Steam, though expensive to run, has been shown to attract more riders than diesel.

The longer the trip, the more important the destination becomes, which is why the Grand Canyon Railway prospers.

A word about speed. Ten miles per hour is fine for a dinner train or a short trip, but boredom sets in pretty quickly if it goes on for a long time, especially on the return trip when there's nothing new to see. Indeed, a number of railroads, notably the Cumbres & Toltec and the Durango & Silverton, offer the option of one-way fast bus returns. On the average railroad, which is making some sort of attempt to mimic an historic passenger train experience, speeds of at least 20 mph are the minimum to create that illusion.

So how much should we charge?

The longer the trip, the higher the fare and the fewer potential customers there will be. On the other hand, each passenger pays more. I wanted to get a better idea of fare pricing for different trip lengths. As mentioned above, trip length for this analysis includes layover before the return trip. To measure apples to apples, I divided the fare by the number of trip hours to get a fare per hour.

I volunteer with the Minnesota Streetcar Museum am well acquainted with the short trip end of the continuum. We offer one of the cheapest and shortest rides anywhere, \$2 for everyone age 4 and up. For that they get a 15-minute, two-mile trolley trip. In this example, an hour's riding would be the equivalent of four fares, yielding a fare per hour of \$8.00.

Our fare per hour actually falls on the low end of the trips that are under half an hour. The range is huge, from \$2 (San Pedro Red Cars) to \$60 (Exporail) fare per hour, but that higher figure allocates the entire museum admission to a rather short trip. It's common for museum admission to include a short trip on the demonstration railroad. Removing the museums that charge an admission fee produces a fare per hour range of \$2 to \$36 (Yosemite Mountain Sugar Pine), with an average of \$10.92.

Once the trip length exceeds 30 minutes, including the train ride in the admission price disappears. This makes for a more apples to apples comparison. Moving up the time line, the trips of .6 to 1 hour have a fare per hour range from \$9 (Kiski Junction) to \$35 (New Hope & Ivyland). The average is \$15.96.

The classic tourist railroad trip seems to fall into the 1.1 to 2.9 hour range. The fare per hour for these trips averages \$11.46, with a range of \$6 (Delaware & Ulster) to \$23.50 (Southern Prairie).

In the 3-5 hour range, the fare per hour increases slightly. The average is \$12.11, ranging from \$5.00 (Cooperstown & Charlotte Valley) to \$39.75 (White Pass & Yukon). The latter is obviously a special case, blessed with spectacular scenery and fed by cruise ships where price is less of an issue. Cumbres & Toltec is the next highest at \$26.33.

When the trip is over 5 hours, the fares rise, but the fare per hour suddenly decreases, to an average of \$8.44. The range is \$2.38 (San Luis & Rio Grande) to \$28.63 (White Pass & Yukon), with the next highest again the Cumbres & Toltec at \$14.83.

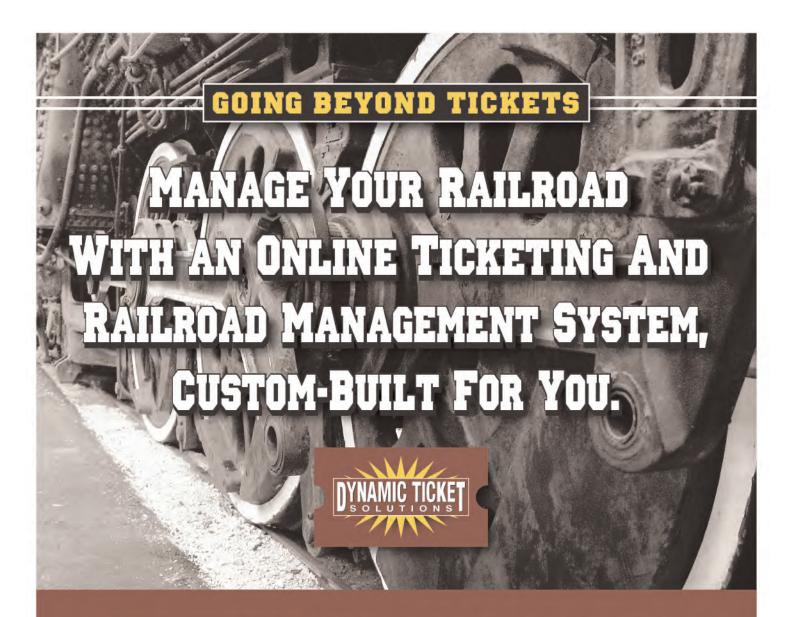
	Fare 1	per Hou	r
Hours	Avg.	Low	High
.5 or less	\$10.92	\$2.00	\$36.00
.6-1.0	\$15.96	\$9.00	\$35.00
1.1-2.9	\$11.46	\$6.00	\$23.50
3.0-5.0	\$12.11	\$5.00	\$39.75
Over 5	\$8.44	\$2.38	\$28.63

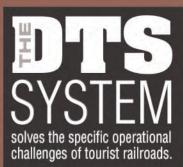
How do our fares compare?

As these numbers show, there is tremendous fare variability. These are all single adult fares, but it's probably safe to say that children, senior and family fares also range widely.

On the tables that follow are all the adult fares I could find on the internet. Check them to see how your fare compares to the average. Is your ride underpriced, overpriced or in line with similar attractions?

The entries marked with an asterisk (*) indicate that the ride is included as part of museum admission charge. Note that these fare per hour numbers are much higher and can't be directly compared to museums that price the ride separately.





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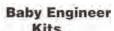
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R	Arkansas & Missouri	- 11	\$54.00	\$4.91
R	Eureka Springs & North Arkansas	1	\$14.50	\$14.50
2	Fort Smith Trolley	0.3	\$2.00	\$6.67
7	Grand Canyon Rwy	8.25	\$75.00	\$9.09
7	Verde Canyon	4	\$54.95	\$13.74
	Alberni Pacific	1.5	\$22.00	\$14.67
	Kettle Valley Steam Railway	1.5	\$22.00	\$14.67
4	California State RR Museum	0.75	\$10.00	\$13.33
4	California Western	4	\$54.00	\$13.50
4	Niles Canyon Rwy	1.25	\$12.00	\$9.60
4	Orange Empire Rwy Museum (main line)*	0.5	\$12.00	\$24.00
4	Orange Empire Rwy Museum (streetcar loop)*	0.25	\$12.00	\$48.00
λ .	Pacific SW Rwy Museum	1	\$15.00	\$15.00
4	Railtown 1897 RR	0.75	\$15.00	\$20.00
1	Roaring Camp & Big Trees	1.25	\$26.00	\$20.80
1	San Pedro Red Cars	0.5	\$1.00	\$2.00
1	Santa Cruz, Big Tree & Pacific RR	3	\$28.00	\$9.33
1	Western Pacific Railroad Museum*	0.16	\$4.00	\$25.00
1	Western Rwy Museum (main line)*	1	\$10.00	\$10.00
\	Western Rwy Museum (streetcar loop)*	0.25	\$10.00	\$40.00
1	Yosemite Mountain Sugar Pine	0.5	\$18.00	\$36.00
1	Yosemite Mountain Sugar Pine	1	\$21.00	\$21.00
)	Canon City And Royal Gorge RR, LLC	2	\$39.00	\$19.50
)	Colorado Railroad Museum	0.25	\$10.00	\$40.00
)	Cripple Creek & Victor	0.75	\$12.50	\$16.67
5	Durango & Silverton	9.25	\$85.00	\$9.19
_		-	-	\$4.00
)	Fort Collins Municipal Ry.	1.25	\$2.00	
)	Georgetown Loop RR	1	A Committee of the Comm	\$17.56
)	Leadville, Colorado & Southern RR, Co.	2.5	\$35,00	\$14.00
)	Manitou & Pike's Peak	3	\$36.00	\$12.00
)	Platte Valley Trolley	0.5	\$5.00	\$20.00
)	Rio Grande Scenic RR	8	\$19.00	\$2,38
)	Rio Grande Scenic RR	9.5	\$99.00	\$10.42
	Connecticut Trolley	0,5	\$9.00	\$18.00
	Naugatuck RR Co. Inc.	1.5	\$14.00	\$9.33
	Shore Line*	0.5	\$10.00	\$20.00
	Valley RR Co.	1	\$10.00	\$10.00
	Valley RR Co.	2,5	\$19.00	\$7.60
E	Wilmington & Western RR Co.	1.5	\$14.00	\$9.33
Β.	Wilmington & Western RR Co.	2.5	\$18.00	\$7.20
ш,	Florida Railroad Museum	1.3	\$14,00	\$10,77
+	Tavares, Eustis & Gulf	- 1	\$14.95	\$14.95
4	Blue Ridge Scenie Rwy	4	\$32.00	\$8.00
4	Georgia State Railroad Museum*	0.25	\$10.00	\$40.00
4	SAM Shortline	3.5	\$29,95	\$8.56
1	SAM Shortline	6.25	\$29.95	\$4.79
A	SAM Shortline	8	\$29.95	\$3.74
1	St. Mary's Railroad	1.25	\$17.00	\$13.60
4	Stone Mountain Scenic *	0.5	\$24.95	\$49.90
	Hawaiian Railway Museum	1.5	\$12.00	\$8.00
	Kauai Plantation	0.6	\$18.00	\$30.00
	Boone Scenic Valley	0.5	\$2.00	\$4.00
	Boone Scenic Valley	1.75	\$20.00	\$11.43
6	Thunder Mountain Line	3	\$30,00	\$10.00
	Fox River	0.5	\$4.00	\$8.00
	Abilene & Smokey Valley RR	1.5	\$15.00	\$10.00
5	Midland Rwy	1.5	\$13.00	\$13.00
5	Midland Rwy	2	\$20.00	\$10.00
,	Big South Fork Scenic Rwy	2	\$20.00	
		3		\$11.38
1	Big South Fork Scenic Rwy		\$22.75	\$7.58
(Bluegrass Scenic	1.5	\$11.50	\$7.67

W 107	3	Trip	Adult	The other Designation of the last
	Railroad or Museum	Hours	Fare	Fare/hour
MA	Cape Cod Central	2	\$20.00	\$10.00
MA	Shelburne Falls	0.25	\$4.00	\$16.00
MB	Prairie Dog Central	3.5	\$27.95	\$7.99
MD	B & O Railroad Museum*	0.33	\$10.00	\$30.30 \$23.33
MD	Baltimore Streetcar* National Capital*	0.3	\$7.00 \$7.00	\$23,33
MD	Walkersville Southern	1,2	\$12.00	\$10.00
MD	Western Maryland Scenic RR	3.5	\$35.00	\$10.00
ME	Belfast & Moosehead Lake	1	\$14.00	\$14.00
ME	Downeast Scenic	1.5	\$15.00	\$10.00
ME	Maine Eastern RR	1	\$15.00	\$15.00
ME	Maine Eastern RR	4,5	\$37.00	\$8.22
ME	Sandy River & Rangeley Lakes	0,5	\$5.00	\$10.00
MĖ	Wiscasset, Waterville & Farmington Railway Museum	0,75	\$7.00	\$9.33
MI	Coopersville & Marne RR	1.5	\$11.50	\$7.67
MI	Houghton County Historical Museum	0.25	\$5.00	\$20.00
IM	Huckleberry RR	0.67	\$13.00	\$19.40
MI	Little River RR	0.75	\$10.00	\$13.33
IM	Little River RR	1.5	\$20.00	\$13.33
MI	Michigan Transit Museum	0.6	\$7.00	\$11.67
MI	Toonerville Trolley	1.75	\$14.00	\$8.00
MI	Toonerville Trolley	6.5	\$47.00	\$7.23
MN	Lake Superior & Mississippi RR	1.6	\$13.50	\$8.44
MN	Minnesota Streetcar Museum	0.25	\$2.00	\$8.00
MN	Minnesota Transportation Museum	0.8	\$15.00	\$18.75
MN	Minnesota Transportation Museum	1,5	\$20.00	\$13.33
MN	North Shore Scenic Railroad	1,5	\$16.00	\$10.67
MN	North Shore Scenic Railroad	6	\$29.00	\$4.83
MN	Western Minnesota Steam Threshers*	0.3	\$12.00	\$40.00
MO	Belton, Grandview and Kansas City Rwy	0.75	\$9.50	\$12.67
MO	Branson Scenic	2	\$26,00	\$13,00
MO	St. Louis, Iron Mountain, & Southern	2	\$16.00	\$8.00
NC	Craggy Mountain Line	4	\$10.00	\$10.00
NC	Great Smoky Mountains Rwy Great Smoky Mountains Rwy	4.5	\$51.00 \$51.00	\$12.75 \$11.33
NC NC	New Hope Valley Rwy/NC RR Museum	1	\$10.00	\$10.00
NC	North Carolina Transportation Museum	0.5	\$6.00	\$12.00
NH	Conway Scenic RR	0.9	\$16.00	\$17.78
NH	Conway Scenic RR	1.75	\$26.00	\$14.86
NH	Conway Scenic RR	5.5	\$59.00	\$10.73
NH	Hobo	1.33	\$16.00	\$12.03
NH	Mount Washington Cog	3	\$66.00	\$22.00
NH	Winnipesaukee Scenic	1	\$16.00	\$16.00
NH	Winnipesaukee Scenic	2	\$18.00	\$9.00
NJ .	Black River & Western RR	1.5	\$14.00	\$9.33
NJ [Delaware River Railroad	- 1	\$16.00	\$16.00
NJ	New Jersey Museum of Transportation	0.25	\$4.00	\$16.00
NJ.	Whippany Railway Museum	0.75	\$14.00	\$18.67
NM	Cumbres & Toltec Scenic RR	3	\$79.00	\$26.33
NM -	Cumbres & Toltec Scenic RR	6	\$89.00	\$14.83
NM	Cumbres & Toltec Scenic RR	7.5	\$95.00	\$12.67
NV	Nevada Northern Rwy	1.5	\$27.00	\$18.00
NV	Nevada Southern Rwy Virginia & Truckee RR Co., Inc.	0.75	\$10.00	\$13.33 \$20.00
NV	Virginia & Truckee RR Co., Inc.	6.3	\$52.00	\$8.25
NY	Adirondack Scenic RR	1.5	\$15.00	\$10.00
NY	Adirondack Scenic RR	3,25	\$19.00	\$5.85
NY	Adirondack Scenic RR	9.5	\$37.50	\$3.95
NY	Arcade & Attica RR Corp.	1.5	\$15.00	\$10.00
NY	Catskill Mountain RR	0.75	\$8.00	\$10.67
NY	Catskill Mountain RR	0.75	\$14.00	\$18.67
NY -	Cooperstown & Charlotte Valley	3	\$15.00	\$5.00
NY	Delaware & Ulster Rail Ride	2	\$12.00	\$6.00
NY	New York Museum of Transportation*	0.3	\$10.00	\$33.33
NY	Saratoga & North Creek	2.7	\$18.00	\$6.67
NY	Saratoga & North Creek	8	\$25.00	\$3.13
NY	Trolley Museum of New York	0.5	\$6.00	\$12.00
OH	Cincinnati Rwy Co., The	1	\$13.00	\$13.00
OH	Cuyahoga Valley Scenic Rwy	3,1	\$18.00	\$5.81
OH	Hocking Valley Scenic	1.75	\$13.00	\$7.43

State	Railroad or Museum	Trip Hours	Adult Fare	Fare/hour
ОН	Hocking Valley Scenic	2.25	\$17.00	\$7.56
OK	El Reno Trolley	0.4	\$3.00	\$7.50
OK	Oklahoma Rwy Museum Ltd	0.6	\$12.00	\$20.00
ON	Credit Valley Explorer	3	\$46.50	\$15.50
ON	Halton County Radial Railway*	0.3	\$13.00	\$43.33
ON	Huntsville & Lake of Bays	0.5	\$5.70	\$11,40
ON	Port Stanley Rail terminal	1	\$15.00	\$15.00
ON	South Simcoe	0.8	\$13.00	\$16.25
ON	Waterloo Central	1.75	\$15.00	\$8.57
ON	York-Durham Heritage	1.5	\$18.00	\$12.00
ON	York-Durham Heritage	3.5	\$25.00	\$7.14
OR	Eagle Cap Excursion	3	\$60.00	\$20.00
OR	Eagle Cap Excursion	4.5	\$70,00	\$15,56
OR	Mount Hood Rwy Co.	4.5	\$30,00	\$6.67
OR	Oregon Coast Scenic RR	1.5	\$18.00	\$12.00
OR_	Sumpter Valley RR	1	\$17.50	\$17,50
PA	Kiski Junction RR	1	\$9.00	\$9.00
PA	Lehigh Gorge (R&N)	1	\$12.00	\$12.00
PA	Lehigh Gorge (R&N)	2	\$25.00	\$12.50
PA	Middletown & Hummelstown RR Co.	1	\$13.00	\$13.00
PA	New Hope & Ivyland Rail Road	0.75	\$26.20	\$34.93
PA	Oil Creek & Titusville Lines	3	\$19.00	\$6,33
PA	Pennsylvania	0.5	\$9.00	\$18.00
PA	Steamtown National Historic Site	0.5	\$5.00	\$10.00
PA	Steamtown National Historic Site Steamtown National Historic Site		\$24.00	\$8.00
PA	COOCUMULOS/S VETABLE DEL TEN PLADADA VERBINER	0.75	\$34.00	\$6,80
PA	Strasburg RR Co. Tioga Central RR	1.5	\$20.00	\$13.33
PA	Wanamaker, Kempton & Southern	0.67	\$10.00	\$14.93
PA PA	West Chester RR Co.	1.5	\$15.00	\$10.00
QB	Exporail (demonstration railway)*	1	\$18.00	\$18.00
QB	Exporall (trolley loop)*	0.3	\$18.00	\$60.00
RI	Old Colony & Newport	1.4	\$10.00	\$7.14
SC.	South Carolina RR Museum, The	1	\$15.00	\$15.00
SD	Black Hills Central RR	2	\$28.00	\$14.00
5D	Prairie Village*	0.2	\$4.00	\$20.00
SK	Southern Prairie Railway	2	\$47.00	\$23.50
TN	Southern Applachian Rwy Museum	1	\$19.00	\$19.00
TN.	Tennessee Central Railway Museum	7	\$32.00	\$4.57
TN	Tennessee Central Railway Museum	10	\$65.00	\$6.50
TN	Tennessee Valley RR	0.8	\$17.00	\$21.25
TN	Tennessee Valley RR	6.25	\$37.00	\$5.92
TN	Tennessee Valley RR	9	\$95.00	\$10.56
TN	Three Rivers Rambler	1.5	\$26.50	\$17.67
TX	Austin & Texas Central RR	3	\$25.00	\$8.33
TX	Austin & Texas Central RR	6	\$31.00	\$5.17
TX.	Grapevine Vintage RR	1	\$10.00	\$10.00
TX	Grapevine Vintage RR	4.5	\$28.00	\$6.22
TX.	Texas State RR	4.5	\$32.00	\$7.11
UT	Heber Valley RR Utah	1.5	\$20.00	\$13.33
UT	Heber Valley RR Utah	2	\$20,00	\$10.00
UT	Heber Valley RR Utah	3	\$30.00	\$10.00
VA	Buckingham Branch RR Co.	3.5	\$30.00	\$8.57
VT	Green Mountain RR Corp.	2	\$25,00	\$12.50
WA	Chehalis & Centralia RR Association	1.25	\$14.00	\$11.20
WA	Chehalis & Centralia RR Association	1.75	\$17.00	\$9.71
WA	Chelatchie Prairie	2	\$16.00	\$8.00
WA	Issaquah Trolley	0.25	\$5.00	\$20.00
WA	Lake Whatcom Rwy	1.5	\$25.00	\$16.67
WA	Mount Rainier Scenic RR	2	\$31.00	\$15,50
WA	Northwest Ry. Museum	1.25	\$20.00	\$16.00
WA	Pend Oreille Valley	1,5	\$15.00	\$10.00
WA	Yakima Trolley	0,5	\$5.00	\$10,00
WA	Yakima Trolley	1	\$10.00	\$10.00
WI	East Troy Electric Railroad	1.5	\$12.50	\$8.33
WI	Laona & Northern Rwy	0.75	\$20.00	\$26.67
WI	Mid-Continent Rwy	0.8	\$20.00	\$25.00
WI	National Railroad Museum Wisconsin Great Northern	0.4	\$2.00	\$5.00
WI	Cass Scenic	1.5	\$18.00	\$12.00
WV	Cass Scenic	4.5	\$25.00	\$9.50 \$5.56

State	Railroad or Museum	Trip Hours	Adult Fare	Fare/hour
WV	Durbin & Greenbrier Valley	3	\$42.00	\$14.00
WV	Durbin & Greenbrier Valley	6.5	\$62.00	\$9.54
WV	Durbin & Greenbrier Valley	9	\$79.00	\$8.78
WV	Potomac Eagle Scenic Rail Excursion	3	\$50.00	\$16.67
WV	Potomac Eagle Scenic Rail Excursion	7	\$90.00	\$12,86

(Continued on Page 9)

LAYOVER AND STAY-WARM SYSTEMS

By Preston Cook

If you have a heated engine house to protect your Diesel locomotives during cold evenings and winter weather, then your railroad is among the fortunate, and this article may not be for you. But if your operating season carries into sub-freezing weather, or you operate trains in the Christmas season, or have to provide for equipment movements year round, and do not care to risk idling your Diesel engines for long periods, or have neighbors who do not appreciate the noise, then locomotive layover systems may be of interest. These systems cover a range of protection, from simply charging batteries, to heating engine cooling and lubricating systems, to providing stay-warm functions combined with monitoring and alarms.

A note before we go further. The purpose of this article is to discuss the features and limitations of the various layover and stay-warm system types. In the course of this discussion, particular manufacturers' products encountered in the author's experience may be mentioned as typical examples of installed equipment. This is not intended to be an endorsement of any individual manufacturer or their products, there may be other suppliers who offer equally effective equipment. I have no financial interest in any of these companies, and who you might purchase equipment from is of no concern to me. It is not feasible for me to research every possible available system, and manufacturers who want their equipment featured in this magazine might want to consider the purchase of advertising space to do soc

Battery charging systems

Battery charging systems include temporary chargers that can be connected as needed, and permanently installed onboard chargers that can be plugged in using a pigtail lead, or powered from permanently installed plug-in circuitry carried by the locomotive. They accomplish two goals, the first and most obvious being to keep the state of charge of the batteries adequate to deal with cold weather starting without requiring the time consuming operation of positioning other locomotives to assist starting with booster cable jumpers. A secondary advantage of charging systems is that they help to prevent freezing of the electrolyte in a discharged battery, which can distort the plate spacing and fracture the battery case, requiring expensive battery replacement. The permanently installed onboard chargers generally have a charge tapering provision that monitors the condition of the battery and prevents overcharging. While charging systems will help with cold weather starting, the age and condition of the battery are still a limiting consideration, and the charging system does nothing to protect the other engine systems from experiencing freeze damage.

Electric cooling system heaters

Electric cooling system heaters have long been a traditional means of keeping engines from freezing and assisting in cold starting. They are manufactured in a variety of sizes to suit a wide range of applications, and some units are convertible by changing heater element connections to allow them to operate on one of several supply voltages. Kim HotStart is probably the most frequently encountered supplier of these units in the railroad

industry, although there are others. Units for smaller automotive type systems can be 110 volt supply, however heaters for larger engines are usually 220 or 480 volt systems.

Oil fired cooling system heaters

Oil fired cooling system heaters are an alternative to electric systems. They are similar in construction to a home oil heating furnace, and use Diesel fuel either from the locomotive fuel tank or a separate onboard tank to heat water in a small tank that is used to provide heat for the main engine. The burner and the circulating water pump still require power, but usually operate from commonly available 110 volt AC single phase, rather than requiring larger and more complicated 220 volt service. They have the disadvantage that they still consume external power in addition to the Diesel fuel, they require space to mount the boiler on the locomotive, and on endcab switchers that space is sometimes only available on the catwalk in front of the engineer. Also, the boiler is in itself a freeze risk if left unattended or not plugged in during freezing weather.

Heating the lubricating oil

In smaller Diesel engines with "wet" blocks, where the coolant circulates through all areas of the engine block structure, the heat from the block is often adequate to keep lubricating oil in the oil pan at an adequate temperature for cold starting. However in "dry" block engines, where the cooling water is contained within integral jackets on the cylinder liners, there is much less heat transmission from the block to the lubricating oil in the oil pan. Consequently with dry block engines it is often desirable to provide a separate oil heating circuit. This is done by circulating both the lube oil and the engine coolant with pumps and either using a separate heater for the lube oil, or heating it by circulation through the engine oil cooler.

Full commuter type layover systems

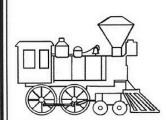
The layover systems commonly used in commuter service,

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where locomotives are in the weather during nights and weekends throughout the year, combine all of the functions we have discussed to this point. A battery trickle charger with a controlled charging curve is normally combined with a layover package that heats the coolant as well as the lube oil, and circulates them within the engine and the accessory equipment. The systems are applied to both the main engine and to any Head End Power (HEP) engine on board the locomotive. In many commuter locomotives with electric cab heating and air conditioning systems, the layover system also powers the HVAC unit to maintain the cab at a minimum around 55 degrees in the winter, and a maximum around 80 degrees in the summer.

This combination of systems allows the locomotive to be shut down a very short time after entering the yard, saving fuel and eliminating engine noise in the neighborhood. The capacity of the systems is generally specified so that the engines can be started on arrival of the crew very shortly before the locomotive is needed for service, and will be warm enough to allow yard movement a few minutes after starting. The disadvantage of this kind of high capacity system is the power requirement, generally 480 volts AC from a wayside plug in station, which energizes not only the locomotive layover systems, but also provides some layover functions in the passenger cars.

Auxiliary power units

The Auxiliary Power Unit (APU) has gained popularity with railroads that have to leave locomotives at outlying points in cold weather. The APU is basically a small emergency generator, adapted to locomotive use. A typical unit offered by PowerRail Distribution uses a John Deere engine in the 50horsepower range, to provide heating and electrical support for the locomotive main engine during extended shutdowns. This skid-mounted small engine drives a generator that provides electric support and charging services for the locomotive. Running the small engine is often more fuel efficient than idling the main engine, and reduces souping and fouling of the main engine cylinder assemblies in extended idling. Recent APU's often include heat exchangers to transfer the heat from the APU cooling system to the main engine to assist in heating the larger engine, improving their efficiency. Their electrical output charges the batteries, and depending on the size of the unit can provide power for other onboard heaters or for power tools.

The APU has the advantage that it is usually permanently installed on the locomotive, and available everywhere the locomotive goes. Some operators, like the New York Subway System, have APU's on their new work locomotives that are integrated into the locomotive control functions, and operate in reverse logic from the main engine. When the main engine is shut down, they start up to provide engine heating, cab heating, air conditioning and electrical support. When the main engine is started, the APU shuts down.

The APU has the disadvantage that it still consumes Diesel fuel and produces noise, so it is not as attractive as externally powered layover for locomotive that must be shut down in heavily populated areas. It also requires maintenance and periodic overhauls, an added maintenance expense. The APU requires installation space on the locomotive platform, generally an area about two feet by three feet. This space is available in the rear of the long hood on many types of road locomotives, but installation on end-cab switchers may need to be on the catwalk ahead of the engineer, where the unit may obstruct carbody doors.

So those are some of the options, actually quite a wide range of possible equipment combinations, that are available to provide layover or auxiliary power protection for locomotives. All of them cost money, all of them use energy in some form, but in many cases they provide a better and more cost effective alternative than idling and fouling a large locomotive main engine just to keep it from freezing in cold weather.

RESTORATION OF ENGINE 557

By Dick Morris, Engine 557 Restoration Company

The locomotive

Early in World War Two, the War Department entered into a crash program to design and build a standard Consolidation locomotive for use in Europe and Africa. It would supplant earlier designs for standard War Department Consolidations and Mikados, both of which were built in relatively small numbers. ALCO led the design effort, but Baldwin, Lima and the War Department also participated. By the end of the war, 2120 examples had been built; making it the largest class of steam locomotives ever made in the U.S. ALCO, Baldwin, and Lima each turned them out in large numbers. Most were standard gauge, but significant numbers were built to five foot gauge for the USSR and to 5 foot 6 inch gauge for India. Today the common designation for the design is S160, but this designation apparently

wasn't used until a number of years after production had ended. When built, some called her and her sisters "Gypsy." Like the popular burlesque dancer of the day, Gypsy Rose Lee, when our Gypsy came out she was stripped for action.

A requirement of the War Department was that parts must interchange to the maximum extent possible, between locomotives and between manufacturers. Even when new, the locomotives frequently had parts from more than one manufacturer and the kit of standard replacement parts that accompanied them had to fit any locomotive in the class. Another requirement was that they had to be made quickly, cheaply, and under wartime material restrictions. Yet another requirement was that the loading gauge had to be small enough to fit European rail systems. To minimize cost and comply with European practice, most were not equipped with a generator, electric lights, or pilot and were equipped with European style couplers. Many of the components that would have been castings or forgings in pre-war production were fabricated from bar and plate material. Some used frames flame cut from 4-1/2 inch steel plate and others using frames of cast steel. By the end of the war, they had operated in Africa, many of the countries in Europe, and in the USSR. After the war, the U.S. Government made the surplus locomotives available to other countries and in addition to Europe, they made their way to China and both North and South Korea. Superheaters and a 225 psi boiler pressure helped make the design efficient and powerful. Most were equipped to burn coal, but the design also had the flexibility of easily being converted to burning oil. The design proved to be a good one, and with modifications to improve reliability, many continued to operate successfully into the late 1980s. Of the entire production, only 20 to 30 were operated in the U.S., most of these on the Alaska Railroad and at the Army's training railroad at Fort Eustis. Only two or three were operated on non-military railroads in the "Lower 48" states, including number 1702, remembered for its service on the Reader Railroad in Arkansas and now being overhauled by the Great Smoky Mountains Railroad. Tennessee Valley Railroad Museum rebuilt and ran #610 until a few years ago. Approximately 25 of the design still exist worldwide, with six to eight currently operational or being overhauled for operation.

When a rapid increase in traffic required additional motive power early in the war, the Alaska Railroad wanted



Alaska Railroad #557 as delivered in 1944.



In the shop in Wasilla.

Below: The reconditioned tender frame.



to purchase additional locomotives from Baldwin to an existing Mountain design. Coming up against wartime shortages, they settled for the Consolidations because they could obtain them quickly using War Department contracts. Twelve of the War Department Consolidations were eventually supplied – with all but one built by Baldwin. Seven were supplied new and the others were obtained as surplus. At least one saw service in Europe before coming to Alaska at the end of the war. Our locomotive, #557, was delivered to the Alaska Railroad in November, 1944. She was USATC number 3525 and part of a War Department order to Baldwin for 180 locomotives to the same design, of which 120 were standard gauge and another 60 were broad gauge and destined for India. The last new steam locomotive purchased by the Alaska Railroad, she was the only one in that order specially equipped for U.S. operation. Baldwin equipped her with a turbo generator, electric lighting, pilot, bell, knuckle couplers, and power reverse. A single cylinder air compressor mounted to the left side of the smoke box resulted in the unusual offsetting of the smoke box door. The Alaska Railroad found the standard compressors to be inadequate and quickly replaced them on all 12 locomotives with a cross compound compressor on the front deck.

After the war's end, Engine 557 continued to operate reliably in passenger and freight service until the inevitable replacement of steam with diesels was undertaken. In 1954, the railroad retired all of its remaining steam locomotives except for Engine 557, which was converted to run on oil rather than coal. It no longer operated in regular service, but continued to be on standby for special events and excursions and was kept in reserve for emergency relief. Used during floods when the railroad's diesel locomotives could not operate due to the depth of water on the tracks, there was still river silt in the driver journal boxes when they were dismantled for the

restoration!

In 1964, ARR sold Engine 557 to a scrap dealer in Everett, Washington. Monte Holm, a scrap yard owner in Moses Lake, Washington, had always wanted to own a steam locomotive, and purchased Engine 557 from the scrap dealer. Mr. Holm retained 557 in a small museum on his property, occasionally running it until parking it permanently in the 1970s. Because of his love for 557 he protected and preserved her for nearly 50 years. Following his death in 2006, his family sold 557 to Jim and Vic Jansen, owners of Lynden, Inc., a transportation and logistics firm. The Jansens, in turn, donated the locomotive to the Alaska Railroad Corporation, subject to an understanding that it would be restored and put back into service for special events and excursions for the benefit of Alaskan residents and visitors.

In December, 2011, Gypsy was moved from Moses Lake on a flat car, barge, and railcar to Anchorage, Alaska, and in August, 2012, she was moved another 50 miles by truck to Wasilla, Alaska, where the restoration effort was to take place.

The Organization

The Engine 557 Restoration Company, an Alaskan non-profit corporation, was established in May 2012, and began operations when a board of directors and officers were appointed at an initial board meeting in August, 2012. At that meeting, the Company purchased 557 from the Alaska Railroad Corporation for one dollar.

The Restoration

The rods had been removed for shipping to Alaska, but the restoration effort didn't begin in earnest until August, 2012. A volunteer crew, most of whom had never touched a steam locomotive, working in a warehouse with no heat and only a couple of electrical outlets, started the task of removing the cab, piping, appliances, appurtenances, and smoke box front under the expert oversight of Chief Mechanical Officer Jeff Debroeck. The newly designated "engine house" was then turned over to Central Environmental, Inc., and a five-man crew spent a week tenting the locomotive and removing all of the boiler jacket and asbestos lagging as an in-kind donation. The volunteer crew then went back to work removing super heaters, flues, and tubes.

Following guidance from Robert Franzen of Steam Services of America, several months were spent making and recording thousands of ultrasound thickness measurements of the entire boiler. The exterior of the boiler was found to be sound and it will only need minor repairs. However, the firebox was another story. In a number of places the firebox had eroded beyond acceptable limits and there were numerous small cracks in the tube sheet. After a review of the boiler measurements and a sobering discussion on the condition of the firebox between Debroeck, President and Project Manager Pat Durand, Secretary-Treasurer Dick Morris, and Consulting Engineer Robert Franken, a unanimous decision was made to condemn and totally replace the fire box. Over nearly six months, the volunteers removed each of 1042 stays and the mud ring rivets and cut the fire box into several pieces for removal. After the firebox was removed we found our final validation that the condemnation decision was correct when two significant cracks which had been hidden by an old weld were discovered adjacent to the mud ring corners.

While one group was taking boiler ultrasound measurements and removing the firebox, others were working elsewhere. The engine truck was removed, disassembled, and cleaned. The truck was found out of tram and equalizer components heavily worn.

Drivers were removed, crated, and sent to Tennessee Valley Railroad Museum for refurbishment. An unwelcome finding was that, although the tire profiles looked close to new, the number 3 drivers were a quarter inch smaller than the others; apparently that axle was swapped with one from another locomotive while still in service. TVRR also found a crankpin on one axle was incorrectly quartered and one hub liner was loose and corrected both. The hub liner was repaired, journals and crankpins ground and roller burnished, and the drivers' treads turned, putting them in a better condition than when the locomotive was still in service.

During the last two years the organization has also been acquiring appropriately-sized tools needed to complete the overhaul, including compressors, lathes, a milling machine, band saw, jacks, drill press, welders, shelving, and supplemental storage containers. Most of the support equipment came to us through donations and loans. After the first winter without heat, the building owner installed a furnace, so we were then able to continue working four-days-per week and no longer had to cancel work days because the inside temperature had dropped below 15 degrees.

At the end of September, we received our first inspection by the Federal Railway Administration. The inspection took place after the condemned firebox had been removed and the inspector reported no exceptions for the boiler and firebox. We were also appreciative of his favorable comments on the expertise of the team of volunteers and the quality of their work.

The restoration is estimated to cost 1 million dollars plus a similar amount of in-kind donations and volunteer time. In addition to donating support equipment, area businesses have generously supported the project with use of the restoration facility, electricity and heat, fabrication of parts, asbestos abatement, transportation of items to and from the "Lower 48," hardware, safety gear,

paint, and last, but not least, the portapotty. To date, these in-kind donations have exceeded \$400.000.

The Future

This winter will see the completion of the tender truck rebuild and fitting of "roof kits" to install roller bearings while maintaining the original truck appearance. Painting of the tender and locomotive frames will be completed and the tender trucks and tender brake rigging will be fitted. Rebuilds of many smaller parts like the turbo generator, valves, and power reverse will be completed.

In the spring, a team of contractors will come in to do the critical fire box fitting and welding followed by the volunteer crew installing the new stays.

In planning for the long term viability of the locomotive with reduced maintenance, and increased reliability, several other improvements are being made. Two known areas of high maintenance for this design were the crown sheet and arch tubes. The replacement for the firebox crown and side sheet uses thicker material and the arch tubes, which are not necessary when oil is used for fuel, will not be replaced. A design decision to limit cost at manufacture was to use only 16 flexible stays in the boiler. In line with accepted practice for similarly sized boilers, approximately 400 of the rigid stays will be replaced with flexible stays when the new firebox is installed. Engine truck journals and axles will be modified to convert to them to use inside roller bearings.

Our goal is for operation in mid-2016. Our organization is working closely with the Alaska Railroad to develop operational plans and the infrastructure to support a continuing steam program. Planned operations are for the locomotive to operate once per week from Anchorage, traveling 50 miles along the spectacular views of the Turnagain Arm, to Portage, Alaska. The train will then be turned at the Portage way and return to Anchorage. A heritage premium will be added to the regular fare to support steam locomotive operations.

For further information, status reports, and photos go to the "No. 557 Info" link at alaskarails.org.

OFF AND RUNNING

By Jim Porterfield

The Center for Railway Tourism is set to begin its third year at Davis & Elkins College. Here's a brief report on where things stand today.

With remarkable speed, the Faculty Senate of the college worked with me to refine and approve a comprehensive curriculum that leads to a minor in railway heritage tourism management. Undergraduate students who complete the program earn a Bachelor of Science degree in Management (the minor is open to others, such as History or English majors), with an additional 18 credits in Railway Heritage Tourism Management. There are five required courses and a like number of electives. I hope you will find some of them innovative and unexpected:

Railway Heritage: Presents the student with a thematic and chronological overview of the history of the railroad industry in America, demonstrates the industry's impact on the nation's social and economic history, and illustrates the broad potential that heritage has for economic development through tourism.

Heritage Tourism: This introduction to heritage presentation techniques includes museums, other attractions, hotels and restaurants, and tourism services, presenting them as vehicles for both cultural appreciation and economic development.

Heritage Marketing: An application of the principles of marketing to cultural and heritage tourism settings, with a heavy emphasis on cases.

Heritage Preservation: Topics include Preservation Planning, Preservation Economics, Approaches to Preservation, Archival Documentation, and Preservation and Technology.

Railway Heritage Internship: Working with selected railway heritage tourism sites, this field experience emphasizes internship situations that are compatible with the student's career aspirations, and the requirements of his or her major field if that is not Management.

Pretty standard stuff, you say? True. Now consider the five electives, of which at least one must be completed:

The Railroad in Film: An interdisciplinary examination of the role of railroads in life and culture as portrayed in film, it features major studio feature films, augmented where possible by historical footage, cartoons and newsreel and entertainment shorts, all selected for their cinematic quality and their relevance to the role being examined by the feature film.

The Railroad in Art, Literature and Music: Using portions of George H. Douglas' All Aboard: The Railroad in American Life, Norm Cohen's Long Steel Rail: The Railroad in American Folksong, and reprints of selected articles and other published commentary and critical and scholarly essays, artworks and more, an exploration of railroading as portrayed in the creative arts.

Railway Heritage Practicum: This

three-week intensive course will take place at a different railway heritage facility annually, and offer a hands-on experience in which participating students are introduced to the qualities needed to operate a railway heritage site or to oversee the preservation of a railway heritage component (i.e., restoration work, exhibit construction, the launch of a marketing initiative, creating an operating schedule, or similar).

Study Abroad/International Internship: One (an internship) or more (a course) student(s) will visit six of the leading railway heritage sites in England, Ireland, Scotland and Wales to learn the techniques employed by these, among the cutting-edge practitioners of industry preservation, interpretation and tourism.

Model Railroading in a Museum Setting: History, how-to, and the educational and promotional importance of model railroads in telling railroading's story, with an emphasis on tailoring the model railroad to capture real railroading in or near a museum's locale, as well as on incorporating an authentic run schedule to illustrate for visitors how railroads serve(d) their community and region.

Because the electives are open to all undergraduates - in the case of the film course, open to the public free of charge; and of the Study Abroad offering, to students at other schools as well, the hope is to attract those who might not have considered railway heritage tourism as a minor to do so.

Further, not-for-credit versions of most courses are being developed to offer through distance education. They are for those who already have a degree or who do not want to pursue one.

Outreach: If you would like one or more of the Center's four-color 8 1/2" x 11" glossy admissions posters to place on the bulletin board of your meeting room, distribute to the career and college office of your local high schools, or share with any other location, do not hesitate to get in touch with me at porterfieldj@dewv.edu or by telephone at 304/637-1307. More information can be found at the Center's page on the Davis & Eklins College website.

What Else is New?: In cooperation with the new West Virginia Railroad Museum and the folks managing the 26 mile (soon to be 28-mile) Allegheny Highlands (Rail) Trail – the ex-Western Maryland Railway route north out of Elkins, the Center is working to arrange funding to create 10 historic markers along the route of the trail. The goal is to "take the museum into the field" by tying locations on the trail to the history and impact of the West Virginia Central and Pittsburg/Western Maryland

Railway on the region.

In cooperation with Elkins' independent bookstore, with its large and vibrant children's department, and the Elementary Education Department at Davis & Elkins College, the Center is seeking the support of a foundation underwritten by a best-selling author to help launch Reading 'n Railroading. This program will develop learning materials and experiences around classic or current children's books devoted to railroad subjects. It will encourage reading and engage families in local railway heritage, preservation and tourism, and be made available to railroad heritage sites and public and school libraries nationwide.

In cooperation with two of North America's award-winning documentary filmmakers, the owner of the Elkins Cinema 8 theater complex, and Davis & Elkins College, work has begun on the first annual Railroad Film Festival, tentatively scheduled for late summer 2015. The festival will showcase current and historic feature films, documentaries, railfan videos, web content, simulations, and games, with screenings, talks, workshops, and an awards ceremony.

In cooperation with the American Society of Railway Artists, administered by the Center, and The Station Art Gallery in Westfield, New York (conveniently located in a restored ex-New York Central depot sitting alongside that heritage railroad's still-busy "Water Level Route"), the Society's just-concluded first annual exhibit. On display were 25 works by some of North America's most prominent railroad artists, as well as by those who paint trains as part of their body or work, and others just turning their attention to trains as a subject. A common thread among visitor comments was the striking variety of subjects and techniques employed by these creative individuals, each of whom is portraying or interpreting our favorite industry.

Notice the common descriptor: Cooperation. One tenet of the Center for Railway Tourism, concerning the future of the railway heritage preservation community, is that the community has a civic obligation, as well as a compelling survival interest, in demonstrating its relevance by reaching further and deeper into the area it serves. Engaging those who have a tangential interest – And what aspect of American life wasn't touched by the railroad industry? - and building on that engagement to attract visitors, volunteers and underwriters, is one way to help assure longevity. I welcome hearing from those who share our thinking: porterfieldi@dewv.edu or 304/637-1307. We have work to do

One More Item: The West Virginia Railroad Museum recently assigned its full-time AmeriCorps Member to post a minimum of one news item each week, plus a Throw Back Thursday item each Thursday (http://webtrends.about.com /od/Instagram/g/Throwback-Thursday-Definition.htm), on its Facebook page (https://www.facebook.com/wvrailroad museum). In addition, the Museum followed Eric Riback's advice (see page 10 in the Summer 2014 issue) and committed to responding promptly to comments and queries. The result? The site's engagement count rose from 20 per week in mid-September to 1075 per week in just three weeks. (NOTE: In full disclosure, here and above, I am a member of the board o directors of the West Virginia Railroad Museum.)

LESSONS FROM JAPAN

By Aaron Isaacs

An unexpected trip to Japan gave me the chance to visit The Railway Museum (yes, that's its name), located outside Tokyo. Recently Jim Wrinn blogged on the TRAINS Newswire that he had recently visited the world's best railroad museum in Switzerland. I responded that I had just visited the other best museum, in Japan.

It doesn't hurt that the Japanese appear to be crazy about trains. That's not surprising, since it's hard to travel anywhere over there without riding the rails. Even so, I was not prepared for the sight that greeted me when I arrived a few minutes before opening on a Sunday. About 3000 people, mostly families, were waiting for the doors to open. A couple thousand more poured from the adjacent people mover station in the next 15 minutes. Security guards gradually released groups of 100 to the dozen ticket vending machines and finally cleared the waiting area 30 minutes later.



Above: This is the entry hall and only half of the crowd that was waiting for the doors to open.

Middle: The main exhibit hall, centered on a 2-8-2 on the working turntable. Bottom: The map of the museum, which stretches along an active railroad.











Above: The collection spans the full history of Japanese railroading, from 19th century steam to high speed Shinkansens. Middle left: Children prepare to board a miniature shinkansen. Families can eat lunch on the MU cars behind it. Middle right: A very American narrow gauge Porter 2-6-0 is part of the collection.

Bottom: At one end of the museum grounds is a 2-foot gauge "layout" where children can drive their own trains.







Once inside I saw a state of the art museum housed both inside and outside a very large modern building stretching along an active rail line. The cavernous two-level main hall displays 35 pieces of beautifully restored rolling stock. In the center is a turntable on which a 2-8-2 periodically turns during a docent presentation. The other pieces and many models and exhibits cover the entire history of Japanese railroading. Behind glass along one wall are six cars from the Emperor's special train. Americans will appreciate the little narrowgauge Porter Mogul from 1880.

The whole place strives for child-friendliness. Outdoors there is play equipment, two miniature railroads (one a conventional 12-inch gauge and the other a 2-foot gauge layout with drive-your-own trains). There is a room with four locomotive simulators, one steam and three diesel. Families can eat lunch in any of six rail cars. There's also a library, restaurant and museum shop.

ON THE ROAD TO INDY

By Aaron Isaacs and Jim Vaitkunas

On the way from Minneapolis to the annual Hoosier Traction Meet in Indianapolis, we stopped at a group of small museums and history displays. It's amazing what's out there.

Manly Railroad Museum, Manly, IA

There's not much info available on the Manly Museum, located in a former Rock Island division point and junction town. The portion of the railroad from Manly down the Cedar River valley to Iowa City is now the Iowa Northern, and they apparently have a heavy involvement in the museum. It's located in a building in downtown and wasn't open when we passed through. A couple blocks away a GP10 and caboose sit on display on isolated track. Not yet in evidence are the pair of Rock Island Eunits, including E6 #630, that were previously located at the Midland Railway in Kansas.

Locomotive 457, Mason City, IA

If there was a prize for the best looking park engine anywhere, Minneapolis & St. Louis 2-8-0 #457 (Alco 1912) would be in the running. One of only two surviving M&StL steam locomotives (the other is 2-8-0 #471, which sits derelict near Annandale, MN). After retirement by the railroad, #457 was sold to American Crystal Sugar Co. in Mason City, which used it to switch sugar-beet cars.

It was sent to East Park in 1959 in a project funded by the Mason City Noon Rotary Club and acquired the nickname "Rotary Cannonball." The locomotive was in poor condition for many years with parts stripped off it, until the 457 Committee was formed and restoration began in earnest in 2004. \$125,000 was raised to cosmetically restore the engine and build an open sided, fenced shelter for it.

The locomotive was dedicated a year ago and it looks great. Unlike so many park engines, it has boiler and cylinder jackets, appears to have all its appliances and replica builder plates. The lights are all wired and work, and a steam generator creates the illusion that it's hot.

Rock Island Depot, Rockford, IA

Located on the Iowa Northern and owned by the local historical society, this is a classic two-story wood depot with agent's quarters upstairs. It's in good condition and notable for still having an intact brick platform and train order signal. So many other preserved depots are missing those and it really compromises their appearance. Parked next door is an Illinois Central caboose that was recently repainted but incorrectly lettered for the Rock Island.









Illinois Central Depot Independence, IA

This substantial brick and stone depot seems pretty grand for a town of 6000. Purchased from the railroad in 1994, it has been moved half a block from the former IC main line and rotated at right angles from its former site. A short piece of track has been laid out front. Another detached track behind it displays one of the ex-Grand Trunk Western 0-8-0's that ran at Northwestern Steel & Wire in Sterling, IL, coupled to another IC caboose, this one lettered for IC. The depot houses the local Buchanan County Tourism and is nicely restored both inside and out.

Hub City Railroad Museum Oelwein, IA

Oelwein was the hub and shop town of the Chicago Great Western, a fallen flag now reduced to small remnants. The museum, opened in 1987, is located at the old yard. It has acquired the 1912 Railway Express Agency building, the 1951 two-story brick yard office and adjacent 75-foot dispatcher's tower. CGW rolling stock includes an FP7, steel boxcar, covered hopper and bay window caboose.

Opposite top: Equipment display in Manly, IA.

Opposite middle: M&StL #457 in Mason City's East Park.

Opposite bottom: The Rockford, IA depot. The rails are now Iowa Northern

Top and middle right: The Illinois Central Independence, IA depot, viewed from the railroad grade.

Bottom right: The Hub City Railroad Museum in the former Chicago Great Western Oelwein, IA yard.







Hesston Steam Museum Hesston, IN

The museum started in 1957 as a steam threshing group. There are traction engines, a steam powered electric generating plant and a sawmill. The first trains arrived in 1969. Over the years the site has grown to 155 acres with three railroads, dual gauge 24/36 inch, 14 inch and 7.5 inch. Each makes at least a one mile loop through the property, with trains running simultaneously on all three. The big power is New Mexico Lumber Shay #7 (Lima 1929), the last narrow gauge Shay built.

Mendota Union Depot Museum Mendota, IL

A new depot houses both Amtrak and the depot museum, and several pieces of rolling stock are on display outside, across from the town's main street. Since I was there last, a fence has been installed around Burlington 2-8-2 #4978 (Baldwin 1923) and wood caboose #14451 (Aurora Shops 1911).



Top and middle: The Hesston Steam Museum sports three separate railroads with four track gauges.

Below: CB&Q 2-8-2 #4978 heads up the Mendota Union Depot Museum's collection.



Trolley 36, Rockford, IL

Although located on the way to Chicago, we had never managed to time a visit to Rockford when Trolley 36 was running, so this was a chance to satisfy our curiosity. Trolley 36 is a gasoline engine powered single truck open streetcar that would never be mistaken for the real thing, but it gives riders who've never ridden a trolley before a taste of what it must have been like.

The car is operated by the Rockford Park District and is based at a new replica depot located in River Front Park on the east bank of the Rock River north of downtown. River cruises also start there.

What we didn't expect was the sign on the carbarn that said "Rockford & Interurban". That was the real historic interurban that was part of a through route to Elgin on the east and Janesville, WI on the north. It ran big wood interurbans until 1929. Inside the depot were well done, extensive displays on the R&I, clearly the work of someone who knew the history.

At the ticket window we were told the next trip was sold out to a group of seniors who later arrived by bus, so again the opportunity to ride was missed. However, we traveled several blocks up the line and photographed the street-running portion of the route. It should be mentioned that this odd little contraption runs on active ex-Chicago & North Western trackage now owned by mighty Union Pacific. A switch run ventures up the branch to serve a local industry during the week. When the trolley runs, a gate is placed across the track and they have to get permission from the UP dispatcher.

Brodhead Depot Museum Brodhead, WI

There are plenty of depot museums with a caboose sitting out front. The Brodhead museum is a step above, because attached to the Milwaukee Road ribside caboose is a Fairbanks-Morse 10-44 diesel switcher, that ran on this line and was built in nearby Beloit, WI. The Milwaukee Road depot dates from 1881.



Above: Trolley 36 at the River Front Park depot, a new building.

Right: Sign on the carbarn.

Below: The ride follows the ex-C&NW tracks on Madison Street for several blocks.

Bottom: The Brodhead Depot Museum features a Milwaukee Road F-M switcher.







Mineral Point Railroad Museum Mineral Point, WI

This is the oldest depot in Wisconsin, dating from 1856 and constructed of local stone. Its builder, the Mineral Point Railroad, was absorbed into the Milwaukee Road. The last train ran in 1984, although the depot had been vacated years before. The Mineral Point Railroad Society formed in 1999 and successfully applied for Transportation Enhancement grant funding. Restoration was completed by 2004.

The result is a fine museum that stands out from its peers. The building restoration and displays on Mineral Point railroad history are professional quality. The HO gauge diorama is extremely effective. It accurately shows the Mineral Point yard as it was in 1920, when both the Milwaukee Road and the Mineral Point & Northern were in town, along with industries and enginehouses. When you go outside everything in the diorama is gone except the depot.

DAILEY FOUNDATION AWARDS

The Tom E. Dailey Foundation has approved 14 grants for a total of \$44,765. Tom Dailey, a senior executive in the payment processing industry for nearly 30 years, established the foundation through an endowment.

The railroad-related grants include:
Milwaukee Road Heritage Center –
\$3,000

This Montevideo, MN group, formed in 1992, preserves the history of the Milwaukee Road. It has several early rail cars, donated by Canadian Pacific. Grant funding will be used to repair and restore a 90-foot long turntable built in 1913.

Beaver Area Heritage Foundation – \$1,000

The project is to restore the Beaver, PA, station back to its original appearance. It will house a local genealogy collection and two classrooms. Grant will be used toward renovation of the exterior of the structure.

Steam Into History – \$2,000

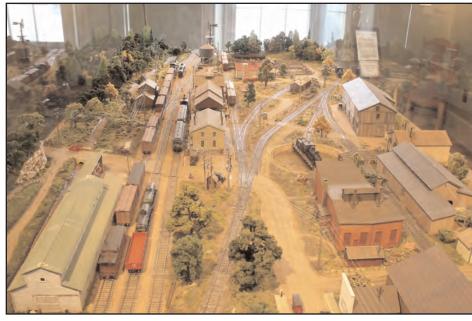
The group was formed in 2010 as an educational effort to provide Civil War railroad history to the general public. Visitors board a replica train which travels a 30-mile route taken by Lincoln to deliver his Gettysburg Address. The grant is for the purchase and installation of a handicap lift.

New Mexico Steam Locomotive & Railway Historical Society – \$7,500

The group is restoring Atchison, Topeka & Santa Fe 4-8-4 No. 2926 to running condition – an Albuquerque landmark of historical value. The project began in 2000 and is expected to be completed by 2016. The locomotive will



The Mineral Point Railroad Museum has only been up and running for ten years, but it's as good a small museum as you'll find, thanks in part to the HO scale diorama of the depot area in the 1920s. The depot is in the center of the photo.



be used to provide not-for-profit excursions in New Mexico in celebration of railroad heritage. The grant is for a portion of the cost of fabricating a modernized version of a brake stand subsystem to meet Federal Railroad Administration certification.

Sarpy County Historical Society – \$2,500

The project is the restoration of a Union Pacific CA-9 caboose built in May 1967. The grant request is for a portion of the \$12,000 estimated cost to relocate and restore the interior and exterior of the caboose. The expense is for materials only. All time to be provided by retired railroad workers and Eagle Scouts.

Northwestern Pennsylvania Railroad and Tooling Heritage Center – \$4,465

This grant will be used for insulation of the exterior walls of a former trolley station as part of a capital improvement project for completion of a transportation museum. The main goal of the project is to create and operate the trolley station museum as an educational and interpretive center emphasizing the industrial history of trolley, railroad and canal transportation in northwestern Pennsylvania. Eight supervised high school vocational education students will work on the restoration project.

Pennsylvania Trolley Museum Inc. – \$3,000

The group's collection includes a 1926 vintage suburban streetcar, Philadelphia Suburban Transportation Co. center door "Red Arrow" car No. 66. After serving visitors since 1974, it needs major refurbishment. Work will include repainting the exterior, reupholstering the interior, rebuilding the second truck with overhauled traction motors, replacing windows, and rebuilding the center door

steps and underframe.

Austin Steam Train Association Inc. – \$2,000

Among the group's collection is the Rippling Stream, a stainless-steel, sleeper-buffet-lounge car. This car was originally delivered to the New York Central in 1949. The group was founded in 1989 and runs historic rail excursions through the Texas Hill Country, serving 27,000 passengers last year.

Hoosier Valley Railroad Museum Inc. - \$3.300

This group has operated a working railroad museum and display site in North Judson, IN., since 1988. It preserves and maintain 33 miles of former Chesapeake & Ohio track. The grant request is to replace 250 railroad ties.

New England Steam Corp. – \$2,000

The group was formed in 2012 to purchase, relocate, rebuild, and care for Maine Central 4-6-2 No. 470. Once complete, the locomotive will be a steam technology classroom. Funds will be used to transport the locomotive via truck.

The Toy Train Depot - \$4,000

This Alamogordo, NM, railroad historical preservation group is restoring a Chicago & Eastern Illinois caboose.

Funds will be used to upgrade the electrical service and to replace the platform to the caboose.

Railroad Museum of New England Inc. – \$2,500

This organization, in existence for 46 years, owns and maintains the historic 1881 Thomaston, CT, railroad station. The station is located in the central business district of Thomaston, and is listed on the State Register of Historic Places. The group operates the Naugatuck Railroad, a 19.5-mile tourist train ride, and conducts special events at the station. Funds will be used for masonry wall repairs.

Railways To Yesterday Inc. – \$2,500

This Allentown, PA-based group is restoring a Johnstown Traction Co. trolley, No. 311, that served the city of Johnstown, Pa. It is a Birney Safety Car built in 1922 by the Wason Manufacturing Co. of Springfield, Mass. Safety trolleys are designed to operate with just a motorman, saving the cost of the conductor. The car, which ran on the museum's line, was removed for repairs in 2004 and is now undergoing restoration to working condition.

HOW TO PUSH AN ELEPHANT THROUGH A KEYHOLE

By Dave Roth & Garrett Brisbee, Golden Gate Railroad Museum

The painting of the Union Pacific Railway Post Office car #5901 (ACF 1949) has been one of the most challenging projects we have encountered. Some have asked why you don't just spray it already. The success of a good paint job is the preparation of the surface. Cutting corners on preparation will show up in the end results, sometimes immediately with a visually poor finish and sometimes down the road with a paint job that doesn't last. There are no shortcuts to a good paint job.

There are four major factors that have added to the difficulty of this job. The first is the green paint that was on the car. When UP 5901 went out of service in 1967, it was put into Maintenance of Way service, numbered 903683 and painted in UP MOW green. This green was very low quality paint, produced a very low quality finish and had to come off. If the car still only had the UP yellow finish, we could have prepped that

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surface and painted over it.

The second major factor is the car is constructed of aluminum. This restricted some of the methods we could use to remove the green paint. The third is also a product of the aluminum construction. Huck bolts, a large industrial sized pop rivet, were used to rivet the roof and end sheets to the frame members. Getting the paint off from around these turned out to be laborious. The sides of the car were assembled with flush rivets that were blended into the car body for a smooth appearance.

The fourth challenge was the areas where major galvanic corrosion of the aluminum had taken place. There were areas where the damage was minimal, and other areas where whole panels were compromised. Again, aluminum panels, steel fasteners and water make for a large battery. The aluminum loses this battle to the steel, and holes are formed in the panels. Some areas responded well to commercial epoxy bonding, just like new cars are assembled with. Other areas had too much thermal expansion to utilize this method, so welding was the only option. The problem with welding aluminum is that it conducts heat so well. To combat the heat loss, you must pump massive amounts of current into it in order to melt it. The problem with the heat is that is tended to overcome the flush rivets and pop them out. A true



"two steps forward, three steps back" scenario. But we learned, and we

Let's not forget the surface preparation issues. Our first attempt at paint removal was to use a chemical stripper and we tried several brands. All of them would remove the green paint, but would barely break the yellow paint under the green. We tried several applications and the realized that paint stripper would not do the job. A consequence of using stripper was it compromised the integrity of the yellow paint, and now it would have to

come off in the areas we had chemically stripped.

In these areas we began to use mild abrasive disks. Although very labor intensive, this worked very well and allowed us to get to bare metal. In the areas we had not used stripper, we used a combination of disks and flat board sanders to remove the green paint and feather the high spots in the car. A one point the two sides looked very different as the south side was only sanded and ended up with a very psychedelic appearance.

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Left: The original UP passenger paint, covered by MOW green. Above: RPO 5901 completely stripped, with the roof painted.

As we progressed with these methods, we noticed that the areas where the paint had been feathered began to lift around the edges. We concluded that all the paint would have to come off. Many people had put in lots of hours to get this far. We were beginning to burn out. This coupled with the difficulty of removing the paint from around all the Huck bolts led us to search for a more effective way to

remove the last of the paint.

We looked into many different ways to take off the residual paint. We tried hydro-blasting (high-pressure water with sand), sodium bicarbonate blasting, steaming, and spot blasting. We looked at outside firms to strip the paint, but none were cost-effective. At the 11th hour we tried needle scaling. While it worked, it initially pitted the soft aluminum. We

then prepped the edges of the needle scaler needles by taking off the sharp edges...success at last! This was time consuming, but gave us what we needed to spray.

How do you push an elephant through a keyhole? One hair at a time. We decided to break down the paint removal project into smaller chunks, and paint each as it was finished. Getting paint on the car instead of off of it was the goal. The first area painted was the underbody. The trucks and under frame were high-pressure washed and steam-cleaned several times on really hot days to assured it would dry quickly. It's the underbody so it didn't require an auto body finish.

We are now attacking the roof. It gets the same grey as the underbody. We were able to use the aforementioned needle-scalers to remove the paint from around the nearly 1000 Huck bolts that are used to join the roof panels to the car body. This process produced a mild texture to the roof, but it will be barely noticeable in the finish after primer and paint.

The plan is to do the ends next, and then block, sand and prime, the sides. Most of this work can be done outside. When the final yellow finish goes on, and also the lettering and red stripes, this will need to be done inside to keep the bugs from attacking the finish.

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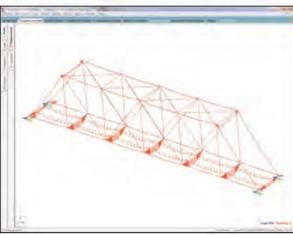


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The Union Pacific 5901 was one of seven cars, UP 5900-5902, Chicago & North Western 8225-8226 (all from American Car and Foundry) and Southern Pacific 5003-5004 (Pullman Standard), built in 1949 to provide a pool of cars to add RPO service to the SP-UP-C&NW streamliner City of San Francisco operating between Oakland Pier and Chicago. Mail service was an important source of revenue for the railroads. Painted in the Armour Yellow and Harbor Mist Gray passenger colors, the car fit right in to the look of the sleek streamliner. The car is 85 feet long with a full 60-foot post office apartment. The rest of the car is space for worked storage mail.

When the Post Office removed RPO cars from the railroads in 1967, many were put into Maintenance-of-Way service with most having the postal equipment stripped from the interior. UP 5901 was renumbered UP 903683 and assigned to the Bridge and Signal Gang. For some reason, the car retained all interior postal fixtures and the MOW gang made use of the postal bins, painting them silver and marking them for

nuts, bolts, washers etc.

When finished, the UP 5901 will be a prime example of the Railway Mail Service and Union Pacific passenger service from the 1940's–1960's and continue to teach another generation about this unique period in railroad and postal history.

ADOPTING THE SIGNAL GARDEN

By Stephen Oualline, Orange Empire Railway Museum

About a year ago, I started working at the museum. I choose to

work on the signal garden for two reasons.

First, I am an electrical engineer and I think signal circuits are fun. Secondly, if I screw anything up in the garden, it doesn't affect operations. It has been a very interesting and educational process. During my time in the signal garden I've learned a lot of new and surprising things.

I thought that my work would involve working on wiring, motors, and relays and I'd be using tools like the soldering iron, wire cutters, and wire lug crimpers. When I opened up the signal cabinet for the first time I found out how wrong I was. The shelves were covered with mouse droppings. So step one was to clean the stuff up. The first tools I used -- the vacuum cleaner, the spray bottle, and the



cleaning rag.

Lesson 1: Things don't always go as you expect.

Lesson 2: Sometimes you have to deal with a lot of mouse poor.

The next step was to figure out how the signal garden was wired. The old system used a custom micro-processor hidden in the signal cabinet in the corner. However, the processor had no documentation and no source code for the custom program used on it. I did get a wiring diagram. The layout had all the wires in the signal garden including ones that were planned but never implemented. Of course the diagram didn't designate which circuits were planned and which were real. And the ones that did exist were only sometimes correct.

Lesson 3: The project may be weirder that you think.

Finding out how the circuits were really laid out was an interesting process. For example, there are a pair of red and black wires that go from one signal to the signal cabinet, but when they arrive they are purple and pink. Then there was the wire that went from the Upper Quadrant Wigwag (labeled WWA) to a relay labeled WWB to a control signal on the computer labeled WWA.

And then where were two buttons numbered 2. That's right, two buttons labeled "Button 2" that did entirely different things. Now they are button 2A and button 2B, but originally they were both button 2.

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email: <u>info@adaptivelifts.com</u> Website: www.adaptivelifts.com Lesson 4: Sometimes the project is going to make you laugh or cry. Laughing is better.

After figuring out where each wire went (as best I could) and documenting it, I was ready to change out the processor. The new processor design called for the system to use 99% commercial, off the shelf, systems. (For the geeks out there I'm using a Raspberry PI.) The idea behind this is that if something goes out, anyone with basic knowledge of computers can order a new part and get things working. (That is if they look at the documentation I've carefully left in the cabinet.)

Lesson 5: Try and keep things as simple as possible. Use commercially available parts and document what you do. Your successor will thank you.

I tried to make the changeover from the old processor to the new one happen as smoothly as possible. It didn't work out quite as well as expected. I expected it to take about half a day, and scheduled two. It took three months.

The first problem was caused by me accidentally connecting a +12 wire to a ground, thus sending 24 volts through the board that handles button presses and frying it. Once I got that fixed (and a new board was purchased), the new system worked, for a while. Then the USB hub mysteriously fried. Eventually

I found out that when either of the wigwags turned off, everything on the USB bus disappeared for an instant greatly confusing the system. Basically there is a big electromagnet in the wig-wags that make them go. When you turn that magnet off, all the energy has to go somewhere, so it goes back down the pole, crosses over to the ground wire putting a big voltage spike on the line. The result is that when you get enough spikes, you fry some electronics. So I learned about something called a "flywheel diode" which helps eliminate spikes. I also learned about relay isolation. The electronics are now 100% isolated from the wig-wags.

Lesson 6: Every project has its nasty surprises.

While I was frying electronics, I sought the advice of some of the engineers where I work. I told one of them that I'd fried about \$150 of electronics. His response, "You're just getting started. I've got a wall covered with thousands of dollars of stuff I've fried." But finally, I think I've got almost all of the gremlins out of the system. And the garden should be working normally.

There was also a lot of cosmetic work to be done. Basic things like trimming trees and hosing off the bird poop that falls on the signals.

Lesson 7: Trees grow, birds poop,

and volunteers get to deal with both.

Signs are another issue. I thought I'd just clean and replace the signs. That is until I took the first one apart and found that the 1/4" steel backing was bent. I don't know what the tourists do on our signs but whatever it is they are bending them. The result is that the Plexiglas covering the signs is getting fractured.

One by one the signs are getting replaced with new ones. The replacements are going to use thick plywood, which is not only stronger than steel, but also bounces back if you do manage to bend it. Hopefully the new signs will last a little longer.

Lesson 8: Tourists do the strangest things.

Right now, I'm concentrating on doing some of the small, numerous tasks that need to be done to make the garden better. The searchlight signals have has their backgrounds painted, new signs are going up, and the tree trimming and washing are on-going.

As for the future, the crossing bell has stopped working. I want to take it off and fully restore it. My first thought was that I would climb up a ladder and haul it down with one hand. Thankfully I sought the advice of people who know more about restoration that I do. They pointed out that the bell assembly probably weight about 300 pounds.

Lesson 9: Get help from people who

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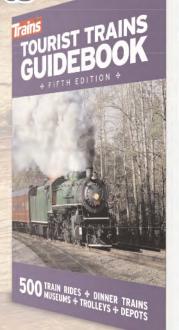
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Seashore Trolley Museum has restored Connecticut Company open car #838 (Jones 1905), which had been out of service for quite a few years. Jim Schantz photo.





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know more than you do.

Another project that will be done soon is making the searchlight signals operational. The plan is to wire them up as if they were protecting three track blocks using old school relays. Eventually I want people to be able to look into the base of the signal to see the wiring and relays in action.

A number of people have asked me about the Acme Traffic signal on Broadway. I plan on getting that operational as well. So far, the job has taken some unexpected turns. It took us some time to find the guy with the key labeled "traffic signal". Why that key has that label we don't know because we found out it doesn't open the signal. Currently we are searching for the key that really does go to the traffic signal. Several leads look promising.

Lesson 10: You'll find surprises in the most unexpected places in any restoration project.

Long range plans include getting the semaphore operational and maybe the crossing arms. I'm also looking for new and unusual signals out there. But my main goal, the one I've had since I started this project is to leave the signal garden a little better than I found it.

HERITAGE RAILNEWS

Alberta Railway Museum Edmonton, AB

Canadian National GMD-1 diesel locomotive #1179, originally Northern Alberta #302, has been donated to the museum by CN. The locomotive is now under restoration and will receive its original paint scheme.

Bluegrass Railroad Museum Versailles, KY

The museum has acquired a Southern Railway signal bridge of the type now being replaced.

A number of tourist railroads and museums host Civil War reenactors. However, Bluegrass appears to be the first to coordinate that with the operation of a Civil War-era replica locomotive. The museum arranged for a visit by the Leviathan as 60 reenactors recreated a battle.

California State Railroad Museum Sacramento, CA

The California Parks and Recreation Commission has adopted the general plan for Old Sacramento State Historic Park. This is important because it makes official the development of the former Southern Pacific Sacramento Shops as the Railroad Technology Museum. It also includes a short extension of the Sacramento Southern excursion trains to the online Sacramento Zoo and a longer extension to the Stone Lakes National Wildlife

Refuge

An anonymous donor has given \$40,000 toward the restoration of Granite Rock 0-6-0T #10, along with \$47,000 from the Ludwick family Foundation. Also underway is the restoration of Sierra Railroad 2-8-0 #28, which has recently received a \$75,000 challenge grant from the Sonora Area Foundation. It has been matched by \$75,000 raised by five Rotary Clubs in Tuolumne County, plus \$100,000 from the California State Railroad Museum Foundation.

When ARM and TRAIN held their joint convention in Sacramento in 2007, they toured the museum's three warehouses totaling 30,000 square feet that housed stored artifacts. All were located in West Sacramento. The museum is a unit of California State Parks, which decided to consolidate its nine storage facilities. It acquired 265,000 square feet of former Air Force space and began moving collections in 2012. The railroad museum generated over 1100 pallets and hundreds of carts, enough to fill over 55 moving vans. The move itself took a year beginning in June 2013.

Colbrookdale Railroad Boyertown, PA

A new tourist railroad started up in October 2014 on the 8.6-mile former Pennsy branch line from Pottstown to Birdsboro, which opened in 1869. Owned by Berks County since 2009, it has not been viable as a freight railroad. The Colbrookdale Railroad Preservation Trust is a 501[C]3 non-profit. Despite being rather near other tourist railroads, the trust projects annual ridership of 10,000 and has argued that the railroad will provide economic benefits to the local area.

The trust proposed that a station and

80-space parking lot be built in a borough-owned lot in Boyertown. In June 2013 volunteers began cleaning up trash along the right of way. A series of developments since then have led to this fall's startup of service.

In December 2013, the Rivanna Chapter NRHS, which recently finished restoring Pennsylvania Railroad steel cabin car #47768 (Altoona Shops 1941), donated it to the railroad. It will be maintained and operated on tourist trains.

Last March 2014 PennDOT granted \$1.4 million for track repair. The railroad is raising the \$600,000 match. The money will replace one-third of the line's 24,000 ties, rebuild switches and do some bridge repair.

A loading dock crane dating from the 1860s in Boyertown has been restored thanks to a \$30,000 state grant obtained by non-profit Building a Better Boyertown.

Also in March 2014 the ownership of the railroad transferred to the Berks County Redevelopment Authority. The previous operator, Eastern Berks Gateway Railroad, will continue as the line's freight operator. The goal is to turn ownership of the railroad over to the Trust.

In May 2014 an open gondola excursion car and a heavyweight coach were acquired from the Saratoga & North Creek. Motive power arrived in the form of ex-Conrail GP10 #7580

June 2014 saw the Boyertown Borough Council transfer a land parcel for the rail yard to the Berks County Redevelopment Authority, which is doing a \$1 lease to the Trust for the yard and depot.

In July 2014 the Trust received a \$200,000 grant to build a new station at Boyertown.



In April 2014 the editor happened upon this coach in Saratoga Springs, NY, headed to the new Colebrookdale Railroad in Pennsylvania.





The PRR 1887 Birdsboro freight station has been acquired by the Trust. It will be disassembled and reconstructed to serve as the Pottstown station.

Florida Railroad Museum Parrish, FL

The Museum has purchased 11 acres that it had been renting for a long time. The purchase price was \$550,000. A permanent 6,000-square-foot building that could be used to house displays and to host community events is planned for the property.

Friends of the East Broad Top

Repairs to the EBT boiler house are complete. The Friends have finished stabilizing the leaning sand tower building. They are currently replacing windows in the blacksmith shop, and beginning a major project to rebuild the south end of the locomotive shop. The renovation of the Robertsdale post office building is complete. It will serve as the Friends headquarters and will soon house history displays.

The restoration of Spokane, Portland and Seattle Railway wood coach #218 (Barney and Smith 1912) has reached substantial completion. It was converted to an outfit car in 1947 and retired in the early 1980s. Nearly every aspect of the car required care, and several special tools had to be developed to complete the work including a vacuum veneer press to repair or replacement interior ceiling panels, a system to form and solder zinc for the colored glass windows, and a detailed plan to fabricate new interior panels to replace those that were damaged beyond repair, or were missing. The car received structural repairs, a new canvas roof, operable windows, and a new hardwood floor. More than 16,000 hours has been invested. Bart Norton photos.



The San Diego Electric Railway Association has cosmetically restored the exterior of PCC #539, originally St. Louis #1777 (St. Louis Car 1946). Reupholstering the seats is the next step. SDERA photo.



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The Toledo, Lake Erie & Western has purchased this carbarn and track from the moribund Waterfront Electric Railway. The two operations were located next to each other in Grand Rapids, Ohio.

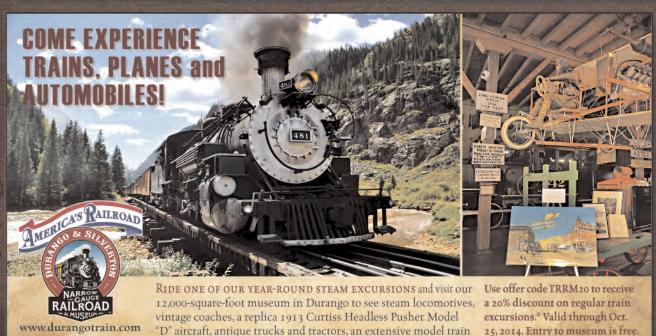
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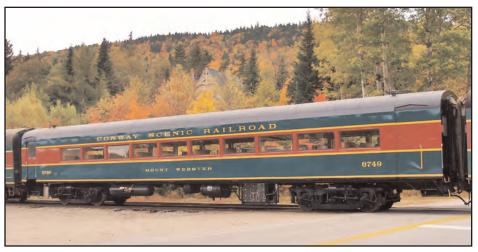


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Michigan Transit Museum Mount Clemens, MI

As others have recently, the museum is thinning its collection. It has decided to deaccession Toronto PCC #4601 (St. Louis/CCF 1951). Originally numbered 4512, it was one of 19 cars rebuilt for the new Harbourfront line. Efforts to regauge the car, which rides on 4 foot 10 7/8 inch trucks, were unsuccessful, leading to the decision to deaccession.

Northern Ohio Railway Museum Chippewa Lake, OH

In October one of the museum's streetcars carried the public for the first time. Overhead wire has yet to be strung, so Cleveland Railway crane car #0711, which carries an electric generator, pushed Shaker Heights Rapid Transit #12 (Kuhlman 1914). The museum's line is laid on the right of way of interurban Cleveland & Southwestern, which was abandoned in 1931.

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The Conway Scenic Railroad has restored former Montreal commuter coach #6749 as a table car, increasing its passenger fleet to 15 cars. Photo courtesy Conway Scenic.

Northwest Railway Museum Snoqualmie, WA

A new museum of hydrolelectric power has opened along the demonstration railroad at Snoqualmie Falls. It chronicles Charles H. Baker's 1898-1899 development of the world's first underground power station. The owner is Puget Sound Energy.

The station powered the Puget Sound Electric Railway, the interurban that operated between Tacoma and Seattle for 26 years.

The museum has hired A full time Curator of Collections. Stathi Pappas, is responsible for care of the large object collection, and for management of the Museum's collection care facility in Snoqualmie.

Vintage Locomotive Society Winnipeg, MB

The society, which operates the Prairie Dog Central, has leased 104 acres immediately north and east of its Inkster Junction operating base. The land is the first step in creating a yard facility for its for-profit subsidiary Prairie Rail Solutions.

Wanted: Fulltime Machinist

The Mt. Rainier Scenic Railroad, located Mineral, WA is seeking a full-time machinist to assist with repairs, maintenance and restorations of its railroad equipment. Knowledge of locomotive steam construction and operation preferred. Please send resume to: MRSR Box 250, Mineral, WA 98355. For further info call: (253) 495-8503.



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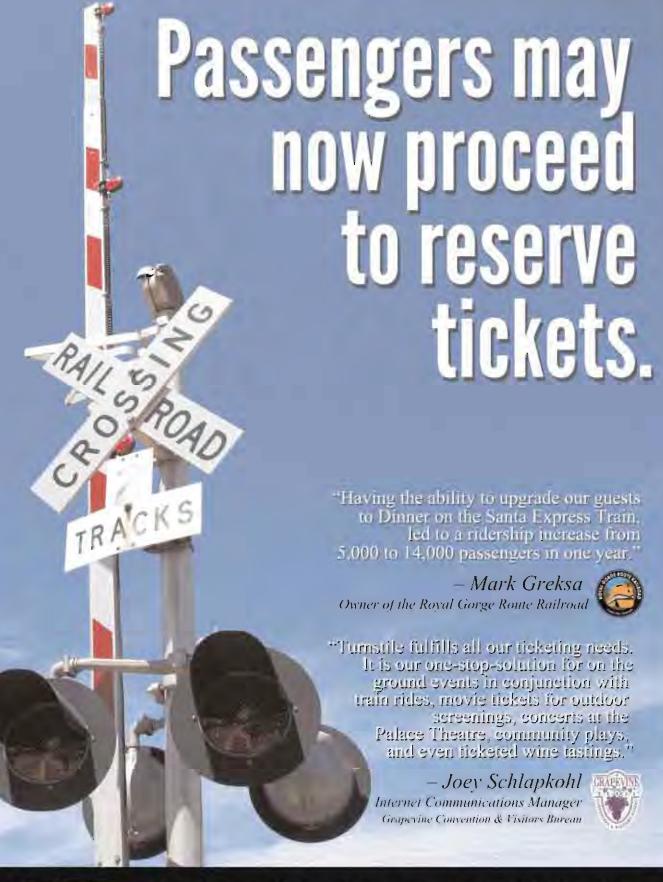
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