



# The PLS GAZETTE

P.O. Box 26202  
Collegeville, PA 19426-0202

## FIRST CLASS



# The PLS GAZETTE

March-April 2012

A newsletter of the Pennsylvania Live Steamers, Inc.

**MARCH-APRIL TOPICS:** From Along the PLS Mainline 1 Annual Election Results 1  
Calendar 2 Membership Renewals Past Due 2 Membership News 2 Membership Gauge 2  
One-Inch Rebuild Complete 3 Donations 3 U.S.R.A 4 Library Report 6 Spring Cleanup 7

## From Along the PLS Main Line

I'm pleased to be writing this, my first Gazette editorial as the new president of PLS. For those who don't know me, I've been with PLS since 1981 and previously served as president from 1990 through 1994. I have also served as club secretary and as a member of the board of directors. I look forward to a successful year that will provide enjoyment to all of our members and satisfaction to those who

work to make PLS a better organization. And I want to thank Pat Murphy for his dedication and leadership as president for the last four years. Well done!

Due to a quirk in the calendar, most of you will be reading this Gazette the week after our first run, not the week before as in most years. I expect that first run on April 22 will be the same as most years with steam locomotive owners jockeying for position to have their boilers safety tested prior to the running season and others getting the kinks out of equipment that hasn't run for five or more months.

For those who will be operating 7 1/4 inch gauge equipment at PLS this year, you will see a significant change to the track in the area of the Rahns station. The main line no longer merges with the tracks exiting the station but rather has been moved to now merge with the track exiting the yard. Main line through traffic will now descend the grade on the left track. The signal crew is now working on new signals for this area that should be more operator friendly.

*(Continued on page 2)*



Members of PLS on a February frolic in Florida. (R-L) Pat Murphy, Dave Johnson and Bruce Saylor triple heading on the Buckingham Central Railroad near Ft. Myers. Photo by Ron Shupard.

## Annual Election Results

Elections were held at the regular membership meeting on March 17, 2012. Lee Nonnemacher, Bob Blackson and Walt Mensch, running unopposed, were confirmed as president, secretary, and treasurer, respectively. There were six names on the ballot for the board of directors, for which three were to be elected. Those elected were John Bortz, Jr., Bob Freer and Jim Salmons. Rounding out the board with one year remaining on their two-year terms are Sharon Connelly, Paul Rice and Ron Shupard.

— Lee Nonnemacher

**Clockwise from Near Right:** Lee Nonnemacher, Bob Blackson and Walt Mensch are the club's new officers.





## From Along the PLS Main Line

(Continued from page 1)

Projects for this year will include ongoing maintenance and refurbishment of existing track and roadbed. Time and the elements take their toll and the constant maintenance is required in order for PLS to continue as one of the smoothest operating live steam railroads to be found anywhere. Another project, and one for which an end may be in sight this year, is the signal system. There are only a few blocks left to complete and there will be signals on the entire railroad. The proposed "East Rahns" passing track and storage yard will hopefully get out of the planning stage and into construction in the next few months. And I can't forget to mention the need for ongoing property maintenance; grass cutting, trimming, weed control and general tidying up.

Long term, the greatest concern for PLS is the graying of its active members. There aren't many who participate regularly who don't also carry a Medicare card. Finding a way to interest somewhat younger folks to get deeply involved is something we really need to conquer if PLS is going to continue to exist and thrive. This is something the board of directors will be taking a good look at in the coming months.

If anyone would like to contact me, please e-mail [president@palivesteamers.org](mailto:president@palivesteamers.org).

Yours in steam,

Lee Nonnemacher – President

## 2012 PLS Calendar of Events

Saturday, April 21	Board of Directors Meeting - 9:30 AM Membership Meeting - 12:30 PM <b>Spring Clean Up</b> Afternoon/Evening Run
Saturday, April 22	Run Day - Members & Guests <b>Boiler Testing</b>
Sunday, April 29	Run Day Rain Date
Saturday, May 19	Board of Directors Meeting - 9:30 AM Membership Meeting - 12:30 PM
Friday, May 25	<b>Spring Meet – Members &amp; Guests</b>
Saturday, May 26	<b>Spring Meet – Members &amp; Guests</b>
Sunday, May 27	<b>Spring Meet – Members &amp; Guests</b>

## Membership Renewals Are Past Due

All membership renewals were due by March 1. If you have not renewed and wish to remain a member, please do so at this time. Dues must be accompanied with the completed renewal form which you received in early January. If you need another form, please e-mail [secretary@palivesteamers.org](mailto:secretary@palivesteamers.org). This will be the last notice.

— Lee Nonnemacher

## Club Membership News

PLS welcomes new Associate members Robert J. Kubasko, Donald Sweger, Michel Farag, Robert J. Rusczyk, Edgar Hendler, and Richard A. H. Sterner, plus Minor member Jake Lavala.

## Membership Gauge

As of March 31, PLS has:

**103 Regular Members**  
**306 Associate Members**  
**8 Honorary Members**

## Pennsylvania Live Steamers, Inc.

<b>President</b>	Lee Nonnemacher	1474 North Wales Road, Blue Bell, PA 19422-3687	<a href="mailto:president@palivesteamers.org">president@palivesteamers.org</a>
<b>Secretary</b>	Robert Blackson	303 North Tulpehocken Road, Reading, PA 19601	<a href="mailto:PennsylvaniaLiveSteamer@comcast.net">PennsylvaniaLiveSteamer@comcast.net</a>
<b>Treasurer</b>	Walter Mensch	1348 Sheep Hill Rd., Pottstown, PA 19465	
<b>Gazette Editor</b>	Allen Underkofler	Box 609, Kimberton, PA 19442-0609	<a href="mailto:pls@apunderkofler.com">pls@apunderkofler.com</a>

**Board of Directors:** John Bortz Jr., [jonyx@netzero.net](mailto:jonyx@netzero.net); Sharon Connelly, [connellywood@verizon.net](mailto:connellywood@verizon.net); Bob Freer, [W3YLT@Juno.com](mailto:W3YLT@Juno.com); Paul Rice, [ricepaul@verizon.net](mailto:ricepaul@verizon.net); Jim Salmons, [jshay6@verizon.net](mailto:jshay6@verizon.net); Ron Shupard, [shusmoke@aol.com](mailto:shusmoke@aol.com).

**Safety Committee Members:** John Geib, chairman; Buddy Borders; Pete Brown; Pat Murphy; Bruce Saylor.

Pennsylvania Live Steamers, Inc. • P.O. Box 26202, Collegeville, PA. 19426-0202 • 610-454-0477 • [www.palivesteamers.org](http://www.palivesteamers.org)

## Spring Cleanup

In preparation for the arrival of the chipper members of our work crew have been busy moving the large pile of branches of all sizes, deposited by the storm last year, from the lower infield to the area near the existing chip pile. With the combined use of the club tractor and small trailer, Walt's backhoe and a members pickup, the mess has been cleared and piled ready to be chipped. This leaves items such as ties and large pieces of trees which won't fit into the chipper. The photos show the clean up process on two different days. Anyone who noticed the original pile may remember it was about, eight foot tall, ten feet wide and twenty feet long. A job well done.

— Ron Shupard



**Above:** Eric Peffel, Jim Rich, Bruce Saylor and Walt Mensch gathering up the debris from the flood that required chipping. **Below:** Bruce Saylor and associate member Terry Weinstein using Terry's truck to remove debris to be chipped.





motive Committee were reviewed by the USRA Railroad Committee, which was mainly concerned with operating issues, and they recommended some changes prior to final adoption of USRA Specifications.

Parallel standardization was also developed for freight cars. Box cars were standardized in single- and double-sheathed (wood) designs with steel frames. There were also standard designs for 45- and 55-ton two-bay hopper cars and several versions of gondolas. Particular attention was devoted to standard dimensions and locations for steps, ladders, grab irons and other attachments that affected crew safety, especially at night. In all, the USRA ordered government

purchase of 10,000 freight cars and over 1900 locomotives at a total cost of more than one billion dollars, comparable to about 240 billion dollars today based on "Economy Cost Inflation" i.e., the cost to society of manufacturing them in 2012.

The war suddenly ended before the first USRA locomotive steamed into service but the USRA continued operations until March 1, 1920. Full autonomy was returned to the railroads, again under the imperious thumb of the ICC, and with staggering financial burdens remaining from the Wilson administration's lavish labor concessions. Beyond the political and financial turmoil, however, the success of USRA *designs* cannot be denied

when measured by the number of standard locomotives that continued to be purchased with private funds, the last being 0-8-0 switcher No. 244 built for the N&W in 1952!

Was the USRA a national success? Yes and no. It did put the railroads back on their feet, but at prodigious expense to taxpayers, and it probably would not have been necessary at all if there previously had been fewer and less oppressive governmental regulations. North American railroads proved their mettle in the Second World War, performing with excellence while enduring far greater operational stress than existed in 1917, and they did it without help from Uncle Sam. 🍷

## Library Report

As we noted in recent issues, PLS is now accepting magazine donations for the library and we very much appreciate those donations. That said, our space is limited and so we have to focus upon magazines that deal with miniature live steam engines and those that are dedicated to one or more of the prototypes of northeastern and mid-Atlantic flags like the Reading. As we have noted before the more general modeling and train magazines like *Model Railroader*, *Railroad Model Craftsman*, and *Trains* are not being collected by the club. In fact these magazines today are unfortunately worth so little on the open market that most organizations do not accept them anymore.

But, thanks to member donations, we are doing very well with regards to a number of highly relevant magazines. For instance our collection of *Live Steam*, an American magazine, is approaching a complete set for many years. From 1975 to 2009 the club now has 398 issues—we are only missing 2 years, 1992 and 1996, and four other single issues. For that 35 year period we have over 95% of the magazine issues. These are now located on a single long shelf in sequential order in the back of our big red caboose. The club has recently acquired a new black and

white copy machine so that if you are looking for a particular article you are welcome to make a copy here at the club. A bit of change donated would be appreciated for this service.

Another American magazine was Modeltec which is no longer published. This had a number of very good detailed articles on building miniature steam engines such as the E6 Atlantic. We have very few years of this magazine and would really appreciate more donations of any of our many missing years to fill out the collection.

A very relevant periodical is the English magazine *Model Engineer*. This magazine in some ways represents the premier traditional media for those hobbyist interested in making miniature machines. Over half of each issue is devoted to miniature steam locomotives in various scales. The magazine began in 1898 and is still going strong. In the beginning the magazine was published every week but over time it has been offered less than that. I would estimate that there are over a thousand issues of this magazine of which the club has perhaps half that many. What issues we have are now arranged by date on a single 10 foot shelf in the caboose. From 1952 to 1976 our collection is almost complete while the other years are only represented partially. Additional issues would be welcome.

A periodical of great relevance to our Gauge One members is called

*Steam in the Garden* which is published six times a year. It began in 1991 and I believe is still being published today. Recently Paul Quirk kindly donated 21 issues of *Steam in the Garden* to the club and we are now trying to fill out this holding. Thanks to Paul, our collection represents about 16% of the total issues published to date.

We are also trying to collect magazines that discuss particular northeastern railroads often published by chapters of the National RR Historical Society. We have a very small smattering of this kind of material but would very much like to enlarge our collection.

Finally, I would like to thank those people who made donations to the library during this time. They are Ruth Morwood, Bruce Saylor, Jim Salmons and Paul Quirk.

If I missed anyone who make library donations please let me know so that I can correct that error. We really do appreciate your gifts to the club. When you donate a book or magazine that we already have we sell these duplicates on our run days when the club sale table is open. These sales are an important source of income for the club. Once again thanks to you folks who help us out in this way. 🍷

— Lynn Hammond,  
PLS librarian

## Rebuild Completed

The one inch track rebuild is ready for the operating season. The track was rebuilt from the tunnel to the east station switch. A large number of the ties were rotted due to a slow build up of mud in the track ballast. This resulted in the widening of the down grade right of way which will provide better drainage. Adjusting the grade to make it more constant corrected the irregularities previously making the ride a thrill when your brakes stopped working. The photos show how the ballast was delivered to the work site, my work train on the new track while I was adding the "super elevation" on the curve, and Hank Riley trying it out while checking the new weed growth. This rebuild was accomplished with the help of many of the regular work day members with the help of a mild winter.

— Ron Shupard



**Above:** Hank Riley makes a run through the new one-inch trackwork. **Below:** East and west views from the canyon show the results of many weeks of work on the part of many members. The final application of ballast completed the job.



## Donation Acknowledgements

PLS wishes to thank the following members for donations received during February and March: Lawrence Moss, Jr, George

Dietrich, Joseph Marshall, Kenneth Valeri, Susan Borders, David Laird, Jared Schoenly, David Taylor, James Doherty, Steven Kilpatrick, Carl Skelonis, Judith Taylor, John and Rita Bixler, John Caldwell, Harry Quirk, Jeff Stahl, Roy Nelson, Paul Nichini, Jeffrey Guzy, Albert Rieger, Jr, Stephen Roadcap, Nicholas Nichini, Virginia Kulak, Edward Wagner, Pat Heller, Ted

Xaras, Buddy Borders, John Bortz, Jr, Rich Falzone, Michael McDevitt, Bob Morris, Tom Tucker, Don Maleta, and Rowland Dudley. Thanks also to the Goddard School and the William Penn Foundation.

The club also appreciates the donation of books and video tapes, by Ruth Morewood, from the collection of her late husband, Bill.



## “America’s Socialist Experiment”

USRA is one of Washington D.C.’s earliest contributions to the Federal Government’s pervasive alphabet-soup of acronyms. Those letters are the initials of the *United States Railroad Administration*, established to take over the privately-held railroad industry during the national emergency of WW-I. Because “USRA” is such a ubiquitous prefix to so many American locomotive designations even today, it is fitting to explain how this agency came about and what it accomplished.

Although it was not established until 1917, conditions leading to formation of the USRA had their roots in the late 1800s when availability of abundant private equity encouraged railroads to over-expand rail networks and build infrastructure, often of dubious necessity. Costs for servicing large debt obligations in addition to routine operating expenses soon placed railroads in a precarious financial position. Their economic straits became acute in 1906 with passage of the Hepburn Act that gave the Interstate Commerce Commission (ICC) power to set maximum rates railroads could charge and to limit consolidation of companies that might otherwise have improved profitability. The ensuing Panic of 1907 further devalued railroad stock and diminished revenue needed to meet debt obligations and operating expenses. New capital was no longer available for financing expansion of terminal facilities or purchase of desperately needed motive power and rolling stock to handle increasing traffic. Equally important, routine maintenance of existing facilities had to be deferred indefinitely.

As the nation’s entry into the First World War loomed in the spring of 1916 President Woodrow Wilson averted a strike by railroad brotherhoods by legislating the eight-hour

work day and increasing wages by 40 to 50 percent. However, the ICC denied requests by railroads for rate increases to adequately compensate for those new costs. Most of the nation had recovered from the financial Panic by the time the United States entered the war on April 6, 1917 but the plight of railroads had not improved; they were woefully ill-equipped to handle the upsurge in freight shipments and widespread travel by military personnel.

Presidents of seventy railroads met in Washington after war was declared. Five were selected for the *Railroads’ War Board* to plan strategy to cope with increased transportation demands. Some railroads refused to adhere to the War Board’s recommendations at all and many companies and government agencies frequently operated in their own best interests. For example, a plan to expedite freight traffic by issuance of “Priority Tags” to be placed by shippers on cars with high priority lading, collapsed when tags were handed out indiscriminately to shippers favored by railroads and even Federal agencies. The concept was so abused that at one time 85% of all freight cars on the PRR Pittsburgh Division carried priority tags! Passenger service was significantly curtailed but when railroads wanted to combine overlapping routes the Justice Department threatened anti-trust action. On top of all that, the winter of 1917 was particularly harsh, causing a critical coal shortage in New England. Empty hopper cars clogged eastern yards and ships bound for Europe from east coast ports were unable to depart for lack of coal while trainloads of new shipments were waiting on mainline passing sidings for yard congestion to clear.

President Wilson had enough with rundown, laggard railroads after they repeatedly failed to fulfill their wartime

responsibilities, albeit under his own administration’s draconian restrictions. He took possession of the railroads through Congressional action on December 26, 1916 by authority of the Army Appropriations Act, and on January 1, 1917 the USRA was created. Ownership of the railroads remained with shareholders and most operations were conducted as usual, but ultimate control was dictated by the USRA which had power to supersede ICC rules and even sacrosanct anti-trust laws.

Wilson appointed his son-in-law William Gibbs McAdoo, then Secretary of the Treasury, to Director General of the USRA. Before the reader gets in a twist over that bit of nepotism, it has to be said that McAdoo had been the driving force behind successful financing, construction and operation of the twin-tunnel commuter railroad under the Hudson River from New Jersey to Lower Manhattan, known today as PATH. For that effort he received stellar praise from financiers, engineers, laborers and especially the riding public, and was widely regarded as an effective railroad administrator.

The USRA played a crucial role in locomotive design but McAdoo also immediately wielded far reaching control over the entire railroad system in other ways: Duplicate (parallel) rail routes of competing companies were eliminated; increased Pullman rates and other measures were part of a broad policy to discourage passenger travel; deplorable use of box cars for warehouses by shippers was prohibited; locomotives went to whatever roundhouse was equipped to service them when owners’ facilities were unavailable; and all trains were dispatched over the shortest route regardless of track ownership. Those and other efficiencies instituted by the

USRA freed-up locomotives and cars but an estimated shortage of 10,000 freight cars and 2000 locomotives still existed.

The acute shortage of locomotives on domestic lines in 1917 was not caused by the railroads’ failure to modernize motive power, but rather from all U.S. locomotive manufacturing capacity having been devoted exclusively to production of 2-8-0 Consolidations for export to armed forces in England and France and 5-foot gauge 2-10-0s ordered by Czarist Russia. The USRA diverted over 200 Consolidations from overseas shipment for immediate delivery to neediest eastern U.S. roads, and ordered re-gauging 200 of the 2-10-0s that could no longer be delivered because of the Russian revolution. The 2-10-0 conversion was so successful many were still running at the end of steam.

To address the vast remaining locomotive shortage, the USRA established a nine-member Builders Committee headed by Samuel Vauclain, of the Baldwin Locomotive Works. The committee was comprised of four representatives from ALCO, two more from Baldwin, and one each from Lima and H.K. Porter. Those men knew what they were doing! Within one week they had determined major specifications for twelve standard locomotives that would satisfy the majority of requirements for freight and passenger service by U.S. railroads, including 0-6-0- and 0-8-0 switchers, light and heavy versions of the 4-6-2 Pacific, 2-8-2 Mikado, 4-8-2 Mountain, and 2-10-2 Santa Fe, and 2-6-6-2 and 2-8-8-2 Mallets. The committee’s designs did not originate in a vacuum; major dimensions of all types were based on comparable existing locomotives with

records of successful operation.

All USRA locomotives had superheaters and all boilers, except on switchers, had combustion chambers. They were accompanied by standardized tenders with a coal capacity of 16 tons, and water tanks for 8000, 10000 or 12000 gallons depending on locomotive type. Labor-saving appliances included coal pushers on tenders of switchers and stokers on all other types, power operated fire doors, and power reverse gear. Other standard features were dual water gauges with water columns and as many other components s possible designed for common use and replacement across all types of locomotives. Problems arising with interchangeability of patented devices were circumvented with requirements for all appliances to have mountings and connections to enable easy interchange. Designs by the Loco-

## USRA Locomotive Specifications

TYPE	SPEC.	TRACTIVE EFFORT (Pounds)	WEIGHT ON DRIVERS (Pounds)	BOILER PRESSURE (PSI)	DRIVER DIAMETER (Inches)	CYLINDER BORE & STROKE (Inches)	GRATE AREA (Sq. Inches)	VALVE GEAR	NUMBER BUILT
SWITCHER	0-6-0	39,100	163,000	190	51	21x28	33.2	BAKER	255
SWITCHER	0-8-0	51,000	214,000	175	51	25x28	47.0	BAKER	175
LIGHT PACIFIC	4-6-2	40,700	162,000	200	73	25x28	66.7	BAKER	81
HEAVY PACIFIC	4-6-2	43,900	197,000	200	79	27x28	70.8	BAKER	20
LIGHT MIKADO	2-8-2	54,700	220,000	200	63	26x30	66.7	WALSCHAERTS	625
HEAVY MIKADO	2-8-2	60,000	239,000	190	63	27x32	70.8	WALSCHAERTS	233
LIGHT MOUNTAIN	4-8-2	53,900	224,000	200	69	27x30	70.8	BAKER	47
HEAVY MOUNTAIN	4-8-2	58,200	243,000	200	69	28x30	76.3	BAKER	15
LIGHT SANTA FE	2-10-2	69,600	276,000	200	57	27x32	76.3	SOUTHERN	94
HEAVY SANTA FE	2-10-2	73,800	293,000	190	63	30x32	88.2	SOUTHERN	175
MALLET	2-6-6-2	80,000	358,000	225	57	23x32 30x32	76.3	BAKER	30
MALLET	2-8-8-2	101,300	474,000	240	57	25x32 30x32	96.0	BAKER	80

SOURCE: Huddleston, *Uncle Sam’s Locomotives*, University of Indiana Press, 2002.