

R&LHs *Newsletter*

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Newsletter Notes

The timing of this feature article on 4-8-2s is interesting in that Eugene L. Huddleston's book about the USRA locomotives, *Uncle Sam's Locomotives*, has just been published (see New RR Books section in the last issue and on-line). Because Eugene only mentions the fifteen 4-8-2s, you can read about them here. Text by Bob LeMassena; photos by Harold K. Vollrath; and photos, introduction and captions by Eugene L. Huddleston. This is the last article by Bob LeMassena as he retires from writing. He recently lost his wife, Betty, of fifty years. He will be working for the Colorado Railroad Museum at Golden, Colorado. Steam on, Bob!

From webmaster Adrian Ettlinger: Added to the website (<http://www.rlhs.org>) is an expansion of the *Railroad History Index* to include #187, plus a printable version covering only #152-#187 the period beyond the published Taber Index. A number of projects are in the works for the Reference Section. Next to

appear is member Eugene Lewis's "LOCOPIX", which is a very thorough index to over 30,000 published photographs of steam locomotives. The Internet discussion group (Yahoo group "rlhsgroup") started mid-December continues to be very active, and a total of 658 messages have been posted as of March 24. Over 600 members are participating. Many members have been helped in their research pursuits by information supplied in response to queries on various subjects. 

COVER: J-2 No. 545 (Brooks, 1918, originally numbered 135.) of C&O climbing grade on wye track leading to Ashland Tunnel at Ashland, Ky. The train is no. 23, the F. F. V., which was made up at Ashland station. It is bound for for Lexington and Louisville over some stiff grades (2.67% max.) . Date is 1947. Phil Shuster says the Vanderbilt tanks came from the F-19 Pacifics, which shortly before this pictures had been rebuilt into Hudsons using rectangular tenders. Note in left background the top of furnace for a steel mill, in this case Armco Rolling Mills. Photo by Eugene L. Huddleston.



R&LHS Newsletter

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The USRA HEAVY 4-8-2 and its Illustrious Ascendants

by Robert A. LeMassena

From E. L. Huddleston: “In 1919 Chesapeake and Ohio informed stockholders it wanted nothing to do with the heavy 4-8-2s and light 2-6-6-2s the federal government foisted off on the road: ‘During the year the railroad administration notified your company there had been allotted to it twenty-five freight and passenger locomotives. . . . Directors of your company were of the opinion that the equipment so allocated was not necessary to the efficient operation of the railroad, that much of it was unsuited for your company’s purposes and that the purchase of such equipment . . . was inadvisable.’ While many railroads initially shared this view, most eventually valued the USRA designs, as did Norfolk and Western and C&O, both roads later purchasing copies (though C&O never warmed up to its light Mallets). C&O and N&W equally learned how their “government” heavy Mountain types had speed and power, achieved through a unique combination—a boiler and firebox unit the same size as that of the light Santa Fe (2-10-2) type (which had only 57-inch drivers) set above drivers 69 inches in diameter! Bob LeMassena takes the reader on a thrilling verbal romp among descendents of the USRA light and heavy Mountains, with emphasis on the heavy.”

Toward the end of World War I, the United States Railroad Administration (USRA) designed and ordered “standard” steam locomotives for the nation’s railroads. A total of 1856 engines embracing twelve designs in eight wheel arrangements were constructed during 1918–1920 by all three major builders: American, Baldwin and Lima. The largest group was 625 light 2-8-2s and the smallest group was 15 heavy 4-8-2s. Intended for heavy passenger trains, ten of the 4-8-2s went into service on the Norfolk & Western and five were assigned to the Chesapeake & Ohio. Though both rail-

roads were operating 4-8-2s, these new arrivals were unlike any of them.

What the USRA heavy 4-8-2s lacked in quantity was compensated by their impressive dimensions and specifications. Weighing 352,000 pounds, the same as the light 2-10-2, it was heavier than all preceding 4-8-2s except those of the Atchison Topeka & Santa Fe. Its boiler with 86/96 inch diameters, 20'- 6" tubes, 60 inch combustion chamber, and 76 sqft grate area, was derived from the USRA light 2-10-2. The 63 inch drivers were the same as those of the light 2-8-2, and the

An early photo (1935) of Norfolk & Western #120 shows the original configuration of the USRA design. While its configuration shows its USRA origins, certain changes, made before 1930, appear here, including new tender, feedwater heater (on opposite side), low water alarm, mechanical lubricator, spoked pony truck wheels, bigger smoke stack, and check valves on top of boiler. . As Eugene Huddleston wrote, “Many students of railroading believe American railroads should have continued using standardized designs even after USRA was dissolved — the savings would have been great.” Brooks built 1919. Photographed in Roanoke, Virginia. H. K. Vollrath collection.





By May 1956, this Brooks product of 1919 has been altered just a little bit. N&W historian Ken Miller, citing C. E. Pond, documents the streamlining conversion: "Beginning on February 5, 1945, as the K2's came in for classified repairs, they were placed in the modernization program. They received extended mechanical lubrication, new cast steel pilots, Franklin [driving box] compensators, Hennessey lubricators on the trailing truck and engine driving journal boxes, a Nalco automatic blowdown [system], and streamlining. The tenders were also enlarged to increase coal and water capacity and equipped with roller bearing trucks." This was taken in Norfolk, Virginia. H. K. Vollrath collection.

58,000 pound tractive effort was almost equal to that of the heavy 2-8-2. Five other designs carried 200 psi boiler pressure but the 28x30 inch cylinders were unique. The trailing truck was ALCO standard Cole type, a fabricated assemblage. American's Brooks Works erected C&O 133 - 135 in December 1918, but Baldwin produced Nos. 136 and 137 in June, 1919, a month after the Brooks factory had delivered Nos. 116 - 125 to the N&W.

Lacking feedwater heaters and mechanical stokers, these engines were unsophisticated machines; nevertheless they were reliable, easy to maintain, and quite competent in service. In later years, both railroads equipped them with large 6-6 tenders, feedwater heaters and stokers. The N&W even gave them streamlined shrouds resembling its famous 4-8-4s. The last

"pure" heavy 4-8-2s were erected in 1923, first C&O Nos. 138 and 139 from American's Richmond Works, then N&W 126 - 137 from Baldwin's Eddystone factory. The C&O's engines worked until the early 1950s and those on the N&W lasted until their 40th birthday, a most remarkable record of service.

In 1926, American's Schenectady plant produced 23 "improved" USRA heavy 4-8-2s for the Florida East Coast which already had 67 smaller ones to haul long trains of vacationers, vegetables, fruit and materials for the Florida boom. These locomotives retained the basic dimensions and incorporated a higher boiler pressure, firebox syphons, two compound air pumps, feedwater heater, Delta trailing truck and a 12 wheel tender holding 12000 gallons of water and 5000 gallons of oil fuel. One could say that these were the last of

the breed yet the line was not entirely extinct.

Let us go back a couple of years to 1924 when ALCO's Brooks works constructed five 4-8-2s (Nos. 1401 - 1405) for the Delaware, Lackawanna & Western for milk train service over the Pocono Mountains between Hoboken, New Jersey, and Scranton Pennsylvania. American's designers utilized the USRA's heavy 4-8-2 plans but enlarged the firebox to enclose 80 sqft of grate area thereby increasing the locomotive's horsepower. These engines were supplemented in the following year by five others (Nos. 1450 - 1454) having three cylinders, 73 inch drivers, greater weight and increased tractive effort. Three cylinder locomotives were then being promoted by American and the DL&W bought 35 4-8-2s for freight service and five for passenger trains.

In 1927, just two years before terminating operations, ALCO's Brooks works produced some outstanding locomotives: Gigantic 2-8+8-2s for Denver & Rio Grande Western; Lackawanna 4-8-4s; 2-8-4s for the Erie; New York, Chicago & St. Louis (in 1934) and Chicago & North Western. And 4-8-2s (which were a 2 cylinder version of the DL&W 3 cylinder engines) for the Missouri Pacific. In addition to a larger firebox, these five MP 4-8-2s incorporated frontend throttle, compound compressors mounted on the frame ahead of the cylinders, Worthington feedwater heater, firebox syphons, Delta trailing truck and 6-6 tender. The MP liked them so well that they obtained five more from the Schenectady plant in 1930. Thus the 5335 - 5344 were the last 4-8-2s whose ancestry could be traced to the original USRA design.

However, the species was not completely extinct. Those DL&W 4-8-4s, numbered 1501 - 1505, possessed familiar boilers, but with a larger firebox having 88 sqft of grate area. It was supported by propulsion machinery with 77 inch driving wheels, much larger than any 8 coupled locomotive at the time. Though they were not the first 4-8-4s, having been preceded by those of the Northern Pacific, they were the first members of a surprisingly large family whose common bond was the USRA 4-8-2 boiler with an enlarged firebox.

The next railroad to incorporate the USRA boiler was the Canadian Pacific whose Angus Shops in Montreal built a pair of exceptional 4-8-4s in 1928. The

CP's designers enlarged the firebox to hold a 94 sqft grate, increased the steam pressure to 275 psi, added an Elesco feedwater heater, but did not provide any syphons in the firebox. The 75 inch driver diameter gave a tractive effort of 61,000 pounds and the 423,000 pound engine weight was an all time record for Canadian 4-8-4s. During an overhaul in 1959, a booster was installed in the trailing trucks, and all axles were equipped with roller bearings thereby increasing the engine's drawbar pull to almost 80,000 pounds. This enabled it to pull 20 heavy passenger cars up the short grade east of Toronto without a helper. The two locomotives were never duplicated and they remained on the fast overnight run between Toronto and Montreal for 28 years, then spent the next couple of years in freight service before their retirement.

In 1929 there occurred a most unusual coincidence among 4-8-4s then being constructed for three railroads. One would conclude that all of them were using the same plans and specifications with minor deviations. In February, Chicago, Rock Island and Pacific No. 5000 was erected in ALCO's Schenectady Works. The USRA boiler with an 88 sqft grate area was supported by a fabricated framework riding on 69 inch drivers. It was equipped with a front-end throttle, three syphons in the firebox and a combustion chamber. Its total weight came to 434,000 pounds and its rated tractive effort was 69,000 pounds. During March and April, Lackawanna Nos. 1601 - 1620 were constructed, the principal change was a one piece cast bed and cylinder assemblage, and a total weight of 418,000 pounds. Seventy inch driving wheels produced 72,000 pounds of tractive effort. Like the Rock Island engine, there were three syphons and no feedwater heater. Meanwhile, between March and July, Baldwin was assembling Denver & Rio Grande Western Nos. 1700 - 1713, which weighed 418,000 pounds and exerted a 64,000 pound tractive effort with 70 inch driving wheels. Their frames were fabricated, the firebox enclosed two syphons, and an Elesco feedwater heater was provided. Rock Island Nos. 5001 - 5024 emerged from Schenectady's erecting shop between July and October.

By the end of the 1920 decade, the Great Northern needed a more powerful and faster locomotive for its passenger trains which had been pulled by 4-8-2s.



Baldwin provided 4-8-4 replacements, Nos. 2575 - 2588, during January through March of 1930. Baldwin took the USRA boiler and enlarged the grate area to 98 sqft and mounted it on a fabricated frame supported by 80 inch drivers, the first of such size on an 8 coupled engine. The locomotive weighed 420,000 pounds and had a rated tractive effort of 58,000 pounds. Distinctive features included outside bearing leading truck, compound air pumps mounted on the smokebox front, and a cylindrical tender carrying oil fuel. There were neither syphons nor feedwater heater installed but an exhaust steam injector was used.

ALCO completed the Rock Island's fleet by turning out Nos. 5025 - 5064 in March, April and May. It also delivered a most unusual engine to the Timken Roller Bearing Company, which would allow railroads to test this pioneer application of roller bearings on a road service locomotive. The boiler was that used on CRI&P and DL&W 4-8-4s supported by fabricated frames and 73-inch drivers. Engine weight was 418,000 pounds and the nominal 64,000 pound rated tractive effort was actually about 70,000 pounds because there was no frictional loss in the engine and tender bearings. A trailing truck booster added another 13,000 pounds of tractive effort. The locomotive performed quite satisfactorily on fourteen railroads, and then was purchased by the Northern Pacific in 1933 where it remained in service until 1958.

By 1931, when the nation was sliding into a business depression, the Lehigh Valley decided that it needed 4-8-4s to compete with the Lackawanna for merchandise traffic and it ordered prototype engines from American and Baldwin. Differing slightly in boiler pressure and cylinder dimensions, the two designs embodied the best features of the DL&W 1600s and D&RGW 1700s, both having the USRA boiler and larger firebox with three syphons. Their enormous tenders held 30 tons of coal and 20,000 gallons of water, and the Bethlehem booster installed in their rear trucks augmented the locomotives 66,000 pound tractive effort by another 18,000 pounds. Evidently they must have been satisfactory because the LV ordered ten more from each builder in 1932. Not to be outdone, the Lack-

awanna added ten more 4-8-4s from American in that same year. This group, numbered 1621- 1630, were provided with roller bearing leading trucks and the last two engines had roller bearings on all of their axles. The Timken locomotive had been operated on the DL&W in the spring of 1931 and these subsequently were the first 4-8-4s to incorporate roller bearings.

Impressed by the performance of engines 1629 and 1630, which could exert a drawbar pull of 80,000 pounds, the Lackawanna and ALCO developed the design of a new 4-8-4 which was far ahead of contemporary locomotives. The USRA boiler with three syphons and 88 sqft grate area was retained and a Worthington feedwater heater was added in the smokebox. The 74 inch drivers had Boxpok centers, and a single guide crosshead replaced the two guide type. Air reservoirs were cast into the locomotive bed and two compound compressors were situated on the front frame extension. Timken roller bearings were installed on all of the engine axles, but not those of the tender. Although intended for fast freight trains between Buffalo and Binghamton, New York, these locomotives handled perishables eastward to Hoboken, New Jersey, returning westward on mainline passenger trains.

After the depression had run its course, the railroads wanted much larger motive power. Boiler diameters ranged from 92/102 to 98/108 inches, grate areas were 100 to 140 sqft, steam pressures were 250 to 310 psi and axle loads surpassed 80,000 pounds. When it was designed initially, the USRA boiler was capable of producing the steam for a 2500 horsepower engine. Fifteen years later when provided with Type E superheater, feedwater heater, firebox syphon, larger grate area and increased steam pressure it was able to produce steam for 4000 horsepower. Further increases could be attained only by enlarging the boiler and firebox; consequently development and construction ceased and the USRA designs would have been forgotten had it not been for World War II.

During that war, the War Production Board (WPB) controlled to some degree locomotive design, production and allocations. Southern Pacific 4-8-4s built by Lima went to the Western Pacific, Union Pacific 4-6+6-4s from ALCO were assigned to the Denver & Rio Grande Western, and the Missouri Pacific received 4-8-4s which had been designed originally by

LEFTT: Norfolk & Western 4-8-2 No. 124 on local to Winston-Salem at Roanoke, Virginia. Photo by Phillip R. Hastings. Eastin-Phelan Collection #772-2.



With low-water alarm, mechanical lubricator, multiple-bearing crossheads, modified cab, “flying pumps,” sloping pilots, and 16,000 gallon Vanderbilt tender, C&O #546 hardly looks the same. Built originally by Baldwin in 1919, she is at Richmond, Virginia, March, 1948. H. K. Vollrath collection.

Baldwin for the D&RGW. The Pennsylvania’s Altoona shops constructed 2-10-4s from Lima/C&O plans. WPB control appeared to have been inoperative when the Delaware & Hudson, Lehigh Valley, and Chicago, Rock Island & Pacific ordered 4-8-4s from American in 1943. ALCO dusted off its plans for previous LV and CRI&P engines and adapted the USRA boiler shell for the D&H engines. Excepting track gauge, there was scant evidence of any standardization among the three designs. Virtually every significant item was different: driver diameter, valve gear, cylinder dimensions, grate area, steam pressure, firebox syphons, feedwater heater, superheater, axle bearings and booster. The D&H design was new but those of the Rock Island and Lehigh Valley were based on their own locomotives. Despite this great diversity in fundamental dimensions and design, the engine weight, tractive efforts and maximum horsepower were surprisingly close. In the author’s opinion, the Chesapeake & Ohio 4-8-4s built

by Lima in 1935 would have been a satisfactory compromise with respect to weight, horsepower and tractive effort. Everything else was of secondary importance.

The demise of the USRA heavy 4-8-2 “family” commenced after World War II when diesel-electric motive power began to replace steam locomotives. The first ones to disappear were not the oldest members but those of the next generation: DL&W 4-8-2s and the five passenger service 4-8-4s were retired in 1947. Within the following ten years all of this 300 member dynasty had perished excepting the Norfolk & Western 4-8-2s, the Canadian Pacific 4-8-4s and the Timken engine. The Timken locomotive, Northern Pacific 2626, was scrapped in 1958 but the two CP 4-8-4s were preserved for exhibits at Regina and Ottawa. The ultimate survivor, N&W No. 124 (of the 1919 order) and Nos. 152 - 137 (1923 order) existed until the end of 1959. When those remaining locomotives were

scrapped, an illustrious dynasty spanning forty years had become extinct.

Bibliography

American Locomotive Company Construction Record.
Baldwin Locomotive Works Construction Record.

Drury, George H. *Guide to North American Steam Locomotives*. Milwaukee: Kalmbach Publishing Co., 1993.

Edson, William D. "The USRA Locomotives" *Railway and Locomotive Historical Society Bulletin* 93 (October 1955).

Farrell, J. W. & Pearsall, Mike, *The Mountains*. Pacific Fast Mail, 1976.

Farrell, J. W. & Pearsall, Mike, *The Northerns*. Pacific Past Mail, 1975.

Prince, Richard E. *Norfolk & Western Railway*. Richard E. Prince, 1980.

Locomotive Cyclopedia. Simmons-Boardman Publishing, 1922 - 1947. 

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Missouri Pacific #5340, shown at Texarkana, Kansas, September, 1949, illustrates the evolution of the USRA light and heavy Mountain types. Built by Schenectady in 1930, this handsome passenger engine can be traced back to USRA 4-8-2s nos. 5301-5307, Richmond, 1919. H. K. Vollrath collection.

USRA 4-8-2s and Ascendants

Year Built	Mfr.	Type	Railroad	Nos.	Boiler Pressure	Driver Diameter	Engine Weight	Tractive Effort	Grate Area	Notes
1918	ALCO	4-8-2	C&O	133-135	200	76	352,000	58,000	69	1
1919	ALCO	4-8-2	N&W	116-125	200	76	352,000	58,000	69	1,2
1919	BLW	4-8-2	C&O	136-137	200	76	352,000	58,000	69	1
1924	ALCO	4-8-2	DL&W	1401-1405	200	80	376,000	58,000	69	1
1923	ALCO	4-8-2	C&O	138-139	200	76	352,000	58,000	69	1
1923	BLW	4-8-2	N&W	126-137	200	76	352,000	58,000	69	1,2
1925	ALCO	4-8-2	DL&W	1450-1454	200	80	382,000	61,000	73	3
1926	ALCO	4-8-2	FEC	801-823	210	75	356,000	61,000	69	4
1927	ALCO	4-8-2	MP	5335-5339	250	73	394,000	64,000	84	
1927	ALCO	4-8-4	DL&W	1501-1505	250	77	421,000	65,000	88	5
1928	CPS	4-8-4	CP	3100-3101	275	75	423,000	61,000	94	6
1929	ALCO	4-8-4	DL&W	1601-1620	235	70	418,000	72,000	88	
1929	ALCO	4-8-4	CRI&P	5000-5024	250	69	434,000	67,000	88	
1929	BLW	4-8-4	D&RGW	1700-1713	240	70	418,000	64,000	88	
1930	ALCO	4-8-4	CRI&P	5025-5064	250	69	434,000	67,000	88	
1930	BLW	4-8-4	GN	2575-2588	225	80	421,000	58,000	98	8
1930	ALCO	4-8-4	TRBC	1111	250	73	418,000	64,000	88	9
1930	ALCO	4-8-2	MP	5340-5344	250	73	394,000	64,000	84	
1931	BLW	4-8-4	LV	5100	250	70	413,000	66,000	88	10
1931	ALCO	4-8-4	LV	5200	255	70	424,000	67,000	88	10
1932	BLW	4-8-4	LV	5101-5110	250	70	413,000	66,000	88	10
1932	ALCO	4-8-4	LV	5201-5210	255	70	424,000	67,000	88	10
1932	ALCO	4-8-4	DL&W	1621-1630	235	70	429,000	72,000	88	11
1934	ALCO	4-8-4	DL&W	1631-1650	250	74	447,000	72,000	88	12
1943	ALCO	4-8-4	DL&W	700-714	285	75	470,000	62,000	96	
1943	ALCO	4-8-4	LV	5211-5220	255	70	451,000	67,000	88	13
1944	ALCO	4-8-4	CRI&P	5100-5109	270	74	467,000	67,000	96	
1946	ALCO	4-8-4	CRI&P	5110-5119	270	74	467,000	67,000	96	

Notes:

- 1 Modified afterwards.
- 2 Streamlined shroud added.
- 3 3 cylinders, front end throttle. Rebuilt to 2 cylinders.
- 4 Delta trailing truck, feedwater heater.
- 5 First 8 coupled locomotive with large drivers. Rebuilt with cast bed.
- 6 First 4-8-4 with cast bed and high pressure. Roller bearings added.
- 7 First with cast bed and cylinders. Modified afterward.
- 8 First 80 inch drivers and cylindrical tender. Roller bearings added.
- 9 First road service locomotive with roller bearings and trailer truck booster.
- 10 Booster on rear tender truck.
- 11 Nos. 1629 & 1630 first 8 coupled locomotives with roller bearings. Modified afterwards.
- 12 First large application of roller bearings.
- 13 Trailing truck booster. R&LHS

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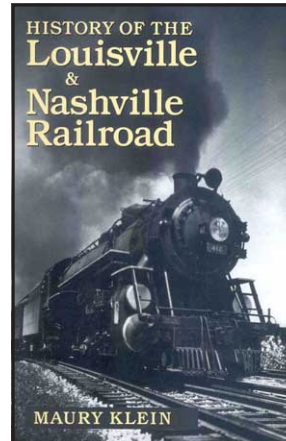
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The Annual Meeting of the Railway & Locomotive Historical Society, Inc. will be held on the morning of July 4, 2003, from 7:00 AM to 9:00 AM at the Wyndham Baltimore Inner Harbor Hotel, 101 West Fayette Street, in downtown Baltimore, Maryland. A slate of Directors will be presented for approval by R&LHS members in attendance. A full breakfast will be available at the beginning of the Annual Meeting at a charge of \$24.00 per person, reserved and payable in advance.

This year, the R&LHS Annual Meeting is being held during the R&LHS/NRHS joint national convention, Star Spangled Rails, in Baltimore July 1-6. R&LHS members planning to attend Star Spangled Rails may reserve and pay for the R&LHS Annual Meeting breakfast at the time they register for other convention events. Or R&LHS members and their families may reserve breakfast at the R&LHS Annual Meeting by sending a check or money order payable to the "Railway & Locomotive Historical Society" to W. F. Howes, 3454 Cormorant Cove Drive, Jacksonville, FL 32223-2790. Breakfast reservations must be received by June 20. 

STAR SPANGLED RAILS CONVENTION SCHEDULE

Star Spangled Rails, the joint NRHS/R&LHS convention is to be held in Baltimore, July 1-6, 2003. The convention's schedule of events celebrating the Baltimore and Ohio Railroad's 175th Anniversary and our nation's 227th Independence Day is:

TUESDAY, JULY 1, 2003

West Virginia Rails: *New Tygart Valley Flyer's* Western Maryland diesels, the Edwards rail car *Cheat Mountain Salamander*, the Climax-powered *Durbin Rocket*, and the Cass Scenic Railway Shay locomotives (trip continues through Wednesday, July 2nd);

Gettysburg Scenic Railway: covered wagons pulling a matched passenger consist to Mt. Holly Springs;

Delaware Duo: two special trains— steam and doodlebug— on the Wilmington and Western's line to Hockessin, and a guided tour of Amtrak's Wilmington Maintenance Facility;

Three Centuries of Annapolis: a guided walking tour and harbor cruise of Maryland's historic capitol city.

Night Photo Session: Steve Barry, Managing Editor of *Railfan and Railroad*, will light up many of the vintage cars at the Baltimore Streetcar Museum.

WEDNESDAY, JULY 2, 2003

The Potomac Valley: Amtrak from Baltimore's Penn Station via Washington, DC, CSX's Metropolitan Subdivision to the Western Maryland Station in Cumberland, MD. There, convention-goers will transfer to the steam-powered Western Maryland Scenic train for a run to Frostburg, MD.

Stewartstown/Muddy Creek Forks Tour: Stewartstown to New Freedom on the Stewartstown Railroad, and, track speeder ride over Maryland and Pennsylvania (Ma & Pa) Railroad track with a visit to the Ma & Pa Preservation Society's historic buildings and railroad equipment at Muddy Creek Forks, Pennsylvania.

Sculpted Vines/Vintage Wines: a tour and luncheon at the world renowned Ladew topiary gardens, and tour of Maryland's Boordy Vineyard Winery.

THURSDAY, JULY 3, 2003

Seminars: a variety of seminars featuring railroad history run through the morning at the convention hotel; topics include Intercity Rail Passenger Service: B&O, The Final Decade, a panel discussion, and PRR, the Fall and The Rise of the Broadway Limited by Joseph W. Welsh; When the Railroad Leaves Town by Dr. Joseph Schwieterman; The Archeology of the B&O given by Herbert H. Harwood, Jr.; My Life with Steam by Ross E. Rowland, Jr.; Running Steam by William L. Withuhn, curator of transportation for the Smithsonian Institution; Railroad Photography T ech-

niques, by Steve Barry and James Boyd of
Photographs by John Hankey.

Railfan and Railroad; and, Baltimore's Legacy in

Rolling Seminars: two seminars will travel to their topic areas: Railroad Resources in the Mid-Atlantic States goes to the National Archives Center in College Park, MD; and The First 13 Miles of the B&O Railroad.

Shop the Mills: a day-long shopping tour to the mega-mall Arundel Mills and the historic Savage Mills.

Bay Lady Luncheon Cruise: a two-hour lunch-time cruise around Baltimore's harbor.

NRHS and R&LHS Meet the Officers Reception: followed by: **Star Spangled Rails Convention**

Banquet: features Gilbert O. Mallery, Vice President Business Development, Amtrak as the key-note speaker.

FRIDAY, JULY 4, 2003

R&LHS Breakfast and Membership Meeting: the annual meeting of the Railway and Locomotive Historical Society.

Baltimore Transit Tour: a day at the MTAM Metro and Light Rail lines and shops, and the Baltimore Streetcar Museum.

B&O 175th Anniversary Railroadiana Show and Sale: Hosted by Golden Spike Enterprises for convention attendees only (continues on Saturday, July 5th, open to the public).

The Wacky Quacker Duck Tour: a land and water based orientation to the city of Baltimore.

NRHS Board of Directors Meeting: The regular meeting of the NRHS Board of Directors.

NRHS Annual Membership Meeting: The annual meeting of the membership of the NRHS.

July 4th Celebration and Fireworks: Colorful fireworks by Zambelli Internationale will illuminate the night sky over Baltimore's Inner Harbor celebrating Independence Day.

SATURDAY, JULY 5, 2003

The Harrisburg Circle: an Amtrak with Juniata Terminal's restored PRR E-8's from Baltimore's Penn Station via the former Pennsy 'Port Road' along the Susquehanna River circling Harrisburg, Pennsylvania area sights including Three Mile Island, Enola Yard and Rockville Bridge.

Star Spangled Baltimore History Tour: a visit to historic Baltimore sites, including Ft. McHenry, the Star Spangled Banner Flag House, and B&O Railroad president John W. Garrett's Evergreen House.

B&O 175th Anniversary Railroadiana Show and Sale: Hosted by Golden Spike Enterprises at the convention hotel, this is a day long show and sale open to the public.

SUNDAY, JULY 6, 2003

The Blue Mountain Limited: excursion from Baltimore's Camden Station by MARC over the former Western Maryland 'Dutch Line', now CSX to New Oxford, Pennsylvania.

Baltimore Transit Tour: a repeat of the Friday, July 3, tour of Baltimore's Light Rail and Metro subway lines and shops and the Baltimore Streetcar Museum.

All convention events will take place at or originate at the convention hotel, the Wyndham Baltimore Inner Harbor Hotel at 101 W. Fayette Street in downtown Baltimore. An outstanding special convention rate of \$115 per night has been arranged; reservations may be made by calling Wyndham at 1-800-WYNDHAM and asking for the 'Baltimore Rail Convention 2003' rate.

Registration packages with full details have been mailed to preregistrants for priority ticket ordering. Beginning on April 22nd, all NRHS and R&LHS members may register and purchase tickets for the convention. For those NRHS and R&LHS members not previously registered, the registration fee is \$45. Nonmembers may register and purchase tickets beginning on May 30, 2003; the registration fee for nonmembers is \$60.

To obtain a registration form and full convention details, write to Star Spangled Rails, P.O. Box 441668, Ft. Washington, MD 20749-1668, or visit the Star Spangled Rails web site at www.star-spangledrails.org <<http://www.star-spangledrails.org>>. Updated convention information may be obtained at that web site as well, as it is announced.



TRADING POST

Submissions should be made to the Newsletter editor to arrive by June 15, 2003, for inclusion in the next issue. All items subject to available space and editorial decisions as to content. Logos and photographs are limited to 7/8 inches high if space permits. New Trading Post items are posted on our WebSite. <<http://www.RLHS.ORG>>

NEW BOOK - *The Shepaug Railroad 1872 - 1948*. The complete history of Connecticut's **Shepaug Valley Railroad** that ran from Bethel to Litchfield for over 75 years. Contains many photos never published before. \$18.95 postpaid. **Fletcher E. Cooper**, 13 Maple St., Litchfield CT 06759-3101.

SEEKING - **New York, Susquehanna & Western Railroad** Trustee minute books compiled during the trusteeships of Walter Kidde and Henry K. Norton (1937-1953). These may be bound in maroon hard covers with black rectangles on cover and spine indicating dates in which the enclosed information was compiled. I'm interested in locating archival or library holdings or possible purchase if privately owned. **Robert E. Mohowski**, 1601 Crystal Lake Ter, Franklin Lakes NJ 07417-1312. (201) 337-5791.

RIDE - Private Varnish to NRHS/R&LHS **Star-Spangled Rails** from Chicago using *Cardinal* route with connection from Dearborn, MI. Includes vista dome, two sleepers (serve as your hotel during convention), diner (with several meals) and round-end observation. Po-whatan Rail Services, PO Box 2345, Dearborn MI 48123-2345, (248) 435-2858, 9AM - 5PM CT weekdays. <franktrainman@yahoo.com> <www.americanrail.com>

WANTED - Steam, Diesel, and Electric builder's and number plates for my collection. Still looking for any early builder's to include a **Rhode Island** without the cast-in construction number, Taunton, Mason. Erie K-5 4-6-2, any DL&W steam plates, early diesel plates to include F-M Trainmasters, ALCO DL-109 & PA, and

Baldwin Cab and Transfer units. Will purchase outright or have some plates to trade. **Ron Muldowney**, 52 Dunkard Church Rd., Stockton, N.J. 08559-1405, (609) 397-0293. <steamfan@crusoe.net>.



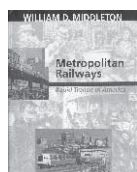
SELLING - *Russian Rail Transport, 1836-1917*, colorful history of Russian railways beginning in 1836 until the Bolsheviks took power during WW1. \$32.00 USA, \$36.00 foreign. Also available is the 118-page biography, *Franz Anton von Gerstner, Pioneer Railway Builder*, by Mikhail and Margarita Voronin. \$28.00 USA, \$32.50 foreign. Checks payable to Languages of Montour. **John C. Decker**, 112 Ardmoor Avenue, Danville PA 17821. <JDecker@Uplink.net>

WANTED - RR related seals and labels (no baggage stickers) - older/unusual a plus - I use these on my mail so I'm not looking for collector's items. Give details. All answered. **John Maye**, 1320 W. Lincoln Highway G13, Schererville IN 46375-1559.

WANTED - Old (pre-1930) tickets, passes and cash fare receipts from railroads, trolleys, horse railroads, ferries, bridges, turnpikes, etc. US only. **Dan Benice**, PO Box 5708, Cary NC 27512. (919) 468-5510. **R&HS**

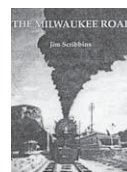
New RR Books

Press releases for new railroad oriented books appear here. They are not paid advertisements and carry no endorsement by the R&LHS. All items subject to available space and editorial decisions as to content. Photographs are limited to 7/8 inches high.

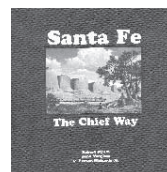


Metropolitan Railways: Rapid Transit in America by William D. Middleton is a large-scale, extensively illustrated volume that deals with the growth and devel-

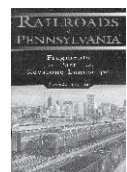
opment of urban rail transit systems in North America. It traces the history of rail transit technology from such impractical early schemes as a proposed steam-powered "arcade railway" under New York's Broadway through today's sophisticated systems. 256 pages, 2 maps, bibl., append., index, 5 x 8 Cloth, \$59.95. Indiana University Press, 601 N Morton Street, Bloomington IN 47404-3797. (812) 855-8817 <iupress.indiana.edu>.



The Milwaukee Road 1928 - 1985 by Jim Scribbins features 10 chapters on this transcontinental granger railroad that faced several transportation rivals, five mountain ranges, designed the first North American Hudson and turned out the *Hiawatha* fleet. 312 pages, 8 1/2 x 11, hardbound. \$58.95 + \$5.00 s/h. Heimberger House Publishing Company, 7236 West Madison Street, Forest Park IL 60130.



Santa Fe - The Chief Way by Robert Strein, John Vaughan and C. Fenton Richards, Jr. Historic photographs and illustrations reminds us how wonderful train travel used to be. They're all here, the Super Chief, the Chief, El Capitan, and the San Francisco Chief. Second printing. 132 pages, 10 x 10 1/4, 131 color plates, 28 b&w photos, 14 duotones, softcover: \$24.95, hardcover: \$39.95. New Mexico Magazine, 495 Old Santa Fe Trail, Santa Fe, NM 87501.



Railroads of Pennsylvania - Fragments of the Past in the Keystone Landscape by Lorette Treese tells the stories of the individuals and events that shaped railroad history, and locates the state's rail culture relics. "Lorette Treese has energetically gathered a wide sampling of history and culture, giving an entertaining glimpse into railroading's past and present." — Dan Cupper. 288 pages, 6 x 9, illustrated, softcover. \$18.95. Stackpole Books, 5067 Ritter Road, Mechanicsburg PA 17055. **R&HS**

Help Pick a Winner!

Help the R&LHS Awards Committee pick the nominees and the winners for the Railroad History Book Award and Article Award!

All members in good standing may suggest candidates for consideration by the Awards Committee when nominating authors for the **2003 Railroad History Awards**. The R&LHS Awards Committee solicits advice from members in two award categories: the David P. Morgan Article Award, and the George and Constance Hilton Book Award.

Articles must have been published in magazines or journals with cover dates of 2001 and 2002. Enter the complete name of the author, the name of the article, the pages on which it may be found, the exact name of the magazine, and its exact cover date (month and year). (Some journals are hard to find, so please send a photocopy of the article, if you can. This will aid the committee and save some time.)

Books must have been published in 2000, 2001, or 2002. (See publication or copyright date for the book under consideration.) Enter the complete name of the author, the complete book title, complete name of publisher, and copyright or publication date.

The Awards Committee will make the final selection of Nominees for each category. The Committee will take members' entries very seriously. In this way, the Society's members can play a key role in the Railroad History Awards.

Fill out and send in this coupon, or photo copy, by May 15, 2003. Only those entries postmarked on or before that date will be tallied for the 2003 awards. Mail to Ed Graham, 316 Innisfree Circle, Daly City, CA 94015-4358. Coupons sent to the wrong address or sent after June 1, 2003, will not be tallied. 

To: R&LHS Awards Panel

For the **2003 David P. Morgan Article Award**

Author's Full Name

Complete Title of Article

Page Number(s) of Article

Complete Name of Magazine or Journal

Exact Cover Date: Month/Year or Month/Day/Year

Publisher's Editorial Address (from inside magazine)

Today's date: _____

For the **2003 George and Constance Hilton Book Award**

Author's Full Name

Complete Name of Book

Complete Publisher's Name

Copyright Year

Member's Name

Member's Address

Member's City State & ZIP

FROM PRESIDENT HOWES:

On July 3, I will step down as president of the Society after nine years in office. Under our bylaws, the Board of Directors annually elects the president and four other officers. It was a year ago that I notified the Board that I would not stand for reelection in 2003, and I appointed a search committee to identify qualified candidates for the position. That committee will offer a name in nomination at the July 3, 2003 Board meeting.

I am pleased with what has been accomplished during the last nine years, but I also recognize that more needs to be done to keep the Society's services relevant to the varied and changing interests of current and prospective members. I intend to remain actively involved. However, I firmly believe that nine years is long enough for anyone to serve as president. We will all benefit from a new face at the helm with some fresh ideas on how to solve old problems and develop new opportunities.

Holding office in this Society is both an honor and a very rewarding experience, highlighted by the opportunity to meet people of diverse backgrounds, but with a shared interest in railroading. I'm sure our new president will enjoy the same encouragement, support and friendship that I have received from the directors, officers and members.

One of my last official acts as president will be to welcome you to the joint R&LHS/NRHS "Star Spangled Rails" convention in Baltimore during the first week in July. Despite the tragic damage to the B&O Railroad Museum in a snowstorm on February 17th, and subsequent cancellation of the Museum's "Fair of the Iron Horse", we have put together an exciting celebration of 175 years of American Railroading with something ... in fact, many things ... for everybody. There will be main line excursions over three historic routes, plus tours of area railroad attractions (including steam and traction operations), seminars, a railroading show and lots of opportunities for good fellowship.

See you in Baltimore!

Bill Howes

TIME VALUE MATERIAL!

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