



The Semaphore

Newsletter of the Rochester NY Chapter, NRHS
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May 2006
Volume 48, No. 9

Program for May 18:

Some Tourist Railroads I Have Visited

by Irene Szabo

Irene will show slides and discuss some of the tourist railroads that she has visited.

The results of this program may prompt several of us to visit these railroads.

Meeting: 7:00 PM

Program: 8:00 PM

Store open before and at intermission of

Future Programs (Subject to change!)

June 11: Annual Banquet, Newport House

June 15, July 20 and August 17: All meetings and activities are at the Industry location.

Sept. 21: Nickel Plate Diesels, by Bill Quick

Oct. 16: Photos of the LV and EL, by Ken Kramer

Nov. 16: American Orient Express Ltd, byk Bob Achilles

Dec. 21: Depots in New York State, by John Stewart and Charles Woolever

2007

Jan. 18: Gold Coast and Danbury RR Museums, by Harold Russell

Feb. 15: RPO Car Operation, by Chris Hauf

Mar. 15: Members' Slide Night

Apr. 19: Rochester Branch of LV RR, by John Stewart



P&W Car 168 waits to enter the NYMT car barn after a training run. [Gale Smith photo]

2006 Special Events

May 21 (Sun.): Joint Operation Opening Weekend

June 18 (Sun.): "Caboose Day"

July 15 - Aug 20 Saturday hours; The museums are open both Saturday and Sunday from 11 AM - 5 PM.

July 15-16 (Sat & Sun): Trolley Rides begin; "Rochester Subway Anniversary Celebration"

August 19-20 (Sat. & Sun.): "Diesel Days"

Oct 29 (Sun.): Last day of Joint Operations. Track car rides end. R&GV RR Museum closes for the season. NYMT museum remains open from November through April at reduced admission rate.

**Yes, the Museums open May 21!
Everything ready?**

Ticket Sellers/Gift Shop help wanted

Jim Dierks of NYMT is looking for volunteers to staff the ticket desk and/or gift shop counter during the times that the combined museums are open. The hours are from 11 AM to 5 PM. This is a good opportunity for a spouse to get involved while you are operating a track car or acting as a depot guide.

Give Jim Dierks a call at 473-5508.

Remember the Chapter and New York Museum of Transportation both benefit in this combined operation — the only one that we know of in the USA!

Reserve Sunday, June 11!

This year's Chapter Banquet will be held on Sunday, June 11, 2006 at the Newport House (500 Newport Road, Rochester, NY), starting around 6 PM. There will be a cash bar, hors d'oeuvres, dinner and dessert. See Page 2.

Chapter Library

11 May Street, Webster (by OMID Tracks)

NOTE: We're back to Summer hours!!

Hours: 7:00 to 9:00 PM

Monday, May 22, 2006

Library Phone: 872-4641

====\$13,600>

Capital Fund Drive Campaign

\$72,000!

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2006 Track Motor Car Operator's Schedule

Date	Operator A	Operator B	Operator C	Prim TC
May 21	Bob Achilles	Dave Peet		TC-1
May 28	Harold Russell	Steve Huse	TC-3	
June 4	Ryan Kane	Phil McCabe		TC-1
June 11	Bob Achilles	Harold Russell	Steve Huse	TC-3
June 18	Bob Fleck	Dave Mitchell		TC-1
June 25	Bob Moore	Phil McCabe		TC-3
July 2	Phil McCabe	Harold Russell		TC-1
July 9	Bob Achilles			TC-3
July 15*	Mike Murphy			TC-1
July 16				TC-3

This year we have 45 qualified track car operators including 8 new people. As we need 3 operators each Sunday, there are ample operating opportunities with every date open except June 11 and August 19. Please call Harold Russell, 42709159 or e-mail at Haroldrussell@juno.com if you would like to be included as the openings are filling rapidly

Sincerely, Harold

Last Call for Track Car Training ...

All training is at NYMT, 6393 East River Road

Date	Type	Operators	Time	
13-May	Hands-on	New		by appointment
20-May	Hands-on, make-up	New		by appointment

Depot Guides

by Dave Peet

Once again we will need volunteers to work as Depot Guides at Industry.

Sundays: May 21 thru October 29

Saturdays: July 15 thru August 19

Weekdays: for group tours

If you are available to help with this, please contact Dave Peet to get on the schedule! Call me at 586-8964 days or evenings, OR email to davepeet97@frontier.net.net.

We will have a voluntary training session Sat. May 20 at 10 AM and Sun. May 21 at 10 AM at Industry.

Additional session will be scheduled if needed!

Thank you to all the members who worked on this last year — I hope we can count on you in 2006!

Contributors to this issue

Chris Hauf, Lynn Heintz, Jesse Marks, John Redden, Charles Robinson, Harold Russell, Jessica Stallone, John Stewart, Jeremy Tuke, and Rand Warner and various publications as indicated.

Candidates for May Election

John Stewart, Nominating Com. Chair

President: Jeremy Tuke

Vice President: Bob Achilles

Treasurer: Don Wawrzyniak

Recording Secretary: Dave Peet

Corresponding Secretary: Chris Hauf

National Director: Bob Miner

Trustees:

Mike Roque'

Mike Dow

Dave Luca

Harold Russell

Both the Ballot and Roster were mailed out a week ago, as of this writing. Thus, members should have received them.

Make your selections and return your

Membership Report

Jessica Stallone, Membership Chair
585-350-9306; membership@rochnrhs.org

Three members have been voted in during recent Chapter Meetings:

Welcome to these new members!

Joseph Nugent

15 Alfie Drive

Rochester, NY 14623; 944-1850

jrn5155@rit.edu

Joe is a member and the current president of the RIT Model Railroad Club. He has been coming to the museum for a few years doing steam locomotive restoration. Joe is interested in Rolling stock restoration; Historical construction equipment; Trip; and Museum/track car operations. He has basic restoration skills that have already come in handy at the museum.

Chapter & National dues

Regular: \$42.00

Family member: \$11.00 (for two)

Each additional family member: \$4.00

Local member: \$20.00 (Primary membership in another Chapter)

Subscription to The Semaphore: \$12

Chapter Banquet

Sunday, June 11 at The Newport House, 500 Newport Road, Irondequoit.

Cash bar at 6:00 PM; Dinner at 7:00 PM

Program and speaker to follow.

Speaker: Steve Barry, Managing Editor of *Railfan & Railroad Magazine*.

Cost: \$25.00 per person! All attendees will receive their very own Limited Edition 2006 Rochester Chapter Collector's Mug

Make your reservation, with check payable to Rochester Chapter NRHS, to:

NRHS Banquet

c/o Jessica Stallone

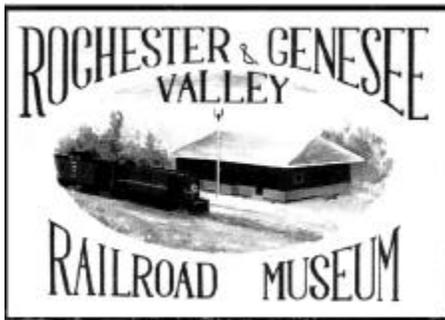
60 High Manor Drive, Apt 1

Henrietta, NY 14467

More details are on the enclosed flyer.

Notice to Exchange Newsletters

Sending your Chapter/Club newsletters to: *The Semaphore*, Gale Smith, 299 Seneca Park Ave., Rochester, NY 14617-2433 will facilitate the exchange of news or ideas.



Motive Power Report

by John Redden

General: As the weather finally warmed up, the trees started to bud, and the work on the locomotives has accelerated.

Plymouth Gasoline Locomotive April was another very productive month for the volunteers restoring the locomotive.

A frame to support the fuel tank and battery has been fabricated and installed by Kevin Klees. The fuel tank and battery were also installed. A restored starter solenoid was mounted along with a small battery charger / maintainer. This will allow for year-round operation of the Plymouth.

The restored cab frame was placed onto the locomotive and will be bolted into place in the near future. A new cab front wall with safety glass windows has been fabricated by Kevin, and awaits installation. Work on installing new roller bearings races onto the large transmission cross shaft has been completed. With the help of John Redden, Norm Shaddick and Rick Israelson this shaft and the large friction wheel were installed on the locomotive. New thrust bearings have been fabricated from bronze and are ready to be installed in the large roller bearing support castings. These keep the cross shaft from moving side to side as the speed is changed.

Restoration of the radiator continues, a large surplus truck radiator has been obtained and the core section has been cut out of it. This core section will be installed into new end sheets that had been previously fabricated. This assembly will be soldered together and tested for leaks. Then it will be installed with the end and side radiator castings into the locomotive.

Thanks to John Redden and very nice new operator seat with upholstery has been completed. Several test-engineers tried it out, and reported that it performs its duties satisfactorily. John has also begun work on the cab floor, and the four sander tubes that deliver the sand to the railhead from our restored sand boxes.

Next steps include balancing the friction

Managers: **Railroad:** (Motive, Rolling stock, MOW, ROW)
Chris Hauf: 381-8583; crhauf@frontiernet.net
Infrastructure: (Buildings, grounds, shops, construction, communications, signals & power, heavy equipment)
Dave Luca: 288-0318; daveluca@frontiernet.net

wheel and completing the installation of the cross shaft bearings. A few repairs remain to the speed changing mechanism, and then we will be able to install the final drive chain.

Plans: If all goes according to plan, and with some luck we expect that the Plymouth locomotive will move under its own power for the first time in over 45 years, this summer. Final restoration work will involve fabricating and installing the exterior sheet metal, and fabricating the engine canopy side panels and front grill.

Diesels: We have completed the planned work on the 1941 electrical cabinet. The replacement lower panel was welded into place, and a resistor bank, that had previously been cleaned up and painted by the CS&P department, was reinstalled. Preparations on parts from the disassembled number one prime mover continue, with the cleanup of its six cylinder liners.

Steam: Ron Amberger, and Joe Nugent from RIT, have continued work on the electric turbo generator for the Heisler Fireless locomotive. Parts have been cleaned, lubricated, painted, and re-assembled. Final governor adjustments have been made, and the generator is nearly ready for testing.

John Redden continued stripping paint from the exterior cab walls of the Vulcan number 12, in preparation for eventual painting and display outside.

Don't forget! The Steam Team meets on the first Saturday morning of each month, year-round, at the Depot. Anyone with an interest in helping out with the restoration work on our two steam locomotives is encouraged to contact Ron Amberger or John Redden. Or, by all means, just stop by the Depot.

Also, please remember that we gratefully accept clean, empty beverage containers that can be redeemed for cash. Any cans or bottles that have the NY 5-cent redemption code would be appreciated. This program has raised the bulk of the money that we use to restore the steam locomotives. So drop those cans and bottles off at the Depot, for the Steam Fund.

Thanks to: All of our Motive Power Volunteers, and also to Kevin Klees, Ron Amberger, and Norm Shaddick for their input to this article.

Electrification

by Rand Warner

Trolley #158 at NYMT has been running in test mode since April 1, 2006. On each Saturday, we have had several runs of the trolley over the length of electrified track.

Trolley checkout is being supported by Bob Miner, Charlie Lowe, Dick Holbert, Jim Johnson, Charles Harshbarger, Mike Dow and Ted Strang.

Substation testing is continuing with live trolley operation by Dick Holbert, Jim Johnson and Rand Warner.

Rail bonding, grounding, and cross strapping is continuing by Rand Warner, Jim Johnson and Charles Harshbarger.

Charlie Lowe, Bob Achilles, Dick Luchterhand, Scott Gleason and Dan Waterstraat are supporting overhead wire work and catenary expansion.

Jim Dierks has ordered stone which was spread by Ted Strang to create a new boarding area.

Track car training is starting - for the combined trolley/track car operations.

Motorman/conductor training will be starting in the near future.

Detail electrical testing, supported by Dave Shields expertise, will be conducted on Saturday, May 56.



Rand empties a charge in the apparatus that 'fuses' a finger-sized copper cable to the rail, which ensures electrical continuity across gaps between rail ends. [Gale Smith photo]

Library Report

Charles Robinson, Chairman

The library will be open for **YOUR** use on **Monday evening May 22 between the hours of 7 and 9 PM.** Come join us at the library.

Our sincere thanks to Gale Smith for donating a much needed new faucet for the library's rest room and to Bob Miner for installing it. Now with old dripper gone, the water will always be on at the sink. No more bending to open the stopcock on the floor to wash your hands.

Gale continues with his reviews and adding to the new books and video tapes to the computer file of our collection. Jerry Gillette and the library chairman continue categorizing and listing, in most cases with a description, the loose photos in our collection. We are getting close to putting all these in albums where they can be found and viewed.

Now that the weather is becoming more comfortable, we will fix up our building where it is needed.

The library staff is grateful for the number of suggestions that have been received regarding a new location for the library. Hopefully one of them will work for us. Thanks for everyone's continuing attention to this problem.

Look forward to see you at the

Returnable cans can help Steam Fund

You can help turn returnable cans into cash for our steam fund by donating them to the Chapter **any time.** There is a receptacle in the Baggage Room at the Museum.

Upcoming Anniversaries

by Rand Warner

- ? **75th Anniversary of Abandonment of Rochester & Syracuse: June 28, 2006**
- ? **50th Anniversary of Closing of Rochester Subway for Passenger Service: June 30, 2006.**
- ? **2006 is 35th Anniversary** of our legal acquisition of our Erie Depot from Erie Railroad for the sum of \$1.00.
- ? **2007: 70th Anniversary** of the Rochester Chapter, National Railway Historical Society!

How can we have significant & appropriate recognitions events & celebrations??

Red Letter Day

Saturday 1 April was a great day to be remembered:

- EK#6 and #1654 center cab diesels double headed to switch freight car string at NYMT.

- First run of Trolley #168 at NYMT, powered from new substation connected to Niagara Mohawk grid.

- Arrival by Silk Road Transport of 4-wheel side dump hopper car from P e n n s y l v a n i a .

Track Department

by Rand Warner

The south leg of the loop at NYMT has been cleared of freight cars to permit inspection and track work efforts.

Sam Swisher & Co. have been digging up and stockpiling a large stock of 80# Dudley rail and switch parts for future construction use.

Rand Warner has talked again with Tom McTighe of LA&L regarding our new siding on the west side of LA&L to hold our Excursion Train set.

John Redden, Mark Pappalardo and Co. have started a switch tie and timber replacement program at Switches #3 and #4 area near the Depot.

Rand Warner has been inspecting all main line trackage prior to start of track car operator and trolley motorman training, and beginning visitor operations.

New replacement ties have been staged out along the hill leading up to NYMT by NYMT and R&GVRM personnel.

Steam Team Meets

This team meets the first Saturday of each month. Anyone interested in 'steamers' is invited to attend. For information, contact John Redden at ejredden@frontiernet.net.

At Last, At Last!!

by Rand Warner

Thanks to persistent work by our Chapter President, Jeremy Tuke, we now have a good working Bobcat Model 61D skid steer loader with bucket.

The unit has been serviced and checked out and appears to be in good condition, with less than 2500 hours on the meter.

This maneuverable, handy unit will do a multitude of jobs for us on track work and many other projects. It can get into areas too tight for a larger machine.

Being a popular make, there are a multitude of rental attachments available to fit it, if needed for special applications.

Thanks Jeremy for making a dream come true, and to you employer for their consideration and generosity.

A hearty **Thank You to Copper and Brass Sales** for this donation. The Museum has been looking to acquire a Bob Cat skid steer for almost thirty years; persistence does pay.

Also, a **Thank You to Joe Scanlon** who arranged for free transport of the machine to

Track Motor Car TC-3 Upgrade

by Rand Warner

Our trusty TC-3 tack motor car has received several important upgrades over the winter, as follows:

- The clutch and transmission have been pulled so that the flywheel ring gear could be inspected and replaced if necessary

- A new starter mounting arrangement was devised ensuring positive, proper, and stable starter engagement.

- A four-wheel chain drive system was installed connecting the two axles to aid in traction on steep hills.

- The gas tank was replaced with a much better unit.,

- All systems were checked out as possible with the motor car in the Restoration Building.

TC-3 should be out running on our main line by the time you read this.

Thanks so much to Bob Mader, Lynn Heintz, Norm Shaddick, Kevin Klees and Rand Warner. We should now have a reliable third motor car for hauling our passengers.



Jeff Kitze donated this mounted sounder and key set to the R&GV RM. At one time it was in a Lehigh Valley RR depot. Jeff does not know how it was used, but it appears to be a 'portable apparatus. [Gale Smith photo]

History of our Hopper Car

by Lynn Heintz

The PRR hopper owned by the chapter will be 100 years old in 2009. To celebrate this centennial we are offering a custom painted model of this car to raise funds for cleaning, sandblasting and repainting in time for this event.

Our car, a Pennsylvania RR H21g, 70-ton, 4-bay hopper came off the assembly line in November, 1909 as a class H21, #747603 50-ton hopper with clamshell doors. Soon, the PRR started replacing the trucks with 70-ton trucks and changing the class to H21a.

In 1926 the PRR started a rebuild program on the class, that would replace the old clamshells with conventional hopper bottoms and doors. This program was not completed until 1948. Several car lots were upgraded over the following years and produced subclass b,c,d,e & f. In 1960, 6839 cars were effected with another set of changes and this set of cars became subclass "g". This program was completed in 1964.

At some point after the PennCentral merger the 747803 became the property of Owens-Illinois in Brockport where it was used as a glass recycling bin. When that plant closed it became a resident of our joint museum facility.

Many items in our collection have a proven local connection and 747803 is among them. On the side of the car is the code P 134 10-66 . This is the date and location of the most recent official weighing by the PRR. In this case P 134 refers to the rr's scale #134 located in Elmira, NY and it

took place during October of 1966. Cars in service were to be reweighed every 1-2 years. It would appear that this car may have been mothballed shortly after the PC merger and, awaiting an upturn in coal shipments that never materialized, was put on the market.

If any member has more information on the chapter or Owens acquisition of this car,

Chapter's Pennsy hopper model now available!

by Lynn Heintz

The Chapter has for sale a custom decorated HO-scale Bowser hopper car. It is an H21g Pennsylvania 4-bay hopper that is lettered as our car was when it came from the rebuild program shop in the early 1960s.

The model sells for \$15 and that includes tax and shipping. This fundraiser will raise money that will be used to repaint the car. The models will be available at all Chapter Store dates.

[Ed. This project was undertaken by Lynn Heintz.]

Gems from Our Past

by Rand Warner



Meeting of 17 May 1956 called to order 8:07 PM by President Sam Grover.

Treasurer Nick Feeley reported a balance of \$440.10 in chapter treasury account.

Motion made and passed to acquire a copy of the movie film covering the move of a Rochester horse car and trolley to the new Rail City Museum (north of Syracuse).

A.W. Crittenden suggested a chapter trip to "Rail City Museum to learn more about operation of a rail museum.

Annual Picnic to be held Thursday evening 26 July 1956 at Webster Park.

Report on recent Chapter Banquet held at Barnard Exempt by Frank Passaro.

Elmer Gabbey to start work on Chapter drumhead sign to display at end of car of our Chapter excursion trips.

Mike Magin will get safety arm bands made up for members of Safety Committee to wear 20 May 1956 trip to Corning.

Meeting adjourned at 8:58 PM.

Program by Ed Van Leer with slides and color movies by A.W. Crittenden.

Shows, etc.

May 12-14: *Day Out with Thomas*, Medina Railroad Museum, 8am-6pm, Medina, NY.

July 1-2: *Bark Peelers' Convention*, PA Lumber Museum, Galeton, PA.

July 2-6: I

Sept. 10: *Buffalo Central Terminal First Train Show*, Buffalo, NY

Nov. 4-5: *Train Show and Sale* at New York State Fairgrounds, Syracuse.

Dec. 9-10: *New and Expanded Two Day RIT Train Show and Sale*

Have you

... Signed up for **Track Car Training and Operations?** See Page 2.

... Signed up for **Depot Guide duty?** Also see Page 2. You will often get one-on-one interaction, and learn more afterward than before the day is done!

Our Railroad gets new signs

by Chris Hauf

The R&GVRR Museum's and the NYMT's shared demonstration railroad recently received all new mile marker, station and yard limit signs thanks to Jason Marks as his Eagle Scout project. Jason approached the museum last year about replacing our few remaining mile markers and adding new station signs for some of our named locations like SCANLONS for "Scanlon's Curve" or REIDS for "Reid's Crossing". The R&GVRRM felt this was great Eagle project for both Jason and the museum.

Jason did a lot of research for the project and helped the museum design the signs which Chris Hauf made using the Rochester Chapter's sign vinyl cutting system. Jason also purchased, cut, painted and installed all of the new 4x4 posts with the help of some other scouts and adults. Sadly, vandals quickly ripped three of the posts out of the ground near Scanlon's Curve before the signs were even installed. Two were found and repainted. One new one was made as a replacement. Jason also led the installation of all of the signs except for the yard limit signs.



The new mile marker signs will be a great replacement for our original mile marker signs made by Chapter member, Neil Bellenger. Sadly, many of these handmade wood signs were torn out of the ground and destroyed over the years by vandals. We still hope our luck will be better this time although vandalism has already been an issue.

The R&GV Railroad Museum extends its thanks to Jason and all of his helpers including his father, Charlie Marks, for an Eagle Scout project well done! And please keep your eyes out this year as you ride our railroad for our new signs!

Address change for NRHS Headquarters

The National NRHS has some time ago, changed their address from a post office box to a street. Here is the new address:

National Railway Historical Society
100 N 17th St., Ste 1203
Philadelphia, PA 19103-2783

2006 NRHS National Convention ...

... will be held in New Philadelphia, OH, July 18-23, 2006. The announced excursions are:

Tuesday, July 19: Dennison to Gould Tunnel and return over former PRR "Panhandle" mainline; motive power: two vintage F units.

Wednesday, July 19: Independence to Canton over entire Cuyahoga Valley Trackage, formerly the B&O line to Cleveland. Power: Alco FPAs.

Thursday, July 20: Dennison to Newark and return over former PRR panhandle route, now Ohio Central tracks. Power: steam.

Saturday, July 22: Dennison to Brewster to Bowerston to Dennison over Ohio Central track including some former Wheeling & Lake Erie tracks. Power: various historic diesel units.

Other activities includes tours of railroad shops, museums, and depots as well as seminars and trips into Amish countryside.

More information available from:

www.buckeyerails2006.org.

Want to hire your own train?

A group of private car owners in Cincinnati have formed a company, Cincinnati Railway Company, to offer a variety of charter excursions across America and Canada, connecting via regular Amtrak routes.

The train consists of five cars. "Chapel Hill" built around 1922 for E.F. Hutton and Majorie Merriweather Post, which sleeps eight; "Birch Grove", a 1950 stainless steel car which sleeps up to 22 people; a "Vista Dome", a 1954 stainless steel dome car having a 360-degree observation area plus galley, showers and lounge area; plus two other cars.

The Company stress the are not selling transportation, but nostalgia. Prices start at \$30,000. To book a traveling bedroom on this luxury liner, call 513/791-RAIL (7245) or visit www.CincinnatiRailway.com. [*Ohio Magazine*, October 2005, pg. 12].

FLR has varied excursions for 2006

Finger Lakes Railroad has among its announced train excursions for the year: several weekend train trips to Watkins Glen, Psychic Train-Equinox, Easter Bunny from Shortsville, Euchre or Poker train for teams, Memorial Day trip at Waterloo, Bird Watch at Montezuma Wildlife Refuge, and excursions to the various festivals by line-side towns.

The most popular appears to be "Blues and Brew" trips, which have also been favored by patrons of the Leatherstocking Chapter's railroad: Cooperstown and Charlotte Valley Railroad.

The Finger Lakes Railroad appears to have a very imaginative and dedicated marketing person (or department). [*Leaky Valley*, Feb. 2006]

VA Chapter nears \$750,000 goal

The Old Dominion Chapter, NRHS, of Richmond, VA is just \$32,000 shy of reaching their \$750,000 Museum Capital Campaign! Their April 2006 *HighBall* newsletter summarized some of donor input. They also use a "Sweat Equity" method towards this goal.

Their objective is restoration of the Hull Street Station Museum in Richmond, VA. Donors include several foundations and railroads, such as Norfolk Southern, CSX, Virginia Department of Transportation, etc.

In contrast, the Rochester Chapter's "Capital Fund Drive Campaign" of \$72,000 with about \$13,000 in the coffers, is cash orientated and non-specific (but tends towards the Restoration Building).

Specific goals appears to have an easier chance of reaching them. Our examples include the construction of the Restoration Facility and the re-paneling of the Erie Stillwell commuter car.

The Four Aces 4-8-4 Steam Locomotive

by Harold W. Russell

The book **Steam Locomotives** by Brian Solomon and various web sites listed at the end of this article are the sources of the following information.

The 4-8-4 Steam Locomotive

The 4-8-4 wheel configuration was the ultimate for modern fast freight and passenger locomotives in the 1930's. This driver arrangement was useful on just about every class 1 railroad in the US and Canada. Drivers up to 80" in diameter were used. The firebox was supported with a large four wheel trailing truck and the four wheel pilot truck provided a good ride and tracking.

With the large increase in passenger travel in the 1920's most railroads found it necessary to operate extra trains or to run their name trains in separate sections because the locomotives at that time could not haul more than 12 passenger cars. From this need sprung the super powered locomotives of which the 4-8-4 was the most popular.

The American Locomotive Company (Alco) built the first 4-8-4 locomotive in 1927 for the Northern Pacific. This locomotive used their 4-8-2 design modified to accommodate a large firebox with an equally large grate area. This was required because the NP had a ready supply of low grade coal.

The NP called this new wheel arrangement 'Northern'. Some southern railroads did not like this name and instead used regional names such as 'Greenbriar' for the C&O. The DL&W used 'Poconos'; the LV, 'Wyomings'; the NYC, 'Niagaras'; WM, 'Potomacs'; CNR, 'Confederations'.

Timken's Great Experiment

In the 1930's the Timken Company wanted to increase its sales of its roller bearings. It saw the railroad industry as a great opportunity. After all, there were tens of thousands of pieces of railroad rolling stock. The friction bearings that were used needed constant care for the all too common 'hot box' of a burning wheel bearing could cause axle failure and a derailment.

The railroad managers of the day were very skeptical and hesitant to try anything new. They had been burned before with wonder products and wanted nothing to do with anything new. The penalty for supporting a failure was severe whereas the credit for a successful innovation was minimal.

To prove its point, Timken ordered from Alco its own 'state-of-the-art' 4-8-4 steam locomotive equipped with its roller bearings.

Thus it became one of the very few private owners of a main line steam locomotive. Even in the 1930's locomotives were not cheap. To defray the cost, Timken arranged with Alco's parts suppliers to contribute to the project without cost until the engine could be sold to a railroad. The suppliers' names were placed on a plaque that was attached to the tender for the duration of the trial period.

Design and Construction

The locomotive was built in Alco's Schenectady, NY plant to the basic NYC design that allowed for clearances of most of the nation's railroads. The locomotive weighed 417,500 pounds, had 73" drivers and 27" x 30" cylinders. The tender carried 21 tons of coal and 14,500 gallons of water. The boiler pressure could be varied between 235 and 250 psig and its weight could be shifted between the drivers and the trucks. This allowed the demonstrator to have a tractive effort from 59,900 to 63,700 pounds. The booster engine could produce and 12,800 pounds tractive effort.

The locomotive was completed in April 1930 and was distinctively decorated. It carried the number 1111 and displayed the four playing card symbols on its sand box and number boards. It was painted dark green with gold stripes. The Timken name was boldly shown in large gold print across the tender. The locomotive quickly became known as the 'Four-Aces' on the railroads that tested it.

In Service Demonstrations

When completed 1111 was assigned to freight service on the NYC. Following this trial, it was evaluated by thirteen other railroads including the C&O and New Haven. On the Pennsylvania it served on the mountain grades without a helper and cut three minutes off the scheduled run time. The locomotive traveled the nation for nearly two years and produced an impressive record for both passenger and freight operation. During this time it ran for over 89,000 miles and routinely achieved top speeds of 88 mph.

At some locations publicity stunts were held to prove that the locomotive could be easily moved. Typically, three 'bathing beauties' would pull the locomotive.

Regular Use

In April 1931 the locomotive was delivered to the Northern Pacific. After the railroad tired it, it was purchased in February

1933 and called its class A-1 and renumbered 2626. The locomotive was regularly used on passenger trains in Washington, Idaho and Montana. On August 4, 1957 the locomotive made its last run when it pulled passenger trains between Seattle and Cle Elum and return. The Timken Company attempted to buy the locomotive and move it back to its Canton, Ohio plant under its own power. It was scrapped, however, before negotiations with the Northern Pacific were completed. Today, roller bearings are the rule on all railroads. Indeed they usually refuse to move any old equipment that has friction bearings.

References:

<http://www.steamlocomotive.com/northern>

<http://www.catskillarchive.com/>

http://www.wikipedia.org/witi/Timken_1111

http://answers.com/topic/timken_1111

RR Historical Dates

3/29/1957: The New York, Ontario and Western Railway ceased operation. First class-one railway to cease operations.

3/30/1954: The Toronto Transit Commission opened the first part of the Toronto subway, the first subway in Canada.

4/01/1976: Congress created Consolidated Rail Corporation (Conrail), out of remains of six bankrupted railroads. First was Central Railroad of New Jersey, then Penn Central, Lehigh Valley, Reading, Erie-Lackawanna and lastly Lehigh & Hudson River.

4/14/1912: The *Titanic* sank - These railroaders perished in the disaster: Grand Trunk RR President Charles Melville Hays; Jacob Astor, director of the Illinois Central Railroad and John Thayer, Norfolk & Western board member.

4/15/1858: The Meadville Railroad Company changed its name to the Atlantic and Great Western Railroad Company of Pennsylvania.

4/16/1928: Rochester and Syracuse Interurban cars were diverted onto the Rochester Subway, operating from Winton Road to the Oak Street Loop. (Service on this line was discontinued on April 30, 1931.)

4/17/1826: The Albany and Schenectady Railroad Company was incorporated as the Mohawk and Hudson Railroad Company. This was the first railroad built in the State of New York.

[Phil Houle listing in *American Rail Link*, Issues 250, 252]

Rochester Chapter National Railway Historical Society
The Semaphore
 P.O. Box 23326
 Rochester, NY 14692-3326

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Chapter Meeting & Program:
**Some Tourist
 Railroads I Have
 Visited**
 by Irene Szabo
 7:30 PM
Thursday, May 18, 2006
 40 & 8 Club

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Editor: Gale Smith
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InterNet (World Wide Web) addresses:
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Contributions to *The Semaphore* are welcomed and encouraged from all readers. They should be mailed to: Gale E. Smith, 299 Seneca Park Avenue, Rochester, NY 14617-2433. Phone: (585) 544-6221. Contributors using a computer are asked to send their submissions on any MS-DOS diskette in ASCII or *.txt format, as well as a printed copy. Also can send by e-mail to: gale299@frontiernet.net. **Deadline: First Day of Each Month.**

Restoration Building Floor Fund

by Dave Luca

One of the Chapter's major goals for 2005 was the installation of the inspection pit and concrete floor in the east side of the Restoration Building. Chapter volunteers will perform the pit excavation and the slab grading. Pre-qualified concrete contractors will perform the concrete placement work. The estimate for this is \$75,000. Recent donations in **BOLD**.

Help "cement" together a great project! Each block represents \$3,000.

\$3,000	\$3,000			
\$3,000	\$3,000			
\$3,000				
\$3,000				
\$3,000				