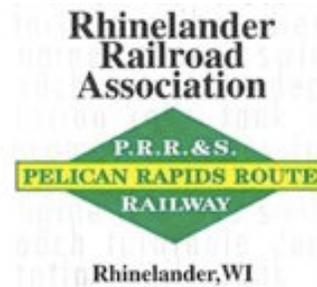


Warrant



February 2012

President's Message: Greetings from the "Old Man" *by Jim Brown, President RRA*

First off, we at RRA wish to express our deepest sympathy to the family of Carl Oberlander who passed away on December 25th, 2011. Carl was a past member of RRA and a great help and friend to all that knew him. His time and effort on the layout at the depot will not be forgotten.

Wayne Campbell, Gary Wolff and I represented RRA at the funeral on the same Saturday as the big move at the Choo Choo store. I was among the first to get to the funeral parlor and was soon approached by Carl's two sons when they found out that I was from the train club. We talked about the many good times we shared with Carl as a member of RRA. Carl had a large HO gauge layout in his basement at home and his sons were wondering what in the world they were going to do with it all. They said to me could we possibly get together with you and some more club members in a couple of weeks? We did, they were happy, we were happy, and that's another story!



And now through the yeoman efforts of Paul Wussow and support of Roger Blocks, and Brendan Marquardt we have a website. I wish to thank them for their considerable time and effort! See: <http://rrahome.org>

More info on the modular layout! It looks like it is going to grow another six, six-foot sections. Brendan Marquardt is in the process of building four sections with his dad, and then Wayne Campbell and Gary Wolff will be building one each. These sections will be their own property.

Egad, I think we have created a monster! More on this at the next business meeting of RRA which will be held at 123 S Brown St. on Wednesday, February 1st, 2012, 7:00pm. Hope to see you there!

Take care, Jim Brown, President, RRA.

Rail Grinding

by R.G. Blocks

Think about our cleaning or polishing model rail for electrical continuity. The 1:1 railroad goes thru a procedure to create a smoother ride and forestall rail failure. They grind their steel rail because cast iron wheels do considerable damage. So, let's talk about mechanisms at work.

Train car wheels are welded to a common axle. The wheel tread is the face that carries the load. It is the tread that makes contact with the rail. There is a raised flange at the inside of tread. The flange provides a degree of security to prevent the wheel from departing from the track.

Each wheel has a tread that is tapered with the largest diameter adjacent to the flange on the inner face of the wheel. Hence, if the wheel set moves to left of the centerline between rails, it rides higher on the left tread. Restated, the larger diameter portion of tread is riding the rail on the left. Clearly, the left wheel, per revolution will travel on the rail further than were the average diameter riding on the rail. This causes the wheel to turn a very small amount to the right.

Railroad car wheels are sort of self-steering! Who would have guessed?

Since two wheels are rigidly joined on a common shaft each must turn the same number of revolutions. If the wheel set moves left, as in the prior paragraph, it means the right most wheel is thus riding with its' smaller diameter on the right rail and must as a consequence slip on the rail.

One might conclude that the smaller diameter of a car wheel would exhibit the most wear per unit time.

It should be clear that the two wheels are the same diameter where the tread meets the flange. The two wheels are of progressively smaller diameter across the tread and smallest at the outer edge. The taper we've described is not large. It is however quite significant.

The force acting on the wheel face, in part, is rolling friction. It is drag. It is wear converted to heat. It is a reason one sees sparks emanating from between the rail and wheel.

When trains round corners, their wheel surfaces work unevenly against rail. It is rolling steel against fixed steel but with an unequal force. The force acts to push against that outer rail if the force is outwardly, away from the direction of curvature.

The flange of the outer wheel prevents, we trust, the wheel set from departing the track. The outer track thus tends to take the 'worst of it' when a train rounds a bend. But not always!

If the curve is banked and the train just happens to go round the corner at the optimal speed where the lateral force is not a significant factor then wheel flanges simply keep the wheels centered on the track. However, the outer rail on a curve is somewhat longer than the inner rail. Further, since most wheels are fixed upon their axles, then both wheels turn at the same speed. Clearly, the outer wheel must roll a bit further than the inner wheel to go around the curve

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without slipping on the track. Thus, even when the curve is banked and the speed is optimal for the curve, there will be slippage.

But the rail, in a curve is longer than the inner rail. Hence if the outer wheel in the turn has a lateral force 'exactly right' then the two wheels rotation just might match the track length differential, and we have little or no wheel or track wear.

However, slip causes wear between the two metal surfaces. The wheel and rail both become worn due to slip. The degree of track and wheel wear is dependant on a number of factors.

Engines wear when the 'drivers' slip upon starting or during speed changes. Sand is frequently applied between the 'drivers' and rail to reduce slip. Sand is abrasive and as a consequence of reducing slip also causes rail and wheel wear. It's akin to the brake lining wear on your car.

Forces also vary due to spongy roadbed. Rail can and does deflect vertically as trains pass. Insufficient soil compaction, sponge like ballast, tie flexibility or lack of tie stiffness (perhaps rot) or an ineffective rail-tie joint will amplify vertical deflection. Such factors allow uneven deflection of rail; hence, they can impart an oscillating motion to the train.

We see the rail deflect as a waveform when standing abreast a passing train. Rocking cars and track rising after each wheel set passes. Track is depressed with each passing wheel set.

Heavy loads, repetitive forces, all combine to cause the tracks to wear unevenly. Thus, track becomes semi-dysfunctional with time. Additional force is imparted to the train due to the uneven track itself adding to the wear and tear on both cars and motive stock. This is a big deal. It is a costly problem.

For example, the Union Pacific (UP) has roughly 30,000 thousand miles of miles of mainline and about 20% of the mainline is comprised of curves. Six thousand plus miles of curves need to be ground evenly and lubricated to prevent wheel slip from causing wear.

We have heard that railroads like the UP find a need to grind about $2/3^{\text{rds}}$ of all mainline track miles each year. That is not to say $2/3^{\text{rds}}$ of all rail needs grinding but many areas are old and worn and will wear faster than the average. Rail metallurgy, head hardened (HH) vs. standard strength (SS) rail, past maintenance, tonnage running over a particular track and roadbed impact maintenance needs.

Grinding the rail seems to be a worthy modeling goal. It takes about one grinder for every 7500 miles of track. Hence, if you are modeling a class 1 railroad like the UP it might be worth including a rail grinding and lubricating setup in your arsenal of equipment.

Rail Grinding in Nebraska

Photos by Harvey Radke

When following railroad tracks one should be prepared for the unexpected. Harvey was 'catching a few rays' of the setting sun and a rail grinding train came by. Note the crew looking for opportunity and getting a breath of fresh air.

As the sun went behind the horizon he could more clearly see the results of rail grinding in action. The following two photos illustrate the visual impact when many grinding wheels are

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simultaneously employed to create a new railhead contour. One rail grinding service says their machines can do the job at a dozen miles per hour with something like two to three dozen grinding wheels working on the track at the same time.



The two photos were taken of a Union Pacific rail grinding operation along Hwy 30, Nb.



Railroad Happenings: or semi local coming events..

February 12, 2012, 9:30 AM – 3:00 PM at DuPage County Fairgrounds, Great Midwest Train Show, \$7. Adults, kids free, located: 2015 Manchester Road, Wheaton, IL 60187

February 18 – 19, 2012 Mad City Model RR Show – Alliant Energy Center, Madison, WI
www.nmra-scwd.org

February 19, 2012 WISE Division Meet, Best Western Plus Midway Hotel, 1005 S. Moorland Rd, Brookfield, WI

March 3 - 4, 2012 High Wheeler Train Show, Palatine, IL info at
www.highwheelertrainshow.com

March 8 - 11, 2012, Midwest Region Convention, Annual Meeting of Members, President Abraham Lincoln Hotel, Springfield, Illinois. Discount Amtrak fares: host Illinois Valley Division. Information at: www.railsplitter2012.org

March 11, 2012 Metro Model RR Club Show & Swap Meet, Circle B Recreation
6261 Hwy 60, Cedarburg, WI info at www.metroclub.org

March 16 – 18, 2012 Chicago O Scale Meet, Westin Lombard Yorktown Center, 70 Yorktown Center, Lombard, IL, 60148 Call 1-800-937-8461 for a room at \$89 and see www.marchmeet.net Buy, Sell, Trade, Clinics, Discussion Groups, Contest, Layout Tours. Show Sat 9 AM – 5 PM and Sunday 9 AM – 2 PM.

March 18, 2012 WISE Division Meet, Best Western Plus Midway Hotel, 1005 S. Moorland Rd, Brookfield, WI

April 15, 2012 WISE Division Meet, Best Western Plus Midway Hotel, 1005 S. Moorland Rd, Brookfield, WI

April 28 – 29, 2012 Titledown Train Show, Shopko Hall, Green Bay, WI
Info at www.tsgblc.com

May 5, 2012 NMRA Winnebago Division Spring Meet, Plymouth, WI

July 29 – August 4, 2012 it's the 77th National Model Railroad Convention, Grand Rapids, MI. The host club is found at www.grmrhs.org a 100% NMRA club. For info on the convention: www.gr2012.org Seventy fantastic layouts within one hour of the 12th best hotel in North America (Amway). Let's all go!

April 2013 Convention, Midwest Region, Marriot Indianapolis, IN (tentative).

What Time Do You Have?

By Charles 'Chuck' Snyder, WUJRR

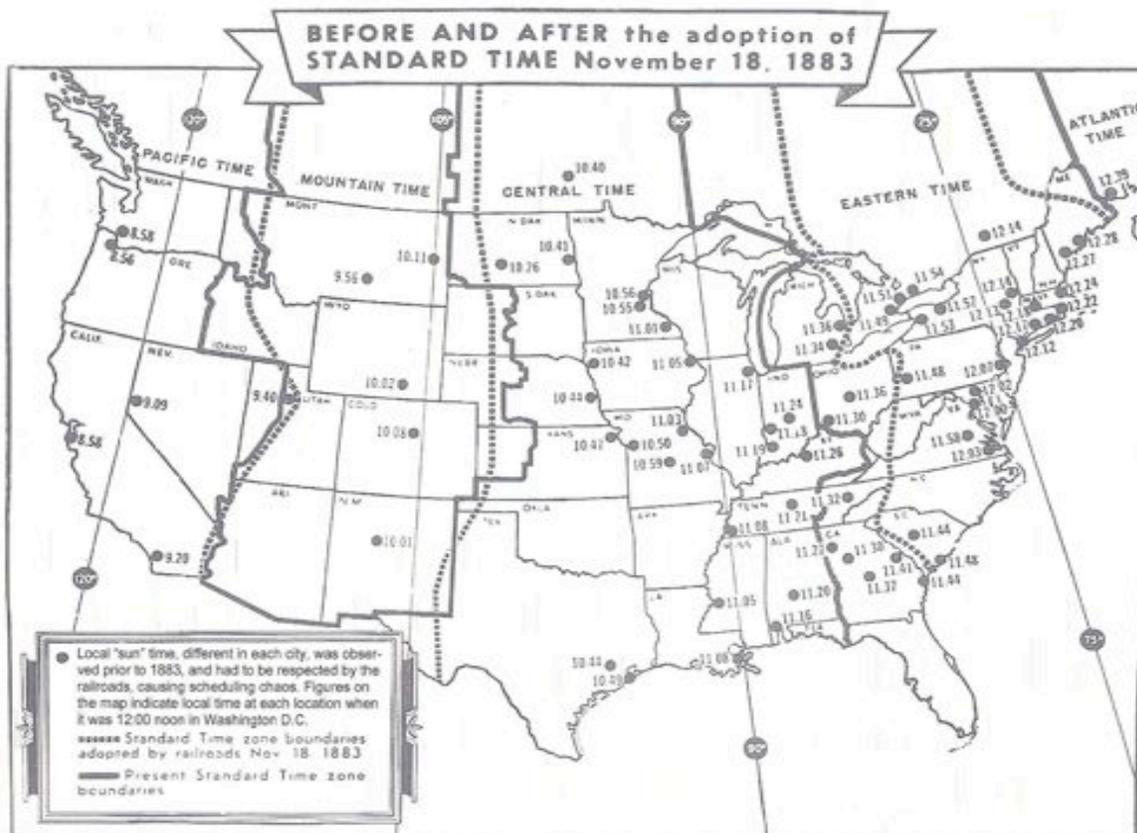
Check your watch. The time it shows was determined by the railroads of North America almost 130 years ago. The actual time where you are is probably about 15 or 20 minutes later than your watch shows.

Before 1883 every town in the U.S. and Canada used its own time: solar time. That's the time you read on a sundial - when the sun directly overhead means it's noon. That time would be shown on the church steeple clock, or in the jeweler's window in each town for the benefit of its citizens.

Back in the old days, when you were walking, or on horseback, a few minutes difference in time from town to town didn't mean a lot. But when the railroad arrived, and trains were going 50 miles an hour between towns, the time differences at each stop made it difficult, if not impossible, to establish any kind of accurate schedules. For instance, when it was 12:00 noon in Knoxville, Tennessee, it would be 11:49 AM in Nashville, and 11:36 AM in Memphis.

Recognizing the time differences as a major problem, in 1883 all the U.S. and Canadian railroads got together in Chicago and established the concept of Standard Time, creating four zones in the U.S. and Canada where the time would be uniform, the same for every town in that zone.

On November 18, 1883 the railroads and almost everyone else synchronized their clocks and watches, and the concept worked so well we're still using it today. Thanks, railroads!



Preparations for NMRA Winnebago Division Visit: Fall 2013 by M Koltz

The following are highlights taken from meetings and notes organized by Mike Koltz.

The committee for the WLD Fall 2013 Meet was held on October 20, 2011 at City Hall in Rhineland. This committee is for the combined efforts of Three Lakes and Rhineland. Bob Dumke went over his notes from 2005 and what needs to be done. Mike Koltz will try to arrange meetings with Northwoods Banquet Center and Quality Inn for future meeting spots. Jim Brown will be in touch with WLD to firm up the date of the 2013 meetings. Chairpersons were sought out for the 4 areas that they are needed. Jim Brown will take over the "Program" area. Bob Dumke and Mike Koltz will take over the "Arrangements" area. Bob Lake will take over the "Promotions". Division Liaison is still open with some hope that it can be filled by a Three Lakes person.

...meeting tomorrow October 24, 2011 morning at 10:00am at the Taj Mahal (or the "Northwood's Banquet Center") at 1540 Pueblo Drive, Rhineland. This is just behind the Honda Dealer.

Bob Lake and I reviewed (visited) the Great Northern Banquet Hall (Taj Mahal) on Monday October 24, 2011 at 10:00 AM for the October 2013 Conference. We were pleasantly pleased with the review that we had. There are two meeting halls. One is 5000 sq feet and is nicely painted and renewed. It has a bar, which could be used to sell hot dogs, brats, soda and possibly beer. The reception area appears to be big enough for reservations, etc. This is a nice area. The other meeting room is 2500 square feet and is also renewed. It is nice with a bar. There appears to be plenty of electrical plug-ins in both meeting halls. Food preparations would be handled by them and is according to the owner very reasonable. There would be no charge for the halls if we had the dinner there.

November 3rd, 2011, Mike Koltz opened meeting at 11:32 am

Meeting was turned over to Bob Dumke. He started out addressing the strength and weakness of the Northwood's Conference Center (referred to here as NCC which formerly was the Taj Mahal). He went over the need for Layouts, Private exhibits, Information Tables, and the children's area. The dance floor is raised approximately an inch or two, which could lead to people tripping. It was suggested to place tables around the rise and perhaps some plastic chain with a sign to watch ones step. Talk of which sections of the hall were good for what was also gone over. Mike Koltz is to make a formal drawing of the halls to use for allocating to what clubs, organizations, etc. This should be done in the next month or two.

The clinicians (presenters) were gone over. The Soo Club Society and the C&NW Club Society should be invited and tables should be provided to them. "Worlds Greatest Hobby" was talked over and they will probably have coloring books for the children.

Recruitment of exhibitors should be gone after. The Choo Choo Store (Three Lakes), Popes (Wausau), and Hobby Horse (Green Bay) were some of the possible attendees. Also going after the Waupaca club (?) by attending their "Strawberry Fest" in June was also brought out.

Mark and Marvin Preussler are the NMRA contacts. Mark's phone number is 920-451-9691. Marvin (who works second shift) is 920-803-9668. They should be contact for clubs within our

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district. Mike Koltz was assigned to call Marvin for this information.

We talked over what we will be serving at the Depot. It was suggested at a minimum to have cookies, juice, coffee. Also, if possible, it would be great to ask Norm if he would bring his barbecue and buns to the Depot. It was thought to be a great idea.

Layout four people should be canvassed to see how much they want to publish their tours.

NCC to sell beer, brats, hot dogs, soda, chips in the main hall. NCC staff would do this.

We probably would like to have the doors sealed between the bar and the exhibits.

We will want to have the dinner there. Half of the small hall would be necessary. 3 to 4 people would be necessary to clean up plus any that Steve (manager) would provide to set-up. Bar would be opened at around 4:30 to 5:30. Dinner from 6:00 to 7:00. 7:00 program. 7:30 main speaker. These times are tentative.

It was approved to sign a contract with the NCC.

Al Duchrow volunteered to join the committee. He will assist Bob on the promotion sub-committee. Welcome to Al and a big "thank you" to him!

Bob and Al to contact hobby shops and should contact people who sell railroad items such as the one at Green Bay.

Preregistration would start September of 2013.

Meeting called to order by Mike Koltz at 5:30 pm.

The Taj Mahal was reserved for Oct. 12, 2013. Jim Brown will get a copy of the check from Norm for the records. Mike Koltz said that he will be measuring the Taj Mahal and preparing a drawing which will be used to determine the amount of booths, organizations which could be invited to Rhineland in 2013. Mike talked about the signs needed. Al Duchrow also talked about making the signs.

Bob Lake is working on a timeline. It will be for what has to be done at what time. This is a very good idea. It will be done in the next two months. It was noted as a great idea.

Al Duchrow talked about getting the names of the "S" gaugers. Jim said that Richard Wade (sp?) should be contacted.

Jim Brown said that he was going to be talking to Tom Berg of Merrill. Mr. Berg is a retired FBI agent and the historian for the Milwaukee road. He also has a Caboose in his yard and has an "O" scale layout, which sounds very nice. Jim thinks he would be a good speaker for the conference.

Another meeting will be called late March or April. At that time more substantial progress should be talked about.