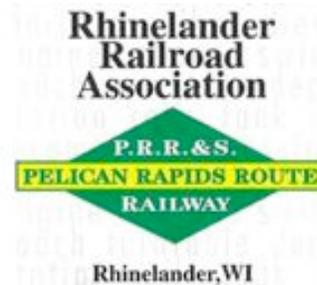
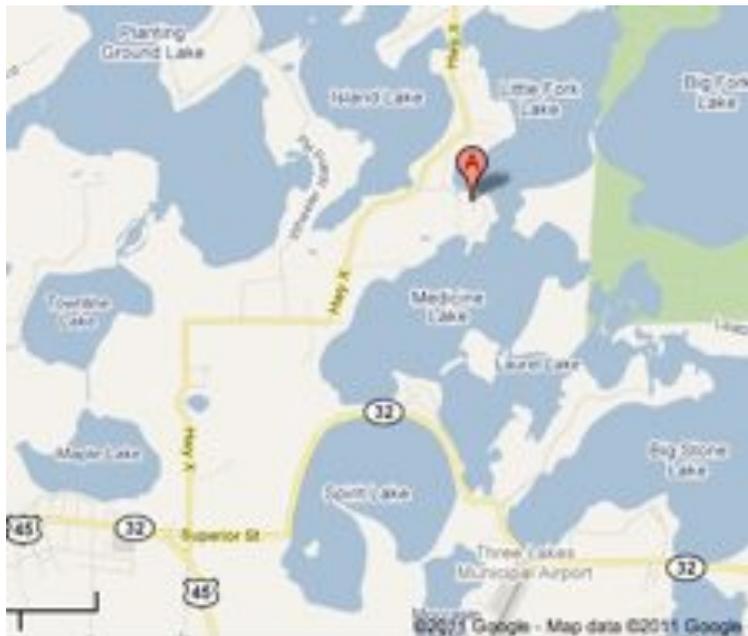


Warrant



March 2011

Note: Wiring Your Layout for Classic & DCC Offered Again



Members of Rhinelanders Railroad Association have had two such clinics and are being offered a chance to get ‘caught up’ or suffer a repeat dose of the same on Sunday, February 27th from 3-5 PM at 1162 Medicine Lake Lodge Road, Three Lakes, WI 54562. A tour of the Thomasville Region of the C&NW Railroad will precede coffee and cookies. Then “Wiring” and “Wiring your Layout” will be presented as combined topics. Members of the Three Lakes Model RR Club will be there. Thus, with good probability we’ll get to meet our next instructor, Paul Wussow a member of both clubs.

Narrow Gauge: little engine big heart

by R.G. Blocks

Dave Krembs is a wonderful model builder. He also has a great eye for history and narrow gauge rail such as our local Thunder Lake RR. This past December Dave was noted working one of his engines on the narrow gauge portion of the Pelican Rapids layout. Dave attempted to show me details of the engine; however, I’ll admit to being a slow learner. Thereafter, Dave sent a number of photos to illustrate his rebuild of a 2-6-0 narrow gauge engine. Sometime, in the not too distant future we’ll do an article on Dave’s project engine and layout.



At the February business meeting of RRA Dave described finding in ‘his things’ a La Belle wooden kit for a Denver and Rio Grande Coach in HOn3 (the kit had a price tag of \$8.95). Then he unwrapped and presented a very nice wooden ‘near replica of the Thunder Lake passenger coach’. Dave’s hands and eyes are firm. His craftsmanship is excellent and his work brings a smile that comes with appreciation for a fine effort. Below, Dave poses with his coach.



Clickity Clack: one boy’s story

by Bob Lake

For me, growing up in Elkhart Lake was like Tom Sawyer to the Mississippi river. Everything a boy could want or get into was easily at hand. Of course, water played a big part in everything. It is a tourist town after all, and the big draw was the clear lake water...and the golf course of course. During those bygone days, the Milwaukee Road passenger service stopped in Elkhart Lake.

Mr. Burkhardt the station agent could be seen most days standing on the platform with his “Y” wand holding the track clearance orders for the passing conductor to grab. During the days of steam locomotive, the Chippewa, clouds of coal smoke and steam would often envelope him and any other passengers standing near enough to be engulfed.

Then everything changed. What was once steam became diesel and the “Route of the Hiawatha” became a multi state byword. Instead of the Chuff of exhaust and Clank of the slipping drivers on the old steam loco, there was the diesel throb and dynamo whine winding up in preparation for power demand.

Those were the post World War II days and a pack of Cigarettes cost 13 cents! If you bought your smokes from a machine you put a nickel and a dime in the slot and there were usually one or two pennies slipped under the cellophane at the bottom of the pack. As street urchins, we kept a sharp eye out for anyone tossing an empty pack and forgetting to recover the pennies. These were prized treasures that we often used to buy bubble gum! But sometimes we used those pennies for more nefarious purposes.

It was well known among the young that it didn’t take much to derail a train. No one knew where that information came from; we just knew it was true. We wanted with all our hearts to see a train wreck! Never thinking of the consequences, we just wanted to see what happened. It was also well known that if you placed a penny just so on the track, the engine would jump the rails and who knew what manner of mayhem would occur.

My collection of mauled pennies grew to many dozens over the years.

Finally one day as I was watching Mr. Burkhardt finessing the key on his desk, communicating with presumably others like him, he glanced over at me and made the comment that the train was due in about twenty minutes and did I have my penny on the track yet. I had no idea that he had been watching me carefully place my pennies time after time. It took my wind away. I was speechless! Then he laughed and said, “It won’t harm the train Bobby. If it could I would have picked up a bunch of pennies over the years! You see, I can see you from my side window here and have watched you and your friends put a lot of money on the rails.”

Thoughts about going from DC to DCC:

by R.G. Blocks

Last month's warrant had the handout for the clinic “Wiring Your Layout” given on Feb 5th at the Rhinelander Library. Below, are several articles and books that you may find handy to help glean a better understanding of the topic as we go from Classic wiring to Digital (DC to DCC). Read ahead: it costs little to be informed and this is supplemental information.

In our short time together I attempt to show you how to wire a layout for AC or DC and how to insert DCS or DCC. Our home layout, from the onset is designed, to allow both old (classical) and new (digital) in an either – or arrangement. It allows great flexibility but has some inherent risk. Thus, before deciding to run in a particular mode you must insure only the right equipment is on the tracks. The smell of train smoke should not involve motors.

Meanwhile, visit <http://www.nmra.org/standards/candi/index.html> to begin your personal review of NMRA conformance and inspections. It will provide insight into where all the various items and terms you’ve been concerned about were actually defined.

Below: I've italicized the books and articles I personally found most rewarding:

Refer to at least the following articles in NMRA’s Scale Rails:

Mar 2007 pg 38, Using State of the Art Electronics to Enhance Operations by Dr Bruce Chubb (Bruce and his wife have been an inspiration to model builders for many years. RGB)

Feb 2008 pag17, A Case for Using High Frequency Filters on a DCC Layout, by Didrik A Voss, MMR (This article provides an insight into the notion that perfection just isn’t so. RGB)

Aug 2008 pg10, Model Railroad Engineer-Electrical Certificate, by L Wolohon and P Richardson, both MMR’s. (Good read describing what NMRA thinks you need to know. RGB)

Refer to at least some of the following articles in Model Railroader Magazine:

Jan 2005 pg 90, Power Districts for Digital Command Control, by Paul Chandler

July 2005 pg 88, ABCs of Consisting, by Mike Polsgrove

Oct 2005 pg92, Adding the sound of Steam, by Mike Polsgrove

May 2006 pg 88, Downloading new Sounds for a LokSound decoder, by Mike Polsgrove

Feb 2007 pg 90, Installing Decoders in HO Scale Locomotives, by Mike Polsgrove

Aug 2007 pg 80, DCC and sound for an Atlas O RS-1, by Mike Polsgrove

Jul 2009 pg 70, Adjust Motor Performance with back-electro-motive-force control, by Mike Polsgrove
Dec 2009, pg 76, *Digital Command Control and Turnouts*, by Mike Polsgrove
Jan 2010, pg 78-, *Tips to convert a layout to DCC*, by Mike Polsgrove
Mar 2010 pg 72-, Controlling locomotive lighting, by Mike Polsgrove
Apr 2010 pg 62-*Wiring a Small layout for DCC*, by Dick Christianson
May 2010 pg 71, Understanding Configuration Variables, by Mike Polsgrove
June 2010 pg 72-, *Simplified yard control panels with DCC*, by Mike Polsgrove
Aug 2010, page 66-, *Understanding Power Districts*, by Mike Polsgrove
Nov 2010, pg 68, *What is DCC*, by (Mike Polsgrove)
Dec 2010 pg 46-, How sound decoders work, by Mike Polsgrove

Very nice (readable, informative, understandable) books on DC and DCC are:

“How to Wire your model railroad”, 5th Ed, wiring made simple and clear for everyone, by Linn H Wescott, copyright, 1950, 1953, 1959 by Kalmbach Publishing Co. Milwaukee, WI USA. (This is an old one but is timeless. You’ll learn fundamentals and organization. RGB)

“Practical Guide to Digital Command Control” by Larry Puckett, copyright 2008, Carstens Publications Inc., ISBN 978-1-59073-012-6

Model Railroader Books, “The DCC Guide” – how to select and use your command control system, copyright 2007 by Don Fiehmman, pub by Kalmbach Books, ISBN 978-0-89024-676-4

Jim Brower: a builder

by R. G. Blocks

The following was written after a series of interviews with one of America’s great railroad builders. This article was given to Jim’s children after his funeral. The funeral was held at the Chapel in the Pines, across from his home on Preacher’s Point. Fitting, it was the place where most of our interviews had taken place. RGB

Jim Brower, of Preachers Point, Three Lakes, Wisconsin was at one time Director in charge of building arguably the most efficient railroad in the USA. Without a doubt his capstone work, the Powder River branch, initially despised as a waste of money by employees and shareholders of the Chicago and North Western Railroad (C&NW) would eventually be the railroad’s largest source of revenue. It brought clean coal to power much of the Midwest USA. The equivalent of five years of America’s electricity was delivered due to his rail work in its first quarter century of operation. Jim Brower was responsible.

Jim, reminiscing with the writer in the summer of 2009, remembered acquiring and building 113 miles of mainline in 13 months. This rail operation had 25 bridges but no signal system and ran on timetables and train-orders. The first train ran August 16, 1984 about two years after Jim started on the Powder River coal project. This is a story about Jim Brower a railroad builder.

Jim started his life work story with the Bureau of Reclamation in Nebraska. They dropped their water projects, ‘non-vet’ employees and Jim all about the same time. Jim then saw an ad for a construction inspector on the New York Central Railway (NYC). He took the job and worked along the then evolving Ohio Turnpike and Indiana Turnpikes, which predated the Interstate Highway Commission. Thus I’d estimate he was working rail and bridge tasks for the NYC in the period 1953-55.

Jim was next challenged to rework the NYC passenger train service at Elkhart, Indiana and straighten out the Elkhart Hump Yard, currently 2nd largest in the world. A hump yard is simply a freight yard built to

take advantage of gravity rather than switch engines when sorting freight cars. To illustrate the number of old, hidden problems, his crew uncovered a Mastodon Skeleton in an adjacent swamp while clearing rail property. This, a surprise to all: the year 1956 -57.

Jim's next assignment was to upgrade one hundred twenty miles of branch line from Elkhart to Jackson, Michigan. He raised the right of way and discovered at least one or more peat bogs that had to be dug out and filled properly to stiffen the roadbed. Sixty mile per hour railroad traffic was the desired and factual end product.

The New York Central had a planning group. Jim was assigned the task of Selkirk Yard, an electronic



hump yard control project at a time when digital control was just emerging. This was revolutionary stuff. Word was that the Southern Pacific was using these new electronic control schemes to run retarders (devices to slow cars rolling freely down off the hump), and to throw switches (the turnouts leading to yard spurs where trains would be assembled with selected freight cars rolling down off the hump). Jim was a Civil Engineer and up to the challenge.

Before finishing the Selkirk job he was reassigned to a hump control project at Columbus, Ohio's Buckeye Yard. This one worked fantastically well. Jim couldn't vouch for how Selkirk turned out.

He was a man with a future and accomplished his assignments.

Then came the great Pennsylvania Railroad merger with NYC in 1968. It formed the Penn Central. Jim was assigned the task of ghost writing for his boss, a Purdue Grad he held in moderately low esteem. The Chicago and North Western Railroad at this time wanted a system to keep track of cars and bought two computers for the task. One of those computers was a backup for the other. Jim liked the idea of redundancy and the fact C&NW wanted him for a hump yard rebuild job. The Penn Central would declare bankruptcy in 1970. Jim would thereafter depart an employer he was learning to despise.

The Powder River is a region in northeast Wyoming that extends into Montana. One hundred twenty miles east to west and 200 miles long north to south it is now the largest area of coal mining in the USA. Located just west of the Black Hills of South Dakota, and just south of Devils Tower in Wyoming, the region is named for the river that drains the area. It was a small if modest coal mining area in the early 1970's.

The Chicago and North Western Railroad (C&NW) began serious contemplation of building a new railroad from near Shawnee, Wyoming and rebuilding about 520 miles of the 'Cowboy' mainline eastward toward Midwest markets in 1969. Burlington Northern (BN) however considered the southern approach to Powder River their private domain. The Interstate Commerce Commission suggested both firms work together. It wouldn't be pretty.

It took a decade, ending on December 4, 1978 between C&NW and the Union Pacific (UP) to find a joint path into the Powder River. The plan would be to build 93 miles from Shawnee Junction, via Bill with C&NW and BN as co owners for 39 mi to the coalfields. Then six miles from Shawnee Junction to Shawnee, followed by 45 miles, Shawnee to Crandall (with the lines rehabilitated), then another 56 miles (all new) to Joyce, Nebraska. Yards would be located at Bill and South Morrill. South Morrill to Joyce, 3 miles would be on the UP. Thus, was their plan, one full of compromise?

However, the C&NW was both time and cash short. Further, the C&NW had the Wyo-Braska Landowners Association and the Burlington Northern working against them.

Jim started the project about one year before actual construction. His initial job as one of several C&NW employees working for the Western Railroad Properties, Incorporated (the property arm of C&NW) was to buy right of way for the railroad. This was tough. Only one condemnation was made when they couldn't find the owner. The state made the railroad pay top dollar for both land and displaced cattle.

Dick Cheney was the Wyoming Governor's assistant and thought both the railroad and folks along the way should succeed and co-exist. Wyoming had less than 500,000 people and they all knew each other. Jim met and married Margaret, a divorcee and bar owner from Torrington, Wyoming. She knew everyone in the state including the judges.

The Landowner's Association, run by a millionaire rancher was the main opposition to the railroad crossing fifty miles of ranch pastureland. This local leader made his money by selling a ranch to a coal mining company near Gillette. The united front thrown up against Jim was looking pretty solid when the very same rich rancher's wife quietly called Jim with a proposition. She suggested an alternate route, both shorter and straighter. The strategy involving a trade of a little land in order to run along the edge of what many a rancher held sacred. Thus, in lieu of irritating many folks by driving thru their midsection he'd skirt their concern. Jim then worked out the details and his former enemy became his best friend.

Then, in May 1983 another breakthrough occurred when the C&NW's Director of Real Estate while working with a reluctant landowner provided a Quit Claim Deed to a small portion of BN right of way to Western Railroad Properties Incorporated, as stated, the property arm, of C&NW. The BN was using rail laid on unpatented land that dated back to an act of Congress dated March 3, 1875 and effectively blocked any cost effective path C&NW had into Powder River Basin. However, when the US patented the adjoining land to private parties a new landowner effectively took title to land under BN rail. Thus, in one lucky instant C&NW now owned the property blocking their path and could bridge across the BN rail and compete without any legal roadblocks.

Jim Brower was Project Director for C&NW Powder River project in July 1983 when the Burlington Northern ceased to be an obstacle to C&NW.

Coal beds were formed when this area was subtropical and had 120 inches of rain per year. It was a land of lakes and swamps. It is presently a semiarid climate with a coal that averages 8,500 BTU / lb with a very low sulfur content at 0.3%. Appalachian coal has a higher, 12,500 BTU / lb heat content; but also a very high sulfur content (about 3.0 %). Thus, Appalachian coal, with ten times the sulfur, needs more costly scrubber facilities to produce 'clean air'. Illinois and Indiana coal has up to 6.0 % sulfur, or twenty times the sulfur of Powder River coal. Thus Powder River coal has between one-tenth and one-twentieth the capacity to make sulfuric acid, acid rain, do damage to forests, rust cars, destroy statues, ruin paint and make the eye burning smog that cities once featured. This in many ways was a clean air project.

In 1970 Powder River firms shipped 4.5 million tons of coal. When the C&NW first began hauling coal unit trains in 1984 it hauled 2.4 million tons of the 76 million tons produced in the PRB. Wyoming became the largest coal producing state in 1988. Coal Trains averaged 14,500 to 15,200 tons each in by 1993. That would be 29,000,000 to 30,400,000 pounds per train of about 120 cars. In 1996, the final year of the C&NW, it alone hauled 109 million tons. That final year of C&NW it ran 8,787 coal trains or 24 trains a day. The C&NW ceased to exist and became the Union Pacific.

Construction of the actual 107-mile railroad into the Powder River Basin by the C&NW took thirteen to fourteen months depending on your source. Jim Brower was Director of the project from onset to completion of construction.

Currently, the US uses 1 billion tons of coal per year. Forty percent of that need comes from the Powder River Basin. Sixty billion tons remains of economically advantageous coal remain in the Powder River Basin. Another perhaps 400 to 500 billion tons are not proven but probable. Thus, a 400-year supply of clean energy lay in the valley of the Powder River. Jim's legacy provides the mechanism to make it available to you and me.



Power plants using Powder River Coal that this writer has personal knowledge of in our area include: Kenosha's Pleasant Prairie Power Plant (WE Co), Presque Isle Power Plant, Marquette, MI (WE Co) and Warrick Power Plant of Newburgh, Indiana. There are many other power plants using Powder River coal; however, we didn't discuss them.

I hope his family will add to this brief 'Professional Life' portion of Jim Brower's life. He was quite an engineer, railroad man and a great builder. Jim was a man of many accomplishments.

Written by Roger G Blocks, P.E. July 24, 2010, President, Chem-Al, Inc. a Registered Engineering Company and former Chief Process Engineer of the Alcoa Warrick Aluminum Smelting and Power Plant, Newburgh, Indiana, now residing at 1162 Medicine Lake Lodge Road, Three Lakes, Wisconsin, 54562. Photos were taken in late summer 2009

Note from your Editor:

We do our best to keep you informed regarding various railroad affairs here and elsewhere. Our projects, thoughts, goals and aspirations of RRA members will find print. Color Photos and drawings in this issue were mine, Dave Krembs or with the blessings of Google.

The concepts of education, fellowship and community service are common to organizations such as ours. We have builders, dreamers, students, retired folks, and every stripe in between. We will continue on the subject of wiring a layout using AC, DC, DCC, DCS, DDC and will stop when you holler 'enough'. This newsletter contains a handout supplement for what will be a power point lecture. Complaints? Try Bob Lake at 715-420-0146 or rekkonball@charter.net Thanks. R.G. Blocks 2/10/2011
rgblocks@me.com or 715-546-2807

Programs and Stuff of Interest:

February 20, 2011-WISE Division Meet-Country Springs Hotel-Waukesha, WI www.wisedivision.org
R.G. Blocks of RRA & TLMRC speaks on "Wire and Wiring Your Layout" 3PM

February 19-20, 2011- Mad City Model RR Show- Alliant Energy Center- Madison, WI
www.nmra-scwd.org

February 27th, 2011 Three Lakes Model Railroad Club meeting. Clinic, "Wire and Wiring your layout"
By R.G. Blocks www.tlmrc.org call 715-546-2807 for directions 3PM – 5 PM

March 5-6, 2011- Traintime 2011 Model Train Show- MSOE-1025 N. Broadway
Milwaukee, WI Free Admission

March 5-6, 2011- High Wheeler Train Show- Harper College- Palatine, IL
www.highwheelertrainshow.com Or www.foxvalleydivision.org

March 13, 2011- Metro Model Railroad Club Show- Circle B Recreation Center
Hwy 60 Cedarburg, WI- www.metroclub.org

March 26, 2011 DCC Class 1 by Paul A Wussow at Rhinelander Library 10 AM
March 27, 2011 DCC Class 1 by Paul A Wussow at:

April 9-10, 2011- 10th Annual Model Train Show- Menomonie Middle School
Menomonie, WI Info Call: (715) 505-4044

April 15-17, 2011- NMRA Midwest Region Annual Convention- Madison, WI
Info at: www.nmra-scwd.org/Badgerland

President's Message

by Jim Brown

Greetings from the old man! RRA's bylaws have been approved by a majority vote at the February business meeting. Members will be receiving a copy so everyone will be informed as to what is in the revised and updated issue.

RRA's second clinic was held on Saturday, February 5th from 10am to 12 noon at the Rhinelander Public Library. It was presented by Roger Blocks and was very informative as well interesting. It showed how younger people, including his grandkids, might become involved in the aspects of model railroading along with adults. We all need to share our interests and learn new things. This is part of what RRA wishes to accomplish. After class a few attendees gathered: (l-r) Norm Braeger, Jim Brown, Bob Lake, Alan Duchrow, Roger Blocks, Tom Kolbeck and Tom Theilig. Photo by Brian Koehn.

We wish to extend our welcome to two new members of RRA: Robert Sabatke and Tom Theilig. Both are modeling in O gauge. Welcome aboard Robert and Tom! There will be a Clinic on DCC on March 26th 10AM at the Rhinelander Library.



Dues must be in by February 28th, 2011 or no more newsletters will be mailed by RRA.

Best wishes for a speedy recovery go out to Dale Woke at the Choo Choo Store in Three Lakes. He had a round with kidney stones. OUCH! Take care Dale, Get back

on track!

The next business meeting of RRA will be on Wednesday, March 2nd at 7pm at the depot. Hope to see you there!
Take care, Jim Brown, President RRA.