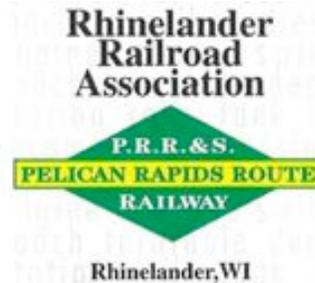


Warrant



February 2011

Ownership: pride in

by R.G. Blocks

I love my car. I own it. Sure, its nine years old. It's mine. No dents, clean oil and a nice shine. I feel that way about our home train layout. Sure, it's almost seven years old. Sure, parts of it date back to 1946 and parts of it are not finished. My grandkids also feel that way about it. They don't feel that way about my car. Maybe they will when age sixteen and they've washed it.

My grandkids work on the layout each time we gather as a family. Sam, now age nine can say he wired the power supply that powers our low voltage wiring. His brother, Dan a good three years older, soldered all the feeds that power the Thomasville Division of our control panel. Their cousins, Laura and James wired the DPDT switches on that same panel. Anna also age nine checked all the DPDT switches and helped build Herzor Mine on Mt Laura. She not only helped build that mine, but also helped build Mt Laura that the Mine sits on. Each one of them soldered block feeds for the track. In short, each child has a bit of sweat equity. They know and own that rail turf. It's theirs and mine. Shareholders: they have an owner's pride.

Members in Rhinelanders Railroad Association should all feel that same way about the Depot Railroad. Some folks feel the certain pride of belonging. They contributed and that is a key. Some once did help and will return. RRA is very active and we are all learning. We will all be able to fix and improve what we do not understand. We've begun a series of classes to fill in our knowledge gaps and thus reduce barriers hindering ownership.



It is a desirable thing to learn new skills. It is a desirable thing to build new things. To modify old things and improve operations at Pelican Rapids is one anticipated result.

At our January meeting Norm Braeger, Treasurer was collecting dues. It's \$20 bucks per year: pay Norm. It also gets you a discount at the Choo Choo shop in Three Lakes. Zack Goodrich and dad Doug are taking in a bit of fellowship.

See you on Wednesday's or on Saturday Feb 5th for a class on wiring layouts.

Wiring Your Layout: a Block by Blocks approach

by R.G. Blocks

Classical Concerns

Irrespective of your gauge, whether AC or DC, two-or-three rail, the concepts in classical wiring are essentially identical. Classical control creates isolated segments of track, each called a block so that each train is within its own circuit and thus independent from all other trains. Block control mimics a considerable segment of real 1:1 prototype rail right up to the age of wireless and computer control. In the late 1970s both model railroads and the real thing both became 'computerized' and digital began to overwhelm analog due to safety, cost and efficiency.

However, old block control schemes have a place in today's DCC world. Thus, we're going to discuss wiring a layout 'the good old fashioned way' so you can run good old-fashioned engines on the very same layout as you run Direct Digital Control DDC, Digital Command System DCS or Digital Command Control DCC.

In classical wiring, the more blocks equals more trains. Each block will have one or more toggle switches to energize the track. Sounds logical and works well as long as operators turn off the block abandoned and properly energize the block being entered. Else, a following train can overtake, or your train halts abruptly. Complex? No, actually quite simple. Costly? Not compared to DCC. But it can be too complex for neophytes and the degree of difficulty to operate lessens the fun aspects.

Thus, we cover the topic since block control is absolutely necessary if you want to:

1. Run non DCC engines without possibly hurting their motors with square waves
2. Isolate engines (classic or digital) on sidings without risk of unanticipated turn-on
3. Alternate running of classic and DDC, DCS & DCC on the same layout and tracks
4. Run both classic and DCS, DCC types at the same time and layout not same track
5. Provide multiple programming tracks for your DCS & DCC engines
6. Isolation of trains prevents one fault from shutting everything else down.

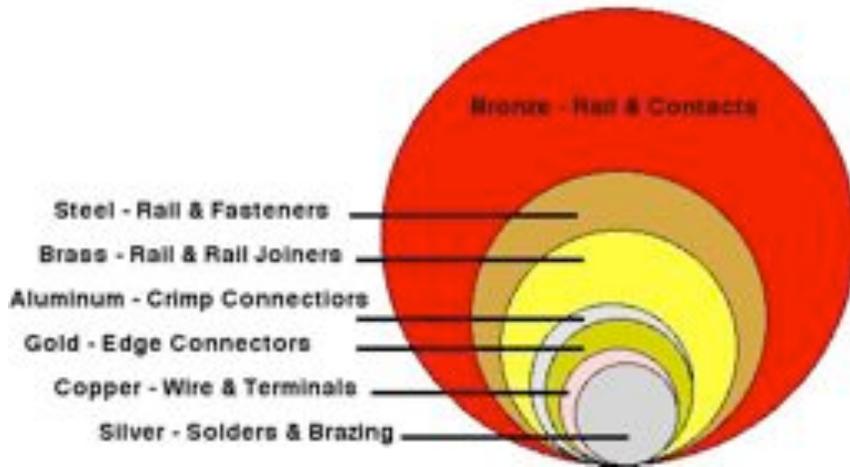
You may want some of the aforesaid benefits regardless of how you feel about your old equipment. Your cost is in time to plan, wire cost, toggle switches, terminal blocks, relays and the like. Pick and choose from the following as you design your controls.

A Few Material Thoughts:

Flex track is normally longer than its rigid snap-together counterparts. Hence, there are fewer rail junctions (joiners) when rails are long. Fewer rail junctions mean fewer mechanical joints to fail (via expansion, contraction or corrosion).

Long, straight runs of track are beautiful; however, in the model world, as in the real world, become subject to the forces imparted by ambient temperature on substructure and rail. Roughly, we realize 0.045 to 0.05 inch expansion or contraction every 100 linear inches over the 45-degree temperature swings of many of our homes in the Northwood's. Thus, if we build a straight track 200 inches or 16.6 ft long we'd have a 1/10th of an inch movement spread among the rail joiners or find a slight bow up or sideways. This implies a small gap of say 0.03 or 1/32nd of an inch every say three feet to avoid heaving.

Nominal Material Cross Section for about the same Conductivity

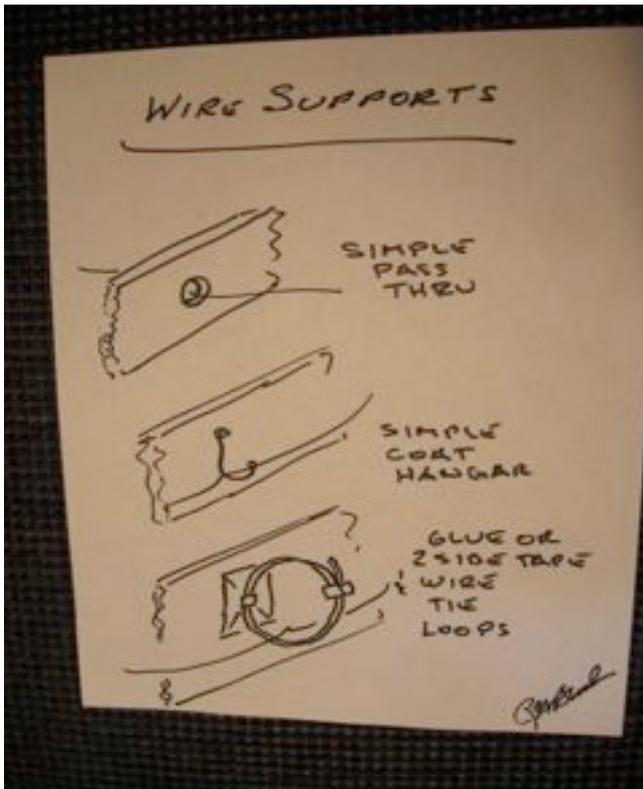


Pure, annealed copper (soft) is the basis for comparing wire conductivity and equals 100% International Annealed Copper Standard or IACS. Aluminum wire is typically 61% IACS. Thus, we need roughly a third larger surface using Aluminum wire to match that of copper. Also, some rail stock is made of Nickel

Aluminum Bronze a mere 7% IACS. Our three-rail track has roughly 10% the conductivity of copper. That's one reason Lionel's best "O" gauge track was so very beefy. It simply is a poor conductor. We provided one feeder per about 10 feet of track and still get some speed variation. The above drawing, while relative, gives you the idea.

Regardless of scale, rail that is code 100 from the same manufacturer will have better conductivity than code 83 and 83 will be a mite better than any smaller code. Assume all rails are of the same alloy composition; then, lower rail code equals lower conductivity.

Concerns of First Time Builders



Wire supports favored are simple pass thru, bent coat hangers, or wire ties screwed to the layout supports. Staples various nail type wire supports are to be avoided due to shock vibration on scenery and structures and potential for damage to wire coating insulation.

Double Pole, double throw (DPDT) toggle switches are available for \$1 to \$3 dollars at electronic and science supply stores. DPDT with center off are really the best of the lot and the center off feature is desirable for yard, siding, turntable, off stage setup, engine houses and programming tracks.

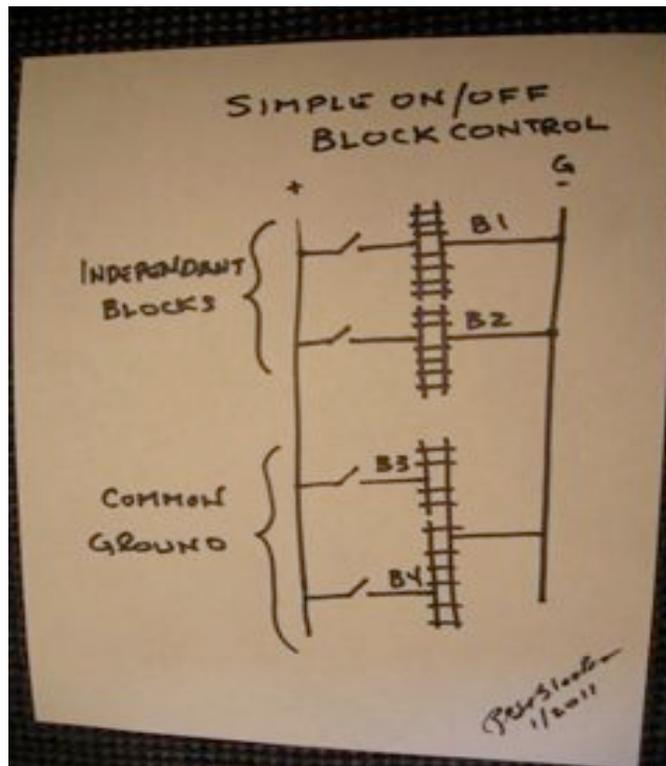
This writer suggests that while common ground systems save a bit of money, that we should instead plan and install independent block wiring. Independent blocks have both rails separated from other blocks. An insulated spacer or air gap of

about 0.03 inches can set the gap between rails. The extra wire of independent blocks

construction is repaid in more consistent operations, and less chance of a short causing total system shutdown.

A PowerPoint program has been developed by this writer to provide the many visuals we need to adequately express this topic. This brief paper is a reasonable reminder of several salient points. It's sort of a handout for a layout.

Written by RG Blocks for NMRA clinics at both Rhinelander Railroad Association (RRA), Saturday, Feb 5th and Three Lakes Model Railroad Club (TLMRC) on Sunday, January 27th, 2011 at 3PM. It is the second program in a series of programs dealing with both classic and digital layout controls.



Columbus Lake: diving into history

by R.G. Blocks

The Ontonagon Trail, cleared by Indians, then improved by white woodsmen beginning in about 1860 is now roughly Route 17. It passed Sugar Camp, Indian Lake and later paralleled by the Narrow Gauge from Rhinelander. Kevin Marks and the writer, on Oct 10, 2010 spent a few mid-day hours in the area of Sugar Camp, in pursuit of evidence of what we call Thunder Lake RR Co. We'll share our observation and encourage you to explore our wooded paradise.

Around 1890, Baird & Robbins logged in and around Sugar Camp Lake. The lake was named for a Maple grove in the vicinity. Logging was typically done in the winter. Drays, pulled by Oxen were used to haul logs from the Sugar Camp area to Mud Lake a distance of two or three miles south. Mud Lake is about 1.5 miles west of today's Rt 17. From Mud Lake, the logs were floated down Pine Creek to Pine Lake and then onto Boom Lake where about eight various sawmills operated.

The only logs that could be moved by floatation were pines, spruce, hemlock or balsam. Hardwoods, too heavy and too dense would sink. In the spring of 1893, a very dry spring, the water in Pine Creek was insufficient to float any type of log.

Quickly, a 36-inch railroad was constructed from the north shore of Boom Lake northeast to parallel the east-shore of Pine Lake. Pine Lake is about 5 miles from Boom Lake and one mile west of Rt 17 today. In 1894 Baird of Baird and Robbins backed out of the partnership and was replaced by W.H. Brown. Then, in 1894 the railroad was extended seven miles. It began by running to east, then north along the east-shore of Jennie Weber Lake. So that you have your bearings, Route 17 now runs along the west shore of Jennie Weber.

Then the narrow gauge railroad progressed north and along the east-shore of Lost Lake. I'm unsure whether you can see Lost Lake from Rt. 17. It is east of the highway. Thereafter, it ran north and paralleled the south shore of Sugar Camp Lake. Near the shore, a sawmill was built.

A village with a post office and rail station was built nearby and named Robbins. Today, the town of Robbins is simply a tree lined neighborhood street adjacent to Sugar Camp Lake.

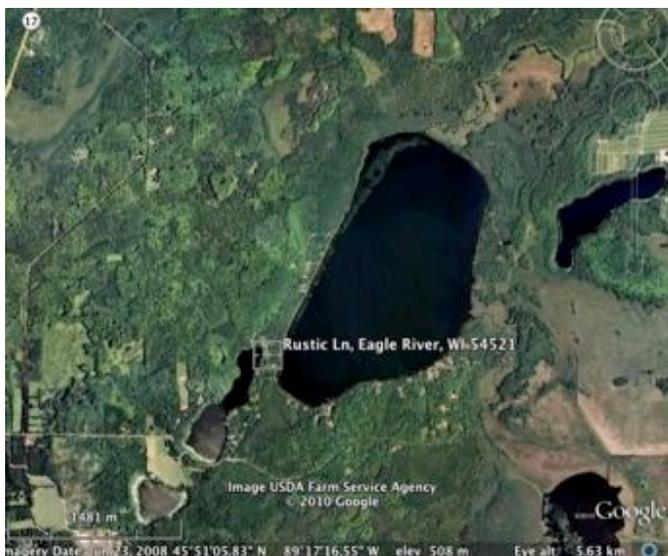


Columbus Lake Road is shown above simply as a reference. The Google Earth photo shows the road thru trees along the west-shoreline.

A spur was built up to Camp 5, south of Indian Lake. From there a line was run due east to a point on the very northernmost tip of Thunder Lake. There, they established Camp 2. That camp on the point was only two miles from the C&NW rail station at the little town of Three Lakes. Today, it is a journey across marsh to get to the original Camp 2 site.

Another spur ran from Camp 5 north to run along the west-shore of Columbus Lake. We followed the clues.

The railroad ran mostly along or on Rustic Road along the lake. Rustic Lane at



Below, the rail line once ran behind the trees on the left and crossed a field on the way to and from Camp 2. We enjoyed October color, the hunt for clues, ideas for our model railroading and fellowship.



On February 18, 1901, one hundred ten years ago, the railroad changed its name from The Brown & Robbins Railroad Company to Robbins Railroad Company and the lumber company renamed Robbins Lumber Co. By then, four of the eight mills had shut down in Rhinelander. However, in 1905 Robbins Lumber Co produced 30 million board feet of lumber.

Also, considerable pulpwood from the Sugar Camp area was delivered to the Rhinelander Paper Co beginning in 1903. That Rhinelander paper plant was operating in 1956 as part of St Regis Paper Co. (with whom a security exchange had been made). Then, in 1998 a merger with Wausau-Mosinee Paper Corporation took place to continue the factory's life. The source of pulpwood had migrated elsewhere, the little narrow gauge railroad was gone; but, not the challenge of providing for today and the future. The rail spur or siding we followed had

contributed to the history of our area. We learned and perhaps will simply remember the beauty, the color.

Following the Thunder Lake Railroad has been a passion of ours for the past two years. Written by Roger G Blocks, January 25, 2011 from notes taken that day last October. We are thankful for several documented histories: especially Thunder Lake Narrow Gauge by Harvey Huston.

Programs and Stuff of Interest:

January 29, 2011- Great Tri-State Rail Sale- LaCrosse Center- 2nd & Pearl Streets
LaCrosse, WI Info at: www.4000foundation.com

February 5th, 2011 Rhinelander Railroad Club. Clinic "Wiring your Layout" by R. G. Blocks
10 AM at the Rhinelander Library, 106 N Stevens 715-420-0146 rekkonball@charter.net

February 20, 2011-WISE Division Meet-Country Springs Hotel-Waukesha, WI www.wisedivision.org
R.G. Blocks speaks on "Wire" 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, "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

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

Note from your Editor:

We do our best to keep you informed regarding various railroad affairs here and elsewhere. We attempt to inform regarding our membership, their projects, their thoughts, our group projects, and the goals and aspirations of RRA. Color Photos and drawings in this issue were mine or with the blessings of Google Earth.

I've alluded to the several constituencies of RRA. You might fall into one or more of them. The concept of education and fellowship are common to organizations such as ours. We have builders, dreamers, electrical skills, mechanical skills, students, retired folks, and every stripe in between. This month we have continued on the subject of wiring a layout. This newsletter is again the handout for what will be a power point lecture: 10 AM, Saturday, February 5th at the Rhinelander Library, 106 N Stevens. We'll have plenty of room. Bring a friend. Interrupt when you've a question. The idea is to learn together.

We're now planning to have one educational program each month. How do you feel about that? Speak to the program chair: your V.P. Bob Lake at 715-420-0146 or rekkonball@charter.net
Thanks. *R.G. Blocks* 1/26/2011 rgblocks@me.com or 715-546-2807

President's Message

by Jim Brown

Greetings from the old man! The RRA Constitution and By Laws have been drafted and sent out to all members. We suggest you read the proposed Constitution and By Laws and be prepared to vote on them at the next regular meeting, Wednesday, February 2nd, 2011. The By Laws will take effect immediately upon approval of those attending the meeting.

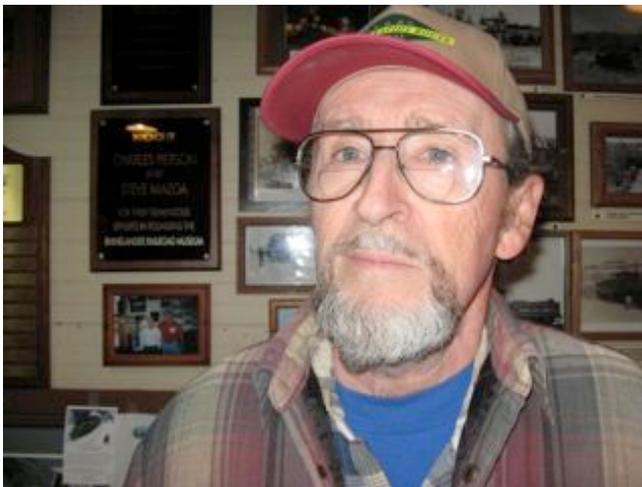
Changes to these proposed By Laws can be offered at the meeting and voted on subsequent to approval of the main body as drafted and in your hands. Those who do not have email will receive a copy, as drafted via mail.

We looked at three different locations to hold monthly educational meetings (the NMRA calls them clinics) here in Rhinelander. We thank Bob Lake, Tom Kolbeck and Alan Duchrow for making introductions and exploring each location.

Each location has positive attributes and the subject of discussion at our Wednesday maintenance meeting January 26. Executive Board members present (Blocks, Marquardt, Duchrow, Lake and the writer) decided that while each location had support, the better location for our purposes, would be the Rhinelander District Library, 106 N Stevens St., Rhinelander, WI.

Saturday Feb 5th from 10 AM to noon was agreed to be the best possible day for both senior and junior members and great for late sleepers. Roger G Blocks will present a program on wiring your layout for classical block control while insuring that it will also work for DCC, DDC and DCS. He'll cover both AC (three rail) and DC (two rail) during the clinic.

We have had our first clinic on wiring given by Roger Blocks at our business meeting in January. There were twelve members in attendance and one guest. It was a bit tight downstairs with that many bodies in close proximity. Thus, space and the severe cold prompted the move to the library for clinics. The plan is to do educational clinics monthly.



We have not set a date for the March clinic; however, it appears Paul Wussow, a member of RRA who lives at this time of year in Glen Ellyn, Illinois and has a wealth of DCC knowledge will be our next clinician. He will cover the basics of DCC. There will be subsequent classes on the DCC topic by Paul and we hope a gentleman named Keith McMillian. Both are considered experienced in the subject.

The next monthly business meeting will be on Wednesday March 2nd, at 7 PM in the depot. We hope to see you there! I'll be the guy that looks a bit like the above picture.

Take care.

Jim Brown, President, RRA