

HUB Headlight

HUB Division Inc., Northeastern Region, National Model Railroad Association - Volume 28 Number 5, May - June 2012
<http://www.hubdiv.org>

RAILFUN TIMETABLE

Hands-on Clinic:

Weathering

By RAILFUN Staff

8 PM Friday, May 11, 2012

DATE CHANGED

Cambridge School of Weston

Hands-on Clinic:

A Fast and Inexpensive Way to Build Tress

By Gerald Abegg

8 PM Friday, June 15, 2012

Cambridge School of Weston

Our Season Opener and Welcome

By HUB Division Members

8 PM Friday, September 21, 2012

Cambridge School of Weston

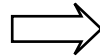
The detail found in today's plastic structures cannot be fully appreciated unless you take some simple steps to highlight these details via weathering. If you are an expert or a novice at weathering, you will be sure to learn some useful tips and tricks from RAILFUN Staff who will share their knowledge of products and techniques that can be used to weather plastic and add realism. You will be able to apply this knowledge by weathering the plastic DPM structure that you built at the April RAILFUN Event. As an added bonus, **Rudy Slovacek** will show you how you can take a plain plastic telephone pole and make it look like a weathered wooden pole. We will have some plastic telephone poles so that everyone can practice Rudy's technique and take home their work. Please bring a selection of small paint brushes, a rag, razor saw, sand paper, and a hobby knife along with any weathering supplies that you may have. We will provide the rest of the materials and supplies.

This hands-on clinic is a follow-up to a very popular clinic given by Gerald Abegg at this year's Spring TRAINing Show on making inexpensive trees. Gerald discovered this simple yet effective technique for making trees at an NMRA Convention in Detroit. Gerald will show you this tree-making technique and provide some tips and tricks. Afterwards, you will be able practice making your own trees using #18 steel wire, sisal rope, spray paint and ground foam. All of the required materials and supplies will be provided. All you need to bring is your imagination, and a cordless drill with a fully charged battery, if you have one.

The map to Cambridge School of Weston appears on page 11.

New member Matt Nadeau and his son Chris run a train on the HUB layout at the Greenberg Show in March.

Photograph by John Lutz.



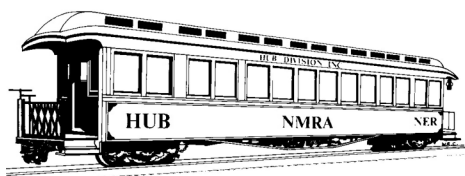
To kick off a new year of RAILFUN events, and to welcome everyone back from our summer break, we are going to hold an information-sharing night where you will have an opportunity to meet and learn about the interests of others. We will take a departure from our normal meeting format and instead offer members the chance to give mini-presentations about their layouts, "What I Did Over the Summer" on my layout, or to share hints and tricks.

So, bring your little presentation or demonstration and we will give you 15 minutes to do your thing. If you bring your digital photos or a PowerPoint presentation, we will supply the laptop and projector. Please contact Ray Barry, Railfun.coordinator@hubdiv.org, first so he can schedule the number of presentations to fill our evening.

HUB Summer Picnic at Waushakum

In a break from tradition, and to provide some variety to our members, the Summer Picnic will be held this year at Waushakum Live Steamers in Holliston, MA, on Sunday July 15 (rain or shine). Check the web site and our Facebook page for further details.





THE PRESIDENT'S CAR

by Manny Escobar

We survived another winter and the start of spring season has never been so good with temperatures above normal. Lots of us have stepped out, worked in the yard, especially on "G" scale, and others started winding down. As we come to the end of our model railroad year and start planning for our fall season, I find myself thinking how grateful we are in the HUB Division for the knowledge, experience and expertise that our members contribute. I have learned so much about this model railroad hobby, the real stuff and the people involved in railroading, and through our clinics, RAILFUN presentations and project committees, not to mention the skillfulness of our members that have earned their MMR through the NMRA Achievement Program (AP).

During the past few Railfun events, our coordinator **Ray Barry** planned and facilitated a hands on clinic on "Laying Track and Ballasting". I was so impressed by how our members helped the new and old modelers alike. There are different ways and new ideas to share. At the next upcoming RAILFUN, Ray is providing a hands-on clinic again on "Structures and Weathering." For this clinic we will charge a small fee for the materials. Please contact Ray at railfun.coordinator@hubdiv.org to make your reservation. The knowledge and experience is fantastic from this group of modelers.

Our HUB "**Spring TRAINing 2012**" was a great success with about 600 attendees. I would like to thank all the clinicians and our feature clinician, **John Pryke** for a great job. I heard some attendees say they were very impressed how well the clinics went,

especially those first-time clinicians. I would also like to thank all the volunteers that helped out. It would not have run as smoothly if it was not for your support. My hat is off to my fellow show Committee members; **Pete Watson, Bill Barry, Bill Roach**, and **David "Shack" Haralambou** for a fantastic job.

The Annual Meeting featured elections for officers and the annual report on the HUB Division's past year by Vice-President **Bill Roach**, and the Treasurer's PowerPoint report by **Gerry Covino**. Five well-qualified candidates vied for three positions on the Board of Directors. **Bill Roach, Peter Higgins**, and **James VanBokkelen** were elected to three-year terms. In a Board of Directors meeting that followed the Annual Meeting, I was re-elected President. The Annual Banquet featured excellent dining and speaker **Matthew Herman** of ESU Loksound US, who presented an interesting PowerPoint presentation on the "Past, Present and Future" of sound decoders. Keep an eye and ear on the new development and products on this facet of the hobby, especially from ESU.

Also a Big Thanks...to **Leonard Pinaud**, and **Ron Noret** for their supportive past years serving as Directors on the board. Their contributions and ideas enlightened the board.

Our **Spring Charter Trip "East Wind"** on May 19 and 20 with the Maine Eastern Railroad, has been well received. As of this article we have 91 attendees, well towards our goal of 100. If you still want to attend please contact me at President@hubdiv.org for space availability. This will feature a 120-mile round trip from Rockland to Brunswick, using one of Eastern Maine Railroad's ex-New Heaven FL-9's, with four run-by's, and a visitation to Rockland roundhouse and shop facility.

I am happy to announce an opportunity for those of you who have never participated in a railroad operations session or would like the chance to do it

again. Our activities coordinator, **John Lutz**, has organized three different days on which you can try this very exciting program for running trains. The "Operating Session for Beginners" first session was on March 31, 2012 at host **Carl Senftleben's** Atlantic Shoals HO layout in Saugus, MA. John had at least nine members operate and try their hands at one of the most entertaining aspects of model railroading that is train operations, better known as op sessions. If you missed the scheduled op sessions, please contact John at (978) 468-6648 or email jrlcorp@verizon.net for further details and reservations.

On that note, if any of you have a layout at home and would like to get ideas on what to do to make your layout run operations like the "Op Sessions" or make your layout a host for a future "Op Session," please contact **John Lutz** and he will be happy to direct you to one of our knowledgeable and experienced members who can help you.

If you want to enjoy a weekend of Large-Scale fun, the second annual **New England Large Scale 2012**, is on June 1-3, 2012. The Rusty Rails & Rotten Ties Railroad Society, the New Hampshire Garden Railroad Society, the HUB Division of the NMRA and the Seacoast Division of the NMRA cordially invite you to a fun filled weekend of Large Scale operation occurring from June 1st to June 3rd 2012. In case of severe weather the event will be moved one week to June 8-10, 2012. Please contact www.tttrains.com/nels2012, email: nels2012@tttrains.com or telephone (978) 256-3062.

Remember that our **Annual HUB Summer Picnic** will be July 15, 2012 (Sun) (rain or shine) at The Waushakum Live Steamers located at the end of Arthur St. in Holliston, Massachusetts. Hot dogs and hamburgers will be available for a small charge. More to come via email.

See you in September. Remember, model railroading is fun! **Keep on Chugging!**



Shanty Talk

by Rudy Slovacek

Well, spring is here and I must say that this past winter has been kind to the railroad. Personally it gave me some time to install and tweak some decoders as well as to prepare a completely new clinic on ALCO diesel locomotives for the Spring show. It begins where **Sam Berliner's** "Boxcab" presentation ends with the collaboration between Ingersoll-Rand, Alco and GE. ALCO dropped the Ingersoll-Rand connection and began to work with Macintosh and Seymour to develop two sizes of diesel engines for locomotive use. The first "End Cab" locomotive was powered by a six-cylinder 300 hp diesel prime mover. Shortly thereafter they released a 600-horsepower version in a high hood to accommodate the larger six-cylinder 531 series engine. This evolved into the successful 539 series before WWII, was followed by a less than perfect 244 series rushed into production after the war and later capped by a real solid workhorse in the 251 series. Production of the 251 series engines continues to this day by Fairbanks Morse, which

acquired the rights to produce it for marine, stationary power generators and for repowering locomotives after ALCO departed from the locomotive business.

As a kid, I used to walk down to the nearby tracks and watch black NYC units in multiples of four, and usually five or six units, belch black smoke as the exhaust powered turbochargers lagged behind the engine rpms when they accelerated up the 0.2% grade north out of Schenectady's Mohawk Yard. They were on their way from Rotterdam Junction to East Deerfield yard. The ground shook and this kid was truly impressed. Over the course of my rail-fanning experiences, I've been fortunate to see and hear a number of different versions of those ALCO locomotives in such places as the Delaware and Ulster in Arkville, NY; the Battenkill in Salem, NY; up on the North Creek in the Adirondacks; the Green Mountain in VT; on the Hobo Railroad in NH; and more recently on the Livonia, Avon and Lakeville in central NY. As modelers we're now fortunate to have both Soundtraxx and Lok Sound provide some accurate DCC sound modules for our modeled versions of these ALCO locomotives.

In Springfield I met an individual who worked in the Colonie shops for the D&H and later during our Spring show I met with the Chief Mechanical Officer of Guilford who also remembered the distinctive ALCO sounds. It was nice to have some independent confirmation of my own sound pairings for the various locomotives with which I'd become familiar. I believe it also helped to make the presentation more accurate and

interesting for attendees. If I'm ever at a loss for words in this column, perhaps I'll try to cover some portions of my presentation—without the sound of course. Even better, another opportunity may arise to give the presentation and more of you will be able to attend.

Short of that I urge you all to support the appropriate Historical Society for your favorite road. They can be a great source of modeling information as well as providing insight in the how and why of the railroad in a previous era. I belong to both the Bridge Line Historical Society that focuses on the D&H, and the AHTS (Alco Historical & Technical Society) that is all about ALCO. For information regarding connecting roads such as the B&M, NYC and Rutland (RUT), I have several reference books I've accumulated over the years. I did not own a camera until graduate school when many Northeast railroads were either being abandoned or in serious decline. What few pictures I did get were in black and white of deteriorating line-side structures because my wife and I could process the film and prints in the dark room inexpensively ourselves. Trucks had swiped the freight by then and there just weren't as many trains moving. Thus I've had to rely on the work of others to capture the details of the era I'm interested in.

Before the digital age I did manage to take some color slides of operations in Saratoga Yard, Mohawk Yard and on various tourist and short lines in the Northeast. But those stories and musing will have to wait for another day. It's spring and a lot of chores await me.

HUB Division Calendar of Events (Subject to Change)

2012

May 11 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
May 19-20 (Sat-Sun)	The HUB-sponsored East Wind Maine Railfan Charter, Rockland, ME
Jun 1-3 (Fri-Sun)	2nd Annual New England Large Scale 2012, Chelmsford, MA
Jun 15 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
July 15 (Sun)	HUB Summer Picnic, Time TBA, Waushakum Live Steamers, Holliston, MA
September 6-9 (Thurs-Sun)	NER Convention "Empire Junction 2012", Syracuse, NY
September 15 (Sat)	HUB Modular Railroad Display, Norwood Day Festival, Norwood, MA
September 21 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA

Top-Down Layout Planning

by Rich Pitter

Our former Editor updates us on the construction of his HO layout.

Dan Fretz recently discussed a useful way to plan a home layout: determine what features you want on your layout then search for a railroad that has those features. In doing so, you'll learn about other features of that railroad that you'll also want to incorporate in your layout.

Years ago, I found the prototype with the features I wanted. I lived in Reno and studied the Virginia & Truckee Railroad. I liked its features from the 1875 era. Rather than model the V&T, I decided to model a fictitious branchline that connected with the V&T. In doing so, the V&T on my layout serves for car interchanges and staging, while the branchline incorporates some

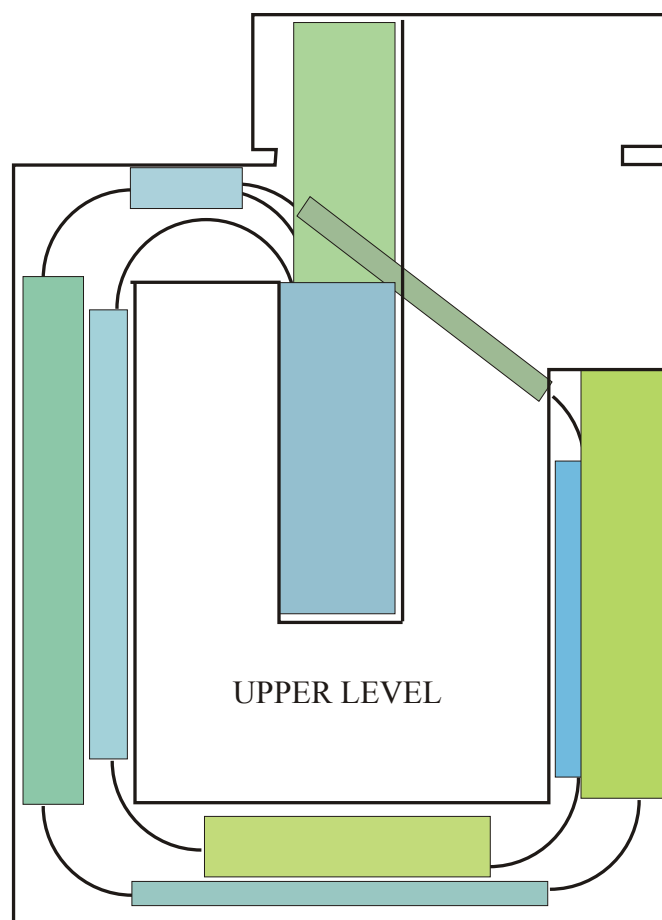
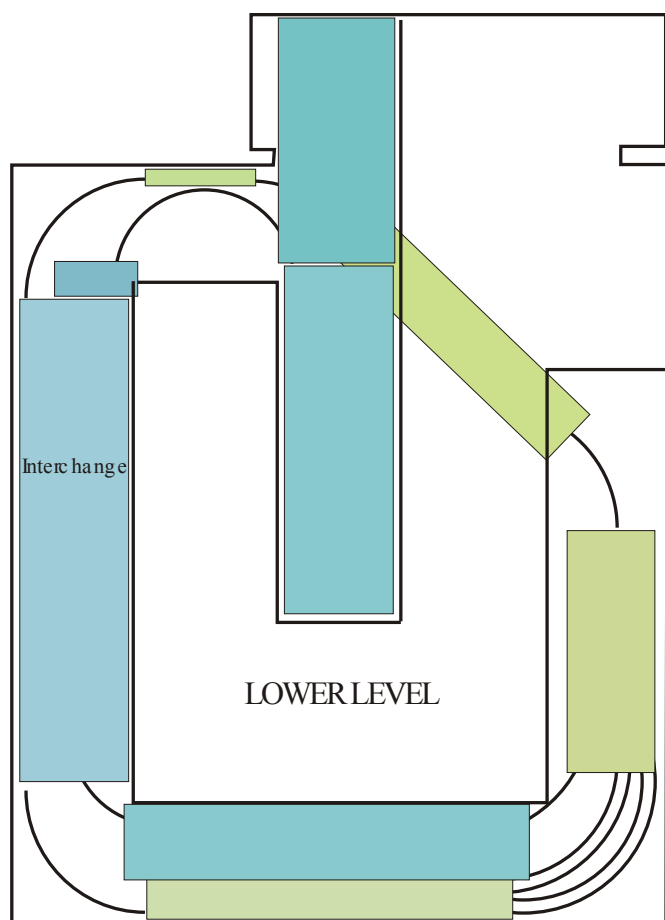
features of the real V&T. That is, I can model the Ophir Hoisting Works of Virginia City on the branchline, compressing it to fit available space. The branchline can also include things the V&T did not have. My purpose is to recreate the spirit and atmosphere of that time and place; it was an adventure for the railroaders as well as all who lived and worked there.

Most of the layouts I designed through the years were table layouts. I noticed that I had to pay attention to placement of curves and turnouts. The process of laying curves and placing turnouts was iterative—I tried something and, if something didn't fit, I would redraw a curve or try another design. There is no straightforward method for fitting, say, a folded dogbone layout onto a 4x8 table. My design exercises served a purpose. I realized that an HO scale layout in 4x8 wouldn't contain enough features to satisfy me, so I've been an armchair modeler until now.

Last spring, with a spare bedroom available as my train room, I considered building an around-the-wall layout. Available space is never ample enough for everything I want, but I trimmed things down so space met my needs. I decided to build on two levels, with 24" wide shelves and 30" wide aisles. I wanted a helix to connect the two levels but reality intervened; a helix won't fit. My tentative solution is to build an elevator to move entire 36-inch trains about 22 inches vertically. In the meantime I'll have two independent layouts.

These past few months, I've spent considerable time planning trackwork. Layout design and construction are intertwined, so I am designing a track plan that will guide me during construction. In the process, I simplified the design into steps.

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Top-Down Layout Planning

Continued

I began layout design by defining the space I could use. I specified 2-foot shelves around the walls of the room, except at the doorway and the closet. Next, I specified 30" wide aisles, so I had room for a 24" wide, 7' 9" long peninsula shelf down the middle of the room, leaving a 36" aisle at the end of the peninsula. I will extend the peninsula into the closet, providing additional space for a few industries. I have space in the closet for shelves 31" long and 24" deep.

Scoping out the layout dimensions is the first step—the top level of planning. I can build the benchwork using this information. If I make a mistake, the remedy is simply a matter of partial benchwork revision (or demolition in the worst case scenario).

The second step of my planning is to lay out the corner curves. I did this with XTrackCAD, a free download. It doesn't have the bells and whistles of other layout CAD programs, but it lets me lay out 18- and 24-inch radius circles at the corners and in other areas where large-angle curves are needed on the mainline.

Many shelf modelers like to use the "once through the scenery" approach. I want two lines on each shelf. On the lower shelf, the outer line (closest to the wall) is the V&T staging connection; the inner line is the valley portion of the branchline railroad. The mountain portion of the branchline fills the upper shelf. The inner line will run most of the way around the room, rising from its entrance (the elevator) to a stub yard on the peninsula, then backtracking, continuing to rise as the outer line, around the room to another stub yard near the doorway. There will be removable connecting bridges across the aisle near the door to permit continuous running.

The trick in this step is to position the corner curves so that the inner and outer lines are adequately separated on the shelf. I then connect the corner curves with zones of railroad activity along the walls. A zone is often initially represented by a rectangle a few inches wide by the necessary length. The rectangles support broad curves in the trackage. I'll place industrial spurs on most rectangles and passing sidings on some.

My third step of planning is to precisely locate the staging tracks—a four-track double-ended yard with capacity to hold 6-foot long trains on each track. This is critical because the yard goes around a corner. The staging tracks are laid out using the Draw Circle feature of XTrackCAD. I will transfer the track locations to plywood using a tape measure and trammel. In order to lay out a yard that goes around a corner, one needs to locate curves precisely and use accurate turnout templates to avoid kinks in the trackage. The attached diagrams show my layout design up to this point.

The third step also involves laying out three other major towns. One of these is the junction of the branchline and the V&T. It will have two interchange tracks for northbound and southbound V&T freight, and two branchline yard tracks. The other two major towns on the upper level will have yards with runaround tracks and turntables. This level of planning also finalizes trackage along the walls between the corner curves. With this level of planning complete, I can lay out and cut the plywood underlayment pieces.

The next planning step will consider the terrain on both levels, but especially for the upper mountain level where, following a theatrical approach, the back (outside) track will be higher than the front track. I also want bridges over streams. With this level of planning complete, I'll build stream drop-downs into the plywood rectangles before I mount the plywood on the layout. More about this will be presented in a later article.

First Operating Session for Beginners

by John Lutz

The HUB Division's first Operating Session for Beginners was held Saturday April 1st at Carl Senftleben's Atlantic Shoals Railroad. Nine HUB Division rookie operators attended and all had a great time.

Participants were HUB members **Jack Corcoran, Rick Corkey, John Doehring, Ben Fretz** and dad **Dan Fretz, John Geisel, Peter Higgins, Rick Murray** and **Ed Sisk**. Even John Lutz who put the Operating Session for Beginners program together got a chance to participate. Carl had two pilots and a dispatcher helping the rookies. They were HUB member Don Howd and Peter Laier. Jere Jozak was the Dispatcher for the afternoon.

- Rick Corkey handled the switching in the city of Port Evangeline. Port Evangeline has a railroad running down the middle of a street as Atlantic Avenue in Boston had.
- Jack Corcoran was a road engineer running two long freights, one headed by two Mallets and the other headed by a pair of Trainmasters.
- John Lutz handled three passenger trains which included a doodlebug, a slick B&M E-8 with three cars in tow and a long Class One with an refrigerated express car full of fresh lobster that had to be cut out along the way and replaced with another reefer to go to the end of the run.
- Rick Murray handled switching the big Church Point Yard. He made up trains taking freight to Harmony Mills (CPHM) and Weymouth North (CPWN) as well as handling other duties.
- John Geisel's job was to run the Tweedside local freight, symbol FYTS, from Fundy Yard to Tweedside. Then he handled the switching at Tweedside. When John got there, all you could see of him was his head sticking up through the layout.

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An update from the HUB Division Signaling Committee - Part 2

by Dick Johannes, Chairman, HUB Division Signaling Committee

In Part 1, we introduced JMRI and CATS. Now we look at how we tested our ideas and how we have chosen the final hardware to implement our signaling system.

To do the testing we constructed three signaled modules shown in Figure 2. Each of these three test modules uses different signal types. We also created two "passive" modules to represent unaltered modules that lack a signal card and lack signals. Figure 2 shows the track configurations and signal placements on the three "active" modules that contain signal cards. Each module had a different type of card to further test the function on JMRI. The OS module is the one that was demonstrated at the RAILFUN meeting last June. It uses triangular G-type signals. The Crossover module has four double-headed searchlight signals and the Straight module uses two vertical D-type signals on the outside track only. All the varied signal types are wired identically using common anode wiring and four-wire (red, green, yellow and ground) telephone handset modular cable and plugs. PRR position light signals were also tested and they, too, work with this approach. Once the three modules were completed, we then created three separate module definition files in CATS, one for each module. The sequence of the three "active" modules can be permuted into six different configurations. [See Figure 3]. If you add the two passive modules there are 120 possible configurations. We didn't test them all but it is fair to say all that was needed was to separate the modules, disconnect the power poles, disconnect the RJ module to module connection, reconnect the modules in a different order, re-plug in the power poles, re-plug in the RJ connections, load and import the individual module definition files into CATS in their new order, power up and run. Everything worked as we expected. When the track configuration changed, the signals that

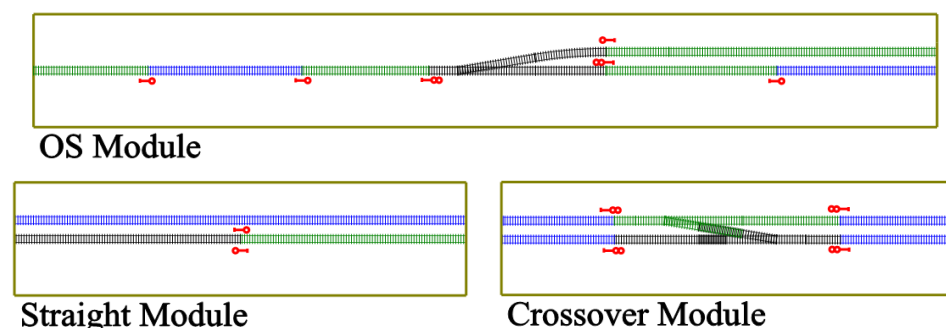


Figure 2. The three test modules

had moved now showed aspects appropriate to their new locations. Occupancy detection also appeared on the panel as expected with the new track plan. The act of simply loading the files in a new order took care of all of the underlying details of the track configuration and signal aspects, with no programming required.

We also used the information Bill Powers provided to test whether single rail gapping and the wiring approach he described would allow unaltered modules without signals (we are calling these passive modules) to be inserted at arbitrary locations. The important assumption being that the inner main has the last block extended to the left (westbound) and the outer main has the block extended to the right (eastbound). This, too, functioned as expected. We also demonstrated that entirely unchanged or "passive" modules would simply appear to extend the lengths of blocks. An example of what the

dispatcher panel looked like is shown in Figure 4 (Page 7). In this instance, there are two trains moving across the passing siding in opposite directions. Each train is labeled (EDPO and POED). Unoccupied track is shown in white; occupied track in red. The cleared routes are shown in green. The signal colors change on the panel but as in the prototype there is not a 1:1 correspondence with the colors found on the physical signals out on the railroad. EDPO is already in the interlocking and the signal behind it has fallen to red. POED is still approaching the interlocking. There is an intermediate signal not controlled by the dispatcher (thus not shown on the panel) between HUB Junction and HUB Crossing that would be "yellow," which is why the entrance to the interlocking shows green and not yellow. The TrainStat window (lower left) shows the engineer, location, time, lead engine number, etc. for each train.

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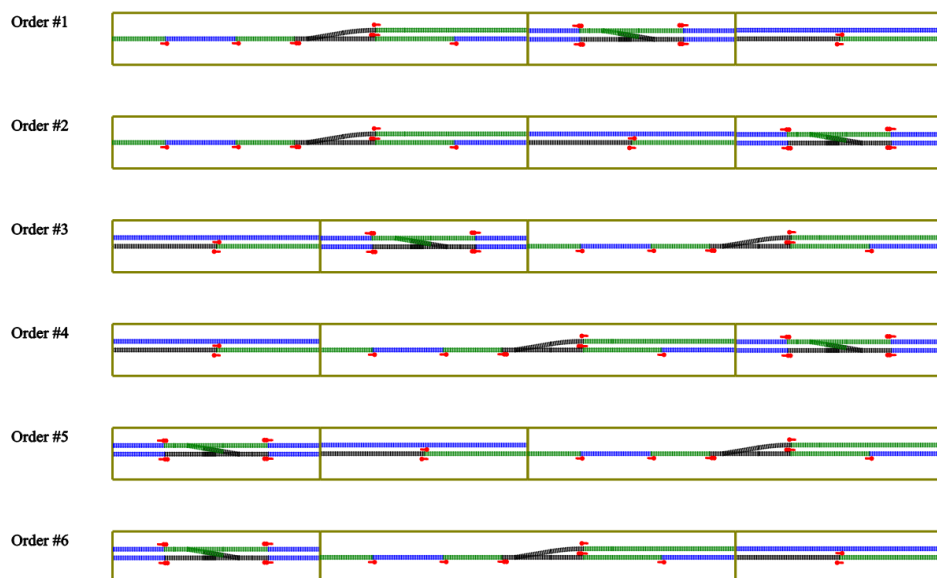


Figure 3. The six different permutations that can be done with the three test modules

Signaling Update

Continued

The key to making this all occur is to construct each module both physically and virtually in software as though it were a complete isolated model railroad. Power comes from the red and yellow Anderson power poles, third track power from the blue poles, accessory DCC from the orange power poles. We already have a RJ connector to support the DCC bus. Signaling requires another RJ connection between modules. Fortunately, this is something that is already in place because a spare was put in place with the last update of the module wiring standard. There will be the need, however, to add one pair of power cables to feed detection on each active module. No decision has been made as to the color of the power poles used. Whatever decision, the HUB will schedule a time and place to complete this upgrade at the Division's expense.

In our initial effort that we displayed at RAILFUN in June 2011, we intentionally separated the hardware used for input from that used for output. We used NCE AIUs for inputs and used an OakTree Systems O48 for outputs. The choices were made to fully test JMRI as much as to test the AIUs and Oaktree boards. When I went to the NMRA convention, I was repeatedly told that the best hardware and software support was to be found with C/MRI and Digitrax. We avoided both to start with, again to affirm the breadth of JMRI.

Once we knew permutation tests were passed, it was time to readdress the

selection of hardware. Clearly, we knew JMRI would support multiple different hardware choices operating on the same layout. However, each of these choices requires its own signal communications bus. Three systems, three busses. Four systems, four busses. As noted earlier, it was the decision of the Signal Committee that we would only wire modules for a single signal communications bus, and that forced the choice of one signal hardware system.

Table 1 (Page 8) summarizes our decision matrix. The most common reason for not being selected was lack of support for JMRI. The decision eventually came down to Oaktree Systems and Bruce Chubb's C/MRI. Based on some limitations found in the Oaktree JMRI drivers that are not actually written by Oaktree, we decided to select C/MRI. C/MRI hardware is available fully constructed and tested from two vendors but one of them, SLIQ Electronics, also produces the Prototypical Grade Crossing Card. We are in discussions for volume discounts for the SMINI boards that will be the basis of active signaled modules. Each of these boards provides 24 inputs and 48 outputs. For most modules with signals, one SMINI board will more than suffice. The MSRP for the SMINI board built and tested is \$190 and, as a kit, \$120. We have had discussions with SLIQ Electronics and they are offering us a very good discount. An added strength of the C/MRI is that an SMINI node can be expanded greatly into a MaxiNode for those modules that have needs beyond 24 inputs and 48 outputs.

Recall that each output is one color lamp on a signal head, and each three color head will consume three outputs, thus 48 outputs is equivalent to 16 three color signal heads. For example, a cross-over protected by four three headed searchlight signals requires 12 heads and 36 outputs.

Another added strength of the C/MRI boards is that they represent one of the few JMRI drivers with a simulator. What this means is that after creating your module in Designer, you can test it in CATS by telling JMRI you are connected to the C/MRI simulator rather than a true hardware system. For example, this allows your "click" of DB20 sensors to turn them on and off to determine the behavior of your module. In addition, you can also check on the actual lights being lit on each signal by examining the signal head table in JMRI while testing in CATS. This is happening while you are looking at the dispatcher panel for your module. The addresses defined in Designer use the actual addresses of the hardware and the simulator emulates their behavior. Thus, once everything is running to your satisfaction, simply converting the connection definition in JMRI from the simulator to the real C/MRI hardware should be all that's needed to move from desktop testing to the real railroad.

Lastly, for the final testing we needed to show that this approach would work with our existing Lenz DCC system. Lenz has a new device for computer connections that offers two types of

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Figure 4. An example CATS dispatcher panel showing CATS (top) and TrainStat (below)

Signaling Update

Continued

connections. One is through a standard USB port found on all contemporary laptops, while the other is via a local area network (LAN) connection. We had difficulty with the USB port approach, but Stan Ames suggested we would likely be better off using the LAN approach. This proved to be correct on two points. First, the LAN connection worked simply and easily on the first attempt. Secondly, this connection makes it simpler to attach a wireless router and support WiThrottle, which also came up on the very first try. Our first successful operation with this device on the modular layout occurred

at our Spring Training show in Taunton on March 11, 2012.

The Signal Committee made a report to the BOD at the March meeting requesting the funds to purchase SMINI boards for the four corner modules. Dick Johannes, David "Shack" Haralambou, Gerry Covino and Ken Belovarac are also purchasing boards. The BOD approved the purchase. With four corners, this could give us up to eight control points in a setup as all four member modules get completed.

Shack, with his depth of professional communications and wiring knowledge has already begun work on approaches to very neat connections to the signal

boards to avoid the Medusa's Head problem that occurs with the number of wires emanating from these boards. We'll describe this work and the details of handling the last few inches at the edges in an upcoming report. As well, we continue to work on the details of the wiring scheme. Mark Harlow, Gerry Covino, Shack Haralambou and Bill Powers will all review this before describing a final plan. It is a surprisingly convoluted problem to solve. We continue to stress the changes to the corner modules and the yet-to-be-constructed active modules, while leaving the passive modules untouched.

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Manufacturer	Strengths	Reason for Elimination
C/MRI	Passed all tests	
Oaktree Systems	Reasonable price. Lots of positive testing results	Failed tests or turnout positioning. No simulator.
Digitrax	Full hardware support	Must use only Digitrax, turnout controllers, block detectors and signal boards. Signal board does not fully support all 3 color blinking aspects.
CTI Acela	Very modular, relatively low cost	Self recognizing network redefines addresses with module rearrangement. Thus fails a major requirement.
ProTrack Grapevine	Very Modular	Difficult website to navigate, could not find pricing. Possible issues with detection method.
Custom Signals	Manufactures signals as well as boards. Source for the Atlas System	Does not support JMRA. Fails a major requirement.
Signals by Spreadsheet	Very clever combination of hardware and software for signaling	Does not support JMRA. Fails a major requirement.
Integrated Signal Systems	Longtime Manufacturer of high end signals	Does not support JMRA. Fails a major requirement.

Table 1. Decision Matrix for vendors that were evaluated by the Signal Committee

Feature	Oaktree	C/MRI	Digitrax
Maximum # of nodes	64	128	?
Large board outputs	36	48	32
Output/Input Ratio	3:1	2:1	2:1
Bi-polar LED Driver Support under JMRI	No	Yes	Yes
Max Com Speed	38,400 Baud	115,200 Baud	57600 Baud
Price / Pin (MSRP)	\$3.04	\$2.64	\$2.60
Common Anode or Common Cathode	Yes	Yes	Yes
MaxiNode capable	No	Yes	No
BD20 Supported	Yes	Yes	No?
Large user community	No	Yes	Yes
Price per board MSRP	\$146	\$190	\$125
Smallest Board	IO24 (8 in / 16 out) \$96	SMINI (24 in / 48 out) \$190	SE8C (16 in / 32 out) \$125
Notes	Driver not written by Oaktree. No simulation mode	Supported by a simulator	Very arcane programming, only one blinking aspect

Table 2. Detailed Decision Matrix

First Operating Session for Beginners

Continued from Page 5

- Ben Fretz, with guidance from his father Dan, handled the Weymouth North (CPWN) local freight from Church Point Yard to the Weymouth North yard. They switched the Weymouth North yard and brought back outgoing cars back to Church Point.
- John Doehring switched the St. Andrews Industrial Area with part-time assistance from Don Howd.
- Pete Higgins ran a train from Church Point to Harmony Mills (CPHM), dropped off the incoming cars and made up a train with cars returning to Church Point.
- Ed Sisk was the yardmaster at Fundy Yard. Among his jobs was making up the Tweetside (FYTS) local freight for John Geisel.

The rookies learned how the dispatcher

has control of the main lines and an engineer must contact him before entering the main and when the train leaves the main line. Also Carl Senfleben provided instructions on the use of car cards and waybills, secrets and pitfalls of switching and uncoupling, and especially that one needed to think ahead when switching. Carl commented on a few no-no's committed by the rookies – putting coffee cups on the layout, not turning off ringing bells or blowing whistles and stacking waybills against boxcars. When has anyone seen waybills leaning against a boxcar on a real railroad?

At the end of the operating session all participants agreed they had a great time. Most wanted to participate in the other Operating Sessions for Beginners.

For those of you who are interested in finding out more about Carl Senfleben's Atlantic Shoals Railway, it was featured in the May 2005 issue of Model Railroader.



Update from Across The Border

by Erich Whitney

The Seacoast Division has had overwhelming success with its Model Railroading Night in Derry. We started offering this program in January that drew 54 people from the community. February and March attendance was in the mid-20's so we know the interest is there. We're trying several different programs to see what people find most appealing. We have two more meetings this spring, then we'll take July and August off and resume in September. We're looking to do a series this fall on building model railroads—both modular and permanent. Here's a list of upcoming meetings:

- The May Model Railroading Night in Derry will feature Jerry Kelley's Hoosac Tunnel models, stories, and secrets. Join us on Friday, May 11th.
- The June Model Railroading Night in Derry will feature representatives from Northeast Scale Models giving a presentation on modeling. Join us on Friday, June 8th.

All of these meetings are on Friday night at 7 PM in the Marion Gerrish Community Center, 39 West Broadway, Derry, New Hampshire. Take I93 to exit 4, right at the end of the ramp and the community center is on your left after about 3/4 mile—just after you pass through a traffic light.

Come share the fun of model railroading!

The *Headlight* is always accepting photos and articles relating to model and prototype railroading. Please email editor@hubdiv.org.



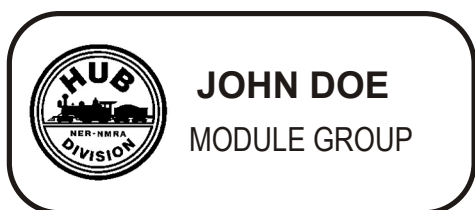
Peter Higgins and Dan Fretz look on while Ben Fretz uncouples a car. To the left is Ed Sisk hard at work switching cars in the Fundy Yard. In the background is pilot Peter Laier and Rick Murray working the Church Point Yard. In the far distance is John Geisel in his Tweetside yard perch. Photograph by John Lutz.

Signaling Update

Continued

We'll be making periodic reports on this effort over time as there are many details to define, not to mention creating our own documentation for each modular modeler, as we move through the process of adding signals to the Hoosac,

Upton & Boston Railroad. Lastly, we felt it was worth sending in an application to present our work to the Grand Rails 2012 NMRA National Convention this summer. We received notification that we are on the schedule on Wednesday, August 1 at 1 PM. This is a nice reward for our efforts.



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HUB Module Kits Available

The HUB Division offers to its members a complete packaged module kit for \$155. The kit has everything you need, including all pre-cut lumber, hardware, a complete wiring harness for the DCC and inter-module connections, a panel-jack and wire, and even roadbed and the track! A module is the perfect solution if you do not have the space for a full-size layout or just want to experiment or learn new techniques without committing the time and money to a larger setup. Please contact Mark Harlow at modulekits @hubdiv.org with additional questions and to order the module kits.

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Upcoming Regional and National Conventions

The "Empire Junction '12" NER Convention is September 6 thru 9, 2012 at the Holiday Inn on Electronics Blvd. in Liverpool (Syracuse), New York, hosted by the Central New York Division. Visit <http://empirejunction.org> for additional information and to sign-up for their update email list.

The 2012 NMRA National Convention is July 29-Aug 4, 2012 in Grand Rapids, Michigan. Visit <http://www.gr2012.org/> for additional information.

HUB Headlight

Volume 28, Number 5, May - June, 2012

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President
Manny Escobar
president@hubdiv.org

Vice President
Bill Roach
vp@hubdiv.org

Webmaster
Dan Fretz
Webmaster@hubdiv.org

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NMRA NER Representative
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Bill Barry
Editor@hubdiv.org

Peter Higgins
HUBboard3@hubdiv.org

James VanBokkelen
HUBboard4@hubdiv.org

Office Manager
Pete Watson
Officemanager@hubdiv.org
65 Branch Road
East Bridgewater, MA 02333-1601

Treasurer
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Treasurer@hubdiv.org

Model Train Expo Show Director
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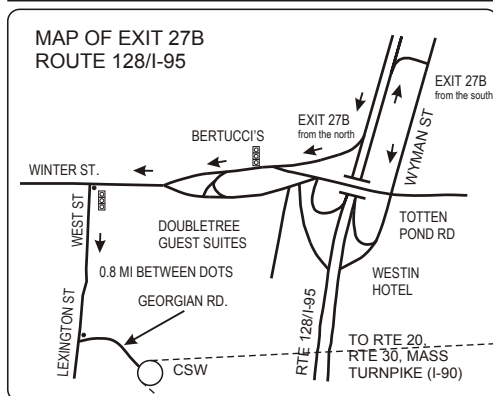
Model Train Expo Business Manager
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nemte@hubdiv.org

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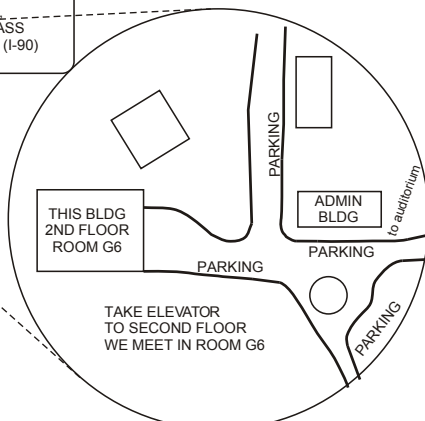
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MAP TO CAMBRIDGE
SCHOOL OF WESTON

MAP TO RAILFUN MEETINGS



Dream Long Deferred

Jerry McDonald



After many decades of not having a place to build a layout, I'm finally going to have the whole upstairs of my new barn to build the Rockland Canton & Northern. The railroad room upstairs is 25' by 30' with a completely clear floor space. Updates to come. Photograph by Jerry McDonald.

RAILFUN.....

NO MOTIONS.....

NO SECONDS.....

NO BUSINESS.....

NO YAWNS.....



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New England Large Scale 2012

June 1-3, 2012

Chelmsford, MA

www.tttrains.com/nels2012

email: nels2012@tttrains.com

978-256-3062

Enjoy a weekend of Large Scale fun in New England. The Rusty Rails & Rotten Ties Railroad Society, the New Hampshire Garden Railway Society, the HUB Division of the NMRA and the Seacoast division of the NMRA cordially invite you to a fun filled weekend of Large Scale operation occurring from June 1st to June 3rd 2012. In case of severe inclement weather the event will be moved one week to June 8th till June 10, 2012.

Schedule

Friday afternoon/evening June, 1 2012 - Chelmsford MA

Participate in an evening operating session on the SJR&P Railway where cars and trains are moved according to a schedule. Layout opens at 3PM, Operating session 5PM till 8PM. Light dinner provided. Observers and participants both welcome.

Saturday June 2, 2012 10AM-5PM –

Picnic lunch and Large Scale running – Chelmsford, MA

Bring your trains and run on Deb and Stan's large [SJR&P garden railroad](#). The SJR&P is a track powered DCC layout and can accommodate DCC, RC or Live Steam (with insulated wheels.) (A section can also be set up for DC if there is interest)

In the afternoon time will be set aside for a steam-up to allow live steam locomotives (with or without insulated wheels) the opportunity to climb the 1000 ft. 2% grade

During the day there will also be a variety of manufacturer demonstrations including:

- Remote Control Systems of New England
- Bachmann Trains

Additional manufacturers attending will be announced on our WWW site.

A Large Scale only silent auction/white elephant table will be set up for the day with a close of 4PM.

Sunday June 3, 2012 Morning and Afternoon – Various locations in MA and NH

On Sunday a selection of layouts in Massachusetts and New Hampshire will be open for operating your equipment or visiting. Morning sessions are from (10AM-1PM) and afternoon sessions are from (2PM-5PM). See registration form for a list of layouts open and locations.

To help up plan for the event we are asking all attendees to preregister.

A contribution of \$6.00 is being asked to cover the cost of food for the event



New England Large Scale 2012

June 1-3

US Mail Registration Form

We are asking that all participants register in advance so we can do advance planning in order to maximize your enjoyment for the weekend. Please fill in and mail back the following registration or fill it in on-line at www.tttrains.com/NELS2011. No information collected will be shared outside this event.

Name: _____

Address: _____

City: _____

State: _____ Zip Code: _____ Country: _____

Phone Number: _____ Email Address: _____

Scale: _____ Large Scale Interests: _____

Do you wish to participate in Friday's Operating Session: _____?

Will you be bringing equipment to run on Saturday: _____?

Will you be bringing anything for the White Elephant table or Silent Auction: _____?

Sunday Layouts you will be attending

Richard Kadrmas - Amherst, NH

AM Session: _____ PM Session: _____

Dave Barker - Bow, NH:

AM Session: _____ PM Session: _____

John & Pemi McRae - Moultonborough, NH:

AM Session: _____ PM Session: _____

Joe & Donna Santoro - Wolfeboro, NH:

AM Session: _____ PM Session: _____

Richard Parshley - Wolfeboro, NH:

AM Session: _____ PM Session: _____

Wes Warner - New Salem, MA:

AM Session: _____ PM Session: _____

Bob McCown - Littleton, MA:

AM Session: _____ PM Session: _____

Bill, Liana and Drew Hewitt - Mansfield, MA:

AM Session: _____ PM Session: _____

Would you be willing to volunteer to help out: _____?

Please send \$6.00 per person or \$12.00 for a family of up to 4 (check or money order made out to "Debbie Ames"). For family registrations please include the names of the 3 other family names on this registration.

Mail to: New England Large Scale 2012
8 Higate Rd
Chelmsford MA, 01824

For Questions contact: Deb or Stan Ames
978 256 3062