

HUB Headlight

HUB Division Inc., Northeastern Region, National Model Railroad Association - www.hubdiv.org
Volume 37, Number 1, September - October, 2020

ONLINE RAILFUN TIMETABLE

Editor: Due to the Covid-19 pandemic, the HUB has purchased a licence for the Zoom online meeting software and we've successfully used it for several events in the spring. Zoom meeting info will be sent out in advance of each RAILFUN via the Google email list and via Constant Contact.

Presentation: How One Man's Vision Can be Brought to Completion in Creating a Dream Model Railroad

By Bruce Robinson

8 PM Friday, September 18, 2020

For many years Jim Falls wanted his own model railroad. At one point he contracted with Jack Armstrong to design a layout to fit the space he had, but fate intervened and the house was sold. The new house did not have the same size or shape as Jack's design, so Jim found a published track plan that he based his new layout space on and started building. Benchwork was installed and track laying began, only to be met with frustration moving his ideas forward. Jim contacted me and proposed that I join him in building his idea of the Stratton Valley RR. It took just two years and two weeks of a lot of fun times brain-storming and building, but the Stratton Valley was completed in time for the 2018 Tour de Chooch.

Presentation: Lighting Your Layout

By David "Shack" Haralambou

8 PM Friday, October 16, 2020

Shack will use his professional experience in the broadcast industry to explain how to light our layouts. He will cover lighting basics including the different types of lighting available (incandescent, fluorescent, LED, Halogen) as well as what color temperature is and what it means for your layout. He will talk about how to physically light your layout and the considerations that affect the type of lighting to install.

Shack will also have an update about the Museum of Science train exhibits, and where we go with this in the future.

Presentation: STEAM in the HEADLINES

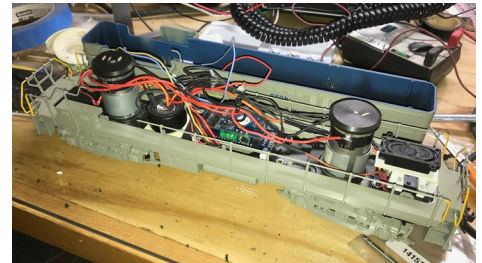
By Doug Scott

8PM Friday, November 20, 2020

Doug Scott is a published photographer who has been riding and photographing trains since the fall of 1977. Doug's work is well known locally.

The year 2019 hosted two special steam engine events that garnered headlines, one of national importance, the other drew northeast regional attention. Nationally, the rebirth of Union Pacific Big Boy #4014 was planned to coincide with the 150th anniversary of the completion of the United States' first transcontinental Railroad. Regionally, the Norfolk & Western J class engine #611 visited the Strasburg Rail Road in what was billed as a "N&W Steam Reunion." Doug was able to photograph the 4014 traveling across Wyoming in May 2019, and also the ceremony commemorating the driving of the Golden Spike at Promontory Summit, Utah. He also participated in one of the photo charter days with N&W 611 and 382 in Strasburg, PA. Doug's program will

RAILFUN Timetable Continued on Page 6



My First DCC Install

By Dave Insley

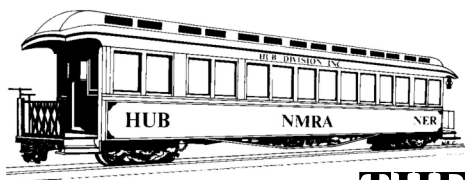
It became time to try my hands at a DCC install. The AP Certificate for Electrical has a series of requirements to achieve, one of which was a DCC install. I have a 20-year-old Atlas D&H U-boat that I bought for my youngest son when he showed a little interest in trains. That interest did not last, but the engine is still in my possession. So, I bought a decoder and a speaker, which then sat on a shelf.

Fast forward a few years, and I see this article by Tony Koester about building an O-Scale small layout. I have equipment

(Continued on Page 4)

Also Inside This Issue

- Page 2.....The President's Car
- Page 3.....Shanty Talk
- Page 5.....Featured Module
- Page 6.....Calendar of Events
- Page 7.....RAILFUN Survey
- Page 8.....Progress on the RC&N
- Page 9.....Go to a HUB RAILFUN Night and add 30 inches
- Page 10...How I learned to stop worrying and love DCC "Phase 2"
- Page 11...Moving and Storage Facility
- Page 12...Erich's Electronics Notebook
- Page 14...In Memoriam: John R. Lutz & 2020 Keith Shoneman Award
- Page 15...McKelvey Brothers Logging Company & Adapting Alco S-1
- Page 16...Treasurer's Report
- Page 17...Clinchfield comes to New England, Achievement, PNE Delivery
- Page 18...HUB leadership & COVID Car Building
- Page 19...Order Forms & Apparel Info



THE PRESIDENT'S CAR

By James VanBokkelen

Hello, members of the HUB Division and readers outside our group. I'm writing this looking out on a lawn that needs mowing again, with my garlic ripe and wheat harvest in the barn. Rain has been off and on here, but mostly made up for the June dry spell.

With the Covid-19 virus doing so much damage in Massachusetts, I don't have a lot to say about public events. None of the train shows or events we might have attended will happen this year: Greenberg, Hooksett, Tour de Chooch, etc. The Amherst Railway Society still hopes to put on their Railroad Hobby Show in January 2021, but our Module Group has decided not to attend. Our meeting place for RAILFUN sessions, the Cambridge School of Weston, is closed to outside groups for the 2020 to 2021 school year. Our June Murder Mystery Dinner Train, our October Northeastern Region Convention in Westford, MA, and our December New England Model Train Expo have been postponed to 2021.

However, a number of area museums and tourist railroads have re-opened this summer. If you need to get out, check the web sites for Conway Scenic, Hobo Railroad (Lincoln or Weirs, NH), Seashore Trolley Museum, Berkshire Scenic, Shore Line Trolley Museum, Maine Narrow Gauge RR and others. Many are limiting their hours or days open and all prefer you buy tickets in advance on-line.

The HUB Division held a formal, remote Annual Meeting on the evening of June 19. There was no business, as we'd already conducted the vote for new Directors via email and USPS mail. Doug Scott gave a nice presentation of train activity on Cape Cod, including many shots of the historic ex-New Haven FL-9 cab units. A Board meeting was previously held on April 21, 2019, in which the Board re-

appointed me as President. Because Shack Haralambou is spending most of his time down south, Mal Houck agreed to replace him as Vice President.

RAILFUN Coordinator Andy Reynolds has filled out this year's regular RAILFUN dates with online events using the Zoom platform. Breaking with tradition, he's scheduled an August event for the 21st. Presentations through January 2021 can be found in this issue and on the HUB Division website calendar page (www.hubdiv.org/schedule.htm).

Erich Whitney is acting as our Zoom Coordinator, mostly by organizing a calendar listing of when our Zoom account is being used. If you have a HUB-related activity you'd like to conduct using our account, please let us know and we can see about scheduling it.

We will also be experimenting with different Internet tools to see which has the best combination of function and popularity. Some other Divisions in the NER are using FreeConferenceCall's product. Look for notices about trials on hubdiv@googlegroups.com in the next few months.

NMRA Achievement Program activity is starting to work its way around the virus. It's straightforward to earn Author, Volunteer or Association Official, and the NMRA is putting things in place to review and process paperwork. If you already have the operating hours, Chief Dispatcher might even be earned in isolation. The NMRA thinks it can do remote evaluation for Civil and Electrical. But Cars, Locomotives, Structures and Prototype Modeling rely heavily on in-person evaluation.

However, as the NMRA's efforts to adapt play out, many of us are building models or working on layouts in this unexpected free time. Keep the necessary paperwork on the To-Do list as well. I hope we'll see a lot of new AP certificates this winter.

The dates for Mill City 2021 will be October 8-11 next year (still Columbus Day Weekend). It will take place at the Westford Regency Hotel in Westford, MA. We plan to carry over many of this year's arrangements, including schedule, layouts, and clinics. We will maintain our focus on model railroad operations. But,

Fiscal Year 2020 Appointments

Malcolm Houck - Vice President

Gerry Covino - Treasurer

Mike Dolan - Secretary

Peter Higgins - Membership

Bill Barry - Headlight Editor

Andy Reynolds - RAILFUN Coordinator

Ron Noret - Module Coordinator

Dave Insley - Webmaster

Peter Watson - Office Manager/Clerk

John Russo - Expo Show Director

Mark Harlow - Expo Show Manager

Ken Belovarac - Librarian

Dan Fretz - Donations Chairman

Barbara Hoblit - Public Relations

Peter Watson - NMRA AP Chairman

Erich Whitney - Zoom Meeting Coordinator

inevitably, at least a few will change. If you have a new presentation, or a layout that would make a nice tour or operating session, get in touch. We will also need volunteers for the Convention site and activities, so think about penciling in some time to help out.

The HUB is always looking for more volunteers. We will be looking for Board Member candidates in the 2021 election, and when things return to normal we will need help with show management, local RAILFUN events to serve members who can't get to Weston on a Friday evening, and modular railroad operations. Talk to me or another Board Member/Officer to get involved!

Personally, since my last column, I've spent time on my layout, farming at home and elsewhere in town, and working at Seashore Trolley Museum as a gandy dancer. My layout space isn't climate-controlled so Summer work is limited to cool periods and occasional evenings. Some of you have seen the 'cab ride' videos I posted. My camera car works in 'Plate C' clearances and is available for loan if any of you want to make your own video.

If there's something on your mind about the HUB or its activities, email me at president@hubdiv.org, call me at (603) 394-7832 or catch me at a HUB online event.

Until next time, High Green!



Shanty Talk: Fall 2020

By Rudy Slovacek

In my column of May-June 2020, I described some updating of my old Athearn D&H PA for a passenger train. This started me thinking of doing some earlier wartime operations during which I could run my Alco military train with tanks produced in Schenectady. Of course, this pushed me to consider running some older passenger cars such as the steel heavyweights used both during and after the war. I have a nice D&H consolidation locomotive, purchased from Jeffrey Tyrell at www.accuratecustomfinishing.com and a modified IHC 2-6-0 Camelback, which could plausibly serve as a D&H passenger locomotive during hard-pressed service in the wartime period.

Fortunately, Athearn made a 72-foot clere-story roofed coach, similar to the 82-seat passenger coach made for the D&H by the Barney and Smith Car Company in 1916. The number of windows is a bit less but otherwise it is quite a good representation. They were renumbered in the early 1940s to the 222-230 series. My sources were Freight Cars Journal Monograph #4, ISSN 0884-027x 1989; Equipment of the Delaware and Hudson Railroad; Vol 1 Passenger Cars, Liljestand and Sweetland; D&H Color Guide to Freight and Passenger Equipment, Odell, Martin, Cross and Wright, 1997 Morning Sun Books and, of course, the D&H Historical Website at www.bridge-line.org.

I purchased a custom lettered Athearn car a while ago and, later on, an unlettered one from Dave Insley at the white elephant table. To upgrade these cars, the cast-on grabs were removed and 0.010-inch diameter wire was bent then added for grab-

irons. The undecorated car was painted dark green and decals were added for the D&H. See Figure 1.

It was also during WWII that the D&H first acquired S2 Diesel switchers from Alco, so once again I turned my project skills toward detailing and adding decoders to those nice-running Atlas S2s and S4s that I had obtained a couple years ago. Like the passenger cars, the cast-on grabs were shaved off and wire grabs added along with simulated canvass window shades, lift rings and marker lamps before adding some weathering. In some, I installed LEDs and Lenz decoders and in others the Tsunami sound decoders. An excellent article appeared in the July 2020 Model Railroader describing the installation of a DCC sound decoder in a vintage Atlas Alco S2 switcher, so, I won't go in detail here. See Figure 2.



Figure 2: D&H Alco S-2 Switcher.

While rummaging through my workbench drawer I came across a couple of Athearn composite-side 34-foot hoppers, reasonably close to the model recently produced by Accurail. I had accumulated them with the intent to produce some older wartime hoppers, which were unavailable at the time. I spray-painted them black followed by a Testors gloss-coat. Then, using decal sets from Champ and Walthers, I added the WWII-era D&H script in one corner and the circular "A Century of Anthracite Service" in the other corner. With the further addition of the D&H abbreviations and road number, in a series close to the Accurail car, I finished off with another clear coat and some weathering.

My two primary aging colors are gray for wood and rust for the steel parts. I also came across a Stewart 34-foot rib-sided steel hopper with only dimensional data. This too was treated to the same procedures as the Athearn cars except it was

numbered 5203 to represent a car in the D&H fleet series still operational according to the Railway Equipment Register of 1966 (My graduation year). They make a nice complementary set with that Accurail composite hopper. See Figure 3.

Last, I want to talk about another project for providing extra detail to period automobiles and trucks that I use in my modeling efforts. License plate colors are usually specific to both the states of registration and the years they were in effect. For a comprehensive look for the period between 1903 and 1997, see "License Plates of the United States: A Pictorial History 1903 to the Present" by James K.

Fox published in 1997. It shows a list of the license plates for each state and the colors used over that period. Since the actual numbers are barely legible in HO scale, it is the colors I am most concerned with.

For example, in upstate New York where the D&H ran between the war and late sixties, the plate colors would have been either black with yellow orange lettering or the reverse with a yellow-orange background and black lettering. Micro Scale made a sheet for HO numbered MC4149. I find that instead of using the decals themselves, I make a photocopy then cut out the plate with a razor. I glue it to scale 1x6 Evergreen strips painted either silver to match the chrome bumpers or a flat black to be unobtrusive in other truck and auto locations. It is simpler than going through the decal process.

(Continued on Page 6)



Figure 1: D&H 72-foot steel passenger car.



Figure 3: Stewart, Accurail and Athearn hoppers lettered for D&H.

My First DCC Install

(Continued from Page 1)

from my dad's collection, including an RS-3 in Delaware and Hudson paint. I put these two things together and decided to try my first DCC install in the RS-3. I will admit, this was cheating a bit since there is way more space in O-Scale than HO. I have no clue how N-scalers install decoders.

I opened the shell and looked. Seems pretty simple, couple wires coming from the truck to two motors, one on the front truck and one on the back truck. See Photo 1. I also had another Weaver locomotive in his collection that already had DCC installed, so I decided to use that to help guide me.

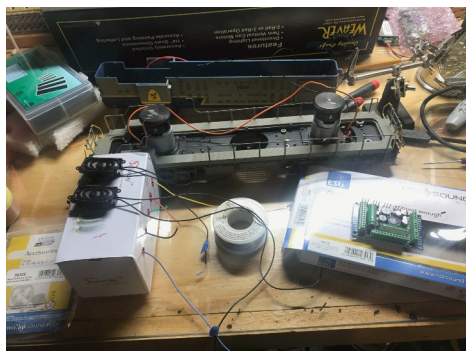


Photo 1: Shell opened, it looked pretty simple.

My first step was to remove the wires from the motor. I heated up the soldering iron and in a few minutes I had them removed. That wasn't so bad. I had two speakers for the new install, so next was to put wires on those. I did not have any 30-gauge wire, so off to Amazon I went.

Each speaker had two pads, a positive and negative. I am pretty sure it does not matter which is which when it goes to the decoder, only if you are adding the two speakers in parallel or series to the same decoder terminal. But I marked each positive wire with a little piece of tape so I could keep them straight, just in case.

The decoder I used for this project was a LokSound 5L. You can read about a previous attempt using a LokSound 5XL on my blog at www.diaryofabelowaveragemodeler.blogspot.com/2020/04/my-first-dcc-install.html. The advantage of the 5XL is that it has screw terminals. The 5L comes with an accessory board that has solder pads. Soldering makes me nervous

but what the heck, I need to get over my fear of trying new things.

I soldered all the wires together, shrink-wrapped the joins and soldered wires to all of the pads on the decoder. See Photo 2. I went from a simple set of wires from the trucks to the motor to a total rats nest of wires. I hooked my DCC system up to a section of O-scale track, put the RS-3 on the track, turned it on, and nothing. Crap. See Photo 3.

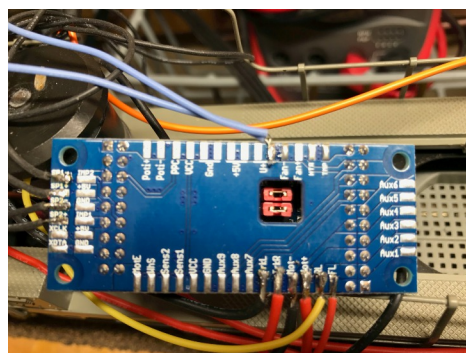


Photo 2: Wires all soldered to the decoder.

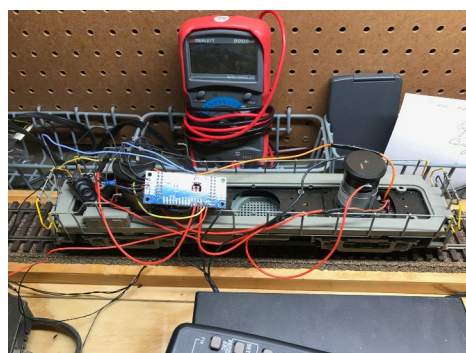


Photo 3: Testing my install.

I hooked it up to Decoder Pro, which could not read the board. Huh? So, I took it apart based on some advice from a friend, re-soldered all of the wires on the board and reset the accessory board into the decoder. I also decided to do something novel and read the manual. Well, I had read it and remembered some little nuance about the F1 function key. It did not make sense at the time, but after a second read, it clicked. I needed to hit F1 to initiate the startup sequence. I put the RS-3 back on the track, hit F1 and I get a bell!! I next hit F8 and that beautiful sound of Alco diesels firing up emanates from the speakers. Yes, finally!

Now it was time to button everything up. I decided to affix the board over the fuel tanks and use two pieces of 1/4 inch

styrene to hold the board. This means I needed to learn how to tap some threads into the base of the locomotive, which I did by drilling #43 holes in the styrene, then used those holes as a guide to drill #50 holes in the base.

I did find a good YouTube video on how to tap holes, so that went pretty smoothly for a first try. I had some 2-56 nylon bolts that worked perfectly for attaching the board. Next I needed to mount the speakers. The primary speaker was a round one I bought that fit directly behind the board. I just used double-sided tape to secure this to the frame. The second speaker was going to be mounted in the front, but I needed a raised platform to be able to get the speaker above the wires coming from the front truck. I built this from 1/4-inch square styrene with a styrene pad on top. I secured the speaker to that with more double-sided tape. See Photo 4.

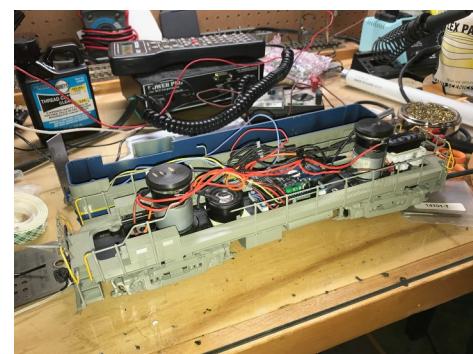


Photo 4: The completed installation before replacing the shell.

My next challenge was getting the shell back on. Since this was my first, I left the wires all a little long, so I had room to work. Luckily, this is an O-Scale locomotive and I had plenty of space. Next time I will be a little more careful as I can see the wires through the cab. A future project will be to add something to the interior to hide this, since it needs an interior anyway.

For now, I'm calling this one done as it works! It took a bit of time, but mostly because I balk at new things and find reasons to procrastinate too often. That and figuring out what materials I did not have along the way.

On to the next project, building a panel that controls four turnouts using LCC. I'll share more about it in the future.

Featured Module: Fossil Coal and Ice

By Bill Harley

Fossil Coal and Ice are three standard 2' x 4' modules that represent a small industrial area alongside the main line.

The general theme is centered on the Fossil Company that owns the coal and ice facilities. The structures and background are generally based on prototype buildings found in Lynchburg, VA, on the Southern Railway. The exceptions (other than a few of the kit buildings) are the coal facility, which is a Maine prototype, and the large LCL freight house from Kinston, NC.

The modules were intended to add a switching venue when originally built for the FCSME modular club in Mt. Airy, MD. When we moved to Massachusetts, the modules were modified to fit both structurally and electrically with the HUB Division modular layout.

The modules are facing a scenic uplift with various repairs to the existing scenery, more figures, some modifications and / or substitutions to various structures and perhaps an electrical upgrade (e.g. switch routing via the DCC circuitry rather than by the DPDT switches in use today).



Center Module - Fossil Ice Plant and Icing Platform.



East Module - Farmers Market - looks like watermelon has sold out.



West Module - Fossil Coal Scale House



East Module - Hwy Crossing



West Module - Fossil Coal (center) and Lynchburg Tower (right) with Miller Meat in the distance (left).

Submissions Wanted

The *Headlight* is always accepting photos and articles relating to model and prototype railroading. Articles about model building or home layouts would be much appreciated. Earn credit towards your Author AP certificate. Please email editor@hubdiv.org.

Shanty Talk: Fall 2020

(Continued from Page 3)

In Figure 4, you can see some vehicles spanning the period between the 40s and 60s. The D&H often used red Ford trucks for it's maintenance vehicles; thus, I've added some N-scale shields to the door panels of the trucks.

Well, that's a glimpse of some of my summer modelling efforts for now. So, stay safe, happy modeling and I hope to see some of you after a vaccine becomes available.



Figure 4: License plates for vehicles from left to right. 44' Chevy Dump, 50' Chevy pickup, 57 Chevy Front, Rear, 54' Ford pickup, and 60' Ford utility.

HUB Division Calendar of Events (Subject to Change)

2020

Aug 21 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Sep 18 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Oct 1 (Thu)	Submissions deadline for the HUB <i>Headlight</i> Nov-Dec issue
Oct 16 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Nov 20 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Dec 1 (Tue)	Submissions deadline for the HUB <i>Headlight</i> Jan-Feb issue
Dec 5-6 (Sat-Sun)	CANCELED The HUB-sponsored New England Model Train EXPO at the Best Western Royal Plaza Trade Center, Marlborough, MA
Dec 18 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM

2021

Jan 15 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Jan 30-31 (Sat-Sun)	Amherst Railway Society's Railroad Hobby Show, Big-E Fairgrounds, West Springfield, MA. NOTE: The HUB Modular Railroad is NOT exhibiting this year.
Feb 1 (Mon)	Submissions deadline for the HUB <i>Headlight</i> Mar-Apr issue
Feb 19 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Mar 19 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Apr 1 (Thu)	Submissions deadline for the HUB <i>Headlight</i> May-Jun issue
Apr 16 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
May 21 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Jun 18 (Fri)	HUB RAILFUN Zoom Meeting, 8 PM
Oct 8-11 (Fri-Mon)	HUB-Sponsored NER Convention, Mill City 21, Westford, MA, www.millcity21.org

RAILFUN:

(Continued from Page 1)

STEAM in the HEADLINES

(Continued from Page 1)

cover modern railroading in Wyoming, the UP 4014 / 844 train to Ogden, along with the SPIKE150 ceremonies in Ogden and Promontory Summit National Historical Park in Utah, and the N&W 611 visit to Pennsylvania, all complemented by a musical soundtrack.

Future Online RAILFUN Sessions:

Modeling Trees

By John Burchnall, Cheryl Sassi and Lou Sassi

8PM Friday, December 18, 2020

How I decided to go for my MMR

By Russ Norris, MMR

8PM Friday, January 15, 2021

New Members

The HUB Division welcomes the following new members

- Father and Son: Robert Collins and Logan Collins, Wrentham

Layouts Open for Visits by Appointment

Dwight Sturtevant's N-Scale show layout and fixed home N-Scale layout were going to be open for the Mill City 2020 Convention. With that moved to 2021, he is welcoming folks to visit by appointment. His home layout now has working signals. Dwight was picked by John at AZATRAX to test his new TS-5 Control Point Signaling System.

Please contact Dwight to request a visit via email at tvman@mapinternet.com or call anytime (424) 216-2765 8am to 8pm, 7-days-a-week. Layout located at 2019 East Street, Three Rivers MA

RAILFUN Survey

By Andy Reynolds – RAILFUN Coordinator

In late February I thought I was doing great. I had RAILFUN clinics scheduled through June 2020, and was busy filling the schedule for the following year. That was until the pandemic struck.

At the February 2020, clinic I polled the members as to what sort of clinics they would be most interested in attending. I based this on topics provided by our HUB President, James VanBokkelen.

So, here is the list of eight clinics from James and a very brief description of each:

1. Air Brush Demo – Demonstration of airbrushing, with portable booth airbrush, etc.
2. Beyond Shake the Box – Slide presentation on assembly of high-end injection molded kits.
3. Simple GIMP – for Model Railroaders – Gnu Image Processing – Image printing and manipulation.
4. Lineside Signals – Engineering, designing and building automatic block and interlocking signals.
5. New England Passenger Trains – Sources on information about past era NE cars and how to model them.
6. Scratch-building Styrene Structures – Step by step process of constructing styrene structures.
7. What was all that track for? – Layout design by researching visible remains of old track and switches.
8. Voltmeter Clinic – How to use a voltmeter / Ohmmeter / Milliammeter to build and maintain a model railway.



*It was a full house for the May 2019 RAILFUN session on realistic walls.
Photo by Andy Reynolds*

Do any clinics on the list jump out at you? Take a second look, pick something and see how it compares to the survey results.

I asked everyone to rate the eight clinics on a scale of 1 to 10. With 1 being the least interested and 10 being the most interested.

I plotted the random anonymous surveys from all the members present on an Excel spreadsheet. As a survey can be used to simply get a point across, I tried three techniques to come up with my results, as someone giving all zeros or tens could skew the results, so as a mathematician myself, I found this a good exercise. I added the point scores and found out the rankings: 1st place: #4- Lineside Signals, followed in 2nd place by #7 – What was all that track for? And, in a close, 3rd place #1 – Air Brush Demo. The remainder ran in this order – Scratch building Styrene Structures, New England Passenger Trains, Beyond Shake the Box, then Voltmeter Clinic and lastly Simple GIMP.

What am I taking away from this? The goal is to keep as many people interested as possible, with no one falling asleep. It's interesting that no one "didn't express interest" in the second-place survey result of "What was all that track for?" and only two people had no interest in the lineside signals. So, I do see a diversity of interests, and roughly 13% had little interest in just one of the eight clinics in general. While there may have been strong interest for the Voltmeter Clinic and the Simple GIMP, it was a more select group. Maybe these technical clinics would be better suited for a regional convention, where there is interest, but not enough interest to stimulate the majority. Or maybe there are more members out there that would love these clinics that will come, if we advertised them properly?

My goal as RAILFUN Coordinator is to provide you with informative, interactive and interesting clinics. If you host a clinic, you can score points toward your AP Author Certificate. Let me know your topic, and if you're a novice at this, we have a pool of members that can get you started. Don't be shy. Also, if you have an idea for a clinic, all you need to do is ask, and I will try to get a speaker. Of note, there were no real hands-on clinics here. According to James, his clinics range from 45 minutes to 1 hour and 45 minutes, depending on the audience interaction.



*During the October 2019 RAILFUN Sessions, HUB Members paint the many figures needed for the MOS layout.
Photo by Andy Reynolds*

I have found many hands-on clinics need a larger block of time than our Friday night allows, so we have experimented successfully in satellite locations, mainly in Hyannis, but have one scheduled in Shrewsbury, too. Members attending the hands-on have all said they learned a lot and will attend more. Ken Belovarac was scheduled to do a hand-laid track seminar on a Saturday in May using FastTrack templates, but it was canceled due to the church closure with the pandemic, but the show will go on at a later date. In the meantime, we are experimenting with Zoom meetings, so watch for our email notices. If you are not getting emails about our clinics, email the office manager (officemanager@hubdiv.org) and request to be added to the mailing list.

So, until we meet again, please keep busy with your modeling, and document what you are up to.

Progress on the RC&N

By Jerry McDonald

The Rockland Canton & Northern is progressing slowly (but hopefully surely). We've finished the benchwork for the second of three peninsulas and have started to assemble the spline roadbed to be used in this section. Our procedures for both benchwork and spline roadbed are a little different and I'll explain how we go about making them. We use the computer program Cadrail for layout planning and it is key to designing and building the roadbed. My intention had always been to have 30" minimum radius on all mainline track, and the layout design was drawn with this in mind.

The staging level on the first peninsula was constructed with this radius and no spiral entrances to curves; although I intended to use spirals in any future track that would be visible, as the staging is not. It took a long time to grasp how to draw and emplace spiral easements, but I finally caught on. When I redrew the visible layout with spirals, reality set in. On the available dimensions of the benchwork, which cannot reasonably be expanded without impinging on the desired aisle width of 3'-0", some curves with spirals had to be slightly less than 30". Reluctantly, I settled on 27" minimum, with spirals, as being aesthetically and operationally better than straight 30". In about half the cases 30" with spirals will fit.

Photo No. 1 shows my method of supporting benchwork, which I call "X-Frame." It is built with 2x4s and 1x4s screwed together using a jig to keep everything square. There are 1x4x4" pads glued



Photo No. 2: Completed Center Peninsula

under each end of the bottom 2x4 to prevent wobbling over any uneven floor. Frames are 5'-0" apart, braced by long diagonal 1x4s at each end of the peninsula. Because of lumber's inherent tendency to warp and twist, I don't rely on the X-Frames for an accurate finished height of the benchwork. To the X-Frames I add standard L-Girders, made from long, glued 1x4s and 1x2s. The L-Girder is where accurate height and spacing are established, using an inexpensive laser level and a carpenter's level. Joists of 1x3s are added above the girders to complete the benchwork. See Photo No. 2 for the final product. Although all of my layout will be away from walls, this method can be used against the wall if desired.

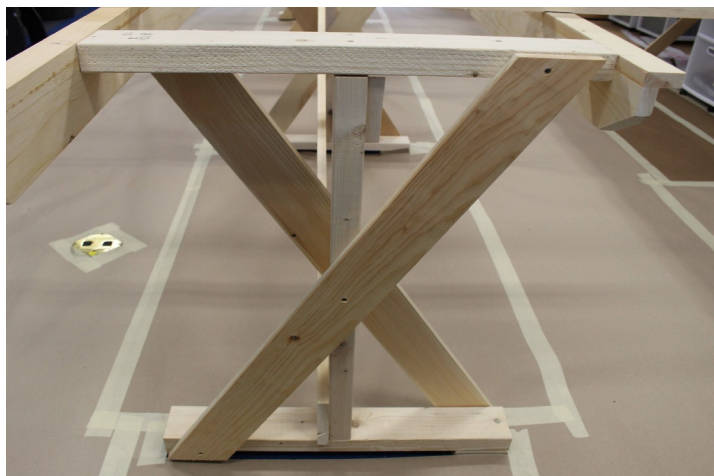


Photo No. 1: "X-Frame"

I have always been partial to spline roadbed, but Pete Watson's clinic several years ago really confirmed my belief that this was the way to go for me; especially since it is conducive to drainage ditches, rolling terrain, and such. Photo No. 3 is a jig I built to bend and glue splines. The three movable

wooden radii are merely safety devices to hold the pieces in place and prevent them from springing out and injuring someone. Photo No. 4 shows the radii that can be bent, from 15" to 42", although I use only a few of them. Splines are 3/16" wide ripped from 1" stock, with five splines and four approximately 1" long separators glued about a foot apart.

One of the nice things about a CAD program like Cadrail is that it gives you exact lengths, radii, angles, and location for each item in the drawing. This was particularly helpful in building roadbed,

(Continued on Page 11)



Photo No. 3: Spline Roadbed Jig

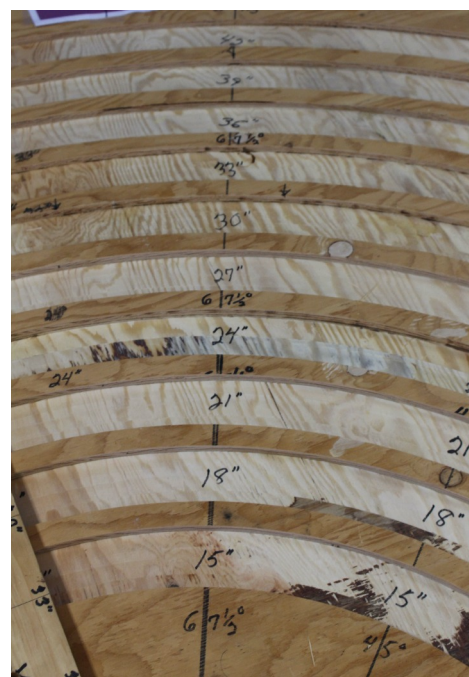


Photo No. 4: Closeup of Radii

Go to a HUB RAILFUN Night and add 30 inches

By Bruce Robinson

I was looking through the schedule for the HUB's RAILFUN night and saw there was a topic coming up about how HUB member Dan Fretz solved his problem of building benchwork over the laundry area in order to make a track plan work. Not a task for the light-hearted, but Dan came up with, and did a PowerPoint presentation on, his solution. I always enjoy presentations on how modelers solved "real estate" problems or found a way to get around a sticky situation.

I, too, have a "laundry problem" in my basement. But there is also another element to think about in this case. You see, the Valley Junction Railroad has been complete since 1994, and there were no plans for adding or modifying any track or benchwork. The operating crews have been running (and sometimes complaining about the yard at Valley Junction for about two decades), which is also responsible for handling interchange trains coming off the Central Vermont. There are three trains that enter/exit VJRR trackage at CV Tower near the entrance to Essex Yard, curve along the edge of the benchwork on double track and terminate in a small two-track staging yard that runs over the top of the washer and dryer. So far, so good, the plan was working.

This two-track staging track handles trains MEBO/BOME (overhead traffic running between Montreal and Boston), trains 1 / 2 (The Montrealer, a first-class passenger train) and trains 110/111 (a milk train coming off the CVRR and heading to the Hood plant in Boston).

Around the time of Dan's RAILFUN presentation, Erich Whitney was standing next to the 30-year-old+ tall cabinet that stores laundry products, vacuum cleaner and miscellaneous junk where the staging yard tracks terminate. With a quick, simple gesture he says "I'd cut this cabinet off about here and extend the Montreal staging tracks." The dirty deed was set, after all the tall cabinet was in pretty bad shape and in need of replacement.

Now we have two experiences colliding with the result that an idea was taking

shape. Maybe something could be made of these ideas. Then, along came the stay-at-home-orders canceling model railroad events (Erich and I were really looking forward to going back to Syracuse for the op-till-you-drop weekend) including the VJRR's monthly operating sessions. A plan was slowly coming together. If the old tall cabinet was replaced, then 30-inches of track, of about five-car capacity each, could be added to the Montreal staging tracks. A key point to remember in all of this "fixing the problem" thinking is that the Valley Junction RR runs on a schedule. Trains are scheduled into/out of Montreal staging at different times and capacity issues only come up if/when trains are not on schedule.

So, what will this entail? Out comes the tape measure, ruled paper and a pencil. In short order (by "short" I mean in a relative way – I don't do much in a hurry anymore!) a sketch took shape that suggested four cabinets would be required. There were an old table top, a tall floor cabinet and a wall-hung shelf that needed to be removed and discarded. In their place, a base cabinet with large top, a shorter "tall" cabinet to support the new track extension and two wall-hung cabinets would need to be built.

Here is what I came up with.



Photo 1: A new base cabinet was purchased and a new top was built. You can see the old tall cabinet on the right side of the photo and the existing Montreal staging tracks.



Photo 2: New tall cabinet under construction. Doors were added later. The height

of the cabinet matches the elevation of the existing Montreal staging tracks.

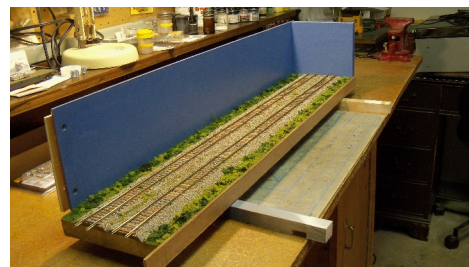


Photo 3: The new 30-inch-long track extension was built on the workbench and installed on top of the new tall cabinet.



Photo 4: New wall-mounted cabinets were built and hung above the Montreal staging tracks.



Photo 5: Here's an overall view of the laundry area. Valley Junction and Essex Yard are on the left and Montreal staging is on the right. The first two tracks in Essex Yard are Central Vermont tracks that follow the curve of the benchwork, cross over the washer/dryer and terminate in Montreal staging.

The new installation yielded more laundry storage/work space and staging tracks that are now seven feet long. Look at all that counter top space for the crew's cookies and refreshments! Montreal staging is ready for use whenever the current pandemic subsides and monthly operating sessions can resume.

This example just goes to show you what can happen when you attend a HUB Division RAILFUN night! Thanks Dan and Erich for the "inspiration."

How I learned to stop worrying and love DCC "Phase 2"

By Jerry Grochow

Seems like the years go by pretty fast, especially when there's lots of modelling involved. I first wrote of my experience learning about DCC (my "Phase 0") in 2018, and followed up a year ago as I got my configuration running on a (small) DCC HO layout. Now, I'm in Phase 2 and adding sensors, turnout control, and even some animations. I'm moving right along with "traintech," and without breaking the bank.

My layout uses a SPROG3 DCC command station (www.sprog.us.com), connected to a PC running the open-source JMRI software (see www.jmri.org). I use iPhones and iPads running the WiThrottle app (www.withrottle.com) as throttles, both locally and from a thousand miles away. See Figure 1. With more than a little bit of network fiddling, the grandkids can now control my trains while watching via FaceTime – my job is to turn off track power before they race to a crash! [Even if you are using other DCC command stations, you can use JMRI to allow this kind of remote control – take a trip over to the WiFi Throttles page at the JMRI web site (www.jmri.org/help/en/package/jmri/jmrit/withrottle/UserInterface.shtml for information).]

My work over the past year has been adding various components to monitor my trains as they traverse the layout and control several turnouts and animations from my PC. For example, when trains pass a station, JMRI automatically plays an appropriate audio clip, and when trains pass certain sensors, a crossing gate goes down, lights flash, and bells clang. See Photo 1.

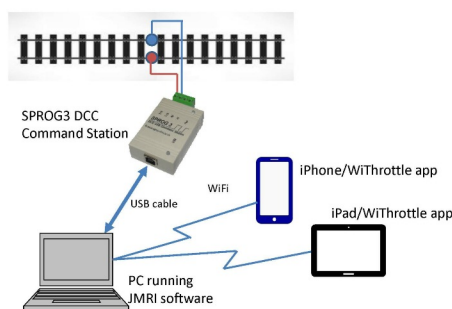


Figure 1: My DCC Setup



Photo No.1: Crossing Gate

A key decision I had to make before getting started on this effort was whether to control accessories via signals sent over the tracks or over an auxiliary network such as Loconet or CMRI. DCC control signals are sent over the track voltage, so both accessories and trains with the proper decoders can receive, interpret, and react to the signals. You can, for example, click on a turnout in a layout diagram on your PC screen and cause a turnout "miles" away to flip, route lights to go on, and frog polarity to change. While it may seem easiest to attach an accessory decoder (dccwiki.com/Accessory_Decoder) to your turnout, signals or whatever, and then to the track, there are several considerations: the DCC control signals sent over the tracks to accessories compete with signals sent to locomotives, as does the power they draw if not otherwise powered. Neither is much of an issue for a small layout (like mine), but could be for larger layouts.

Furthermore, if a train derailment causes a short, track power will be cut off and that would mean that any connected accessory decoders won't operate either. Most modelers that I've spoken to or read about, do not connect their accessory decoders directly to the tracks, but rather to a separate set of wires running around the layout. They then use Loconet or LCC (NMRA Layout Command Control) (dccwiki.com/Layout_Command_Control), or take another approach – like I did by using CMRI.

The Computer Model Railroad Interface (CMRI or C/MRI) was developed in the 1980s by Bruce Chubb (www.jlc enterprises.net/pages/about-us) and seems to be more popular than ever as a way of getting information back and forth from your layout. It has been adopted as an NMRA standard (www.nmra.org/sites/

default/files/standards/sandrp/Other_Specifications/lcs-9.10_cmri_intro_v1.0.pdf) and there are several manufacturers providing accessory control modules. JMRI provides extensive support for CMRI (www.jmri.org/help/en/html/hardware/cmri/CMRI.shtml). In addition, it is relatively easy to "roll your own" using Arduino microcontrollers (www.arduino.cc/), which themselves are quite popular with model railroaders (just search for "Arduino model railroad" and you'll see what I mean).

Given that my approach to modeling is to make appropriate "build vs. buy" decisions in order to limit out-of-pocket expenditures and also to make sure I have a high degree of flexibility and fun (at least what I call fun), connecting and developing Arduino-based control modules for my turnouts, lights, and animations, emulating CMRI "nodes" (using freely available software) and connecting them all over a pair of wires to my computer running JMRI became my preferred approach. See Photo 2. The diagram on the JMRI CMRI support page (www.jmri.org/help/en/html/hardware/arduino/index.shtml#CMRI) shows what I did, all for a cost of about \$3 to \$8 per accessory depending on whether I ran one or several turnouts, lights, and signals off the same Arduino (by comparison, accessory DCC decoders running over Loconet typically cost \$10 to \$25 per accessory depending on the size of your layout).

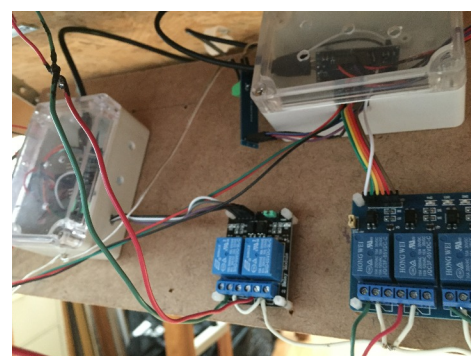


Photo No.2: Arduino (in boxes) with TO relays

Here are some examples of what I've been implementing so far:

- Turnout control: There are many approaches to throwing turnouts, from manual "ground throws" to solenoids to slow-motion switch machines. The state-of-the-art seems to be slow-motion switch

(Continued on Page 11)

How I learned to stop worrying and love DCC "Phase 2"

(Continued from Page 10)

machines (from Circuitron, Walthers, and others) but these cost about \$20 or more per turnout. You can accomplish the same thing using a \$5 Arduino, a few extra components and \$2 servo motors. Controlling four turnouts via a single Arduino will cost about \$5 per turnout. See Photo 3.

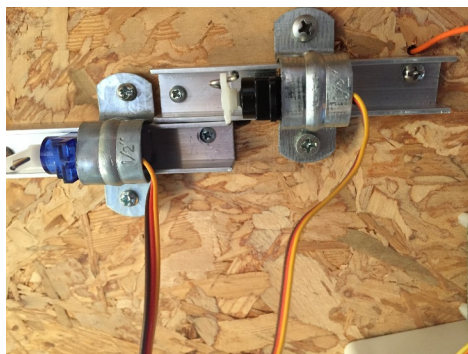


Photo No. 3: Servos for 3-Way TO.

- **Sensors:** Similarly, there are many approaches to implementing location and block occupancy sensors on your layout (we modelers are a creative bunch!). The trade-offs are a topic for another article (or search the web), but I ended up choosing inexpensive infrared (IR) receivers and detectors (about 50 cents a pair in quantities of 10 on eBay) that I connected to an Arduino. I found that putting them so the beam shines across the tracks where a train will interrupt the signal worked best.

- **Animations:** I created a simple animation using an Arduino to operate the motor on a Ferris wheel (described here: s3-us-west-2.amazonaws.com/mrhpublish.com/2020-05-may/123.MRH20-05-May2020-P.pdf),

So there you have it: Phase 2 of learning about DCC took me down a path that doesn't actually require DCC – expanding my world of "traintech" into the world of CMRI and microcontrollers. While I run my locomotives using DCC, the approach I took to accessory traintech doesn't require DCC and will work on layouts that use DCC, DC or even deadrail locomotive control. Perhaps I should change the name of this series of articles to "How I stopped worrying and learned to love traintech!"

Modeling a Moving and Storage Facility

By Ken Belovarac

I have been scratch-building a moving and storage facility, and it is about 90% complete. The brick siding is from Monster Models, roofing shingles from BEST, widows from Grant Line and doors from Bar Mills. The interior has lights, a rest room, office area, and two stairways going to the first floor. There are two working sliding doors for the rail siding that can hold two 40-foot box cars. The front of the building has a truck loading ramp. The roof framing is seen by removing the roof. Everything else is scratch-built including the office furniture and dormers. An outside crane will be added so merchandise can be lifted to the second floor. A chimney needs to be added for heating. The granite foundation, not seen here, has been built into the layout and is not removable, although the building is removable. The name J. H. Bennett is based on a moving and storage company in Erie, PA. The red brick and many windows mimic the original building, but it never had a rail siding.



Progress on the RC&N

(Continued from Page 8)

since the central portion of a compensated curve might cover only a small part of a circle all the way up to a semicircle or more. Mark off the length of the full-radius central portion on the middle spline (which corresponds to the centerline of the drawing) and glue up just that much of the spline in the appropriate arc of the jig. Leave enough length at each end for a spiral and a small bit of straight track. This gives an exact radius center.

Photo No. 5 shows a full-size jig for a 27"

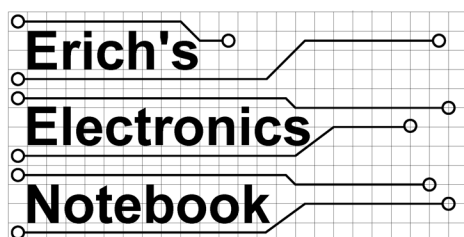
curve with spirals at each end, printed from Cadrail. After the glued center has dried, it is placed on the spiral jig between the 27" nails, the unglued ends of the spline are formed against the nail marked "Spiral", separators added, and

glued. Although center may vary in length, spirals will remain the same. Cadrail shows two lengths, "xy" for level track and "xyz" for track on a grade, which will be slightly longer than the drawing shows.

All my Cadrail layout drawings are done within a diagram of the room. In this way, each point on a drawing can be referenced to a physical point in the room. You see on Photo No. 2 a pair of curves, with spirals, set on the Benchwork, not yet attached. Using a Cadrail one-foot grid, it is very easy to locate them permanently.



Photo No. 5: 27-inch Spiral Template.



By Erich Whitney

Signaling

At the June online RAILFUN meeting I presented an update on the HUB Modular Railroad Group's signaling project. I received a number of questions before, during, and after this meeting so I thought I would use this issue's column to explore the subject in more detail. I've been focused on the particular challenges we face in implementing a signaling system on modules. While much of this information translates to home layouts, I think I should point out that there are differences. The biggest difference is that if you choose to implement signals on your home layout, presumably you will design it once and it will operate the same way at every operating session. Whereas with modules, the layout is likely never the same from one show to the next and it's modular, both of these have implications on the design. There's also the different use-cases to consider: operate the signals to control the movement of trains, allow members to experience dispatching, add an element of realism to the layout that compliments the modeling, scenery, and operation of the trains.

The HUB's modular signaling system, as it exists today, is flexible enough to accommodate a module owner who doesn't have an interest in signaling. In this case, the module is benign (or passive) as long as it adheres to the harness and track wiring guidelines provided. Most of the current effort on this system is focused on improving the usability and simplifying the setup of the signaling system so that it doesn't interfere with having fun at shows. Members who wish to add signaling to their modules should reach out to me with questions and I can help guide them to a solution that fits your constraints. The RAILFUN presentation slides contain the latest information, and a revision of the HUB Module Specification is in the works to help make this even clearer.

Exactly how does this signal system work?

For the sake of this discussion, the signaling system on the modular layout is used to prevent trains from running into each other. While that is the same goal that the real railroads have, they would probably have a thing or two to say about moving trains efficiently. When we run trains on the modular layout today, we operate trains on the outer main in one direction and trains on the inner main in the opposite direction so, for the most part, we're concerned about the front of one train running into the tail of another. The only "cross traffic" situation is at the entrance to the main staging yard for trains entering and exiting the layout where they have to cross the inner main. The signaling system is designed to handle traffic in either direction on either main line, however in practice this is currently rarely done. When we are at the point where Centralized Traffic Control (CTC) dispatching is more commonplace, we could easily accommodate more bidirectional mainline traffic.

There's just four pieces of information that the signaling system needs in order to function:

1. Where are the trains?
2. What aspect should each signal indicate?
3. What is the current state of all turnouts connected to the main line?
4. What is the desired state of all turnouts connected to the main line?

With these four pieces of information, a signaling system can function under a variety of operating disciplines – CTC, Absolute Permissive Block (APB), Automatic Block Signaling (ABS), etc. When we want a train to move, we set the signal in front of that train to an aspect that's understood to mean "proceed" and the engineer can move that train. When there's something ahead of that train that's either stopped or moving slowly, then we can set the signal to display a "slow" or "stop" aspect and that train must obey in order to avoid a crash.

Where are the trains?

Our modular system has been designed to create "blocks" on each of the main line

tracks. The blocks break up the layout into sections just like the prototypes. Each block has a sensor (a block detector) installed such that any time a train is in that block, the detector indicates that the block is occupied. For the locomotives, this is easy – whenever their wheels make contact with a segment of track connected to a block detector, the detector senses the small amount of current that the decoder is using even if the locomotive is not moving. Remember, DCC always has power on the rails. However, freight cars and passenger cars without lighting don't draw any power from the rails so they are not detected unless we put a small resistor across at least one axle. About 5K ohms is sufficient. This way, long trains that occupy several blocks will be detected from head to tail. There have been clinics on how to install resistors on wheelsets given at past RAILFUN meetings and there are commercially available resistor wheelsets available if you don't want to do it yourself.

What aspect should each signal indicate?

This question can be answered in several different ways depending on whether we're using CTC, APB, or ABS. However, we have come up with just three aspects sufficient for our needs: Stop, Go (track speed), and Go Slow (restricted speed). Each time a signal is in view from the perspective of what the engineer in the cab can see, that signal shall be obeyed. If we're running under CTC, that means that a dispatcher is in control of the flow of train traffic and a signal might indicate stop in order to allow a train to cross the tracks in front of you. Under APB, the signals are telling you about the occupancy of the next two blocks; a Go indication says that the next two blocks are clear, a Go Slow indication says that the next block is clear but the one after that may be occupied, and a Stop indication says that the next block in front of you is occupied.

What is the current state of all turnouts connected to the main line?

This information uses sensors (switches) to indicate what the position is of each turnout. For the modular layout, the only turnouts that matter are the ones that are connected to either main line. Turnout

(Continued on Page 13)

Erich's Electronic Notebook

(Continued from Page 12)

position is typically detected using the switches that are part of either the switch machine (i.e. Tortoise) or the DCC accessory decoder used to control the turnout. In order for CTC to work on the modular layout, the dispatcher must be able to control the state of each turnout. This is typically done by installing a DCC stationary decoder on each mainline switch machine, although we do not require this control to use DCC – it could use CMRI (defined later) instead, but that's a topic for another future article.

I would like to point out that for modules where there is no signaling system installed, but they have a manually thrown turnout that connects to either main line, there is a solution to help prevent a mainline train from fouling that switch or crashing into a train entering or leaving the mainline. This was a suggestion made during my RAILFUN presentation brought up by James VanBokkelen and I wanted to make sure that it got captured here. Figure 1 is a diagram showing how to use a Double Pole, Double Throw (DPDT) slide switch to manually throw a turnout. One side of the switch (the upper half) controls power to the isolated frog, the other side of the switch (the bottom half) is used to connect a 5K ohm resistor across the track when the switch is thrown. This will cause the block to be detected as "occupied" so that the signaling system knows that this block is not clear. A small piece of stiff wire is used to activate the throw bar by drilling a small hole through the side of the switch and bending the wire such that it engages the throw bar through the drilled hole. If you don't like the look of the switch, you can glue a switch stand to it and hide the switch in ground cover.

What is the desired state of all turnouts connected to the main line?

This question relates to turnout control I mentioned above. For CTC, the dispatcher will set a desired route that will send a command to all the turnouts to move to their desired positions. Then the dispatcher's panel has to show that the state of all the turnouts has been changed to the desired positions before the signals will change.

How the signaling system works

On the HUB layout, all train movement is controlled through the Lenz DCC system. The signaling system uses the Computer Model Railroad Interface (CMRI) introduced by Bruce Chubb many years ago. This system has its own separate network (CMRInet) that is connected around the layout using one of the CAT5 Ethernet cables you can see between the ends of the modules. CMRInet uses an RS485 differential serial interface that has been around for a very long time. Each module that needs to connect to CMRI needs a CMRI node installed. A CMRI node is a small computer board that communicates to a master computer over CMRInet. Each CMRI node has terminals on it for connecting all of the block detectors, signal heads, and turnout position sensors to it.

A CMRI node can also control a turnout with the appropriate adapter board; however, in most cases members use a DCC stationary decoder to control the turnouts (again, a future topic). There are currently two different types of CMRI nodes in use on the HUB layout. One is a Chubb SMINI board that has 24 inputs and 48 outputs. The other CMRI node in use is based on the cpNode board produced by Model Railroad Control Systems (MRCS). This is an Arduino-based computer board that comes as a base node with 16 input/output pins and then you can add IOX expansion boards that give you additional pins in groups of either 16 or 32 pins. The primary difference between the SMINI and the cpNode is that the cpNode is user-programmable. You have to download a program to it from

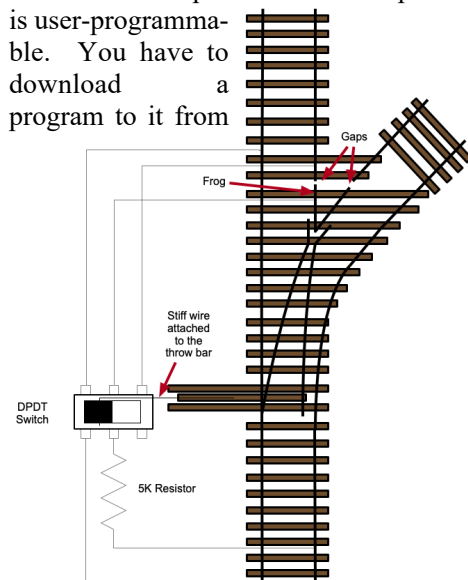


Figure 1: DPDT Switch Turnout Control

a computer so that it can be properly configured for your needs. Whereas the SMINI has a fixed function and you just hook up to whichever available terminals you have on it. The CMRI nodes by themselves do not do anything without a command from the CMRI master, which in our case is a laptop connected to CMRInet via a USB-to-RS485 converter device. We run Java Model Railroad Interface (JMRI) that contains the necessary software to control CMRInet. In addition to JMRI, we use a program called Crandic Automated Traffic System (CATS) that implements the control panel for our layout. CATS can either run the railroad using the CTC or APB discipline.

The CMRI master constantly polls (requests) all of the CMRI nodes using the CMRInet protocol. Each CMRI node in turn sends the CMRI master its list of inputs and whether they are high or low and, in return, the CMRI master sends the CMRI node a list of output values. All of this activity happens as part of the JMRI software running in the background behind the CATS program. The CATS program takes all of this information in JMRI and makes a decision about any signal aspect changes based on the current movement of trains. The CATS program also provides a dispatcher panel and user interface for the dispatcher to set routes and control the movement of trains.

What about Layout Command Control (LCC)?

For the purposes of this discussion on signaling, CMRI and LCC are two ways of doing the same thing. They both provide ways of answering the four aforementioned questions separate from the DCC system. I could, and probably should, spend an entire article explaining the differences and similarities between these two systems. Both are NMRA standards and both of them work, but they each do so differently. At the present time, the HUB Modular Railroad only supports CMRI for signaling. I'm currently doing some research into what it would take to support both systems on the modules. As far as JMRI and CATS are concerned, it doesn't matter how the inputs get read or the outputs get set — that all happens in hardware outside of

(Continued on Page 16)



In Memoriam John R. Lutz

By Bill Barry

HUB Member and past Membership Chairman, John R. Lutz of South Hamilton, MA passed away on July 22, 2020. He was 79-years-old. John was originally from New Jersey, and attended Cornell University on a Naval ROTC Scholarship. He went on to serve with the Seabees in Rhode Island, Antarctica, Cuba, and Vietnam. John was a licensed Civil Engineer and Project Manager, and enjoyed his work on a variety of construction projects throughout his career in Rhode Island, New Jersey, Michigan and Massachusetts.

I first got to know John when he and I traveled to the St. John show in 2010. He was a great traveling companion and we talked about so many different things, but we definitely talked shop about engineering and construction. He was very proud of his daughter Alison and all her accomplishments, plus his wife Tracy went to Smith College just like my wife did. He talked of his son Adam, who they had lost early in his life. My favorite story from the Canada trip shows how honest John could be. We were entering Maine at the Houlton border crossing after visiting a number of layouts. They asked if we had made any purchases and John announced he had "bought some trucks." This really confused the border guard, until John explained what they were and they waived us on.

We shared rides to several other NER conventions over the years, but the most memorable was when John and I tagged along with Rudy Slovacek at the 2012 NER Convention in Burlington, VT. John and I had a great time chasing the convention train with Rudy and finding and walking the old Rutland Railroad causeway (now a bike path) across Lake Champlain. I also had a good chuckle after driving to a number of layouts that could only be reached by dirt roads. The state speed limit if not posted is 50 MPH, and John informed me he wouldn't have made it to nearly as many layouts if he had been driving.

John spearheaded the membership program offered by the HUB and introduced the membership package pricing that we still provide to new HUB members today. He was really enthusiastic about operations and got me interested as well. He created the HUB's OSfB group that Peter Higgins speaks about. John was also a volunteer at the Wenham Museum and organized the HUB's annual display at the museum.

Due to COVID-19 restrictions, an outdoor memorial service for John will be held at a later date. For those who wish to make a donation in John's memory, the family suggests either of two local organizations: Wenham Museum, 132 Main Street, Wenham, MA 01984, or online at www.wenhammuseum.org; and Family Promise, 330 Rantoul St. Beverly, MA 01915, or online at www.familypromisensb.org. If you are donating by check, please write "Memory of John Lutz" in the memo line.



John in one of his favorite spots, behind the Membership Table – In this case at the Wellesley Community Center in 2017. Photo by Bill Barry

2020 Keith Shoneman Award

By Peter Higgins

This year's recipient of the Shoneman Award for fostering the spirit of realistic railroad operations on model railroads went to a member that didn't even have a model railroad of his own. However, he knew where there were some pretty good ones and operated on them. John Lutz was that member. He was always at RailRun, Tour De Chooch, and even traveling to Op's Till You Drop in New York with Jeff Gerow. John shared his enthusiasm with many others in the Region and the Division.

In 2013, John approached HUB Division President Manny Escobar regarding the formation of the Operating Sessions for Beginners and that was the beginning of the OSfB Group. For many, John was that inspiration that initiated new members to their first operating sessions at one of his regular Friday or Saturday session spots. First it was Carl Senftleben's Atlantic Shoals Railway, then Don Howd's Dividing Creek RR. Next was Keith's Shoneman's, Pennsylvania and New England, Stan & Debbie Ames SJR&Pry and on to Bruce Robinson's Valley Junction Railroad in New Hampshire. At every Op Session the OSfB numbers grew, but that wasn't enough for John Lutz, so he reached out to area clubs. The three in particular that were large enough to accommodate the growing interest in operations were Pepperall Siding, Nashua Valley, and North Shore MRRC. Several of these were to be featured at this October's NER Convention.

It was for the number of operators that John's enthusiasm created, that we've recognized him for his contribution to Operations and hoped to honor him for all his work sharing his hobby with so many. Unfortunately, his health declined rather suddenly, but he still made an appearance here and there when he could, even attended a Zoom meeting. Quicker than we expected, we lost him... But, we will always remember him for what he did for so many to make this great hobby of ours a bit more enjoyable. "I wouldn't be surprised to find out one day John received the award from Keith himself."

McKelvey Brothers Logging Company

By Russ Norris, MMR

Greetings everyone! Here are a few pictures of a recently built and scenicked logging scene for my East Broad Top layout. The McKelvey Brothers logging company was the only narrow-gauge railroad to connect with the EBT back in the 1920s. The Shay is a rebuilt MDC model lettered for McKelvey. I am currently repowering a brass Benson Shay which is a better copy of the McKelvey prototype.



Adapting a Alco S-1 to Narrow-Gauge

By Russ Norris, MMR

Here are some pictures I took of my latest project – adapting a LifeLike ALCO S-1 to narrow-gauge and installing a Soundtraxx mobile decoder in it. The engine was re-gauged from HO to HO_{N3} – not difficult, as there was ample room to press the wheels in for the conversion. As you can see from the photo with the hood off, there wasn't a lot of room to install the decoder. I had to cut away some of the insulation to make it fit, and then there was really no room for a speaker or keep-alive. I plan to run it mainly for my track cleaner car, so I wasn't really interested in sound and lights. I left the open frame motor in place, as it is nicely connected with both trucks and runs as smooth as glass. On lowest power the engine just creeps along, and since the frame is quite heavy, it runs well without the need for a keep-alive. The hood was painted and lettered for the East Broad Top Railroad and Coal Company. The EBT did not actually have any diesel power until after it closed down as a common carrier, and then became a successful tourist road. However, the railroad was in talks with GE about changing from steam to diesel in the early 1950's. I imagineered a second hand S-1 that might have been bought on the cheap to test out the idea of dieselization.



Treasurer's Report Fiscal Year Ended: June 30, 2020

By Gerry Covino

The HUB Division has successfully completed another fiscal year by continuing to offer quality programs to our members and maintaining a solid financial position as shown in the summary financial statement below.

The Division completed its second year under contract with the Boston Museum of Science (MOS), constructing and operating its Train Exhibit at "All Aboard Trains" during the Holiday season. This project is a three-year contract with the Division. The financial contribution committed by the MOS helps the Division fund future programs. The event continues to be a huge success largely due to the unselfish donation of time by many of our members. This includes constructing and staffing the exhibit for many hours over the holidays, and the removal and storage of the exhibit for future years. Due to the success of the Exhibit, the MOS wanted us to expand the number of weeks it is on display, but in the light of the restrictions and issues surrounding the COVID-19 pandemic, we declined. The Exhibit will go forward as scheduled, however the Division will limit our staffing to three-days per week as stated in our contract. The good news is that the MOS still wants to extend our contract for an additional 3- to 5-years. "Shack" will continue to manage negotiations with the MOS.

Other factors contributing to the Division's success are the generosity of our members through their time commitments that support our programs, and the income from our donations table at the NEMTE (through great management by Dan Fretz, with assistance from Rudy Slovacek, Dave Insley, Barbara Hoblit and many others).

Additionally, the Division continues to receive many small donations from friends of the HUB Division as we promote the HUB as a non-profit organization. The programs we offer provide some revenue that helps offset the costs associated with their success. The Module Group delivers enjoyment to many modelers under the direction of modular superintendent Ron

Noret, with assistance from Dick Ball, while accepting honorariums from several venues. Our RAILFUN meetings continue to educate and entertain members under the direction of its coordinator, Andy Reynolds.

Our major fundraising event, the "New England Model Train EXPO," once again has been financially successful, despite a small decrease in paid admissions and Dealer participation. The event provides financial resources that fund a major portion of the Division's programs while our show management maintains strong cost controls. The Division leadership is extremely grateful and thankful for the effort and support you provide with the many volunteer hours required to staff this two-day event.

As we begin our new fiscal year, we face many challenges brought on by the pandemic. Due to the many uncertainties, the Budget Committee proposed, and the Board approved, a budget through the end of October. The Budget Committee will reconvene virtually in August to review the remainder of the budget for the Board to review and approve in September. We did this in the hope of having more knowledge as to what programs could go forward in the new fiscal year.

In anticipation of needing to change the way we conduct meetings and gatherings, we purchased a "Zoom" account allowing the Division to stay in contact with members and offer training experiences.

The Division reviewed COVID-19 guidance from the Commonwealth and concluded that we needed to cancel this year's NEMTE event. Fortunately for the Division, our financial health is strong and the Division will be able to weather this storm and continue to provide programming to our members, albeit in a new format, without incurring a devastating decrease in our financial picture. As we become aware of canceled events, we will post them to our website and mailing lists.

Finally, the Board urges each of you to make, or continue making, an annual financial contribution to the HUB Division, and consider leaving part of your railroad collection to it. The HUB Division is a registered 501(c)3 non-profit organization. This means your contribu-

tions to the HUB could be tax deductible. You will find a form in this issue of the Headlight that you can use to make your contribution.

You also have two other ways for contributing to the Division:

1. When making personal purchases over the internet using PayPal, designate a small donation to the HUB.
2. Use Amazon Smile for your Amazon purchases and select the HUB Division as your non-profit choice. The Amazon Foundation will contribute to the Division at no cost to you.

Your financial support, as well as your volunteer support, will help ensure the ongoing success of the organization and the programs offered to you and to new members. Your ongoing generosity is greatly appreciated.

Considering the circumstances, please try to have another great modeling year.

Account Balances Year-Ended June 30, 2020

Checkbook	\$ 2,493.60
General Savings Account	538.34
Reserve-Life Savings Accounts	56,211.63
Restricted Savings Accounts	3,092.59
Program Checking Account	1,122.57
PayPal Account	1,287.21
USPS Permit Account	<u>0.87</u>
Total Funds Available	\$ 64,746.81

Erich's Electronic Notebook (Continued from Page 13)

JMRI. The one fundamental difference between CMRI and LCC that I will point out here is that CMRI requires one and only one master node on the network. Whereas LCC is what is called a "peer-to-peer" network meaning that any node can send a message to any other node without being asked (or polled). If you would like to learn more about LCC, please look up Jeff Gerow's fantastic introductory clinic on LCC which he has given at previous HUB events and regional conventions. He does a really nice job explaining LCC to the model railroader.

I hope you have found this information useful. Please keep the questions coming and I look forward to the next time we can all get together and play with trains!!!

The Clinchfield comes to New England

By Bob Collins

Below are some photos of the layout my son Logan and I have been working on for the past year and a half. It is based on the Clinchfield Railroad and is about 12-feet x 28-feet. I've gotten a lot of extra work done this summer.



Feed and Grain at St. Paul, Virginia.



The natural beauty of the Blue Ridge Mountains.



Awaiting orders at Erwin, Tennessee.

Achievement



Jim Kerkam proudly shows off his Chief Dispatcher AP Certificate.
Photo provided by Jim Kerkam

PNE delivery on the Valley Junction



SW7 #30 delivers the PNE (the late Keith Shoneman's Pennsylvania & New England) box car for unloading at New England Produce in Valley Junction on the Valley Junction RR.

Photo by Bruce Robinson



The NER has a new logo. It was launched at the 2019 convention in Syracuse. To learn more, check out the October-December NER Coupler. You can find it at the Region's website at www.nernmra.org.

HUB Headlight

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Headlight Printers

Versatile Printing Services, LLC, Burlington, MA

COVID-19 Car Building

By Bill Harley

I made progress on building cars to increase my fleet.



ACL watermelon car from Westerfield kit



ATSF Bx-3 boxcar from Westerfield kit



Southern 70T cement car from Funaro & Camerlengo urethane kit



Southern Mt. Vernon Car Co flat car relettered and backdated from Exactrail GSC flat car - with tiedowns

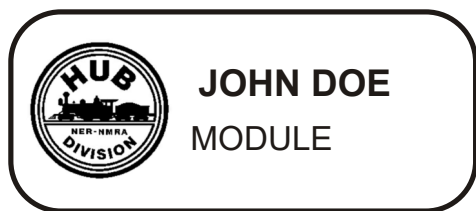


Southern 70T hopper from Model Diecasting kit with lettering with multiple decal sets. Hobby Load coal load

Make checks payable to:
“The HUB Division, Inc.”

**Mail to: Gerald Covino, Treasurer
The HUB Division, Inc.
P.O. Box 672
Hollis, NH 03049-0672**

***To pay using your credit card, email
Treasurer@hubdiv.org and an
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[illegible]

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I enclose \$7.00 for a subscription to the HUB Headlight for 2019

Name _____

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It Takes All of Us Working Together!

() \$25.00 () \$50.00 () \$100.00 () Other \$

YES, I am happy to support The **HUB Division, Inc.** to foster railroading through displays, modeling and educational opportunities to members and the public at large. I show support with the enclosed gift.

Name _____

Address

City **State** **Zip**

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 the roadbed and 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.

By Barbara Hoblit

To order HUB Logo branded merchandise, the HUB Division is partnering with Queensboro to bring you a personalized shopping experience. Within the HUB store you will find shirts, hats, outerwear and accesso-



ries in an array of sizes (men's, women's and youth) that you can purchase directly online and have sent directly to you.

In order to access the merchandise for ordering, please visit the website at:

<https://nmrahubdivision.qbstores.com/>

Create a log in with your personal details
and start shopping.

Each week, Queensboro will send a promotional email to all registered HUB Online store users with special pricing on selected sale items. Sale periods normally run for about three days.

Shipping rates to the contiguous US are always a flat \$7.95

Please reach out to me at PRDirector@hubdiv.org if you have any questions or concerns.