HUB Headlight

HUB Division Inc., Northeastern Region, National Model Railroad Association - www.hubdiv.org
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RAILFUN TIMETABLE

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

By Bruce Robinson

8 PM Friday, March 20, 2020, Cambridge School of Weston

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: Designing and Manufacturing Model Trains in China - the "Rapido Way"

By Bill Schneider and/or John Sheridan

8 PM Friday, April 17, 2020, Cambridge School of Weston

Bill Schneider and John Sheridan are the project managers at Rapido, and one of them will show us a presentation of their manufacturing plants in China and their operations in Markham, Ontario, Canada. We'll get a rundown of the design phase, first-tooling, pre-production to the production phase, and the delivery of their inventory. While Rapido is based in Canada, they focus on a variety of Canadian and American prototype models, and have an impressive line of New Haven products.

Hands-On: Helping the World Build Better Railroads

By Ken Belovarac

10 AM Saturday, May 9, 2020

First Lutheran Church, 1663 Main Street, West Barnstable

Interested in getting your AP in civil engineering, or just interested in making turnouts and other track features (crossovers, gantlets, turnouts, three-way switches, wyes, etc.)? This hands-on clinic with Ken Belovarac will focus on building hand-laid track turnouts and wiring them up for DCC layouts. Also, we would like to know who can bring a Fast Tracks template, as this is the base for attaching the copperhead PCB ties to the Micro-Engineering HO rails, and then hot glued onto the pre-drilled laser-cut wood ties assembly. We will have a limited quantity of templates, tools and supplies on hand. We encourage you to call Andy Reynolds and discuss what you want to build.

After the session, we'll be visiting Dave Trimble's layout in Centerville. His entire layout uses hand-laid turnouts.

For more about the AP-Civil certificate, visit: www.nmra.org/civil.
For information on what we are doing, go to: www.handlaidtrack.com/fast-tracks-videos

RAILFUN Timetable Continued on Page 2

All Aboard! HUB Division at the Boston Museum of Science

By Jerry Grochow

For the second year in a row, the HUB Division has developed and operated a holiday exhibit of model trains at the Boston Museum of Science. You may have seen the museum billboards along several highways displaying a locomotive with "All Aboard! Trains at Science Park" in letters about 10-feet high. That was us!

Our exhibit supplemented the permanent exhibits that the museum has on locomotives (only a few), the train-themed movies (Polar Express and Thomas the Tank Engine in 4D, and Rocky Mountain Express in IMAX) and this year's traveling exhibit of Thomas the Tank Engine

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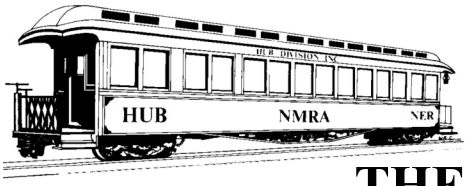
Also Inside This Issue



THE PRESIDENT'S CAR

By James VanBokkelen

Hello, members of the HUB Division and readers outside our group. I'm writing this looking out at a lawn that just got re-covered in snow (but I've seen mostly grass since our early December storm melted).

In the New Year, our Holiday Party drew more attendees than ever before. Both our Module Group setups, first at the Wenham Museum and then at the Amherst Show at the Big E, went well. We continue to have one of the most efficient and flexible modular layouts in the NER, and my thanks go to everyone who brings modules, helps with setup and takedown, or operates at shows.

The next HUB Module Group event will be March 28-29 at the Greenberg Show in Wilmington, MA. We'll have a fairly large oval layout and expect lots of families in the audience.

Our 2020 HUB Annual Meeting will be conducted at the Cambridge School of Weston the evening of Friday, April 17 at 8 PM. This will be a quick meeting so we have plenty of time for the RAILFUN presentation.

As I mentioned in my last column, we won't have Spring TRAINing this year. Our show organizing resources are engaged for the Mill City 2020 NER Convention in October.

The next big HUB event is our Dinner Train on the Conway Scenic Railway on June 13. Tickets are going fast as I write, so don't delay. See Page 13 and visit: www.hubdiv.org/events/murder-mystery-dinner-train/

Sunday, July 19, is the HUB Cookout at Waushakum Live Steamers in Holliston. This free event is always fun, but I won't see you there because...

I plan to attend the NMRA national convention in St. Louis July 12-19. July seems like a long way off, but it looks like we can be part of the Mid Central Division Division 4/5 (our Cleveland friends) layout. St. Louis is four hours closer than Kansas City, where Gerry and I brought modules in 2018. This won't be a full HUB Modular Layout event but our friends from Ohio have been assigned space at the National Train Show. If you're going, be aware that Operating Sessions usually fill up quickly. If you'd like to bring modules or help with the layout, please let me know.

Until Midsummer's Day, at least, my planning horizon is October 9-12 (Columbus Day Weekend) for our Mill City 2020 NER convention in Westford, MA. We've been talking to layout owners about tours and operating sessions, but if we don't know about your layout, it can't be part of the convention. Please let us know if you want to show your layout, or help out otherwise.

Speaking of volunteers, the HUB needs 'em: The Board needs a Recording Secretary, there will be room for more Board Member candidates in the 2021 election, and we need help in show management and operations for members. Talk to me or another Board Member/Officer to get involved!

Also, if you want to earn the Association Official AP certificate, I'll designate you the HUB's NER Director. Participating in their quarterly telephone meetings will qualify you in three years. The one face-to-face meeting is at the NER convention, but with 30 members on the Board, one absence is unlikely to prevent a quorum.

Personally, I've been focusing on my layout this winter. No cross-country skiing or snowshoeing, and not even much snow removal so far – definitely the mildest winter in my 32 years here. In the new year, I've added three structures to the layout, two with lighting. I've also made some progress on landforms for my recent Downtown Newburyport peninsula. Take a look at: www.railroad-line.com /forum/topic.asp?TOPIC_ID=20091 &whichpage=75

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 event.

Until next time, High Green!

New Members

The HUB Division welcomes the following new members

- Robert Moores, Wakefield
- "Big Mike" Shipp, Leominster
- Greg Thompson, Arlington
- Savery Moore, South Carver
- Daniel Trefrey, Salisbury
- Rick Freni, Revere

Student Members

- Robby Waxman, Jamaica Plain

RAILFUN:

(Continued from Page 1)

Presentation: The Colorado Railroad - A rail trip your spouse would love

by Bob Peters

8 PM Friday, May 15, 2020, Cambridge School of Weston

This PowerPoint presentation will start with Bob's September trip to see the Coast Guard Cutter Eagle sailing into her new home port in New London, CT, and some railroad trivia about the surrounding area. After the introduction, we will take a ride on the famous Durango & Silverton Narrow Gauge Railroad. Durango was founded by the Denver & Rio Grande Railway in 1880. The railroad arrived in Durango on August 5, 1881, and construction of the line to Silverton began in the fall of the same year. Bob will also discuss the issues one encounters traveling with a spouse and looking for other sources of adventure. This presentation will have you reserving your tickets for the next flight out.

Shanty Talk: Late Winter 2020

By Rudy Slovacek

Over the past couple of *Headlight* issues I've described some of my modeling efforts, and at Springfield I got to display one of the projects, my WWII supply train. It went over well and I got a number of nice comments. One of my recent touches was to add the paper signs to the crates accompanying the armor units. I've actually made up two trains now. The first displays a tank platoon of Sherman M4's for the early phase of the war. The second, which I took to Springfield, displayed four types of units manufactured in whole or in part at the Alco plant in Schenectady. This included Sherman M4s, M7 Priests, and M10 and M36 Tank destroyers.

While I had intended to begin rearranging and cleaning up my work bench, I've scrapped that in favor of starting a few more projects. One is the use of pan pastels to weather my steam locomotives. This was inspired by the late Dick Johannes and a recent article by Tony Koester in Model Railroader. It is one I can undertake without the use of a spray gun and perfect for winter evenings. As many of you know, I'm a great fan of weathering and my forays into the back-dating of steam locomotives cry out for developing some new skills based around steam power. It almost goes without saying that anything I intend to run on a layout must appear to be at least used in every-day service, not straight out of the box with a plastic look.

After Springfield, I had occasion to travel to upstate New York for a relative's 50th birthday party. While there, and visiting my brother in Schenectady, I traveled down Blue Barns road. I saw a Pan Am train parked at the signal on the old B&M track that runs from Rotterdam to Crescent and joins the old D&H line from there to Mechanicville. I'm told by a resident of Rustic Bridge Road that they do this often and one can frequently hear the engines idling there. This track basically parallels the D&H main that splits after crossing Glenridge Road and the Alplaus creek. One branch heads directly north to Ballston Lake and Saratoga, while the other branch heads toward Crescent and Mechanicsville.

When I first began driving as a teenager, I encountered a train in the same location, stopped at the signal with its' headlight on and the Blue Barns road flashers disabled. Not expecting a train, which is partially hidden by the forest on the roadside, I caught a glimpse of the headlight out of the corner of my eye and just knew I was going to die in a crash. My entire life flashed before my eyes until I realized, glancing in my rearview mirror, that the train was just parked waiting for the signal on that side of the road.

That track also holds another special meaning for me. As a kid, I roamed the fields and woods behind my home. I'd explore until supper time and usually ended up at that first B&M track that crossed Blue Barns Road. There I'd stand in awe as strings of four, five sometimes six black diesels pounded up the 0.2% grade northbound with as many as a hundred cars in tow.

For many years I mistakenly thought this was a NYC line until I realized the NYC shared run-through rights on the B&M. At the time, in the late 50s and early 60s, the run-through rights extended from Rotterdam Yard to at least Mechanicville Yard. The engines were mostly either Alco RS-2s, RS-3s or some EMD F-units. I do not specifically remember any Alco FA units or Geeps. What I do remember was the black smoke pouring from those Alcos as they throbbed in run-eight up the hill under a load. In later years, I caught some orange and gray Guilford six-axle GE units lettered for the D&H on that same track. Thus, in memory of that occasion, I just had to add a couple of those units to my fleet when they came out from Atlas.

The D&H undertook a number of track realignments in the mid 60's that eliminated the Round Lake to Ballston Spa connector northbound and added a "Y" switch just south of Crescent. Trains headed North from Mechanicville could do so without going back to Mohawk Yard. Likewise, trains headed to Mechanicville and Albany could be routed directly through Crescent by a second switch, just south of Ballston lake on the D&H Main. This triangle became known to some of us railfans as "the Magic Triangle" and was a great place to watch D&H, B&M, Guilford, and later CP, Pan Am and NS activity on the North side of Schenectady. More on that in my next column. In the meantime, enjoy our mild winter and happy modeling.

South Station Construction

By John Cipar

South Station in Boston is going to have major construction in the next few years as a skyscraper will be built above the terminal tracks. I decided to get some photos before it is too late. Here are a few of these taken on January 11, 2020.

Amtrak ACS-64 electric #625 has just brought a Regional Train in on Track 9A.

ACS-64 638 begins its Boston to Washington journey with another Regional train.

As the regional departs, an Acela train from Washington approaches the station platforms.

The HUB Division elections will be held at 8PM on April 17, 2020 at the Cambridge School of Weston

Candidates for The HUB Division Board of Directors

(Refer to Page 5 for the ballot)

Mike Dolan

I was the HUB's Recording Secretary for two years. I would now like to be elected to the board so I can actively contribute to its functioning. My previous experience will aid me in working in the interest of the HUB Division.

I have worked with Pete Watson on the past three Spring TRAINing shows.

I have been active in the hobby for many years and have served in many positions at the South Shore Model Railway. From a start on the Board of Directors, to Chief Engineer and then to Vice President. I was also involved in their Budget Committee during my time in the club. I am most proud of the time I served as Scenery Committee Chair.

I was also involved in the N.E. Free Mo Group for a number of years. I am constructing the Whitman Southern Railroad in my basement. The layout started with my four original Free Mo modules plus six additional modules. The layout will include a waterfront interchange, an engine facility, city scenes, a coal mine and possible steel mill.

Last spring I earned my Golden Spike Award and am currently working on other AP Certificates.

I would appreciate your vote to elect me to the Board of Directors.

Mike Tylick, MMR

Building numerous smaller layouts in different scales, my On30 Marshfield and Old Colony Railroad was recently completed. After retiring from teaching fine art, I've built models commercially for several layout-building businesses and currently own RailDesign Services.

An NMRA Master Model Railroader, I have been an Achievement Award coach and judge for several AP Chairs. I frequently share my expertise by writing articles for national publications and have delivered clinic presentations at the national level. Working with the Publicity Director to elevate the quality of our promotional materials, I am currently designing visuals for the HUB's MillCity 2020 Regional Convention. Member retention programs I am involved with include the HUB Holiday Party, and Summer Picnic, RAILFUN, including the recent visit to Bar Mills models, and outreach programming to areas outside of I-495. But I consider my most important achievement has been to foster greater communications with our neighboring divisions, resulting in the exchange of guest clinicians and events among the groups.

I am fortunate to currently serve on the division's Board of Directors. I hope you will vote for me so I can continue to advance my ideas.

Dan Fretz

As I complete my current term as a member of the HUB Board of Directors, I would once again like to thank you, the HUB members, for your past support in electing me to the Board. I am honored and have truly appreciated the opportunity to serve the organization in this capacity. I have been on the Budget Committee for the past seven years, and have served as the Donations Chairman for the past four years, where I am responsible for collecting donated model railroading equipment and running the ever-popular Donations table at our Marlborough show.

I have also been active in the Modular Group for many years. You will often see me out in front of the modules while running my Chessie System trains, where I can talk with interested visitors and answer questions about our hobby.

My involvement with the HUB continues to be a very rewarding experience for me. As a member of your Board, I will work toward the continued success of our Division and the NMRA, as well as supporting and promoting this remarkable hobby at every opportunity.

I thank you for your consideration, and ask for your vote.

Jim Joubert

I joined the NMRA in 1974 when I became a charter member of the Down East Model Railroad Club. As a founder and leader of the club, I learned about the rich diversity of member's interests and the unlimited opportunities in model railroading.

As a candidate for the HUB Board of Directors, I plan to build on my experience to expand membership through introducing more young people to the hobby. I will work with our Board to find more opportunities, including our program with the Museum of Science, to introduce the next-generation to model railroading.

I will also work with the Board to expand our educational programs to the north and west of Boston, building on our current ventures on the Cape.

I have leadership experience with many groups, including the Boy Scouts, Carpenter's Union apprenticeship and mentoring programs and the Knights of Columbus. I currently serve as the president of the Sand Dune Central Model Railroad Club on the Cape.

Please consider me in your vote for the Board of Directors.

METHODS OF VOTING

Eligible voters are not always able to make it to the Annual Meeting. In lieu of voting in person at the Annual Meeting, a HUB member may cast one ballot using one of the three (3) following methods:

1. MAIL:

Ballots found in the March-April 2020 issue of the *Headlight* (below) may be copied or cut out and mailed to the Registrar. The HUB member **MUST write his/her Name and Membership Number on the outside of the envelope** to certify the ballot enclosed. The ballot must be mailed to:

HUB Division Elections
65 Branch Road
East Bridgewater, MA 02333-1601

Mail ballots must be received by the Registrar no later than Monday, April 13, 2020. The Registrar will verify the ballot and record the member as having voted.

2. E-MAIL:

A ballot may be cast by sending an e-mail to **elections@hubdiv.org**. The e-mail must be sent from the HUB member's official e-mail address that is on file with the HUB Office Manager. It is the responsibility of each HUB member to ensure the HUB Office Manager has his/her correct e-mail address. Only one official e-mail address is allowed per member. You may confirm your official e-mail address by sending an e-mail to the HUB Office Manager at: **OfficeManager @hubdiv.org**

2. E-MAIL (continued)**:**

A valid e-mail Ballot **MUST contain** the HUB member's **Name and Membership Number in the E-mail Subject Line**. All votes must be placed in the body of the E-mail. Place ONLY the names of the Candidates for whom the member is casting votes. The three names can be the candidate names included on the ballot or write-in candidates. Write-in candidates must be members in Good Standing of the NMRA HUB Division.

E-mail ballots must be received by the Registrar no later than Monday, April 13, 2020. The Registrar will verify the ballot and record the member as having voted.

3. PROXY:

Any HUB member eligible to vote in the election may **designate in writing** that another eligible HUB member may cast his/her vote at the Election.

A. The Letter of Proxy **MUST contain** the HUB member's **Name, Membership Number, and handwritten Signature.** The Letter of Proxy must also declare the **name of the HUB member acting as proxy.**

B. The HUB member acting as proxy will present the Letter of Proxy at the Annual Meeting to obtain the eligible member's ballot for voting purposes.

See Page 4 for candidate statements

2020 HUB DIVISION BALLOT

(see instructions above)

Board of Directors (3-year terms)

Vote for up to three candidates:

___ **Mike Dolan**
___ **Mike Tylick, MMR**
___ **Dan Fretz**
___ **Jim Joubert**
___ **write in:** _____
___ **write in:** _____
___ **write in:** _____

Treasurer's Report

By Gerald Covino, Treasurer

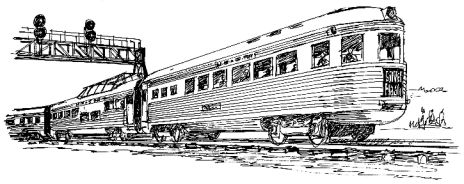
Stated below is our financial position as of December 31, 2019, the mid-point in our financial fiscal year July 1, 2019 through June 30, 2020.

The New England Model Train EXPO (NEMTE) had yet another good year under the leadership of our Director William Harley. The event saw a slight drop in older dealer participation, but we did manage to add several new dealers. The show had a 3.7% increase in attendance over last year. This was likely due to our program at the Museum of Science.

Our donations table at the NEMTE was very busy thanks to the many donations secured by Dan Fretz throughout the year. Dan and his team, including Dave Insley, Rudy Slovacek and others, spent many hours turning the donations into cash that helps fund the division activities.

The Division enjoyed its second year of partnership with the Museum of Science. Vice President David "Shack" Haralambou and volunteers transformed last year's single large exhibit into three smaller ones to fit the space provided by the museum. With the outstanding commitment and support of our members, especially Stan Ames, Jeff Gerow, Peter Watson and Dana Andrus, this project exceeded the expectations of the Museum. The Division as well as the Museum enjoyed a huge exposure, especially with TV-5's Chronicle airing early in the exhibit's run. Great job everyone.

Mid-Year Account Balances	
Checkbook	$ 1,715.28
General Savings Account	538.29
Reserve-Life & Restricted Savings Accounts	54,990.97
Program Checking Account	1,088.58
PayPal Account	3,652.61
USPS Permit Account	3.29
Total Funds Available	$ 61,989.02



All Aboard! HUB Division at the Boston Museum of Science

(Continued from Page 1)

displays and activities. While all got a lot of interest, clearly the HUB Division displays were a major draw, even getting us an almost four-minute slot on WCVB-TV's Chronicle program on December 13, 2019. The HUB got a shout-out, Peter Higgins got interviewed, and Dana Andrus, Jeff Gerow, and John Russo got cameos. You can see it at: www.wcvb.com/article/all-aboard-these-model-trains/30213581

Under the outstanding leadership of HUB Division VP David "Shack"Haralambou, the HUB-designed exhibit included G-, O-, and HO-scale train layouts. These layouts ran continuously (well almost, and with occasional help!) every hour the museum was open from the week before Thanksgiving until a week into the new year. The Museum of Science is Boston's most visited museum with almost 200,000 people of all ages visiting during the seven weeks of our exhibit. Based on the crowds, and comments of museum staff, it is fair to say that almost every one of those visitors spent at least some time in our exhibit. New Year's Day was one of the busiest with the exhibit practically full shortly after the museum opened at 9 AM. While this was designed as mostly a "do not touch – display only" exhibit, our members found a number of ways to involve the visitors and we expect to do even more next year. We also were reminded that signs like "DO NOT SIT" and "DO NOT LEAN" don't mean much if you can't read or your "grownup" isn't watching!

Shack and Gerry deconstructing the O-scale layout.
Photo by Jeff Gerow

In 2018, we had a large space with a single display "mountain" containing three tiers – G-scale on the bottom (eye level for the 5-year-old set), O-scale in the middle (adult eye level), and HO-scale at the top (unfortunately, not even a basketball player could see all the details at that level). That space was under construction this year, so we were given a smaller area on the second floor of the Blue wing. This forced us to separate the display into several smaller exhibits, which, as it turned out, was very well received.

The MOS provided entrance and backdrops for all the areas and had a well-known professional modeler provide an HO-scale version of the museum itself, complete with an elevated railway outside. We added Green Line trolley cars that ran back and forth under computer control (programmed by Jeff Gerow). This proved to be our most trouble-prone display as the trolley cars didn't seem to be designed for such heavy-duty service (just like the real thing!).

Model of the museum, complete with a scale model of the Green Line Lechmere Viaduct.
Photo by Jeff Gerow

Boston section of HO-scale layout.
Photo by Jeff Gerow

We also developed an HO-scale semi-freelanced part of Boston, complete with the Prudential Center (not to scale), Fenway Park, a CITGO sign, and other sites. This exhibit ran a commuter rail train (using DCC) in a figure eight that had only the occasional derails. Lots of detailed buildings and other scenery made this a very impressive setup.

O-scale was at a secondary entrance to the exhibit area consisting of a snowy mountain display with two DC-controlled trains circling on two levels. The upper level usually ran a steam freight while the lower level typically had a Lionel Super Chief passenger train, complete with a wireless controller for realistic conductor and station announcements. During lighter traffic times, we were able to let some of the kids (ages 6 to 86!) operate the wireless throttle and have a great time running the train and stopping at the station. Scenery included a station, a number of buildings, lots of trees, and many people and animals. Add to this a looping replay of a train-mounted video camera going round the exhibit and there was a lot to look at.

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All Aboard! HUB Division at the Boston Museum of Science

(Continued from Page 6)

G-scale was represented with another mountainous scene on two levels. The upper level had a stationary steam loco of the Polar Express that made typical sounds. The main level had a trolley track disappearing into the mountain and bounded by portals on each end. Again thanks to Jeff, the trolley made a realistic stop in the middle of its back-and-forth route to pick up passengers accompanied by appropriate sounds.

Finally, we had a small table where our volunteers occasionally repaired some of the trains (when they weren't out removing scenery "snowballs" that some of the older kids liked to throw on the tracks). We usually had a G-scale NW2 displayed on rollers. We could use it to discuss model railroad operations or technology with those who were interested. It let others learn whistle signals, simply push a button to blow its horn (which seemed to be a favorite activity for almost every age group), or rev up the throttle. Our volunteers also spent a fair amount of time track and wheel cleaning, especially on the O-scale exhibit where traction tires seemed to leave their rubber on the rails quite quickly. We had lots of "DeOxIt" on hand to help make things run smoothly.

The original effort was proposed by the Museum of Science (MOS). HUB Division VP Shack ably negotiated a three-year contract for HUB to develop and provide volunteers to keep the exhibit operational and answer questions from visitors. When the exhibit period concluded, HUB Division volunteers packed 120 buildings, over 800 trees, innumerable people and animals, and various other train paraphernalia into crates and loaded our trailer to the brim!

The two tiers of the O-scale layout.
Photo by Debbie Ames

The HUB Division exhibit at the Museum of Science was a great opportunity for the children and adults alike to experience something of the wonderful world of model trains in the context of a science museum. Museum staff and organizers were very complimentary of the HUB Division effort and we have every indication that we will be asked to extend this display in the future. It is a very large project involving over 30 of our members in construction, operation, scheduling, and the necessary dismantling and storing of the exhibit materials.

Overall view of exhibit. Two level O-scale to left, museum model in background, while HO scale layouts are in the "building" beyond.
Photo by Stan Ames

We all owe a special thanks to Shack for design and supervision of construction, Stan Ames for leading operations and overseeing the G-scale display as crew chief, Jeff Gerow as HO-scale and electronics crew chief, Peter Watson as O-scale crew chief and Traintek for keeping our HO locomotives in operation. Thanks also to Dana Andrus for coordinating volunteer scheduling, Dick Ball who stores and prepares the parts of the layout and then packs and drives the trailer, Gerry Covino for overall coordination, and to all the HUB members who volunteered their time to staff the display.. A great job was done by all. We'll need even more help in 2020 so keep your eyes open for the call for volunteers when it goes out in the fall!

A close-up of the G-scale scene with trolley.
Photo by Jeff Gerow

Good Times at *HUBHoliday 2020*

By Mike Tylick, MMR

The HUB Party Planning Committee, reports that by all measures, the HUB Division's Holiday Party (*HUBHoliday 2020*) was a great success! Two years after returning the venue to Quincy's Common Market Restaurants, the attendance has risen by 14%. *HUBHoliday* is one of the very few events for HUB members to meet each other socially, so it has become a very important morale builder.

Andy Reynolds looks happy with the present he opened during the Yankee Swap.
Photo by Ginny Watson

The Common Market is one of Quincy's oldest restaurants. Everything about the menu was high quality. There were circulating waitresses delivering cocktails and yummy appetizers to our very animated crowd. There were no long waits at cash bars or food tables. We had a varied and delicious buffet that included two carving stations, and a dessert station with an indulgent assortment of French pastries. The tastefully decorated function room was away from other groups and large enough to allow our group to circulate and visit with each other comfortably.

Folks chatting early in the evening, including Dottie Houck, Marguerite Tylick, Mike Tylick,Helen Dexter, Paul Dexter, and Ken Belovarac.
Photo by Ginny Watson

Santa arrived shortly after dinner for the annual Yankee Swap. Almost everyone participated, and the Swap went quickly and smoothly despite the large number of presents. There was considerably more trading of gifts than usual but it seems most people enjoyed the bartering and received a gift they liked. Even the weatherman cooperated by changing the forecast from soaking downpours to a few showers. This allowed everyone to get home in time to catch much of the late football playoff game. As Brooklyn Dodger manager Walter O'Malley said "Wait until next year." The Party Planning Committee intends to make *HUBHoliday 2021* even better. We've already penciled in an enlarged space at the Common Market for Saturday, January 9, 2021, and we hope to see you there! Happy New Year!

HUB Division Calendar of Events (Subject to Change)

2020

Mar 20 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Mar 28-29 (Sat-Sun)	HUB Modular Railroad display at the Greenberg's Toy & Train Show, Shriner's Auditorium, Wilmington, MA
Apr 1 (Wed)	Submissions deadline for the HUB *Headlight* May-Jun issue
Apr 17 (Fri)	HUB RAILFUN Meeting - Including Annual Meeting and Election, 8 PM, Cambridge School of Weston, Weston, MA
May 9 (Sat)	HUB Cape RAILFUN Meeting, 10AM, First Lutheran Church, West Barnstable, MA
May 15 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Jun 13 (Sat)	Conway Scenic Railroad Murder Mystery Dinner Train sponsored by the HUB Division
Jun 19 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Jul 12-19 (Sun-Sun)	2020 NMRA National Convention, St. Louis, MO, www.gateway2020.org
Jul 19 (Sun)	HUB Summer Picnic, Waushakum Live Steamers, Holliston, MA
Oct 9-12 (Fri-Mon)	HUB-Sponsored NER Convention, Mill City 2020, Westford, MA, www.millcity2020.org

MODEL RAILROAD LAYOUT TOUR

April 4, 2020

Free, Self-Guided Model Railroad Layout Open House Tour. Includes layouts in southeastern Massachusetts and Rhode Island.

Visit www.layouttour.com for more info.

Seacoast Division Activities

Derry Model Railroad Fun Night

March 13, 2020: Topic: To be determined

April 10, 2020: Topic: To be determined

Meetings are Friday nights at 7 PM in the Marion Gerrish Community Center, 39 West Broadway, Derry, NH.

Visit www.seacoastnmra.org for more info.

RAILFUN on the Cape

By Mike Tylick, MMR

The HUB Division is large, extending from Provincetown to west of Greenfield. Assuming traffic cooperated, it would take over four hours to drive its length. This has made it difficult to find a central location for meetings. The present Friday night RAILFUN meeting place in Weston seems to be a good compromise between distance and population density. However, a number of members still live an hour or more away, not including the Eastern Massachusetts Friday evening traffic. Over the years, numerous ideas have been entertained to extend RAILFUN to different locations but to little avail. Aside from an isolated gathering held in the Worcester area, little concrete progress had been made.

That is, until recently, when HUB RAILFUN Coordinator Andy Reynolds decided to try an outreach program near his home on Cape Cod, a distance far enough from Weston that some local HUB members had never traveled to the Friday RAILFUN. HUB member Russ Norris MMR, an Associate Pastor at the First Lutheran Church in Barnstable, arranged use of the church meeting hall for a Saturday meeting last autumn. I was unable to attend the first meeting but I understand the program was well received. Feedback from attendees encouraged Andy to attempt two additional meetings, both of which were also successful. At the most recent meeting held in January, he put together an interesting "hands-on" demonstration attended by a dozen HUB members and other area hobbyists.

Chris Hall looks on as Andy works on this Cape Cod cranberry module.
Photo by Bob Macauley

Railfun Coordinator Andy Reynolds explains static grass application to Kathy and Sean.
Photo by Bob Macauley

Thanks to Andy and Russ, "RAILFUN on the Cape" has planned for two additional morning meetings in 2020. The dates are May 9, and (tentatively) October 10.

I was fortunate enough to be able to take in the January 11 meeting, and I am glad I did. HUB Refreshment Chairman Bob Macauley was there bright and early to greet us with hot coffee, cookies, and Dunkin' Donuts. The program started with Andy showing the framework and electronic harness of the HUB Division HO module kit - the first time I'd seen that. He proceeded to show us a module in progress with some interesting elevation modifications designed to accommodate his Cape Cod cranberry bog scene. Andy then demonstrated a static grass applicator and we were given time to mess with the materials on either scrap bases or our own scenes. Since I had never used static grass before, I was very interested to try this technique. Andy also brought along his Pan Pastel and eye makeup kits (ala Barbara Hoblit) so we could practice some quick and dirty freight car weathering. As an added surprise, First Lutheran was holding a "Community Lunch" for all who wished to attend. They made a point of inviting us join them – several of us decided to stay and enjoy a wonderful home-cooked meal of garden salad, macaroni cheese and Swedish meatballs. Our sincere thanks to the church members and staff for sharing their positive love and generosity. Our day was topped off with a visit to Randy Child's nearby basement and his "Rec & Frustrated RR." The "R&F" is a misnomer, since it really is a large and visually fascinating layout that depicts many scenes between Boston, Massachusetts and Bakersfield, California. Randy was an excellent host and we thank him for inviting us into his home.

Bob Peters, of the Little Rhody Division, and Mike Tylick, MMR try their hand at static grass application on a scrap base.
Photo by Bob Macauley

This might be a good time to point out that I learned the HUB modular kit is a bargain – one could probably not build an acceptable module for less money or build it nearly as quickly and accurately. The kit costs $155, and this includes all the lumber and hardware, the complex wiring harness, and even the track and roadbed. Please contact Mark Harlow at modulekits@hubdiv.org with additional questions and for ordering information. If you are reading this, you are probably a member of the HUB Division and therefor a *de facto* member of the HUB Modular Group. You might want to give it a try. It is Andy's hope that other members may be encouraged to organize an "Outreach RAILFUN" in their locale. If you are interested, please contact Andy Reynolds at railfuncoordinator @hubdiv.org and he will be happy to help you get started. We hope to see you on the Cape in May or at a future "RAILFUN on the Cape!"

Erich's Electronics Notebook

By Erich Whitney

DCC Boosters

One of the questions I received (thank you) was about how to know if and/or when you need a DCC booster on a layout. So, I thought I'd tackle this question in a broader sense to hopefully clear up any confusion and help modelers decide how to wire up their DCC systems.

Before we dig into boosters, I'd like to clarify some things. When you buy a DCC system, the main box (typically) consists of two things, a DCC Command Station, and a DCC Booster. The DCC Command Station is the brains of the operation but it can't connect to the track without the DCC Booster, which is why they're typically in one box. Figure 1 is a generic block diagram of a DCC system. A typical DCC system will provide between 3 and 10 amps with its internal booster. Refer to your specific DCC system specifications so that you know how much current your DCC system can provide before you start adding boosters.

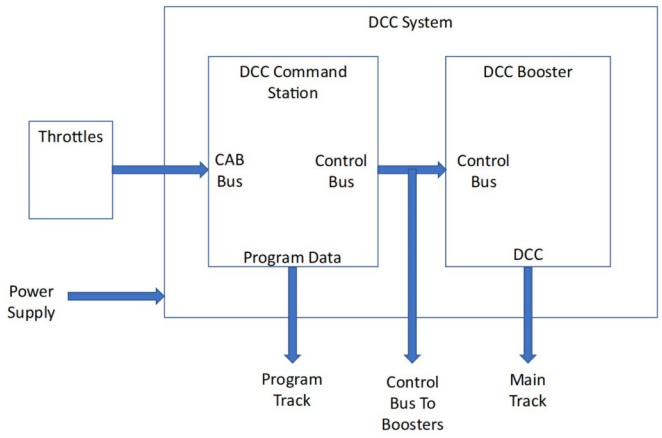

Figure 1 DCC System Block Diagram

When you wire your layout, you typically install a pair of DCC bus wires through the framework below the roadbed. Then you drop feeder wires down from your track to this bus. Rule of thumb is to run a pair of feeders about every three feet and it is highly recommended that you drop feeders for each section of track — do not rely on the rail joiners to carry track current. Rail joiners are meant to just be a mechanical connection to keep the rails aligned — they are not good for electrical conductivity. Alternatively, you can solder your rail joints so that you don't have to use as many feeders, however, you should still do at least one pair of feeder wires every 10-feet. Figure 2 is a basic track wiring diagram. The feeder wires don't need to be very large because they should only be a few inches long. Feeder wires should be made from 20-24AWG stranded wire. I prefer to use stranded wire because it will be less likely to break and it's easier to bend and solder to the rails, but solid wire also works. Always solder the feeder wires to the outside of the rail and bend the end so that it fits snugly in the web of the rail. Use a file and some paint to make the feeder connection 'disappear.' The main DCC bus wires need to be larger because they are carrying the total load on the DCC bus. You can use either solid or stranded wire for DCC bus wires. I would recommend 12-14AWG for most HO layouts. Remember the smaller the AWG number the larger the wire. For more details on feeder wires, see the accompanying article about installing feeder wires that starts on the next page.

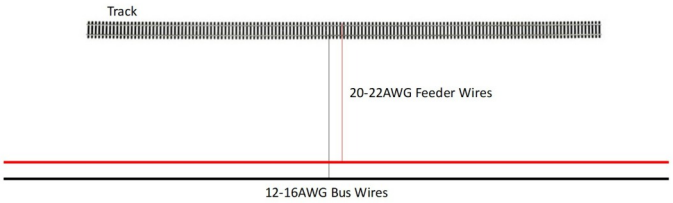

Figure 2 Basic Track Wiring

One of the biggest advantages of using DCC is that it greatly simplifies track wiring. That said, there's still a very good reason to wire your layout in blocks. If you wire your layout with just one bus connecting the entire layout, it will be very difficult to isolate/fix wiring faults and the entire layout will come to a halt if someone runs a turnout thrown against them. Electro-frog switches require a gap between each pair of frogs that face each other. Those are a good starting point for blocks in a DCC layout. Also, if you are thinking of including signals, you'll want to design with blocks from the beginning, so that block detection can be added without rewiring your track.

Another reason to wire your layout in blocks is to allow for adding DCC boosters, should they be needed. So how do you know if you need a booster? There are two ways to tackle this problem, one is you can add up all of your DCC loads, or two, use a meter to measure the load. I'm a huge fan of the DCC Specialties RRampMeter. This device will give you an accurate measurement of the DCC voltage and current at any point on your layout and it comes as either a standalone tool or as a panel meter that you can permanently wire into your layout. Personally, I would install one of these at the output of each booster so that I could quickly see if that booster was operating near its limits. Now, if you find that one booster is heavily loaded, but another is lightly loaded, you can simply move some of your blocks from one to the other. Personally, I would not add any boosters to my layout unless I found that the base DCC system was running near capacity. If you have a lot of locomotives on storage tracks, consider adding a switch to each storage track so that any unused locomotive isn't adding to the overall load of the system. DCC locomotives do consume a small amount of power even if they aren't moving — the decoder is always listening. If it's a sound decoder, it'll make idle noises unless you mute it.

Figure 3 shows a generic track wiring topology. At the top is your base DCC system that feeds a number of breakers and boosters. Each breaker feeds a number of blocks, which in turn

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Erich's Electronic Notebook

(Continued from Page 10)

feeds your tracks. Of course, how you come up with how many boosters, breakers, and blocks is still unanswered and I'm afraid there's no one way to do this. My approach is to take a look at each section of your layout and create blocks for each section. For the main line you probably need fewer blocks, but for each section where there's a yard, a spur, or some other area for switching, you would want to isolate those sections. Remember, you need to use insulated joiners between blocks.

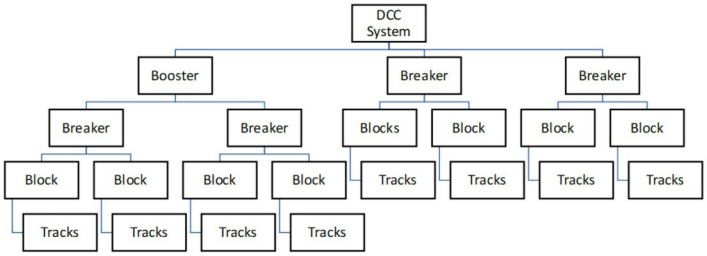

Figure 3 Track Wiring Topology

I know that some people are a big fan of using automotive light bulbs in place of circuit breakers. The problem I have with this approach is that a light bulb allows a significant amount of current to flow when there's a short and that can still do damage. DCC circuit breakers actually cut the power and are self-resetting, which means they will restore power once the short is removed.

When I talk about blocks, I'm referring to an isolated section of bus wires. You can use terminal strips under your layout to connect the blocks to their breakers and boosters as needed. How many blocks and how far to run them is still a bit of an art. I would group blocks into districts which all come to one terminal strip. Then each district has wiring back to a central point where the DCC system and boosters are located. I would install the breakers closer to the blocks they feed. Most of the DCC breakers I've seen have either an LED or a speaker (or both) to tell you when they're tripped. You want to mount these so that it's easy to tell which one is "squawking" when there's a short.

For some perspective on DCC loads, modern DCC locomotives tend to run on about 100mA to 500mA of current. So, a 5 Amp DCC system could run between 10 and 50 locomotives simultaneously. When a DCC locomotive is just sitting still, it only draws a few milliamps. Older locomotives might draw more current. So, you really do have to measure the current draw in order to get a sense for how many can run simultaneously.

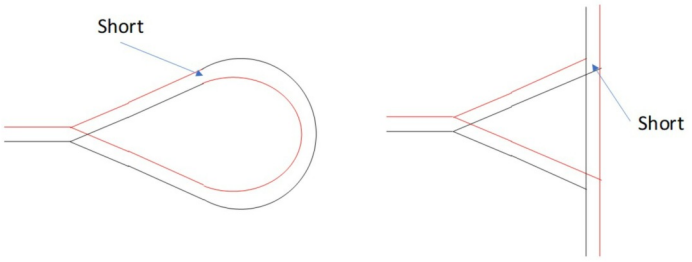

Figure 4 Examples of shorts in reversing loops and wyes

There is one more subject that falls under the category of wiring and boosters. If you end up creating a reversing loop, you will need a solution to prevent short circuits. Reversing loops are created when you have a track turn back on itself. This happens in Wye's, Loops, and Turntables.

The simplest solution is to install an auto-reversing device that automatically switches the polarity in the loop. You can do this manually with switches but that's annoying. Some products combine a circuit breaker and auto reverser into one board which saves a few bucks and simplifies wiring. Follow the instructions that come with your auto-reverser for proper gap placement.

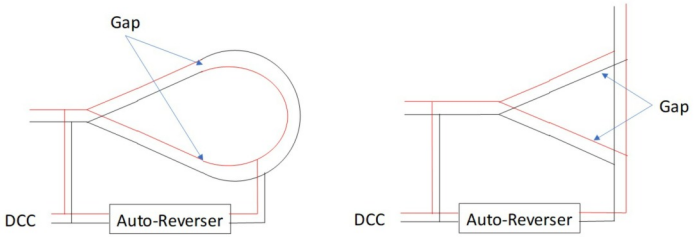

Figure 5 Reversing loop and wye wired with an auto-reverser

For turntables, wire the output of the auto-reverser to the turntable's track. Some turntables may have an auto-reverse function built-in so check the turntable documentation.

I hope this column has helped answer questions about DCC wiring. Please send me an email if you have further questions.

Sources:

I've included some links to the devices I mentioned above. This information is provided for reference, I'm not specifically promoting these products.

DCC Specialties Rrampmeter: www.trainteklc.com/rrampmeter-v1-digital-meter-for-dcc-dc-ac-3-rail/

DCC Specialties PSX4 DCC Circuit Breaker (4 power districts): www.trainteklc.com/dcc-specialties-psx-4-dcc-circuit-breaker-for-four-power-districts/

DCC Specialties PSX-AR Auto Reverser Circuit Breaker: www.trainteklc.com/dcc-specialties-psx-ar-auto-reverser-circuit-breaker/

Tix Anti-Flux: www.micromark.com/Tix-Anti-Flux-1-fl-oz-two-1-2-oz-bottles

Installing Track Feeders

By Erich Whitney

These photos show the steps I use to install track feeders. I drill a hole right next to the outside of the rail where the feeder will go. I strip and tin the feeder wire then make two bends in the wire. The first bend creates a small arc in the end of the wire. Then I take that arc and bend it over to about 90-degrees. When the wire is pulled through the hole, the arc at the end will snap tight into the webbing of the rail that keeps the wire tightly in place while you solder it. I like to leave enough bare wire so that you don't see the insulation sticking out of the hole. It's easier to hide the wire without insulation.

(Continued on Page 12)

Installing track feeders

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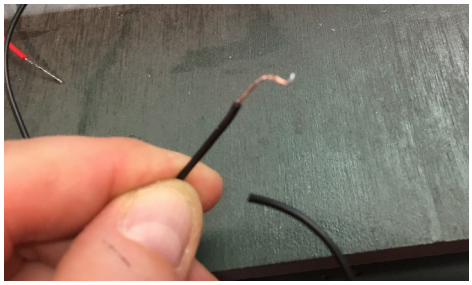


Photo 1: Prepare the end of the feeder.

I think it's helpful to rough up the rail where the feeder will be soldered. This is because it's difficult to get a good solder joint on really smooth Nickel-Silver rail. You can use a wire brush or a sharp tool to scrape the rail.

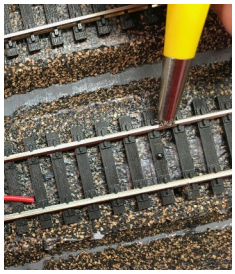


Photo 2: Roughing up the rail with a wire brush.

Photo 3: Scraping the side of the rail.

Photo 4: Tix Acid-Free Flux

Make sure you use a high-quality (non-acid) flux on the rail before soldering. I will tackle acid vs. non-acid flux in a future column.

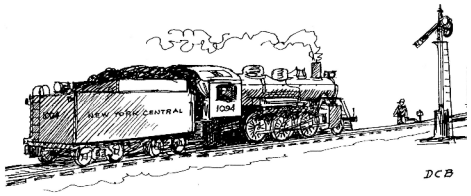
Photo 5: Use a small hobby brush to apply the flux to the rail where it was scraped.

Photo 6: Here's the feeder in place through the hole.

In Photo 6, note how the arc in the feeder makes a snug fit when the wire is pulled through the hole.

Photo 7: Here's the feeder soldered to the rail

After you finish soldering the feeders, go back and run a small file over the top of the rail to make sure there's no solder sticking above railhead. Also make sure no solder crept to the inside of the rail. You can also snip or file any wire that might be sticking out. Then you can use your favorite rail brown paint to further hide the wire. Ballast will cover the hole.



Easy to Use Wire Connectors

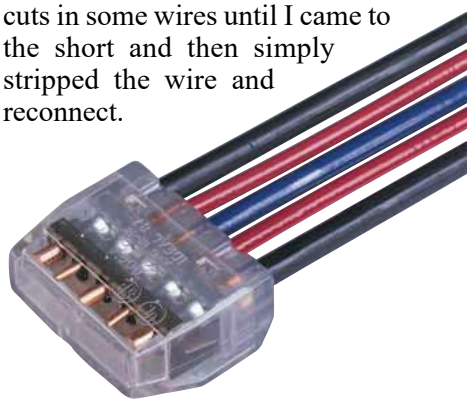
By Mike Dolan

Since the NMRA started sending its email Bulletin; The Turntable, I have read many interesting articles that are designed to enlighten and aid us.

One particular short article concerned a different type of wire connector. These connectors save so much time by allowing you to strip the end of a wire to be connected to other wires and simply push it in. I thought this was interesting considering how many times we have to cut and reconnect wires, whether adding a new section to a module, installing signaling or adding an accessory that requires power.

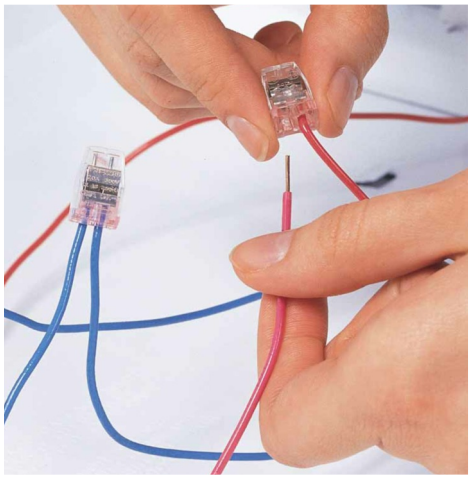
The connectors are called In-Sure and are made by Ideal. They work with wires from #12 to #20 gauge. I found them at the big box stores in bags of 25 to 100, depending on the size. They are available in two-, three- or four-port configurations. I believe there is also a five-port configuration, but I have not seen it.

I used these one night trying to find a short on my railroad. I was able to make cuts in some wires until I came to the short and then simply stripped the wire and reconnect.



I was always a proponent of stripping the wire, soldering and then shrink wrapping it. This product just makes it so easy.

(Photos from Ideal Industries, Inc.)



Murder on the Disorient Express Dinner Train

With the Conway Scenic Railroad and the HUB Division

When: Saturday, June 13, 2020
Departing at 6:00 PM

Where: North Conway Station
38 Norcross Circle
North Conway, NH 03860

Cost: $125.00 per person
Reservations due by Friday May 15, 2020

The HUB Division is pleased to present an exclusive offer to join us on the Conway Scenic Railroad for a murder mystery dinner train experience. The train will leave the North Conway station and proceed to the famous Frankenstein Trestle on the Mountain Division of the Maine Central Railroad. Your ticket includes a full dinner as well as a performance of "Murder on the Disorient Express" where you will help to solve the ultimate mystery.

Seating is limited to the first 96 passengers. Register today to save your seat for this event.

A special offer as part of the reservation is a photo run-by at the "Frankenstein Trestle." Space for this is limited so only those taking photos will be allowed off the train at the trestle. Sign up when registering.

For complete registration information, including menu and seating chart, along with lodging suggestions, please visit:

www.hubdiv.org/events/murder-mystery-dinner-train/

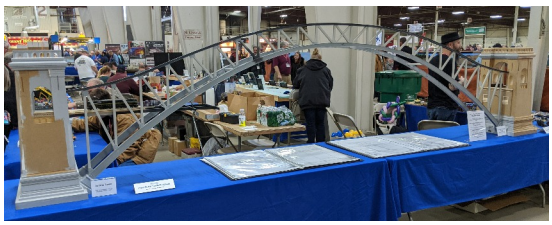
Note: Price includes meal, First Class train ride, Murder Mystery performance, tax and gratuity. All beverages and beverage gratuities are additional.

Due to the mature of this event, the Conway Scenic Railroad has an age restriction of 14.

Please direct questions about the trip and reservations to:

Peter Watson: (774) 259-0647,
Conway.info@hubdiv.org

The Railroad Hobby Show in West Springfield



Above: Dick Ball's city module, including subway, was a crowd favorite.
Top Right: A group of HUB Members take a break inside the layout on Sunday morning while younger members operate Boston Yard beyond
Right: A partially completed HO-scale model of the Hell Gate Bridge was on display in the Mallary Building.
Photos by Bill Barry

HUB Headlight

Volume 36, Number 4
March - April, 2020

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Directions to RAILFUN Meetings

RAILFUN is usually held at the Cambridge School of Weston (CSW) in Classroom G6 on the second floor of the George Cohan Building. The school is located at 45 Georgian Road, Weston, MA 02493.

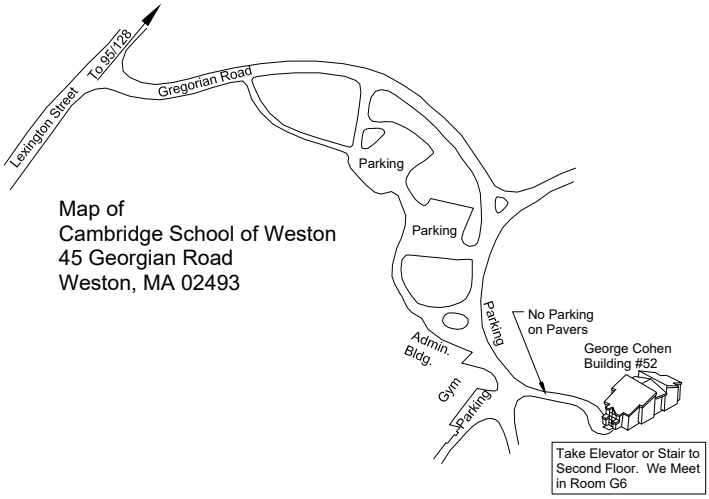
From Route 128 / Interstate 95:

From the North, take Exit 27B towards Winter Street.

From the South, take Exit 27A-B for Third Avenue toward Totten Pond Road/Waltham. Take Exit 27B towards "Winter Street" Bear right onto Wyman Street and continue to the traffic light. Take a right onto Winter Street at the light.

Continue on Winter Street to the second traffic light. Turn left on West Street, which becomes Lexington Street as you cross the Weston town line. At the crest of a small hill is Georgian Road and the CSW school sign; turn left on Georgian Road into the CSW campus.

Follow Georgian Road. There is a parking lot on your right, or you can park along the left side of the road and down the hill by the gymnasium. Please do not park on the stone pavers leading to the Cohen Building. See detail map below.



RAILFUN Weather / School Closure Note:

If the school is closed, we will NOT have RAILFUN that evening. School closings are broadcast over the radio at **WRKO 680AM** and **WBZ 1030AM**, and on **TV Channels 4, 5 and 7**. The Cambridge School of Weston recording is at **781-642-8600**. Check the radio or TV stations early **on the morning of RAILFUN!** You can also check www.hubdiv.org and we plan to post notices on **Facebook** and **Twitter**.

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.

HUB Division Nametag, *Headlight* Subscription and Donation Forms

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2nd Line
3rd Line

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Name _____

Address _____

City_____ **State**_____ **Zip**_____

HUB Division Module Kits

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.

HUB Division Branded Merchandise Online Store

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 accessories 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.