

# HUB Headlight

HUB Division Inc., Northeastern Region, National Model Railroad Association - [www.hubdiv.org](http://www.hubdiv.org)  
Volume 33, Number 5, May - June, 2017

## RAILFUN TIMETABLE

### Hands-On: Foreground Trees with Leaves: Part 5 of Building a Diorama

Presented By Jeff Gerow

8 PM Friday, May 19, 2017, Cambridge School of Weston

With various shapes and colors of scale leaves now available, you can make foreground (read "REALLY good-looking") trees with actual leaves. You'll see and touch the materials used and I'll demonstrate techniques for building these trees - using a sage branch and adding Scenic Express "Supertree" materials to build up the branch and twig structure. These are not "fast" trees, it does take a bit of time to make a really good-looking tree - but when it's done, it can be placed right on the edge of your layout for close scrutiny. I've also found that these leaves on Supertree branches make great saplings and weeds - at the very least, a new texture for our layouts.

### Hands-On: Cutting Edge Scenery Technologies: Part 6 of Building a Diorama

Presented By Andy Reynolds

8 PM Friday, June 16, 2017, Cambridge School of Weston

The final stages of any diorama, module or layout ends with the finer details such as rivers, ponds, seaside scenes and other water effects. We will discuss these and other techniques for aging buildings and applying weathering systems and paints to buildings and rock castings. We'll be experimenting with Bragdon Enterprises Geodesic Foam products used in casting plastic parts and making lightweight rock castings, and show how the products can be used for other parts of your scenery. A number of HUB modules already use these products, most notably Jeff Gerow's Bridge module, Gerry Covino's Tipple module, as well as my Stuff's Brewery and Tidewater Wharf corner module.

This will be our final Railfun until September. We hope to see you there, and we'll give you an update of what's on tap over the summer!

## Welcome and Season Opener

By HUB Division Members

8 PM Friday, September 15, 2017, Cambridge School of Weston

To kick off a new year of RAILFUN events, and to welcome everyone back from our summer break, we are going to hold a show-and-tell night where you will have an opportunity to hear what members have done over the summer and what future plans members have. Come show your work with actual models, dioramas or photographs of your layout. Email Andy Reynolds at [Railfun.coordinator@hubdiv.org](mailto:Railfun.coordinator@hubdiv.org).

*The map to Cambridge School of Weston appears on Page 10.*

### Also Inside This Issue:

Page 2.....The President's Car  
Page 3.....Shanty Talk

Page 7.....Spring TRAINing  
Page 8.....Speed-Matching Locos - Part 3  
Page 12...Calendar of Events

## Photos from Britain

By James VanBokkelen

**E**ditor: Our now retired President has completed another adventure with a trip to the United Kingdom. He has supplied some photos for our viewing pleasure.

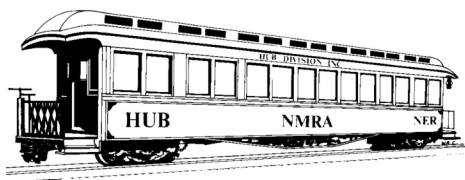


This high-speed 'Pendolino' electric MU is about to cross the Mersey River on the big bridge and viaduct at Runcorn, bound for Liverpool.



The National Tramway Museum at Crich uses the right-of-way of the upper portion of a limestone quarry railway built in 1840 by George Stephenson. Most of their equipment is double-deck, many on 4-wheel trucks like this Chesterfield tram.

*(Continued on Page 4)*



## THE PRESIDENT'S CAR

By James VanBokkelen

Hello, members of the HUB Division and readers outside our group. As I write, I've just returned from a trip to the U.K. to see temperatures in the 80s starting my trees and lawn on a growth spurt.

Since the last Headlight, the HUB Division Module Group has made its March appearance at the Greenberg show in Wilmington and the Railfun diorama project has advanced a couple of steps. By the time you read this, we'll have had our April 22 Annual Meeting at the Spring TRAINing show at the Wellesley Community Center.

Our Annual Meeting is after the show closes. I'd like to thank all of the Director candidates, particularly the one of four who won't be elected. For quite a few years, our leadership has felt it's important to give members a choice, so we make the extra effort to offer more candidates than seats. We particularly appreciate those who are willing to run knowing they might lose.

Also, this year we're trying a catered Banquet; the vendor comes well recommended and we've obtained insurance allowing members to bring their own adult beverages. If you have comments on how this worked out, please pass them to a Director or Officer.

The Module Group members who attended the Maritime Federation of Model Railroaders event in Saint John, NB last year had a good time. This year's event is in Summerside, Prince Edward Island, a much longer drive. Our layout won't be going, but I plan to, and will report on it here.

The Module Group isn't attending this year's NMRA convention in Orlando, FL, either. Those who are going will

find Headlight Editor Bill Barry eager for your notes and photos.

I spent a couple of weeks in the U.K. last month. I spent several days working on my old favorite Keighley & Worth Valley Railway while it hosted the globe-trotting 4-6-2 Flying Scotsman, which visited Boston in 1972 during its American tour, and Australia later. I also managed visits to the Great Central Railway near Leicester, and the National Tramway Museum at Crich (near the Peak District).

Between that and some other travel, there's been no progress on my Eastern Route's downtown Newburyport peninsula. But I've finished a Boxed Pony Truss bridge and made a lot of other progress in the Bexley Depot area. That kind of bridge was very common on the B&M 60 years ago, and one still remains in Rollinsford, NH. I worked from Historical American Engineering Review info available from the Library of Congress (photos and links can be navigated to below).

[www.railroad-line.com/forum/topic.asp?TOPIC\\_ID=20091&whichpage=54](http://www.railroad-line.com/forum/topic.asp?TOPIC_ID=20091&whichpage=54)

I'll also circulate the URL on the [hub@guesswork.com](mailto:hub@guesswork.com) email list.

On the Achievement Program front, I haven't heard back about my Chief Dispatcher paperwork. I bet it has something to do with our Region AP Chair making a transition to a contest-related role with National. But I'm keeping busy polishing my paperwork and buildings for Structures; maybe I'll get that in before Summer.

Looking forward to Fall 2017, this year's Northeastern Region convention will be November 9-12. Rails to the Gilded Age will be hosted by our neighbors to the South, the Little Rhody Division, at a site just outside Newport, RI. Watch [www.newport2017.org](http://www.newport2017.org) for details.

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

Until next time, High Green!

## 2017 Election Results

The following members were elected to 3-year terms on the HUB Division Board of Directors:

Mike Tylick

Dan Fretz

John Doehring

## HUB Summer Picnic

July 16, 2017

The Summer Picnic will be held at Waushakum Live Steamers in Holliston, MA, on Sunday, July 16 (rain or shine) from 11AM to 2PM. Visit [www.waushakumlivesteamers.org](http://www.waushakumlivesteamers.org) More information will be emailed, or look for further details on the HUB website and Facebook page.



Photograph by Peter Watson

## New Members

The HUB Division welcomes the following new members:

- Bill Frank, Ipswich
- Mike Kelley, Pocasset
- James Joubert, Kingston
- Norman Shacat, Medford



Austin Sa mans the Membership Table at the Nashua Valley RR show in Shirley.

Photo by Peter Higgins





## Shanty Talk: OK I Get It

By Rudy Slovacek

**O**K I get it, scenery is not your thing. There are a lot more exciting things to grab our attention like the latest sound decoders having a gazillion functions, such as clickity clack, crossing gates, firemen Fred and mooing cows to name a few, and all in your single engine! Why are they there? Because in the modern age of miniature electronics we can put them there! Whether they are appropriate or not is not questioned. Just like running a train with a phone! We are a gee-whizz generation fascinated by the never-ending limits of technology.

A quick look at convention clinics will show that DCC, signaling and other technology-driven presentations are usually populated quite well. Even in our own Spring TRAINing, out of the nine clinics, only Jeff Gerow's on modeling building interiors came the closest to a scenery theme. With his clinics on trees, running water and interiors, I think of him as the Malcom Furlow of the HUB. He's always

trying new stuff in the quest for realism. Wasn't it Frank Ellison who once said "our trains are like actors, always coming and going onto the stage." Anyone in the theater arts knows the importance of the scenery sets. Whether we are trying to depict the Golden Age of steam, pre-war, depression, post-war steam-to-diesel transition or more modern times, the scenery plays a large role in setting the mood. Anyone shooting for the urban feeling has probably at one time or another drawn inspiration from the masters George Sellios and Art Fahey, not to mention that rascal Michael Tylick. My mentor was one Lyle Sorenson, our editor a while back. He made the rocks, rivers and trees come alive, but that just doesn't seem to command attention these days.

Thus, I guess I was not surprised when I got to RAILFUN all prepared with some supplies to help cover the dioramas that our coordinator, Andy, had started this year, but my demo diorama was the only one there! It seemed unfortunate since this was to be a hands-on clinic. I don't know if this was a case of too much going on that weekend or a somewhat passive interest in scenery. I find the latter hard to believe. Who

doesn't like the pictures? After all how many American males swore they bought Playboy years ago for the articles and not for the pictures? Come on now, who among you out there doesn't find the sight of a nicely modeled train traveling through some realistic scenery a real inspiration. For those of you who missed the April RAILFUN, you missed the opportunity to try your hand at applying static grass. This is actually a relatively new technological innovation. Perhaps Andy will run that clinic again if there is enough demand.

Jeff Gerow is planning a foreground tree clinic for RAILFUN in May and I hope all of you out there can attend. In the meantime here's hoping you'll get some cool scenery in this summer, otherwise you'll just have to settle for my picture of the Rutland up in Vermont and anything else I can scrounge up. See you next year.



## Conway Scenic Railroad Offer HUB Members a Discount During Railfans' Weekend

By Dick Towle

During the HUB-arranged Dinner Train on the Conway Scenic Railroad last June 25, 2016, there were some issues with their new chef. Some of you expressed unhappiness with the service. To make up for this, Russ Seybold, CSRR President, is offering all HUB Members \$10.00 off coach seating for the Sunday Crawford Notch trip during the Railfans' Weekend this September 2nd and 3rd. He is sorry that that everything didn't go as planned and is trying to make up for it.



For more information about the Railfans' Weekend, please visit [www.conwayscenic.com](http://www.conwayscenic.com). To apply for the discount, call Sandy Janvrin at 603-356-5251 Extension 12 and mention "HUB Division."

## Spring TRAINing Membership Table



John Lutz at the Spring TRAINing Membership Table. See more Spring TRAINing Photos on Page 7.

Photo by Bill Barry



## Photos from Britain

*(Continued from Page 1)*



Electric MU sets used in commuter and regional services in the Midlands meet at Runcorn Station.



A Pendolino high-speed EMU beneath the train shed of Liverpool's Lime Street station.



A modern tram enters Manchester's St. Peter's Square station. The downtown portion of the system runs on city streets, but the suburban routes use mostly old railroad rights-of-way.



The Great Central Railway's southern terminus is on the outskirts of Leicester, and had to be built pretty much from scratch when the preservation group re-opened the line. Their one turntable is near the middle of the line, so all the locomotives I saw were facing south. This fast Ten-Wheeler was built for service south of London.



The Great Central strongly favored island platforms. This one, at Quorn and Woodhouse, is equipped and decorated for the 1940s.



Several of this post WWII class of 2-6-0s built for British Railways survived into preservation. As with preserved railways in the US, smaller engines are more economical for frequent, low-speed service over short distances. They also run better in reverse.

*(Continued on Page 5)*



## Photos from Britain

(Continued from Page 4)



London & North Eastern Railway #4472, '*Flying Scotsman*' is one of the most widely traveled locomotives in history. After a multi-year tour of the US in the 1970s, it later visited much of Australia's standard gauge network. Here it arrives Oxenhope, West Yorkshire, the terminus of the Keighley & Worth Valley Railway wearing its British Railways number of 60103.



The K&WV only has a single passing loop, a little below the midpoint of their 5 mile branch. Running opposite the *Scotsman's* special train was 0-6-0 #43924, originally built in 1920 for the Midland Railway. Shown at Oxenhope, she's three years older than the *Scotsman*, but wasn't a star till it started appearing in movies and TV shows in recent decades. Here it's running around at Oxenhope.



The *Flying Scotsman* has been timed at better than 100 MPH, so it couldn't stretch its legs on the short, winding K&WV. But the steady grade up the valley gave it a workout nonetheless.



To start eight carriages on the sharp, steep curve out of Keighley Station, the *Scotsman* needed help. The K&WV provided 90733, a War Department 2-8-0, which spent its first 20 years hauling goods.



Many British tramway systems were converted to bus in the 1930s or even earlier. Trams from these lines spent 20 to 40 years as cottages and sheds before the preservation group was able to acquire and restore them. Often this has required complete reconstruction of the upper level.

(Continued on Page 6)



## Photos from Britain

*(Continued from Page 5)*



The Crich volunteers agreed early on that it wasn't appropriate to show their carefully restored trams in a quarry setting. So they've transported a village's worth of buildings and other structures like this bridge to the top of their hill and reassembled them in a setting of neat cobblestone streets and girder rail.



Most trams at Crich are from Britain itself, with a number from Glasgow and elsewhere in Scotland. Only a few are foreign. This post-WWII German tram has been fitted with a wheelchair lift under the door closest to the camera. It's being put away after the last scheduled accessible trip of the day. The quarry face and a war memorial are visible beyond the cobbled High Street of the Tramway Village.



(Lower left photo) The British trust their signals and preventative maintenance more than we do; here at Willesden Jct., the electric suburban train uses track with both a side 3rd rail and a 4th rail between the running rails because it's shared with Bakerloo tube trains. The diesel-hauled container train to the right shares tracks with high-speed, long-haul EMUs and all kinds of local and regional diesel and electric passenger trains.



Most British preserved railways have at least a few vintage diesels. The Great Central is no exception: This English Electric-built Class 37 shines in its late-1970s freight livery as it arrives at Quorn & Woodhouse bound for Loughborough.

*(Continued on Page 11)*

### The Worcester Model Railroaders, Inc. Club Moving - New Members Welcome

Worcester Model Railroaders, Inc., one of the oldest model railroad clubs on the east coast, is pleased to announce that they are moving to 14 Rail Road Avenue, Webster, MA. The move is expected to take place in late spring and provides an opportunity to build not one, but two new layouts. With roughly 3000 square-feet available, members are looking forward to building a new DCC- controlled, HO-scale layout, as well as an O-Gauge layout. The HO layout, which will be roughly 36 feet by 45 feet, will replicate two of the current Providence and Worcester Railroad lines that radiate out from Worcester, to Norwich and Providence, respectively. Portions of the current CSX Railroad line in the Worcester area will be represented as well. The new O Gauge layout will be 9 feet x 30 feet. Both layouts are currently in the design phase and will be constructed concurrently. The current layout is in the process of being dismantled in preparation for the move to Rail Road Avenue.

If you have an interest in model railroading and would like the opportunity to build new layouts from the ground up, now is the time to join us. Please stop in at our current location, 137 Schofield Avenue in Dudley, on any Tuesday night or Saturday morning and talk with club members about this opportunity. For additional information, please call Club President Ken Gikas at 508-922-0239 or Ralph Kimball at 508-868-5189. More information about the Worcester Model Railroaders, Inc. can be found at [www.wmrr.org](http://www.wmrr.org).



# SPRING TRAINing

## SpringTRAINing By Bill Barry

# SPRING TRAINing

The HUB Spring TRAINing show was held at the Wellesley Community Center this year. Hopefully you were able to attend and enjoy the clinics, annual meeting and banquet. The venue was smaller than many of the hotels we have used in the past, but still offered sufficient space for layouts, dealer tables and, of course, clinics. Our Featured Clinician was Steven Priest, MMR, Editor of Railroad Model Craftsman, and he gave a clinic about the construction of his new layout. Steven also gave an after-dinner presentation that was quite enjoyable. After packing up the modules and setting the room for the evening's events, the HUB's annual meeting was held. Mike Tylick, Dan Fretz and John Doehring were elected to three-year terms on the Board of Directors. Thanks to Bill Harley for running, and hope to see you try again next year. The catered banquet dinner was quite tasty and a definite step up from prior hotel prepared meals. Finally, I would like to thank all of those members that helped out at the show. Without your help our shows couldn't happen. Thank You!



*Top Left: Dealer tables and layouts in the lower hall.*

*Top Right: Fay Chin explains his T-Track layout to a family.*

*2nd Row Right: The Thomas the Tank Engine themed layout from Rhode Island.*

*2nd Row Left: A steam engine leads a passenger train into the circus module's station on the HUB's modular layout.*

*3rd Row Right: Steven Priest receives his certificate of appreciation from John Barrington.*

*3rd Row Left: The HUB annual meeting under way.*

*Bottom Right: HUB Member Tom Wemett set up an Operation Lifesaver table. Member Jacob Blum looks on.*

*All Photos by Bill Barry*



# Speed-Matching Dissimilar Locomotives (or What I Did On My Summer Vacation) - Part 3

By Dan Fretz

*This is the third installment of my article explaining how I speed-match my locomotives. Please see the September-October 2016 and the January-February Headlights for Parts 1 and 2, and a copy of the entire article can be found on the HUB website.*

## Matching a Loco to the Reference

Speed-matching locomotives is a highly iterative process that can take a lot of time. You see what it took to get a reference locomotive set up to run linearly at the same speed in both directions at the same speed step. Now you get to start working with those other locomotives that you set aside because they had various undesirable running characteristics.

When matching a loco to the reference, *MU them facing the same direction*, but leave them *uncoupled*. At relatively low speeds, I space them a few inches to a foot apart to more easily see changes in the gap between them as speed adjustments are made. But at higher speeds, I space them on opposite sides of the track loop, and make adjustments until they are consistently crossing the piano hinge at the same time.

### 1. Initial Setup.

We'll refer to the locomotive being matched to the reference loco as locomotive B. Do the initial setup of loco B as described in the **Initial Locomotive Setup** found in Part 1. However, there is an alternative using Decoder Pro that can potentially save some time. If loco B is the same manufacturer/decoder combination as either the reference or a previous loco that you've already matched to the reference, you can dump that configuration to loco B using Decoder Pro. In many cases, this can get you pretty close right at the beginning. For example, if loco B is the same manufacturer and decoder as loco X, and you've already matched X to the reference, do the following:

- Create a Decoder Pro roster entry for loco B.
- Select loco X in the roster, click "Programming Track", and click the <Program> button.
- Put loco B on the programming track.
- Click the <Write All Sheets> button. This will store the loco X configuration into the loco B decoder.
- Once the write completes, close the programming window for loco X. If you are prompted to write to the configuration file for loco X, just click <Close> - do not save anything!
- Select loco B in the roster, click "Programming Track", and click the <Program> button.
- Click the <Read All Sheets> button to read the configuration from loco B's decoder.
- Once the read completes, go to the "Basic" tab and set the locomotive address of B to the correct value. Then select *File→Save...* to save the new configuration for loco B.
- Close the programming window.

### 2. Initial Speed Check.

Put the reference loco and loco B on the track loop. Select each one and ensure they are set for 128 speed steps. Then MU them. In Decoder Pro, select loco B in the roster, click "Programming On Main," and click the <Program> button.

Do a quick speed check at the minimum, maximum and mid-speeds to see if locomotive B speeds match those of the reference. Keep in mind that initial locomotive setup turned off momentum in loco B. If you configured the reference with momentum, you need to allow time for the reference to ramp up to the throttle setting before making any judgments about loco B's speed.

If loco B is faster at all three speeds, or slower at all three, you might be able to speed match them by just changing the Forward Trim (CV66) value of loco B. If so, move on to step 5. If not, move on to the next step.

### 3. Configure the Minimum Speed, then the Maximum Speed.

For both speed extremes, the process of matching the speed of loco B to the

reference consists of the same steps as configuring the reference loco to a specific speed.

If locomotive B cannot be made to run as slow as the reference at SS1 by adjusting only CVs 2 and 67, you can further reduce its speed by lowering the Forward Trim (CV66) value from its default value of 128. If loco B still does not run slow enough, the only option is to leave Forward Trim at the lower value and further reduce the speed via CV67, or decrease the start voltage via CV2. Note that if the forward trim is changed in this step, any previous maximum-speed match will be affected, so that will need to be redone.

### 4. Configure the Middle Speed.

Place the locos on opposite sides of the track loop, and adjust the throttle to its middle setting, corresponding to SS14. In the unlikely event that the speed of loco B matches that of the reference loco, buy a lottery ticket and move on to step 5. Otherwise, you'll need to adjust CV80 (or the SS14 slider) up or down until loco B's speed is correct, and then modify all of the other speed steps so that they form a straight line from SS1 to SS14 and from SS14 to SS28.

I've done this manually in the past and can assure you that it is quite tedious. Say loco B is matched with CV67=6, CV80=110, and CV94=204. Take the difference in the values of CVs 80 and 67 (in this case, 104), then divide it by the number of speed steps from 1 to 14 (always 13 for the lower range; 1→2, 2→3, ..., 13→14). The result, 8, is the increment in the value from one CV to the next (e.g., CV68=14, CV69=22, etc.). The same procedure on the upper half of the range from speed steps 14 to 18, always dividing by 14 (the number of speed steps from 14 to 28), gives an increment of 6.71. When it is an uneven number, round to the closest quarter, in this case 6.75. An average increment of 6.75 must be approximated by an increment sequence of 7-7-7-6-7-7-6, etc. So CV81=117, CV82=124, ..., CV84=137, etc. If the average increment had come out to be, say, 5.5 after rounding, the sequence would be 6-5-6-5-6-5, etc.

(Continued on Page 9)



## Speed-Matching Dissimilar Locomotives

(Continued from Page 8)

A *much* easier way of doing this is provided by Decoder Pro, through a feature that is really not all that well documented. On the Speed Table tab, under each slider is an unassuming little box that seems to not do much of anything. Hover your mouse over the box and the pop-up help says to click it to "fix the point when adjusting." If you click it, the slider moves just fine, it is not fixed at all. I figured it was a feature that just didn't work and ignored the boxes for the longest time. Boy, was that a mistake.

Here is what those boxes do: By itself, clicking one box does nothing. But click two, and Decoder Pro adjusts all sliders between them to keep a straight line as one of the checked sliders is moved. Click a third box, and Decoder Pro keeps the sliders between clicked boxes 1 and 2 in a straight line, as well as between clicked boxes 2 and 3, which is *exactly* what we just calculated manually. So to configure the middle speed, click the boxes under the sliders for SS1, 14 and 28, then adjust the SS14 slider up or down until loco B's speed is correct. The straight lines from SS1 to SS14 and SS14 to SS28 are maintained automatically.

### 5. Check $\frac{1}{4}$ and $\frac{3}{4}$ Speeds.

I always do a final check of the MU moving forward at speed steps 7 and 21. These will usually match once the minimum, maximum, and mid-speeds are calibrated, but not always (can you say "Tsunami"?). Any speed discrepancies between the reference and loco B are eliminated by following the same procedure as with the middle speed. If using Decoder Pro, leave the boxes checked under the sliders for speed steps 1, 14 and 28, and in addition, check the boxes under SS7 and SS21. Then, for example, if you move the SS7 slider, the value of SS14 remains unchanged and straight lines are maintained between SS1 and SS7, and SS7 and SS14, with all CV values above SS14 being unaffected. If you are not using Decoder Pro, the manual process for matching SS7 and SS21 is the same as in the previous step.

### 6. Fine Tune.

At this point, the speeds should be very close. Place the locos a few inches apart, and then check the minimum, maximum and mid-speeds, remembering to allow time for the reference locomotive to accelerate to the throttle setting. At each point, make small adjustments, if required, to CVs 67, 80 and 94 until loco B runs at the same speed as the reference loco. While making adjustments during this step, use the Decoder Pro slider boxes or manually calculate values for CVs between 67-80 and 80-94, as described in step 3. Then verify and adjust the CVs for SS7 and SS21 if required (the  $\frac{1}{4}$  and  $\frac{3}{4}$  speeds). If adjustments were required at most of those CVs, it's a good idea to split the CV intervals again, to include CVs 70, 76, 83 and 90 (these correspond to the 1/8th, 3/8th, 5/8th and 7/8th speeds).

### 7. Match the reverse direction.

Now reverse the MU, and check the minimum, maximum and mid-speeds. If the speeds of loco B and the reference loco match, move on to the next step. If loco B is consistently faster than, or slower than, the reference loco, try to correct the mismatch by adjustments to loco B's Reverse Trim value (CV95, or in Decoder Pro on the "Speed Table" tab).

In some cases, the reverse speed of loco B is considerably faster than the reference throughout the speed curve, and I've been unable to bring SS1 down to the 3 mph reverse direction speed by using the Reverse Trim alone (hint: the decoder brand starts with "T"). After lots of swearing and gnashing of teeth, the only option at this point is to use the speed table SS1 slider/CV67 to slow it down, or reduce the CV2 Start Voltage.

Once you have a match in reverse, those changes will have affected the SS1 forward matching that you've already completed, so you'll need to go back and redo steps 2 and 3 at a minimum. In doing this, remember that CV67 or CV2 (or both) have now been used and are off-limits to further adjustments when redoing the forward direction match. Changes to the Forward Trim (CV66) value of loco B is the only option.

### 8. Set Acceleration and Braking Momentum.

Line the two locomotives on the piano hinge on opposite sides of the loop, like they are at the starting line for a race. Then increase the throttle setting to its maximum as quickly as possible. When the loco stabilize at the maximum speed, if locomotive B is *ahead* of the reference as they cross the hinge, that means it accelerated faster than the reference. So *increase* the Acceleration Rate of loco B, thereby increasing the momentum effect, which in turn causes the loco to accelerate *slower*. Yes, it is somewhat counter-intuitive. Stop the locomotives, and repeat. Once they accelerate at the same rate, they will cross the hinge at the same time.

Now, with them running at maximum speed, reduce the speed back to zero as fast as possible. If loco B stops before the reference, it is decelerating faster than the reference, so increase the Braking Rate. This will increase the momentum effect and cause the loco to take longer to stop. Return the locomotives to the maximum speed, and repeat. They are matched when they come to a stop at the same time.

If using Decoder Pro, do a *File*→*Save...* to save the configuration of locomotive B.

### 9. Don't Forget to Delete the MU.

Congratulations! The two locomotives are now speed-matched! Delete the MU, and move on to the next loco to be matched with the reference.

So that's the speed-matching process I use. There are certainly easier and quicker ways to do this if you only need "close enough" performance with locomotive pairs that always run together. But if you have numerous locomotives that you want to MU in any combination, I hope you give my approach a try.



## Seacoast Division Activities

### Derry Model Railroad Fun Night

May 12, 2017

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

Visit [www.seacoastnmra.org](http://www.seacoastnmra.org) for more info.



## HUB Headlight

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Mark Harlow - NEMTE@hubdiv.org

**Public Relations Director** Position Open -  
PRDirector@hubdiv.org

**NMRA North Eastern Region Representative**

Barbara Hoblit - MA.NERdirector@hubdiv.org

**NMRA Achievement Program Chairman**

Peter Watson, MMR - HUB.AP.Chair@hubdiv.org

**Membership:** National Model Railroad Association members residing within the boundaries of The HUB Division: zip codes 01400 through 02699. (Barnstable, Dukes, Essex, Franklin, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties of Massachusetts.)

### Headlight Printers

Versatile Printing Services, LLC, Burlington, MA

## 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.

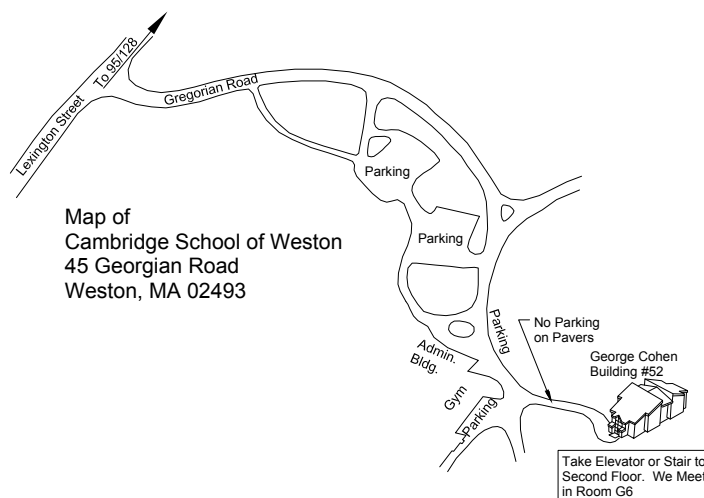
From Route 128 / Interstate 95:

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](http://www.hubdiv.org) and we plan to post notices on **Facebook** and **Twitter**.



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  
electronic invoice will be sent to you.***



**JOHN DOE**  
MODULE GROUP

Badge with magnetic holders and first line of printing is \$11.30, plus \$3.00 S&H. Each additional line is another \$2.00. You may have up to three lines on your name tag.

**Cost:    \$14.30 (1 line)    \$16.30 (2 lines)    \$18.30 (3 lines)**

## First Line

## 2nd Line

3rd Line

[illegible]

# Maine Model Railroad Layout Tour Save the Date

Maine - Brunswick To Rockland, September 16, 2017, the 3rd Annual Maine Model Railroad Layout Tour sponsored by railroad groups and hobby businesses. Have a fun experience seeing layouts and sharing ideas! Free and self-guided tour of indoor, outdoor and club model railroad layouts along the Route 1 corridor from Brunswick to Rockland. For layout descriptions, pictures, maps and directions, please visit:  
[www.mainemodellertour.com](http://www.mainemodellertour.com).

## Photos from Britain

(Continued from Page 6)



In the UK beverages are often taken more seriously than in the US. The Keighley & Worth Valley assigned three volunteers to the *Flying Scotsman's* Buffet Car. Here they sell snacks, hot drinks, soft drinks, mixed drinks and draft beer pumped from the cask to a glass (plastic available for those leaving the train). One beer was brewed especially for the occasion.

Name \_\_\_\_\_

**Address** \_\_\_\_\_

**City**                      **State**                      **Zip**

## HUB Division Headlight Subscription Form

I enclose \$7.00 for a subscription to the HUB Headlight for 2016-17

Name \_\_\_\_\_

**Address**

**City** **State** **Zip**

## Make a Donation to the HUB Division, Inc.

***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**

## 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](mailto:modulekits@hubdiv.org) with additional questions and to order the module kits.



## HUB Division Calendar of Events (Subject to Change)

2017

May 7 (Sun)	HUB Modular Railroad display at the 2017 NYCSHS Convention, The Best Western Royal Plaza Hotel, Marlborough, MA
May 19 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Jun 16 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Jul 15 (Sat)	Submissions deadline for the HUB Headlight Sep-Oct issue
Jul 16 (Sun)	HUB Summer Picnic, Waushakum Live Steamers, Holliston, MA
Jul 30-Aug 6 (Sun-Sun)	2017 NMRA National Convention, Orlando, FL
Sep 15 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Oct 20 (Fri)	HUB RAILFUN Meeting, 8 PM, Cambridge School of Weston, Weston, MA
Nov 9-12 (Thu-Sun)	NER Convention - Rails to the Gilded Age, Newport, RI ( <a href="http://www.newport2017.org">www.newport2017.org</a> )

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*RAILFUN.....*



*NO MOTIONS.....*

*NO SECONDS.....*

*NO BUSINESS.....*

*NO YAWNS.....*