

MAINE RAILERS

M3R CLUB NEWSLETTER FOR JUNE 2023

NEXT MEETING IS THURSDAY, June 8, 2023, at 7:00PM on ZOOM. Watch for the email from Dana Lindsey with the link to join.

President's Message by Gene Thayer

June is here which means Summer is here and in turn we will be spending a lot of time outdoors and probably less time running our trains.

Summer could be a great time to ride the real thing. Take a ride on the Amtrak Downeaster or go over to North Conway and ride the Conway Scenic. There is also the Downeast Scenic Railroad which provides a 12-mile roundtrip ride from Hancock through Ellsworth Falls and across the Union River Bridge on the former Maine Central Railroad. Don't forget the Belfast & Moosehead Lake Railroad.

On a rainy day or a hot and humid day you can stay inside and run the line of trains on your own road. This message is short but so is Summer.

UPDATES



M3R YouTube Channel Update by Channel Master Carlton Spring

May found the Portable Unit participating in two events. On May 5th and 6 th (set up on May 4th), we ran trains in the Shaw Gym in Gorham, ME as part of the Baxter Library's Spring Book Sale. If you haven't viewed the video yet, here is the direct link: https://www.youtube.com/watch?v=XU 6RH-MyQU

Then on May 24th, we ran trains at the Togus VA Medical Center in Augusta, ME. The direct link is: https://www.youtube.com/watch?v=dsHvgHZ5YGE

Detailed accounts of these events follow in this newsletter.

Next month, on the 7th we visit the Woods at Canco in Portland and on the 21st we run trains at the Thomas Memorial Library in Cape Elizabeth, ME. What a great way to celebrate the "official" beginning of summer.



M3R Website by Webmaster Tom Hartwell

We had a bit of excitement/heartburn a few days ago... So, here's the website update for the Newsletter...

While doing some routine updates in mid-May we had a "clash and crash." Our aging and poorly supported "Event's Calendar" plug-in failed, making a mess of things. Once

we determined that the plug-in was no longer being supported and was not working well (if at all) with WordPress, our content management host, along with other plug-ins that we use, we pulled it off our website and went in search of a replacement. I'm happy to report we found one straight away and installed it. Now the Upcoming Events page has an updated look and is easier to navigate. Since all the info on a specific event is now showing in one place, there is no need to go to a

second page to see things like the Event Address, or Admission Fees, etc. I suppose the crash was a "blessing in disguise..."



M3R Activity Committee by Chairperson Bernie Pender & Member Jeff Jacobs

The M3R Activities Committee is busy arranging layout tours for club members. The goal is to have one scheduled approximately each month. The first in the series of layout tours will be hosted by Mark David on June

17th located at 576 Western Road in Warren, Maine. Mark your calendar, and plan to come support your fellow Club member and your Club! Times will be posted as we get closer to the tour.

Activity Chairman Bernie Pender led a small delegation (Carleton Spring & Jeff Jacobs) to Joe Landry's on May 31. They made a video of an interview with Joe covering recent changes to his layout. The video will be shown at an upcoming Zoom meeting to encourage participation in the Aug 12 Open House at the Landry's. The event begins at 11:00 and features food (approx. 1pm), flea market tables, a talk by Joe and of course the layout tour.

After the filming, the crew had lunch at the Governor's restaurant where they enjoyed good food and conversation as G scale trains circled above them.

All M3R members are encouraged to 'follow suit' and use 'any excuse' to gather for coffee or a meal to meet up and enjoy each other's company.

Mark your calendar for July 16 - another big event is on the way!



From the Editor by Art Shean

The buzz around the Club this month is the new M3R Activities Committee. Bernie Pender was thrust into an area that sorely needed attention. As Chairperson, he will assemble a cadre of members that will identify and coordinate a plethora of Club activities to help members enjoy the many aspects of our hobby. Their scope will

include Informal in-person gatherings, outings, field trips, hands on workshops, member layout visits, flash tailgating, etc. They have already arranged member layout visits through January 2024 and began preparations for the annual pilgrimage to Joe Landry's updated layout in August.

Now is a great time to get involved on the ground floor. Stock in this committee is expected to skyrocket. Contact Bernie Pender directly if you want to and can help this group forge ahead on their mission to expand and to diversify our Club activities to meet as many member railroading interests as reasonably possible.

EVENT REPORTS



Hail, Hail, The Gang's All Here! by Art Shean

At 10am, April 29, 2023, in the new Mount Ararat High School Gym, Topsham, ME, Gene Thayer called the informal *in-person* meeting of the Maine 3 Railers to order. With nearly 30 members present, Dana Lindsey declared that we had a quorum. This was the most Club members in one place since our Club show at the Augusta Armory in February. Although no official Club business was conducted everyone appeared to have a great time shopping, selling, running trains, and watching the railway action.



Attendance at the show was robust and a lot of merchandise passed our layout heading out the door. My best guess is their was a large pent up desire to buy things in the Midcoast area left over from the pandemic and the Great Falls Model Railroad Club captured the moment to tap into it.



A number of our members purchased tables and did well including Vic Fuller, Peter Hanson, Lloyd Neal, Brian Inch, and Paul Brown. Alan and Jordan Small represented the 470 Club at their table.

By the way, did I mention **KIDS** having fun at our model train layout? We had kids to the left of us, to the right of us, and right in the middle of us. They were mesmerized with the motion, sounds, lights, and interaction. I bet more pictures were taken at our table than any other display or vendor table at the show. Not to mention the older kids (adults) that admired the set-up crew's work. As always, the operating firehouse and kid friendly LionChief controlled engines kept young hands busy. But the visuals from the carnival rides, county jail, and wind powered generator drew many observer's eyes and cameras.



Even the Older Kids Lingered to Check Out the Action



The intensity of the kids as they studied each detail on our table was encouraging. In them, I see the future of our hobby.

Hats off to the setup, operations, and moveout crews for another "over the top" performance.

The set up began Friday evening before the show with final touches Saturday morning before the show opened at 10 am. Despite the fact the show was held in the new Mt. Ararat



Gym for the first time, the crew quickly adapted to our new environment and thrived on our placement. Our layout was the first tables guests encountered after entering the gym and they had to pass around us to visit the rest of the show. As they say, location, location, location!



Our layout was organized in an "L" shaped configuration with the open side to the incoming guests. It included three independent operating loops and a raised trolley which passed over our MTH Over/Under tunnel.



As you can see above, the setup crew was well organized, efficient, and creative adapting the design as needed to better display the available space and buildings.

The Crews included John Ash, Lou Bragaw, Paul Brown, Sam Carr, David Christie, Sal DeVita, Tom Hartwell, Dave Hodgkiss, Dana Lindsey, Doug Pollock, Art Shean, Carlton Spring, Gene Thayer, and Ken Thorson.

A special note of thanks to Carlton Spring. He displayed a new set of buildings to include a 16 volt power system to light his buildings and the Dana Sullivan Memorial Wind Generator. Dairy Queen anyone? Below you can see Carlton under the table completing the electrical system hook up.



Although by the look on his face I'm not sure he was fully satisfied with the final overall product.



Some other Club members who joined in the fun included Stephen & Joanne Burns, Jack Dexter, Fred Guth, Joe & Irene Landry, and David Smith. Photography by Tom Hartwell, Art Shean, & Carlton Spring



Sunshine and Baseball vs Books and Model

Trains by Art Shean

On Friday and Saturday May 5th & 6th, the Maine 3 Railers returned to the Gorham Recreation Center in Gorham, ME for the Baxter Library Spring Book Sale. Unlike Friday last Fall with the torrential rainstorm, both days were sunny and mild. The

kind of Spring days that remind you Winter is behind us, and Summer is on its way.

Last Fall we were overwhelmed with kids wanting to run the LionChief trains, particularly when school let out Friday afternoon and Saturday morning after soccer practice. Anticipating a similar demand, we designed our layout with two inner Thomas loops, a concentric figure 8 loop, and an outer main line. We avoided any turnouts but included a 45-degree crossover to retain some challenge should we run multiple engines on the figure 8.





Despite our best planning and wishful thinking, the crowd was smaller than we anticipated. There was not a Friday afternoon surge of school kids nor a steady crowd on Saturday morning. Even the Farmers Market held in the parking lot had fewer vendors to draw guests.



With only one baseball diamond vs multiple soccer fields in the Fall and superior weather, the outcome was a foregone conclusion. As can be seen in the below pictures, the number of folks browsing for books was down and likewise the number of guests visiting our layout was proportionately reduced.



Fall 2022 Book Sale Crowd



Spring 2023 Book Sale Crowd

Although reduced in number, those that visited our layout made up for it with increased interest and desire for longer times at the controls. Many kids returned frequently, and some appeared to stay well beyond their parents planned visit times.



Some adults also appeared to be less intimidated by a large crowd of kids and enjoyed strolling around the table, pushing the firehouse button, and even running the trains.





The Setup, Operation, and breakdown crews included John Ash, Sam Carr, Tom Hartwell, Jeff Jacobs, Joe McCarthy, Doug Pollock, Art Shean, and Carlton Spring.



When the clock struck 1 pm on Saturday, we struck our tent and packed up.



Professional Track Packers & Tablecloth Folders

It's hard to believe our crew had the layout disassembled, packed, and loaded in the back of two SUVs and a trailer in less than an hour.



Sam's SUV and the Trailer Loaded and Ready to roll!



Carlton's SUV Set to roll! Until this fall, we bid the Gorham Recreation Center a fond adieu!



Photography by Tom Hartwell, Art Shean, & Carlton Spring



New Location – More Exposure by Sam Carr & Art Shean

Wednesday, May 24th the Maine 3 Railers returned to the Togus VA Medical Center to run model trains for the veterans and the center staff. This was our first visit since 2019 due to COVID restrictions. Unlike our last visit, Sam Carr negotiated moving the layout from a ward setting to a more central location outside the Center's Theater. For those not familiar with the Togus VA Medical Center, the site is a large complex of buildings connected primarily by an enclosed corridor called "Main Street". In general, you can't get anywhere at the Center without walking through Main Street. Hence the move from a ward to Main Street was a good thing for our exposure.

However, unloading and loading our equipment was interesting. We unloaded in the back parking lot, brought loads up one flight in an elevator, and then rolled slightly uphill a couple of hundred yards to the Theater Lobby. So, you might say that "we really went downhill" after this event.





The new location in a nook outside the theater on Main Street provided a nice space for a small layout, which got even smaller when we realized their tables were only 5' long versus the anticipated 6' tables we generally are supplied. The change turned out to be a "good training" opportunity for making last minute field adjustments to our layout designs. The design included an outer loop, middle double reversing loop, and an inner oblong loop. With 3' less feet of table length, we shortened the inner loop to remain on shore without passing over the bridges and removed nine buildings that were planned on the original design. We did manage to fit in two new Menards buildings this time out.



Halls of Handsome Barber Shoppe & Grampa Jack's Hobby Shop

We ran Carlton's MEC consist pulled by the B&M RS-3 on the outer track, a club car train on the middle track, and Jeremiah O'Brien on the inner track.



Delivery, redesign, setup, operation, disassembly, packing, and moveout crews included: Sam Carr, Tom Hartwell, Doug Pollock, Art Shean, Gene Thayer, and Phil Wunderlich. Valerie, Phil's wife, stopped by later in the day to retrieve Phil and David Smith's dad visited with us as well.





We had a good crowd, mostly in the morning. I think Doug Pollock's normally meticulous visitor count hit just over "a Lot". Location, Location, Location!





Sam took a short video of one of the Togus delivery robots going by the layout. Unlike the human staff, it stalled on the way through. The robots deliver files throughout the hospital and travel on the elevators by themselves. This one ended up being hauled away by the maintenance staff. Maybe his AI programming decided playing with model trains was more fun than delivering files.

At lunchtime, the crew members individually filtered down Main Street to the Cafeteria. Turned out to be quite a hike. Staff members must be in good shape just getting

around the center. On the way we discovered an entire wall presenting the history of the narrowgauge railroad that serviced the Togus Center in the past.



As a parting shot, not sure how Sam Carr allowed the control table to become engulfed in spaghetti!





And there is a story behind this final picture. Sam Carr stopped behind Art Shean when he walked over to take the picture of the sign at the entrance to Togus. Then Art saw the "Have a Great Day" on a fence across the street and took this picture. He thought they stole Doug Pollock's famous tagline, but Sam thought it would make a nice touch for the end of this article.



Photography by Sam Carr, Tom Hartwell, & Art Shean

Editorial Note: The following article is reprinted from the August 2000 O-Gauge Railroading, 2 and 3 Rail Journal by permission of the author, Stephen Burns. Note at the end of the article the possible inspiration for the Burns' model logging railroad display.



My Sun Porch Layout

Story by Stephen H. Burns

Photos by Fred M. Dole

This is my 4th permanent layout. Its predecessor had a reversing loop and a switching yard at each end, and I like that configuration very much. It permits continuous operation for the enjoyment of small visitors. For serious operators, it permits trains that are made in one location to deliver goods to another location.



This layout occupies my mother's (21'4"x11' 2") sun porch, in which I fondly remember operating #1684 as a kid. A diagonal aisle leads from the three steps and the door from her kitchen at the eastern corner to several windows at the western corner. A portion of the eastern corner of the layout is over the steps and blocks the door. This portion is hinged on the diagonal dashed line *(see lower left corner of layout diagram below)*, and it rises to permit the door to open, even though it appears to be forested. This worked because the hinge pins are about an inch above the forest floor.



Numbers Indicate the Location and Direction that the Subsequent Layout Photos were Taken



The Bascule Bridge, Canal, Freighter, and Yard Area Provide One of the Major Scenic Areas of the Layout

In this 4th layout, I added a second reversing loop at each end to allow a mainline train to pass switching operations. The #97 Coal Loader required a second track and, fortunately I made this a long passing track that is close to the midpoint between the reversing loops. Lastly, I wanted a place to run a trolley, even at the expense of paving most of the world with track. Notice that all but four turnouts are within easy reach of the aisle, and no turnout is completely hidden. Also, all of the loaders and unloaders are within reach of the aisle, and many are close to the control panel, as is the turntable.

Benchwork

The surface is half-inch CDX plywood, most of which is screwed to 1" x 4" joists. On the southern side of the aisle *(left, looking from the steps)* there are two levels of track and real estate, which are separated by a cliff. The lowest level extends from the aisle to the walls. It is 25 inches above the floor and is supported by joists about every 4' and cross joists about every 2'. I made miniature joist hangers out of galvanized sheet steel to attach the joist ends to the wall.

The upper level on the southern side of the aisle extends from the cliff to the walls. It is 7" above the

lower level (8" would have matched the tunnel portals better) and even with the bottoms of the windowsills. Strips screwed to the window's trim boards support its edges along the walls, and scrap wood spacers hold the rest of the upper level above the lower level.

On the northern side of the aisle *(right, looking from the steps)* there are only the upper level of track and the grade from the lower level. The grade starts just after the turnout in the westward corner and stops just before the hinged portion over the steps in the eastern corner. It is about 2% and #736 can pull 5 Madison cars up it if the track isn't oily.

The upper level and the grade are supported by joists on 2' spacings that are notched at their wall ends to accommodate the grade. The bottom half of the grade is in a tunnel, but it is accessible from below the benchwork. The top of the tunnel is covered by grass, a road, and houses, and it is the only part of the layout that rises above the windowsills. The supporting benchwork for the transformers and control panel is actually on the grade and there was a $\frac{1}{2}$ " gap between it and the upper level. This was unplanned, but it proved very convenient for running wires. A 1" x 8" facia runs both sides of the aisle. It supports the edges of the plywood and stabilizes the most vulnerable legs against kicks to the side.

Roadbed and Track

The roadbed is ½" Homosote, which I cut at about a 30-degree angle with a sabre saw and trimmed with a rasp. It is sparsely nailed to the plywood, and this helps to uncouple much of the high frequency track noise from the plywood. However, a large locomotive going through a turnout will still shake the wooden floor of the sun porch a satisfying amount. Early in the track laying, I sacrificed 1/3 of a sheet of plywood to cut out a series of "crescent" templates with inner and outer

radii differing by 2" for the entire range of curves I expected to lay. These served to mark the Homosote, to ensure accurate curvature at its splices, and to aid in the final details of the roadbed laying.

The mainline and sidings are GarGraves flexible track everywhere that shows. The straight tracks in the tunnels are Lionel 027. Most of the trolley track is O27.

The turnouts were chosen according to the philosophy, "If the turnout fits, install it". But for two, the mainline runouts are O72. Manufacturers include GarGraves, postwar Atlas (*I think*), and Century 100. The two are a Lionel O42 (#5168) east of the turntable and a Ross curve #6 beyond the western switchyard. Most of these are wired for non-derailing operation. The northern switchyard has a right-of-way (No longer in business, use one made by Ross or Curtis Hi-Rail) three-way turnout. The loops at the ends of the trolley track have Lionel #022s. The Western and Southern switchyards have modified Lionel 027 Turnouts (#1122s), which permit the most switchyard track in the available space.



The Main Part of the Layout Consists of the Turntable/Roundhouse Area, an Industrial Area, and Two Freight Yards

Modifying a #1122 started with boring out the rivets and removing the base, the paper insulator, and the drive link. I unsoldered all the connections to the third rails, taking care to fold the power wire to the machine and lamp out of harm's way. Having only a wood cutting bandsaw, I installed an extralarge V belt pulley on its drive wheel to slow its rotation, and I used a dull woodcutting blade with teeth pointing up to prevent tearing the thin metal of the #1122 base and rails. I sawed off the switch machine close to the rails, leaving lots of sheet metal flange on the machine for attaching it to the other side of the turnout. I turned the #1122 over and shortened the curved and straight tracks and the base, taking care to leave at least one set of tabs for each rail securing it to the base. I shortened the straight tracks in the southern yard to ½" after the 'frog". Leaving 1" of rail here would have been better as this yard track turned out very closely spaced. This was not a problem in the western yard, where the curved rails were left full length and exited the main line at 45 degrees.

Reassembling a #1122, I used 4-40 screws and nuts to fasten the switch machine to the straight side of the turnout as far as possible from the rails, but giving consideration to the connecting link and the two positions the movable rails must take, I led the wire from the switch machine and lamp out through a hole under and at the right of the #1122's machine so I can operate it from accessory power. I soldered a wire between the two straight sections of third rail and brought an end through the benchwork to connect to track power. However, I left the curved section to be energized by track

power from the siding. I discarded the base and the paper insulator, which no longer fit and screwed the turnout directly to the Homosote through an unused rivet hole near the end of the straight track.



The Yard Tracks Feature Modified #1122 Switches to Allow Fitting as Many Tracks as Possible in a Given Space

These modified turnouts work with all of my post war steamers of the size of #675 and #2065 and even with #736. My #2020 can back into the siding through them *(which is what counts)*, but when going forward into the siding, the ladder below the cab catches on the machines housing. My MTH 0-8-0 caught its pilot on some of them, which I eased by filing a little off the offending machines' housings. My postwar F-3 and GG-1 also negotiated them. As I was modifying and installing nine #1122, Lionel was shipping the new #022 turnouts with removable pieces, which should be ideal for making compact switch yards.

Wiring

COMMON for the transformers, track, and accessories is provided by a #12 wire that runs a foot or two in from the perimeters of the benchwork. Individual connections to this COMMON rarely exceed 2' in length and are made with #18 or smaller (for lamps) wire. These COMMONS are joined at the Western corner and at the control panel. They are supported by fence staples driven into the bottom of the joists. Long runs of most other wires are supported by old-fashioned wire coat hooks that are screwed into the tops of bench legs.

The mainline is divided into 27 blocks (which is excessive). Also, there are 15 sidings, 6 tracks associated with the roundhouse and turntable, and three blocks associated with the trolley. I used #18 wire, which is adequate since most runs are under 20'. I was very careful with connections to the track, much of which was recycled. I made connections to the mainline where two sections of track joined, and I stripped enough of the ends of the wires to solder them to both sections. For long blocks, I ran additional COMMON and feeder wire every three or four sections, and I wired together the two outside rails of the GarGraves track except where one rail was used to control accessories.

Most of the sidings have a #6019 uncoupler section right after their turnouts, and I soldered siding power and COMMON to the third-rail and outside-rail connections on these. Their magnets and 4th and 5th rails and the cattle platform were powered from "C" on the ZW. Different operating cars work best with different voltages. Most of the 4th and 5th rails and magnets of the #6019s are connected in parallel, two to a controller, for example: southern yard sidings 1 and 2, 3 and 4, 5 and mainline. How I do this is explained in "Wiring the Uncoupler Controller," *The TTOS Bulletin 29 No.2* (March 1994)

This wiring transmits very reliable power to the track and results in imperceptible slowing due to poor connections at the track pins. To make operation more turnout proof, I have paralleled the locomotive and tender pickups, as I advocated in *O Gauge Railroading (Run 160, August 1998, BackShop Letters)*. I've even added extra pickups to my GG-1 and to my MTH steamers.

Any block in the mainline may be powered by either A or D of the ZW. The southern and western yards and the adjacent mainline may be powered by T or by the type S if one wishes (and dares) to do switching while a through train runs on the other loop. The trolley is powered by B of the ZW. I built an elaborate circuit that (more often than not) stops the trolley (with flashing lights and power interruption) if the challenger is about to cross the trolley track behind the roundhouse.



A Third Yard Area is Located Next to the Canal and Bascule Bridge

All the turnouts are powered by 16-volt, 4-A. "electronics" transformer. Unlike a "toy train" transformer, this is designed to maintain its output voltage when heavily loaded, and the lamps in the #1122S dim very little when a turnout is thrown. I use 18-volt lamps for long life. Be sure to use a circuit breaker or an easily changed fuse with an electronics transformer to protect the transformer and your house.

The house lights, streetlights, and tower lights are powered by a 12-volt, 4-A electronics transformer. Again, I used 18-volt lamps where possible and I've put rectifier diodes in series to cut voltages to lamps that are frosted or that have special bases and are hard to find with 18-

volt filaments. Figuring that nothing would ever happen to a lighting circuit, I originally put the fuse for this one inside its box and changing it required unsoldering the load wires and disassembling the box. Within a week I knocked a floodlight tower over onto the turntable and had to change the fuse.

The turntable and the modified #2789 water tower have 12VDC reversible motors and are connected via push buttons to the same positive and negative 9-volt power supply.

The remaining accessories, drawbridges, crossing gates, gatemen, barrel, coal, and log loaders, Esso station, etc. are powered by a 10-12-14-15-volt, 4-A electronics transformer, to each as it needs. One Terminal of each crossing gate and gateman wired directly to the transformer. The

other terminal is wired to approximately a 3' length of insulated GarGraves outside rail. The axles of the passing train connect this to the COMMON outside rail and draw current through the accessory.

With most of the accessories and all the turnouts and lights powered by electronic transformers, the ZW barely gets warm while operating two large locomotives and the trolley. The type-S transformer is needed only when there is an excess of engineers, or we need to use the burro crane to load the freighter.

When I'd finished fitting 2 reversing loops and the turntable and the roundhouse assembly onto the upper level, there was only a small space left



The Control Panel Showing the Toggle Switches for Blocks and Switches

for the control panel. I made a vertical 13" high by 22" wide panel with small, center-off, SPDT. block and turn out switches in hierarchical order for the mainline in the center of the panel. The switchyard, trolley, and turn table switches formed two vertical rows on each side and they are easy to use. The mainline switches proved fiendishly difficult to remember. I added pin-stripe tape to the panel to indicate the track plan. It is topographically correct, but quite ungeographical, and the mainline switches remain hard to use.

The controllers for the #6019 uncouplers and the cattle, coal, and log loaders are on another vertical panel, which is hinged by its top from the fascia near the log loader. The hinges made it easy to wire and this panel is easy to use.

Roundhouse and Turntable

The roundhouse and the farmhouse were purchased from a gentleman who made and sold cardstock houses at train shows near Baltimore. The roundhouse came with a removable roof and I-beams and columns that supported it. I added lights, benches, and other interior details.

The turntable is $22 \frac{1}{4}$ " long and five" wide. Its rails overhang its framework by 1/8". Its length handles #736 and #2020 comfortably. But 3" or 4" wide would be plenty.

Its pit consists of three concentric pieces of galvanized sheet steel that are separated by 1 ³/₄" wide concentric plywood insulating rings sawed from the cutout for the pit. The steel disk at the bottom of the pit is 20¹/₄" in diameter. It supports the central bearing of the turntable and is connected to COMMON for the track current and the motor current. The steel disk is screwed to the bottom of the insulating ring, which has an



Scratch Built Turntable & Cardstock Roundhouse Building

outside diameter of $22\frac{1}{4}$ " inch and an inside diameter of $18\frac{3}{4}$ ". It is screwed to the bottom of a concentric galvanized steel ring of L cross-section.

The steel ring is cut with an outside diameter of 23 $\frac{3}{4}$ " and an inside diameter of 20 $\frac{1}{4}$ ". (the steel disk at the bottom was cut from the inside of this.) Then I cut $\frac{3}{4}$ " long triangular slots at 1" intervals from the outside diameter of the ring towards its center. These permit the sides to be bent up to form the $\frac{3}{4}$ " high stem of the L, which is nailed to the edge of the bench top. Two brass wheels at each end of the turntable ride on the number 1" wide flat, horizontal part of the L.

A circular "rack" gear made of ³/₄" high galvanized sheet steel is screwed to the inside diameter of the insulating plywood ring just above the steel disk at the bottom. I cut its teeth in a couple of hours with a sabre saw and shaped them with a file. The pinion is mounted on a length of (coat-hanger) wire, which is insulated from the turntable and motor. It is turned by a reversible DC slow-speed gearhead motor that was plentiful on the surplus market 30 years ago (I should have bought more). The rack serves also as a current supply for the motor. Insulated, spring-loaded vertical-axes rollers hidden under each end on the turntable complete this current path. The steel disk, the insulating ring, and the upright stem of the L are painted light gray to simulate concrete.

Landscaping

The grass is Spalding Grass-to-Go rug. I should mow it around the houses. Because of concern that the roadbed might rock if I laid atop the grass, I laid the roadbed directly on the plywood and fitted the grass around it. This was extremely tedious, and I would try laying the roadbed atop the grass next time. The grass is secured by various combinations of staples, double-sided tape, hot melt glue, and gravity. The upside is that sufficient grass was left from two 9' x 12' rugs to carpet the aisle.

I bought the trees at a train show from a vendor who made them. They appear to be a common weed that has been stained green. On my previous layout, I had several grape stems, which made convincing dead deciduous trees.

I made some of the card-stock houses as a kid after perusal of plans in the Book of Knowledge and Encyclopedia. My daughters made the barn, silo, and the balloon and helped with several newer houses. More modern structures include kits from Buildings Unlimited, Pioneer Valley, Twin Whistle, and Walters. Most of the structural concrete is cardboard from the backs of pads of paper or gray paint. The freighter was scratch built from a pine 2" x 8" roughly according to a photo of a small freighter for sale in Boats and Harbors. The asphalt roads are painted wood where built up to the trolley track and asphalt saturated roofing felt elsewhere. Some of the roads have gravel shoulders which are simulated with cardboard. Roofing felt is inexpensive and quick to lay. It makes an acceptable and very fast grade crossing just by laying it over the ties and snug against the stems of the rails.

Operation

If visitors want to see the trains run, it's easy to create two super blocks that permit continuous operation of two trains going in opposite directions. One block consists of the lower level, the single-tracked grade and the inside passing track. The other consists of the upper level and the outside passing track. The trolley runs autonomously if you don't insist on it stopping at stations. Please don't ask me any questions while I'm running two trains. It is also a lot of fun alone.

If a small visitor wants to operate more than the trolley, either lower-level reversing loop will store 2 long trains while either upper-level loop will store two shorter ones without blocking the road near the control panel. The visitor can run a single train around the entire layout using the other pair of reversing loops.

If serious operators want to engage in realistic point to point operation, the mainline is already quite long for the room size and the tunnel over the grade can be used to stop the train out of sight and make it seem longer. There are oil and chocolate depots, two factories, and a cattle destination at the upper end; a marine terminal is at the lower end, and thriving milk, coal, and log operations are in the middle.

Acknowledgements

This article is dedicated to my father. A lobsterman, carpenter, and boatbuilder, he disliked most mechanical things. Yet he bought #1684 for my fourth Christmas and several sets thereafter. I hope that watching me construct this layout provided comfort in his last year. More thanks to my mother, who sacrificed her sun porch for this cause. Both she and my late mother-in-law generously funded acquisitions of locomotives, cars, and accessories. And finally, thanks to my wife Joanna for driving me to train meets and then encouraging my habit.

In addition to their trains, Stephen and Joanna have another hobby: they owned a Norwood bandsaw that Stephen built from a kit. The log to be sawed is placed on the bed, which is under the blue tarp in the photo. For the first cut, the saw head is raised to almost the diameter of the log using the wheel Steven is grasping. Then the carriage is pushed the length of the log, sawing a horizontal slice slide of slabwood off of its top. Then Stephen rotates the log 90-degrees and repeats the



process three times to give four flat faces. Subsequent trips with the carriage produce lumber of thickness equal to how much the saw head is lowered each time.



Stephen & Joanna Today



The View from Doug's Chair by Doug Pollock

If U build it, they will come and come they did! We had 421 happy customers that stopped by our layout at the Mt. Ararat Model Train Show. It was great!

Among those visitors was a middle-aged young man with a green and black checked jacket. He could really smile, and smile he did from one end of the layout to the other. There was a smile on his face the whole time. I can only imagine what his thoughts were about.

There were a lot of smiles and a lot of portraits taken with the layout as the backdrop. Two folks in wheelchairs with their care givers who turned them around in front of the layout and got a great smiling snapshot - more big smiles. There was an Army 1st Cavalry soldier who just loved the layout and the Honor Guard and Wreaths Across America display. He showed me a pin on his shirt or hat, and it was a Wreaths Across America Pin. He was a member or had assisted them. I cannot remember which one it was. He also introduced his wife to me.

Margo, the woman who organized the show for the Great Falls Train Club was all over the place and did a wonderful job. She brought her happy smiling grandson around many times. Many people came back to the layout multiple times. Some kids followed the train around the entire layout walking to keep up with it front and back.

We had some club members who had tables for selling items and I know one ended up selling everything (he had it priced for a clearance sale).

All in all, we had a great set up and breakdown with a large crew completing tasks close to a world record.

Be safe Doug

MODEL RAILROADING



Critical Steps to Protect Older Proto-Sound Engines with

8.4V Batteries by Ken Thorson

Older MTH engine bargains can be had for reasonable prices compared to the latest Protosound 3 engines. Cosmetically, the appearance of older MTH engines is just as good or better than current production, but it is important to know what version you are buying and what the disadvantages of those engines will be.

There are at least four generations of MTH engines: Locosound; Proto-Sound (commonly referred to as Protosound 1); Protosound 2; and Protosound 3. This will be a serial discussion of the several types. Old timers know these things; newcomers often do not. It is also helpful to refresh our recollection of things past. Last month, I wrote about Locosound. While Locosound continued to be featured up until 2002, a significant advancement became available with some engines. That was Proto-Sound, also called Protosound 1, which first came out about 1994. This month I turn to the second generation of MTH engines.

Proto-Sound opened a whole new world of command and control for MTH engines. The electronic guts of Proto-Sound were developed for MTH by a company known as QSI (QS Industries). If your engine came with the original box, the label will indicate the components are from QSI. A serious

problem with Proto-Sound QSI engines is that early versions used 8.4V NiCad rechargeable batteries that would eventually fail and not take a charge. If power is applied to the track with such an engine having a failed battery still installed, the charging circuitry may be misdirected and a surge passes into the Proto-Sound circuit board and fries some of the electronic components rendering the circuit board unusable. The engine becomes dead. That is why responsible sellers of used Proto-Sound engines advise buyers to replace the battery before attempting to start the engine. The battery, MTH Catalog Item No. 50-1008, MTH Part No. BG-4000005 (\$14.00) looks like this:



Later, Protosound 2 engines changed the circuitry and converted the power source for the circuit board to two, AA 1.2V NiCad rechargeable batteries (referred to as 3V systems). Those batteries, MTH Catalog Item No. 50-1024, MTH Part No. BG4000003 (\$14.00), look like this:

Because of the potential ruination of the circuit board from powering up an engine using a failed 8.4V battery, if you buy a used Proto-Sound



(Proto-sound 1) engine, it is critical to remove the engine shell (or the tender shell of steamers) and determine which battery arrangement is associated with the engine. If it is the 8.4V version, remove the battery and replace it with a new MTH Catalog Item No. 50-1008, before you attempt to power up the engine to avoid converting your Proto-Sound engine to a bulky paper weight. In a pinch, if you cannot procure the MTH part, a commercially available NiCad rechargeable can be used temporarily.

By far the best solution to the Proto-Sound battery problem is to substitute a BCR (Battery Component Replacement) product. BCR products look like 9V batteries but, instead of conventional battery or Ni-Cad or NiMH innards, there is an internal capacitor that loads when power is applied to the track, and it functions like a battery to provide power to the circuit board in

the event of momentary power interruptions or during the power shutdown sequence. The BCR looks like this:





You can find BCR's on eBay for under \$30 or order them directly from the manufacturer at <u>www.jandwelectronics.com</u> at about \$25 each, plus shipping in both cases. JandW usually offers discounts when BCR's are purchased in quantity (buy 7 get 1 free or buy 10 and get 2 free via the J&W website or by phone order at 717-417-2820. I have seen knock-off kits to make your own BCR and assembled knock-off BCR's, but as J&W explains on its website, those products violate the patent held by J&W, and they are of inferior quality and performance.

Next month – Continued discussion of Proto-Sound and Protosound 2.



Know Your Tracks by Art Shean

Monumental news from Lionel that no one cared to notice. For the first time in decades, Lionel introduced a new FasTrack track piece without a specific operating function. That's correct! No function other than a new length of track. What's so special about this track then? Well, it is only three (3) inches long. Unless you design

or set up many FasTrack layouts this may not mean much to you. But when you are attempting to close a loop or fit in a new spur this new length may make a difference.

When laying track, I like to connect track pieces to within an eighth of an inch. Generally speaking, FasTrack can tolerate/flex enough to fill this size gap without major spread/discontinuity at the joints. Prior to the introduction of the 3" piece, Lionel offered four straight pieces to fill gaps up to 10". These include: 1 3/8", 1 ³/₄", 4 ¹/₂", and 5". Starting with the shortest length of 1 3/8" there are 70 possible 1/8" increments to 10". With the original track lengths, you can use a combination of them to cover 36 or 51% of the 1/8" increments. The new 3" track adds 10 more increments or 14% more for a total coverage of 65%. See the chart below for increments covered and required combinations to cover the 1/8" increments.

The new 3" pieces have not arrived at dealers yet, but I have preordered a number and await their delivery. Expected Availability Date: September 2023



FasTrack Length Chart

Track Length		FasTrack Pieces							
		10	5	4 1/2	3	13/4	1 3/8		
1.374	13/8	0	0	0	0	0	1		
1.500	11/2								
1.625	15/8								
1.750	13/4	0	0	0	0	1	0		
1.875	17/8								
2.000	2								
2.125	2 1/8								
2.250	2 1/4								
2.375	2 3/8								
2.500	2 1/2								
2.625	2 5/8								
2.750	2 3/4	0	0	0	0	0	2		
2.875	27/8					1			
3.000	3	0	0	0	1	0	0		
3.125	3 1/8	0	0	0	0	1	1		
3.250	31/4								
3.375	3 3/8								
3.500	3 1/2	0	0	0	0	2	0		
3.625	3 5/8								
3.750	3 3/4								
3.875	37/8								
4.000	4								
4.125	4 1/8	0	0	0	0	0	3		
4.250	4 1/4								
4.375	43/8	0	0	0	1	0	1		
4.500	4 1/2	0	0	1	0	0	0		
4.500	4 1/2	0	0	0	0	1	2		
4.625	4 5/8								
4.750	4 3/4	0	0	0	1	1	0		
4.875	47/8	0	0	0	0	2	1		
5.000	5	0	1	0	0	0	0		
5.125	5 1/8								
5.250	5 1/4	0	0	0	0	3	0		
5.375	53/8 -								
5.500	5 1/2	0	0	0	0	0	4		
5.625	5 5/8								
5.750	53/4	0	0	0	1	0	2		
5.875	57/8	0	0	1	0	0	1		
5.875	57/8	0 -	0	0	0	1	3		
6.000	6	0	0	0	2	0	0		
6.125	6 1/8								
6.250	61/4	0	0	1	0	1	0		
6.250	6 1/4	0	0	0	0	2	2		
6.375	6 3/8	0	1	0	0	0	1		
6.500	6 1/2	0	0	0	1	2	0		
6.625	6 5/8	0	0	0	0	3	1		
6.750	6 3/4	0	1	0	0	1	0		

FasTrack Length Chart

Track Length		FasTrack Pieces							
		10	5	4 1/2	3	13/4	1 3/8		
6.875	67/8	0	0	0	0	0	5		
7.000	7	0	0	0	0	4	0		
7.125	7 1/8								
7.250	7 1/4	0	0	1	0	0	2		
7.250	7 1/4	0	0	0	0	1	4		
7 375	73/8	0	0	0	2	0	1		
7.500	7 1/2	0	0	1	1	0	0		
7.500	7 1/2	0	0	0	1	1	2		
7.625	7 5/8	0	0	1	0	1	1		
7.625	7 5/8	0	0	0	0	2	3		
7.750	7 3/4	0	1	0	0	0	2		
7.750	73/4	0	0	0	2	1	0		
7.875	77/8	0	0	0	1	2	1		
8.000	8	0	1	0	1	0	0		
8.000	8	0	0	1	0	2	0		
8.000	8	0	0	0	0	3	2		
8.125	8 1/8	0	1	0	0	1	1		
8.250	8 1/4	0	0	0	0	0	6		
8.375	8 3/8	0	0	0	0	4	1		
8.500	8 1/2	0	1	0	0	2	0		
8.625	8 5/8	0	0	1	0	0	3		
8.625	8 5/8	0	0	0	0	1	5		
8.750	8 3/4	0	0	0	0	5	0		
8.875	87/8								
9.000	9	0	0	2	0	0	0		
9.000	9	0	0	1	0	1	2		
9.000	9	0	0	0	0	2	4		
9.125	9 1/8	0	1	0	0	0	3		
9.25	91/4	0	0	0	1	2	2		
9.375	9 3/8	0	0	1	0	2	1		
9.375	93/8	0	0	0	0	3	3		
9.500	9 1/2	0	1	1	0	0	0		
9.500	9 1/2	0	1	0	0	1	2		
9.625	9 5/8	0	0	0	0	0	7		
9.750	93/4	0	0	1	0	3	0		
9.750	93/4	0	0	0	0	4	2		
9.875	97/8	0.	1	0	0	2	1		
10.000	10	1	0	0	0	0	0		
10.000	10	0	2	0	0	0	0		
10.000	10	0	0	1	0	0	4		
10.000	10	0	0	0	0	1	6		

Combinations Added with New 3" Track Piece Combination Still Unavailable

Maine 3 Railers Upcoming Schedule of Events

Future Events Where Maine 3 Railers Will Be Running Trains

- Jun 07 **Woods at Canco Assisted Living**, 257 Canco Rd, Portland, ME 04103, Trains run 10am-3pm with setup 8-10am. (Portable)
- Jun 21 **Thomas Memorial Library**, 6 Scott Dyer Rd, Cape Elizabeth, ME 04107, Trains run 10am-3pm with setup 8-10am. (Portable)
- Jul 08 **Moxie Festival**, MTM Center, 18 School St., Lisbon Falls, ME 04252. Trains run 8am-4pm. Setup Jul 7, 5pm. (Portable)
- Aug 12 **M3R Outing & Swap Meet**, Joe Landry's Home, Hours: 11am-TBD, 19 Orestis Way, Lewiston, ME 04240
- Sep 02-03 **Model Train Weekend**, Seashore Trolley Museum, 196 Log Cabin Rd, Kennebunkport, ME 04046, Setup Saturday Sep 02, 7:30-10am, Run trains Saturday 10am-4:30pm and Sunday, Sep 03, 10am-3pm. (Portable)
- Sep 24-30 **Cumberland Fair 2023**, 197 Blanchard Rd., Cumberland, ME 04021. Setup 9/23 at 8am. Trains Run 9am-9pm daily. Move out 10/1 at 8am. (Trailer)
- Feb 17 Annual Maine 3 Railers Model Train and Dollhouse Show, Augusta
 2024 Armory, 179 Western Ave, Augusta, ME 04330. Run trains 10am-3pm.
 Move in on Friday Feb 16 8am-4pm. (Portable)

M3R Zoom Meetings (All meetings start at 7 pm):

- Jun 05 Executive Board
- Jun 08 Regular Monthly

Roundhouse Zoom Sessions (All sessions start at 7 pm):

- Jun 15 Roundhouse Session, Topic: TBD, Host: TBD
- Jun 22 Roundhouse Session, Topic: What is your current model railway project and what is your next step? Host: Art Shean
- Jun 29 Roundhouse Session, Topic: TBD, Host: TBD

M3R Activities:

- Jun 17 Mark David's Tubular Track/Plasticville Layout Visit, 576 Western Road in Warren, Maine 04864. Hours to be announced.
- Jul 16 **?????**

Maine 3 Railers Group Email:

The Maine 3 Railers have a group email account which subscribers can use to send emails to other club members who have subscribed to the service. Like club forums, this service allows members to ask questions, provide advice, and help other subscribers solve model train problems.

Because this is a free service, the participant list owners (Dana Lindsey and Art Shean) cannot add you; you must add yourself. Below is the home page of our group. It has a link to join (*look under group email addresses*). Another way to join is to be asked. Send an email to Dana Lindsey and he will send you an invitation. Follow the link you will receive to confirm your account. We restrict the use of this service to M3R members. Because the site is not moderated, Dana or Art will review your first two posts to assure you are a member. https://groups.io/g/M3R

Once subscribed you can email other M3R subscribers by addressing your email to: <u>m3r@groups.io</u>, change how you receive emails, or unsubscribe. If you have any questions, contact Dana Lindsey, M3R Secretary