Curing Beginners' Analysis-Paralysis

How one modeler stopped worrying and started building an urban layout ...

— by Mark Rindflesh
photos by the author

After more than a decade of model railroad paralysis, I found a cure. Finally, I was able to stop thinking and planning and begin building. In this article I'll review my symptoms and what worked for me. It is, I hope, what I needed to see 15 years ago.

This article is for beginners like me, trapped by high aspirations and excess doubt, who plan and debate and reconsider and plan over and over and over and never lay track, assemble and paint a structure, build a meadow or mountain or road or forest or farm or town, and never experience the pleasure of watching a locomotive pulling a train, no matter how small, through a scene you created.

My father in law retired in the late 80's and hoped to spend more time building his model railroad. While visiting him in 1993, I looked through his Railroad Model Craftsman magazines and came across a series of articles on building a car float scene. That single set of articles reignited my interest in model railroading, dormant since I was in junior high school.

I began to read all the model railroading magazines and thought about what I might build when a basement bedroom became available after my daughters graduated from college. I read about layouts large and small that were so skillfully built the magazines wanted to present them to us,

Figure 1. A bird's eye view of the intersection of Commercial Street and Van Buren with B&M 1160 switching a reefer behind the boxcar at Portland Cold Storage Company.

the model railroading public. I was finally able to begin my layout.

Finally, in the fall of 1995, a 9 x 14 foot room became available in our basement. This was the same year Bob Van Gelder released his Brick Roundhouse from South River Modelworks. Opportunity and inspiration served, I thought, to get me started building a model railroad. I bought the roundhouse and was ready to plan a layout around it.

The kit arrived. I'd admired the photographs of it and a host of other skillfully built structures. These had established my expectations. But when I opened those two large, red boxes I began to doubt I could live up to my self-imposed standards.

Still, I pushed ahead and generated various track plans to include both an engine terminal and car float operations in my limited space. I read more articles, watched more videos and considered multiple options.

I could not get started, so I told myself I needed to plan more, think more. Maybe a CAD program will help, I thought one day. I bought CadRail 8 and eventually came up with a plan filling the room. Then, looking at "The Final Plan," I was totally locked up by doubt.

My energy drained to nothing and those two big red boxes containing the roundhouse sat on the shelf mocking me. I finally gave up on all my plans and, a few years later, sold the roundhouse having built absolutely nothing.

In retrospect, I now understand what I needed: Smaller aspirations, and a smaller track plan. At the time, though, the model railroading press only occasionally featured small layouts and they never showed the work of a beginner.

Over the next few years, my desire to build a layout did not quite die. The internet had matured and in 2007 I was occasionally browsing model railroad sites and forums. Eventually, fighting my doubts and grudgingly tempering my imagination, I decided if I was going to build anything it had to be a small switching layout similar to some of the British track plans I'd found on the internet.

Next, I had to accept using inexpensive plastic kits instead of craftsman kits so that when I made my inevitable mistakes, the losses would be minimized. As soon as I came to terms with having a smaller track plan as well as lesser aspiration,

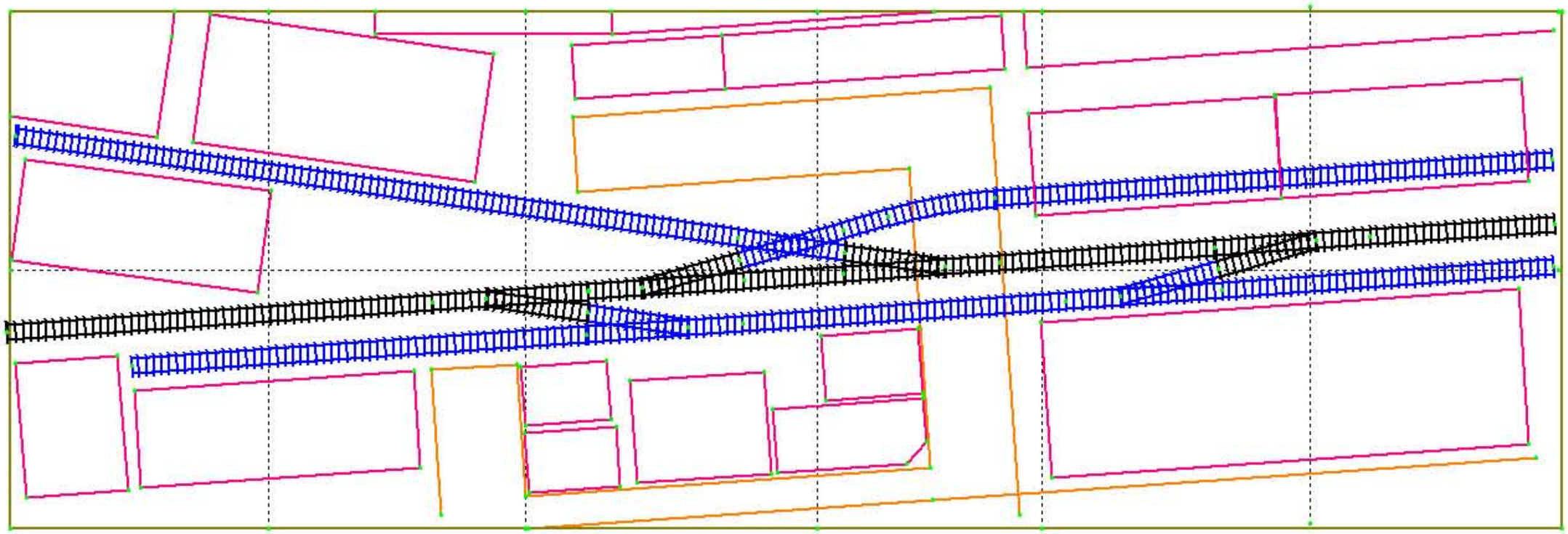


Figure 2. This is my final trackplan. Buildings are in pink. Streets in orange.

my paralysis fell away. I was able to start my layout.

Track Plan

In the spring of 2007, I dug out my copy of CadRail, reviewed how to use it, and began planning. Somehow, I decided I could build a 6x2 foot layout (Figure 2 previous page).

I found inspiration for the plan in John Pryke's book, "Building City Scenery for Your Model Railroad," and in my long standing interest in the New England railroads. When I came across a Portland Terminal Alco S3 switcher and discovered Portland, Maine had the street running I had seen in John's book, my location was loosely set.

Obviously, a layout only 6 x 2 feet imposed severe space limitations. I found an article in Model Railroad Planning 2003, "Timesaver +," and came up with a variation. As I developed this plan, I studied the buildings I might squeeze in. Most were basic Walthers and DPM styrene kits.

I wanted to use larger structures wherever I could to make my trains look smaller and the layout larger. Using CadRail, I used the footprints of various structures in different locations to see what might fit. I also drew in streets in varying ways until I was satisfied with the final arrangement.

I didn't want any track running parallel to the front of the layout so all the track, roads and buildings sit at various angles to create a greater sense of depth. The "mainline" runs down the middle with a runaround in the front and four spurs to serve industries. As you can see, I gave up my desire to have street running to have sufficient operating possibilities with an additional siding or two.

About 3 months after I started construction, I decided to add some staging tracks. I had four feet available at each end of the layout, so I decided to simply add three tracks, using an off-scene three-way turnout at each end of the "mainline." It wasn't much but it did allow a train to enter and depart the layout or pass through and require the switcher to clear the main.

Benchwork and Track

By September 2007 I was ready to begin my benchwork. Because I had little access to power tools, and the size of the layout was small, I decided to try premade benchwork. After assembling the precut and predrilled lumber, I had ¾" plywood cut into 4-inch-wide boards to use to make an open grid. With a 2 x 6 foot piece of the same plywood attached on top the grid, I added ½" pink foam for the subroadbed and was ready to lay track.

However, from the beginning of my planning, I decided to control the view of my layout by using a valance, fascia, and a backdrop wrapping from one front side around the back to the other front side. Fortunately, by this time, I found one of my friends had a table saw.

With his help, I built a large shadow box enclosure that would fit over and around the whole layout. This box was much bigger and more complicated to build than the grid but it went together with only a few missteps over two rainy fall weekends. Then I set it aside for over a year while I built the layout.

I decided to use Peco turnouts because I wanted to throw them manually and they have springs installed that hold the points tightly against the stock rails. John Pryke demonstrated how to build track for street running. I really wanted to do that but, in the end, with so little space, I had to once again come to terms with smaller aspirations.

Wiring

From the beginning of construction, I had planned to use a DCC system. But, I had acquired several locomotives without decoders. I wanted to be able to test them to see if they ran well enough to justify installing a decoder, so I needed to switch between DC and DCC easily.

The wiring was very basic. I ran the bus lengthwise down the middle of the layout using insulated, solid 12 gauge wire. I attached the ends of the bus to small eye hooks, leaving extra at each end. I stripped the ends of the two wires at one end and soldered them to the back of a Radio Shack speaker plug box. Later, I attached the speaker plugs to the end of the wires coming from my new DCC unit and from my used power pack. Then I could plug one or the other set into the speaker plug box and switch from DCC to DC and back with minimal effort.

I used 22 gauge feeders from the tracks and connected them to the bus with 3M suitcase connectors. I'd never used them before but found sufficient support for them from a variety of modelers to convince me to try them. Using them was simple and they worked perfectly (Figure 3 next page).

When I added the turnouts for staging at each end of the layout, I needed some way to handle the polarity of the frogs. Initially, I thought I would use a rotary switch at each end. Later, I decided to use the Hex Frog Juicer designed by Duncan McRee.

One juicer switched the polarity for each of the three frogs in the two turnouts. Installation was extremely easy. I simply soldered the wire from each frog to a longer wire, taped the joints and connected each one to the Juicer. Whenever a short at the frog is detected by the Juicer, it switches the polarity so rapidly there is no effect at all on the movement or sound of a locomotive passing through.

Buildings, Scenery, Streets and Signs

Before I built any of the various structures I considered during my initial planning, I decided to build mockups. I kept worrying things weren't going to fit and wanted to find problems as early as possible. A friend showed me a simple way to use common cardboard to build my models.

Over a week or so I made the mockups and then was able to experiment with them until I was able to find an arrangement I liked. Later, as I built the structures, I would switch out the cardboard mockup for the real thing.

I drew windows and doors to make them a little more interesting.

It's useful to make them look like something more than plain cardboard if they are going to be in place for an extended period of time.

These mockups let me try out different arrangements of the buildings in my limited space. Placing taller buildings in the back of the layout and shorter ones in front provided a visually attractive arrangement. It also allowed easier access to the track behind the buildings.

I placed taller buildings at each end of the layout, which seems to lead the viewer's eye towards the center of the layout. That's what I wanted

Figure 3. A simple bus under the "mainline" was all that was needed to run both DC and DCC locomotives.

Figure 4. With cardboard mockups it was easy to check for size and fit and plan needed adjustments. They also serve as placeholders on the layout while the buildings are constructed.

because my most detailed structures were front and center.

Buildings are the scenery on my layout. I used seven structures for the commercial section in the center and five structures for the industrial sections. I enjoy detail and from the beginning planned a city street setting somewhere. It turned out to be right in the middle. The first five buildings were all DPM structures put together as directed.

Eventually I added roof, window and interior details as well as custom signs. The building in the center, added after initial planning, is the City Classics East Ohio Street Building. Later I modified another DPM kit to make the Hotel Van to fill the space next to it.

Of my five industrial buildings, only the REA warehouse from Walthers was built without modification. Tkaczyk Machinery was built from parts of another Walthers kit with the office section lowered to street level, leaving the rear of the building at dock level. I thought building part of it at street level wouldn't be difficult but it turned out to be more complicated than I anticipated.

However, when I finished and started the Westinghouse Warehouse directly behind it, I had a lot more confidence. Originally, I combined two Walthers Heritage Furniture Buildings end to end to make this warehouse. Later, I decided to fill the space in between it and the backdrop with another addition. This made the building more

visually interesting because the roof is on two levels.

This warehouse is a large structure and with its larger windows, I decided to use foam core board for bracing based on a technique demonstrated at Ken Spranza's website (www.horail-road.com/indexken.html).

This all worked well, so I followed the same approach on my last two larger structures. I combined two Walthers Front Street Warehouses to make one large warehouse that has doors for four boxcars. I cut off the back left corner to fit it against the backdrop but no one seems to notice this.

My last building was my first attempt at scratchbuilding. It was inspired by Jerry Strangarity's Reading RR in Philadelphia highlighted in Great Model Railroads 2003. I used his cold storage building as the source of my plan. It doesn't have too many windows and I thought it would minimize my chances to make mistakes. I was wrong!

I almost had to start over after building the entire structure. Here's what I had done: I built the cold storage using foam core board for the inner layer. Once I had completed this layer, I used Strathmore board for the exterior walls, which I painted first with

Figure 5. On another day, B&M 1160 is switching at the Westinghouse Warehouse across the tracks from Tkaczyk Machinery..

Figure 6. The Yankee Flyer slowly passes Portland Cold Storage on its way to the Portland Union Station after being diverted from the mainline due to a derailment.

a layer of gray to simulate painted concrete. I added a second trim layer with white for contrast.

My mistake was to not consider the thickness of these two layers when I built the foam core interior. Once all the layers were applied, it barely fit the site! I couldn't move it sideways because it sat between two tracks and I couldn't move it back because it was right against the end wall! It did fit, but clearances have been compromised by 1/8th of an inch. I decided to live with the mistake – everything runs very slowly in this part of town, anyway.

For me, signs make up a critical part of an urban scene. Since I used standard kits for many of my buildings, I apply my own signs to make them look original. I wanted both storefront signs, and signs in and on the windows.

The internet provides a vast number of options for signs. When I found a sign I liked, I downloaded it and then used the free photo/image editing program Paint.net to resize, clean up or modify the sign.

For example, see my Quimby's Rexall and the Ted Williams signs (see Figure 11). I had to correct the perspective on Quimby's and I changed the red background to yellow on the Moxie sign. The music store sign originally read, "Fox Records." Using Paint.net, I changed Records to Music Store while retaining the microphone logo.

I used Microsoft Word for the signs on windows themselves. I created one or

two cell tables with the cell size just slightly larger than the window openings. I then typed whatever I wanted on the particular window into the cell, added color and formatting and printed them on overhead projector transparencies.

On the windows over doors, I printed the street numbers. For the Seaman's Savings and Loan front door and windows, I listed various services and the bank hours using a 2 point font. If I wanted a sign on the window I just glued the resized version to the inside of the "glass" with a small amount of canopy glue.

I used a free vector drawing program, Inkscape, to make the sign for the Tip Top Café after my search of the internet did not produce an image I liked.

If you are only going to make one sign, it's probably not worth learning these programs. The time to get used to these editing programs soaked up a lot of time, but I did have fun learning and the skills might be useful another day if I need to create more original signs or decals.

I also add interiors to my buildings to make them less generic. They are large enough to be recognizable when viewed through the windows. My favorite interior is Fox Music. I stocked the record shelves with images of real LP's from the late 1940's and reduced them to scale 12" squares. The record covers can't really be read, but they're quite recognizable – including Howdy Doody, Bob Hope and Groucho Marx. On the walls, I applied posters of Frank Sinatra, the Andrews Sisters, Les Paul and Mary Ford and other stars of the day. They are large enough to recognize when viewing them through the windows.

Figure 7. It's October, 1949, and the fashionable women of Portland admire Dior's New Look at Giselle's Beau Monde.

Figure 8. It's late afternoon in this block of Commercial Street, the home of Fox Music Store and Quimby's Rexall. Mr. Quimby, also owns the Stardust Ballroom upstairs. The sign on the door says "The Kenny Albert Orchestra will be playing tonight with the HiTones".

I used Strathmore board for my roads. I wanted to represent concrete so I gouged the surface here and there to create potholes or broken areas. I then softened the gouges with spackle before painting them a concrete color.

I scribed expansion joints and added the broken white lane lines using white spray paint and a stencil I cut from a manila folder. Lastly, I used gray and black chalk to weather the surface and provide color variation (Figure 8 previous page).

I looked at a variety of ready-to-use sidewalks and just wasn't happy with them. Part of the problem for me was space. By the time I put in roads and sidewalks, I found a half-inch

here and a half-inch there became ever more critical.

So I decided to make my own sidewalks. I used 0.06 styrene cut to width and length and scribed the expansion joints at scale 7 foot intervals. I scribed the curb edge 6 scale inches from the gutter. I then rounded the top edge of the curb with sandpaper and, using a piece of 0.01 styrene, made the bottom of the gutter and carefully scribed the expansion cracks on it.

I painted my sidewalks with Rust-oleum Texture spray paint to give them a slight texture. I liked this look better than the completely smooth surface of the styrene. Finally I brush painted them with diluted gray latex paint (Figure 9).

Backdrop

With the shadow box effect I planned, a backdrop was essential. Even though I had minimal space in the back corners for a curved backdrop, I wanted the curve.

I decided to use vinyl linoleum and glued the front surface to the ends and back of the shadow box with half-inch dowel spacers in the corners to make the curves in the two corners even.

Figure 9. Down the street from Giselle's and Quimby's, the freighthouse crew loads a truck.

Figure 10. The backdrop begins just beyond the tall building next to the Hotel Van on Van Buren Boulevard.

Then I painted the top of the box and the backside of the linoleum blue.

I tried to fade from darker blue at the top to lighter blue at the bottom of the backdrop, but I found this more difficult than anticipated. Latex paint just dries too fast! To keep the lighting simple, I used a 4-foot-long, two-tube fluorescent fixture in the top of the box.

My biggest problem with the backdrop was how to handle the street that runs directly into the back wall. I had read about various ways to deal with this issue including cutting out buildings from commercially made backdrops and arranging them so it appears the street goes down a hill or around a corner and out of sight.

I looked at a few of the commercial city backdrops and just didn't like them. Eventually, I came across King Mill (www.kingmill.com/shop/index.php). They have photographic reproductions of just the type of buildings I wanted.

At first I just planned to use the King Mill photo backdrops as building fronts behind the structures on the layout to provide depth. Then I realized I could make a street scene, photograph it and, hopefully, line everything up with the street on the layout. This turned out to be a bigger project than I anticipated.

Figure 11. This is the view presented to visitors at the first and only open house of the Boston & Maine's Portland Terminal Railroad behind Commercial Street.

The scene I finally photographed was 30 inches deep and 12 inches wide. I built my road down the middle first, then added the sidewalks. Next, I built the crossing road and the near corners of the intersection on the actual layout to match the opposite corners on the backdrop.

Finally, I added my structures. These are simply foam core board with various King Mill images laminated to them. I added roofs, details, signs, figures and cars and photographed it.

A friend tweeked these images with Photoshop and then printed 11x14 inch images for me. I attached them to the backdrop after trimming around all the rooflines. See Figure 10 on the previous page.

Completion and Afterthoughts

By December 2009 I decided I was close enough to "finishing" that I could have an open house and declare the layout done. I set a date in February 2010 that forced me to focus on adding lots of final details.

I placed figures, added vehicles and a few more signs, plus fire hydrants, a mailbox, some streetlights, and trash and weeds around the industrial buildings. The open house went very well and when it was over, I said I was finished (Figure 11).

By spring I had removed a wall between my layout room and the small bedroom next to it and dismantled the layout in preparation for my next effort, a variation on the Boston & Maine in Portsmouth, New Hampshire in a 14 x 18 foot space.

In the end, I'm generally satisfied with my first effort. My decision to begin a small layout with more realistic and achievable goals allowed me to begin a project that had been stalled for years. I enjoyed the whole process more than I'd imagined when I first began.

I had to battle my perfectionism and my hatred of mistakes and doing

things over. I made lots of mistakes large and small. Besides the 1/8 inch track clearance along Portland Cold Storage, one problem that plagued me over and over was going too fast and not writing things down as I worked. I'd tell myself I'd remember how I did this or that. Of course, when the time came to remember, I couldn't.

Other problems included my back-drop linoleum coming unglued from the plywood, a perpetual electrical problem with the crossing, less than ideal color matching on my photo backdrop, no street running, no road-bed, and a number of unaligned joints on my structures.

I never liked the track switch in the middle of the road by the Westinghouse Warehouse but never figured out a way to avoid it. Then there was the problem of the outside ladder on the cold storage building that never lined up correctly between each level, etc. The list goes on and on.

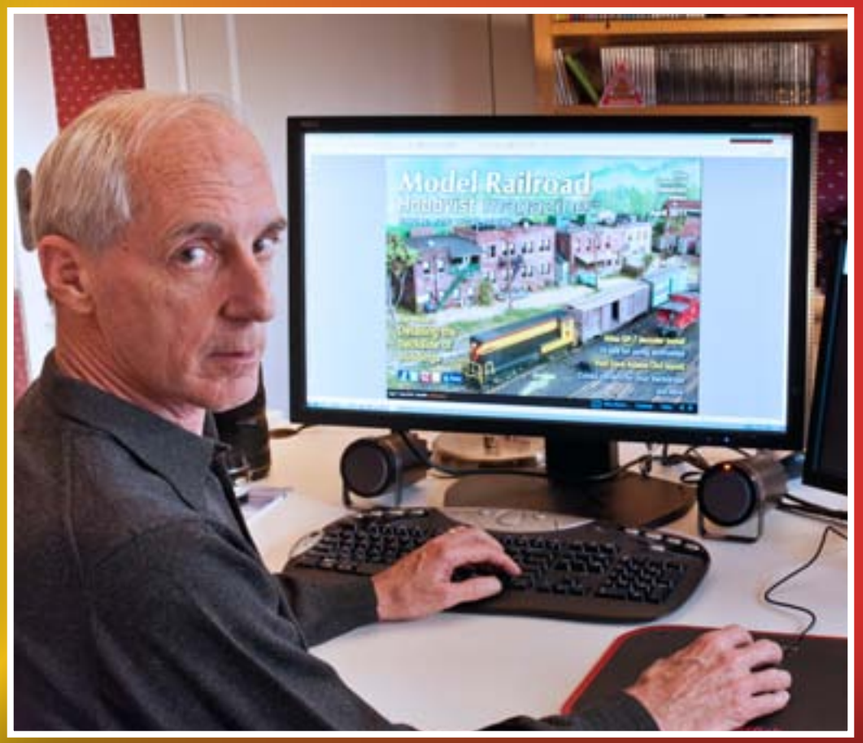
I now have the track plan for my next layout almost finalized and have been building the benchwork. I have considerably more confidence as I begin this project than I did when I began the Portland Terminal.

However, the only way I reached this point was to scale back my aspirations, create a small, then smaller, finally the smallest track plan I could, and accept my limitations and lack of experience. It was difficult to super-downsize like this at the time, but it worked for me. ☑

Figure 12. The beginning of the end.

Reader Feedback (click here)

Mark Rindflesh



Mark Rindflesh "messed around" with an HO layout in junior high school. Forty five years later he finally returned to the hobby.

A graduate of Carleton College and the University of Utah School of Medicine, he still lives in Salt Lake City with his wife of 42 years. He has two grown daughters with a first grandchild expected in the fall.

Having run over 40,000 miles in his 32 years of competitive running , he ran numerous marathons including Boston and New York City. His other interests include photography and the Asian strategy game Go.