

# >> The other side of the Catskills

Edward Loizeaux's S scale NYC Valley Division is a dream come true – thanks to a little help from his friends

By Edward Loizeaux • Photos by Andy Sperandio

**New York State's** picturesque Hudson River Valley is bounded on the west by the Catskill Mountain range. The West Shore Line of the New York Central System serves communities along the western shore of the Hudson River, but that part of the NYC didn't originally extend westward over the Catskills. I wanted to model NYC operations in a setting of my own choosing, and the "other side" of the Catskills seemed ideal.

According to my layout's alternate history, a modest railroad was established long ago to serve a large and verdant valley, and grew as the area prospered. A connection to the nation's rail network was established via an interchange track with the NYC's West Shore Line along the Hudson River. In the late 1930s, the short line was acquired by the NYC and became known as the NYC's Valley Division.

## Turning a dream into a layout

My 20 x 30-foot S scale layout is a childhood dream come true. After years of wishful thinking, I finally had the space, time, money, and spousal approval to build a large model railroad layout. But where would I begin?

Thanks to my long-standing interests in S scale, the New York Central, and the transition era's large steam locomotives and first-generation diesels, some key decisions had already been made.

Other decisions, such as train operations, were more complex and required some thought. I wanted to run scale passenger cars and 4-8-4 steam locomotives. Lengthy rolling stock requires large-radius curves and long mainline runs, while the presence of passenger trains suggested the need for a substantial terminal and a commuter station.

Those broad curves also created sizable triangles of empty space on the layout's corners that were perfect for industries. A large and busy freight yard would be needed to serve the Valley Division's numerous on-line customers. Naturally, steam and diesel engine terminals would also be necessary.

It took several sheets of graph paper and a couple of pencils before I realized that an around-the-wall layout design would be my best choice for a long mainline run. The resulting duckunder at the room's doorway was a tolerable inconvenience in exchange for the grandeur of long trains gliding around broad curves. Besides, as my wife pointed out, I could use the exercise. So that decision was finalized and we installed a dutch door at the room's entrance.

Designing the track plan was an interesting learning experience. It's amazing how simple decisions about scale and rolling stock drive so many other aspects of layout design.

## Filling a "California basement"

I built my railroad in a "California basement" – a converted three-car garage. After relocating our automobiles and many years of accumulated junk, I set about turning a large but raw space into a pleasing home for the Valley Division.

I began by installing the cheapest carpeting I could find. This proved to be an outstanding decision and one I'd repeat in a heartbeat. The carpet adds both physical and aesthetic warmth to the space and makes it easy to work while standing or kneeling for long periods of time.

I also installed drywall over the exposed stud walls. The smooth walls allow my painted backdrop to extend all the way to the ceiling. The new walls help make the room clean and dust-free – track cleaning is only an occasional activity.

Decent working light is provided by 15 twin-tube fluorescent fixtures with plastic

**1** Ed Loizeaux's 20 x 30-foot S scale layout features the New York Central operating through the spectacular Catskill Mountains of Upstate New York. Don Ledger scratchbuilt this bridge from 6,400 pieces of styrene. Mike Kotowski did the scenery detailing and created the 5-foot-tall waterfall with plaster and glossy gesso.









## >>The layout at a glance\_

**Name:** New York Central Valley Division

**Scale:** S (1:64)

**Size:** 20 x 30 feet

**Prototype:** New York Central

**Locale:** Upstate New York

**Era:** 1948 to 1952

**Layout style:** around the walls with operating aisles

**Length of mainline run:** 305 feet

**Layout height:** 42" to 61"

**Benchwork:** open grid, 1 x 3 joists on 1 x 4 stringers with 2 x 2 legs

**Roadbed:** beveled cork roadbed glued to 5/8" plywood supported on 1 x 4 risers

**Track:** code 100 flextrack

**Minimum radius:** mainline 48" (hidden), 54" (visible), 24" industrial

**Maximum grade:** 1.4 percent

**Turnout minimums:** mainline, no. 6, industrial no. 4

**Scenery:** cardboard lattice, cheesecloth, hardshell, Hydrocal rock castings, and Gypsolite

**Backdrop:** painted wallboard

**Control:** North Coast Engineering Digital Command Control

**2** A late afternoon hopper drag hauls empties back to the Pennsylvania RR interchange track to avoid per diem charges for the next day. The stone arch bridge is more than 10 feet long and is constructed of tempered Masonite covered with embossed styrene.

diffusers. Surprisingly, the heat produced by these fixtures is sufficient to warm the room during California's mild winters. At mid-day in the summer, however, the temperature in the train room can become a bit uncomfortable. If I had to do it over again, I would consider placing the heat-producing ballasts of the fluorescent fixtures in the attic space above the ceiling of the train room.

To simulate morning and evening during operating sessions, I also installed a series of 25-watt incandescent lights on a dimmer switch. Operating the dimmer is a

good job for visitors who don't want to concentrate on serious operation!

I added two quiet, bathroom-type exhaust fans to rid the room of excess heat, glue fumes, and paint odors. The fans are much appreciated by my wife, who has a super-sensitive nose.

Finally, the overhead garage doors were replaced by a stud wall. Removable sheets of plywood cover the windows to provide continuity for the backdrop painting – the view of my neighbor's California stucco house doesn't provide a realistic backdrop for the NYC's bucolic Valley Division!

It took extra time and money to prepare the train room, but I'm convinced that nicely finished surroundings greatly enhance a layout.

### Solid foundation, soaring scenery

The Valley Division has a great deal of mountainous terrain and relatively few flat

areas. In other words, it's the sort of terrain that lends itself to open-grid benchwork.

My benchwork is similar to the well-known L-girder approach, except my girders are not "L" shapes, just simple sections of lumber. L girders provide rigidity and stability, but I was able to screw my long girders directly to the wall studs. Even without the "L," I have all the stability and rigidity I need – barring an earthquake, my house isn't going anywhere!

The optimum spacing of the joists was scientifically calculated to be two inches greater than the width of my shoulders. This allowed me to move in and out of these spaces with ease. All the legs on the layout are supported by a pair of 45-degree









**3** Imagine the noise and quivering ground as the Mohawk-powered fast freight blasts out of the tunnel and hammers across the bridge. Each shadow area and crevice in the rock cliff was brushed with dark-brown paint or stain.

Gypsolite is a plaster with many small lumps and bumps, providing a nice texture for paint and scenery.

I colored the terrain with water-based acrylic paints. I then placed ground foam, bushes, trees, fences, structures, and a myriad of other scenic details starting with the smallest and working up to the largest.

**4** That nearly empty tender seems to be longing for the full loads of coal on the adjacent track. In the foreground, the maintenance-of-way crew has removed ballast from a section of track to prepare for installation of a new turnout.





**5** The mid-day mixed freight was assigned a recently shopped H10 Mikado for today's run over the Valley Division and on toward Albany, N.Y. That large electrical transformer behind the tender is a Walthers HO kit that fits perfectly on an S scale flatcar. The beautiful rock formation was cast and carved by Keith White.

Having a professional artist as a long-time friend was pure serendipity. When it came to the backdrop and scenery painting, Mike Kotowski was amazing. Who else would individually paint shadows on the bottom surfaces of hundreds of rock outcroppings, or stain each and every crack and crevice of huge rock cliffs?

As is the case with Mike's backdrop painting, I strive for highly detailed layout scenery. I figure that if we're going to demand that our steam locomotives be correct down to the last rivet, it's reasonable that we try to create equally detailed surroundings for the engines.

### **Tentatively embracing complexity**

I don't like the term "control system" because I think it implies complexity. I like things to be simple – just give me a few volts and a double-pole, double-throw switch to get the juice to the right place and I'm happy.

So how did a low-tech guy like me wind up building a layout with Digital Command Control (DCC), customized software for signaling logic, computerized Central-

## **>>Time saved and friendships forged\_**

**After working on** my layout for about four years, I stopped and assessed my progress. I was dismayed. The benchwork was finished, the main line operated, some of the models were painted, and the unbuilt kit pile was only modestly larger than five years earlier. But I had no backdrop, no scenery, no yards, no structures, no control system, and no signals. At this rate the layout would likely not be finished in my lifetime.

I was confronted with two choices: reduce the size and complexity of the layout or try to enlist a great deal of help from my friends.

Reducing the size would involve tearing out a major portion of the layout, rebuilding something half as large, and running the risk of not being satisfied with the result. On the other hand, asking for help offered the possibility of being able to have my cake and eat it too – and I could still revert to the small-layout option as a last resort.

Asking for help succeeded beyond my wildest expectations. I discovered there are many people who love model railroading but do not have layouts of their own. Some don't have the space or the money for a sizable model railroad, others prefer building individual models or like to work only in a specific areas – such as structures, scenery, bridges, or DCC.

They all have two things in common: they enjoy working on some aspect of layout construction, and they are willing to help attain a clearly communicated goal.

I assigned tasks tailored to each person's interest. In other words, I didn't ask the guy who liked wiring to do scenery, or the painter to build benchwork, or the structure guy to lay track. Our overriding philosophy was to enjoy everything we were doing at all times. I believe that's the reason quality problems were nonexistent.

Nearly 20 people contributed to the construction of this layout. Their geographical dispersion is quite amazing. The fellow who builds trees lives in Arizona, my logging expert resides in Oregon, one structure builder lives in Los Angeles, a passenger car builder lives in Maine, and I have rolling stock painters in Houston and San Jose. My local friends work on tasks that can't be moved off-site.

Nearly all of my volunteers are HO modelers who are not particularly interested in S scale. But trains are trains, and we all have a good time.

Developing new friendships was an unanticipated benefit of involving other people in the layout's construction. Nearly half the friends working on this layout were unknown to me six years ago. – *E.L.*





**6** Cars filled with perishable fruits and vegetables are rushed to East Coast markets by a hotshot freight racing against a threatening thunderstorm. The telephone poles are from Atlas' HO line, while the signal bridge is a modified Plasticville HO scale product.

ized Traffic Control (CTC) panels, and remote dispatching?

It all started with Rick Fortin. During an open house in the layout's early days, I showed Rick where the control panels would be located and how the block toggle switches would work. Rick noted that the layout would be perfect for a DCC system.

Around this time, the National Model Railroad Association approved its DCC standards, which meant I could have a system of interchangeable components and avoid the risk of any one manufacturer's failure causing major grief for my railroad.

But DCC isn't for everyone. Visitors frequently bring locomotives that don't have decoders. To accommodate these folks, each block can be quickly switched back to conventional DC. I often set one main line to DCC while the other is DC. Crossovers between the main tracks can't be used during these sessions and is prevented by electrically disabling the turnout motors.

## >>The wide world of S scale products\_

**Visitors frequently tell me** they had no idea that such a variety of structures and rolling stock is available in S scale. That's my cue to tell them about the pros and cons of S scale.

Few hobby stores carry a broad assortment of S scale products, but many items are available, generally via mail order direct from manufacturers, importers, or retailers.

Many brand names familiar to HO enthusiasts are available in S scale, including Shinohara flextrack and turnouts, Kadee couplers, NorthWest Short Line wheelsets, Overland Models brass imports, and Grandt Line details. The Wm. K. Walther's Inc., Large Scale catalog has a good S scale section.

Plastic and brass rolling stock, laser-cut wood structures, decals, plastic and brass details, signals, craftsman kits, sectional track, and almost-ready-to-run equipment are all commercially available in S scale.

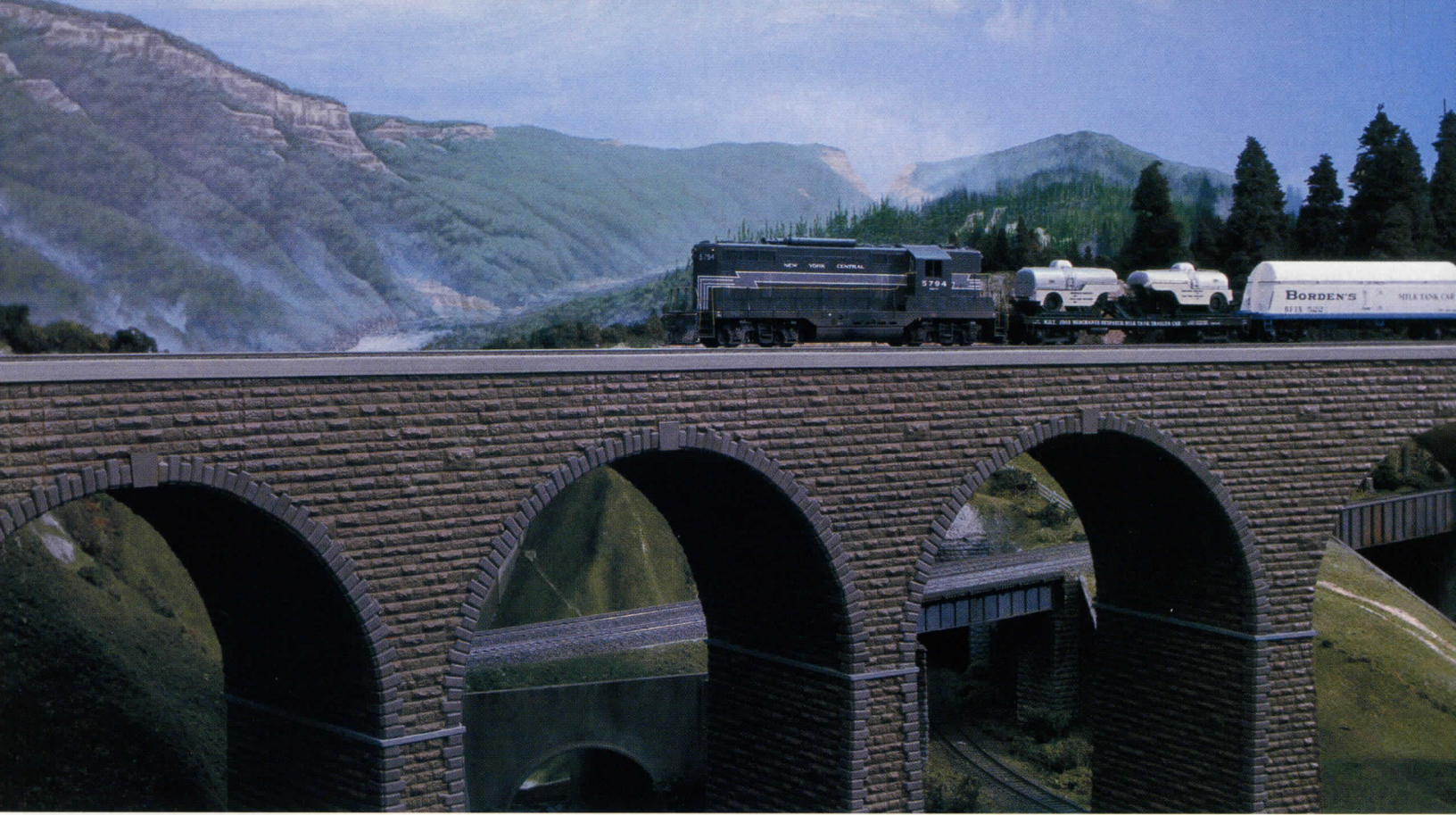
Thanks to the Internet, finding S scale products is much easier than ever before. I've created a Web site with helpful links and other information to get you started, [www.S-scale-RR.com](http://www.S-scale-RR.com).

While the variety of S rolling stock does not match that available in HO, it is not difficult to amass more equipment than you can ever build or run on your layout. Taking the time to explore S scale might result in an interesting journey for you as it did for me. – E.L.

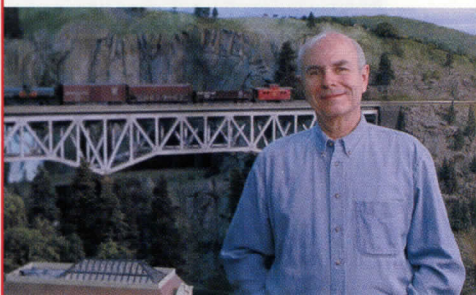
Just as I was coming to grips with DCC, Seth Neumann visited and suggested that we install operating signals. He even offered to help write the software for signaling logic. Software-based logic is preferable to numerous hardware-based circuit boards scattered around the layout and allows the signals to run in different operating modes. For example, "beginner

mode" is a simple red-yellow-green traffic light display that non-train folks – such as my children, wife, and neighbors – can easily grasp. For the local model railroad enthusiasts here in California, "Southern Pacific mode" mimics that railroad's signal logic. For New York Central purists, speed signaling logic was possible simply by running another software program.





## >>Meet Ed Loiseaux



**Ed converted from HO to S scale in 1969.** At that time, only six S scale locomotive kits and a handful of craftsman freight cars were commercially available. Ed helped establish an S scale club in San Francisco, wrote numerous articles and product reviews for S scale publications, served as chairman of the first S scale convention on the West Coast, and is a past-president of the National Association of S Gaugers. He also published *3'16" S'cale Railroading* magazine, served on the NMRA's DCC Working Group, and co-authored the book *Digital Command Control – the comprehensive guide to DCC*.

In short order, Seth had me hooked on software, computerized CTC, Bruce Chubb's Computer-Model Railroad Interface system, and custom software. Thanks to Seth's programming skills, the signaling accommodates bidirectional traffic on both main tracks. The turnout control program even prevents the accidental throwing of a turnout while a train is passing. And it's all done with software. Amazing.

### A layout rich in operation

With five major industrial areas rich in switching possibilities separated by at least 30 actual feet or more of railroad, it's possible to have several way freights setting out and picking up cars simultaneously. Through trains can progress along the double-tracked main weaving from track to track to avoid conflicts with the local freights. Passenger operations include significant express traffic as well as switching mail and express cars, baggage cars, and diners in and out of various trains in the main terminal area.

When full operations start, I expect the layout will keep 10 to 12 engineers busy operating a realistic schedule. With CTC dispatching and tower operators at work, the number of people required to operate the layout can increase as needed to

**7** Always one to use motive power efficiently, the NYC assigned an idle passenger Geep to haul empty milk cars back to the loading docks on this Sunday run. The deck girder bridge shown below the center arch was made from a plastic HO through girder bridge. The edgtrim stones on each arch were individually cemented in place – all 8,000 of them!

accommodate additional visitors. For instance, each train could have a crew of one (engineer/conductor) or two (engineer and conductor). The crew could either operate mainline turnouts themselves as they traverse the layout, or the dispatcher, if there is one, can operate turnouts from the CTC panel. Also, each of the five major industrial areas can have an assigned switcher. Major industries include a coal mine, oil refinery, sawmill, logging camp, an industrial area with many small factories, a Railway Express Agency freight terminal, and a team track.

Much work remains before the first genuine operating session begins, but everyone is looking forward to the big day. As *Model Railroader* magazine says, "Model railroading is fun." Well, the fun is about to begin. GMR