The Polar Express finally arrives in Chicago

John Smith delights his grandchildren by blending whimsy and realism on his O gauge layout

By Roger Carp

Photos by Carl Swanson

Ah, how structured life used to be for longtime model railroader John Smith. Each day brought exciting challenges at the engineering firm he had established. Most of the waking hours that remained John devoted to his wife, Janet, and their three sons. Any time left went toward building O gauge layouts with his family as well as supporting his alma mater, Marquette University.

▲ 1. The legendary Polar Express steam train has reached its final destination – the North Pole! Santa Claus awaits the youngsters on board the heavyweight passenger train. Can you imagine the look of the faces of those boys and girls, some of whom are the same ages as John Smith’s grandchildren, when they see the throng of elves standing on the square?

▶ 2. Kids and adults don’t mind telling you that this may be their favorite scene on John’s O gauge layout. Regardless of age, they love watching Lionel’s no. 31960 Polar Express steam passenger set tiptoe along the snowy main line while a herd of reindeer ambles over to investigate. Hi-rail enthusiasts rave about the other half of the layout, which captures the essence of Chicago.
“The good old days,” John laughs. What changed? “Janet and I now have six wonderful grandchildren. We’re going to spend time with them and help out our sons and their wives.”

Many Classic Toy Trains readers know what John is talking about. They’ll understand, too, how he’s interested in sharing his hobby with those little boys and girls. John’s grandchildren have served as the motivation for designing an O gauge empire that combines his love of realistic modeling and contemporary railroading in Chicago with the youngsters’ enjoyment of the movie The Polar Express.

Freedom from modeling limits

Blending elements of railroading in Chicago with The Polar Express would be quite a challenge. First, John had to decide if he even wanted to develop such a combination. As of a few years ago, that is not where his decades in the hobby had taken him.

Now, however, John understands that the glory of operating toy trains is that they remove limits from what you can envision. After more than 50 years of being immersed in toy trains, he was aware of the freedom at his disposal; he just wasn’t sure he wanted to use it!

Beginning with the Lionel freight train given to him for Christmas 1957, John had progressed steadily as a model railroader. He liked where he had gone over the half-century that followed. The pursuit of O gauge realism pleased him. Therefore, the small and somewhat crude O gauge layouts that John had constructed as a youngsters had led to more elaborate railroads built for and then with Janet and their sons, Scott, Patrick, and Jonathan. Once that trio had grown up and gone on to other pursuits, John persevered on his own, with a few large and realistic layouts.

At the turn of the 21st century, John was running the latest scale models of...
the latest diesels and the biggest steam engines. He had a blast coupling Lion-
el’s locomotives to stack trains, stream-
lined passenger expresses, and unit trains made up of modern coal and grain hoppers or modern refrigerator cars. Operation meant the most, as long as he could run trains with Lionel’s command-control systems.

Plans for his best layout
When John commenced planning what he dreamed would be the finest three-rail layout of his life, he had no reason to doubt that it would also be the most realistic. This beauty was going to capture Chicago!

However, at the behest of Janet, he was dialing back some of his plans. The railroad might have to be smaller, closer to the 8 x 35 feet of the current layout, than the empire he dreamed of.

Otherwise, nothing held him back from the track-filled layout he thought would be ideal for operating long, long trains. Besides extensive main lines, this baby was going to feature all the sidings necessary to accommodate humongous trains pulled by scale-length replicas of SD90ACe and Dash 9 locomotives.

Then, as a sage might have stated, “life got in the way.” For the Smith family, the turning point was the arrival of the first grandchild. John, like his wife, felt his priorities changing.

In place of earlier visions and hopes, John substituted others that would make it possible for the layout to benefit his grandkids. As he conceived of that rail-
road by 2008, approximately half would replicate what he liked best about Chi-
cago, fulfilling his original plans. The rest had to appeal to the little ones, for whom toy trains meant Thomas the Tank Engine and The Polar Express.

John considered how to blend the realism he favored with grandchild-
pleasing whimsy. Was there really a way that Santa Claus and his elves could coexist with the Second City’s Union Station and elevated railways in the same train room?

Getting to work with FasTrack
Armed with some rough ideas, John started building the benchwork to sup-
port the elongated layout with mainline loops that he pictured in his head. What he ended up with was more like custom cabinets painted white than the bare lumber that typically represents the supporting framework of a model railroad.

John decided that the layout should stand 36 inches off the floor so his grand-
children would be able to crawl or walk into an open area under one end. Piled on top of the carpet there Janet and he arranged pieces of Lionel FasTrack and rolling stock the kids could use with models of Thomas, Percy, and James.

The top of the plywood benchwork consisted of sheets of 1-inch-thick foam board. John chose this material because it is sturdy and lightweight, not to mention extremely easy to use. He screwed into this foundation the sections of Lio-
el FasTrack and turnouts that he pur-
chased (the widest radius is O-88).

Selecting that brand of track turned out to be a critical – and very wise – decision for John. When asked his rea-
sons, he answered by emphasizing per-
formance: “FasTrack is a system known for quality and smooth operation.”

As important for John’s layout is the appearance of FasTrack. The plastic road-
bed that surrounds the rails guarantees a look sufficiently realistic to enhance virtu-
ally any scene, from a rail yard in Chicago to the North Pole. He made them better by adding ballast from Scenic Express.

Two heads are better
Constructing benchwork and laying track – what could be more familiar to a veteran in the hobby? Fortunately for John, his career in engineering let him master the fine points of command con-
trol. There was no question in his mind that he would install Lionel’s Legacy sys-
tem to work with the refurbished ZW transformers he owned. This would be a layout that would run like a watch.

Scenery, to be honest, had always been a different story for John. He was
sure he could complete what he had begun, but whether the city, mountain, and more would have the look he desired concerned him, especially when he’d rather spend his leisure hours playing with his grandchildren.

Two years previously, John had met Roger Farkash, who, with his wife, Dorcie, oversees TrainWorx, a division of TW Design in Dallas, Tex. Under Roger’s direction, this up-and-coming business has carved out a unique place for itself as a builder of custom layouts, in particular, public and retail displays for Lionel LLC and replicas of the small railroads that Lionel used in the 1950s.

Conversations between John and Roger ensued, and both felt increasingly comfortable with their approaches to toy trains and the landscaping and wiring techniques they preferred. John laid out his goals for the new layout, and Roger explained how his firm would be able to produce the structures and build the mountain that was intended to serve as the centerpiece for this display.

**Working upward in Chicago**

From many years of studying vintage Lionel displays and building new ones, Roger has come to recognize the value, for both esthetics and operation, in building upward. The importance of adding upper levels had not escaped John either, having lifelong familiarity with the elevated lines of Chicago.

So the two discussed how a bustling rail yard on the tabletop and a double-track elevated line could capture the impressions of Chicago that John desired. Viaducts and towers, station platforms and signals would be essential.

John handled most of the tasks related to the multiple-track yard. He picked out structures and accessories (new ones as well as reissues of postwar favorites) that he believed would enhance the realistic look he wanted. Sprinkling ballast over the FasTrack and adding weeds and debris were great final touches.

Overhead, short trains and subway sets from Lionel traveled over the independent loop. They stopped regularly at the neat platforms arranged atop concrete supports and bordered by footbridges climbed by folks from below.

Following John’s instructions, each elevated train should begin and terminate its trips at a magnificent replica of Union Station. That structure was to be the crown jewel of the layout, as the full-size one was for Chicago.

Roger got down to work on this one-of-a-kind model, and the talented employees at TrainWorx soon were finishing a superb model, complete with interior illumination, weathered steps, and huge multi-paned windows.

**Up to the ceiling for the North Pole**

Conveying the atmosphere of Chicago in about 100 square feet was a challenge that was both familiar to Roger and something he could do without a great deal of difficulty. Doing the same for the North Pole as presented in The Polar Express took him into new territory, although he valued the experience.

There were three primary components to be considered, according to Roger. One would be the immense open area where the magical train arrived. A second would be the evocative structures surrounding that square. Third had to be a towering mountain that suggested ascending into the stars to reach Santa and his workshop.

The crew at TrainWorx knew they had to study the scenes in The Polar Express motion picture until each had a clear idea of the buildings shown at the North Pole and ways of modeling them. They conferred on these projects, deciding how to fashion O scale versions out of MDF (medium-density fiberboard) and Plexiglas.

Soon enough, a wonderful village set in the frigid North Pole was coming together in the heat of Dallas. Also necessary to capturing the mood and feel of the children’s book were figures, especially Santa Claus and the elves residing with him. Other great additions were the herds of Lionel reindeer grazing nearby.

▲ 5. Given the challenge of capturing the feel of The Polar Express book and movie, with their North Pole setting and towering mountain, there’s no question Roger and the rest of the talented crew at TrainWorx surpassed John’s expectations.

▲ 6. One of John’s favorites, the magnificent Texas Special from Lionel, gently wiggles out of the yard in Chicago and begins a long journey to the Lone Star State. A Union Pacific Trackmobile, coupled to a reissued no. 3562 operating barrel car, waits its turn.
Regarding the mountain, Roger has become an absolute wizard at carving blocks of Trymer 2000-XP, a polyurethane foam. He fabricated the framework for the peak out of aircraft plywood, and the tunnels were lined with “bending birch.”

“With saw, knives, and rasps, we carved the foam glued to the plywood,” Roger said. “Then our staff applied final details with pencils. We coated and sealed the surface of the mountain with Rosco FlexBond and brushed red clay onto the surface to protect the foam and provide a good surface for latex paints.”

Perhaps the best idea was having the track run higher and higher toward the peak, with a handcar pushed by struggling elves. Somehow, it gets to the snowy top before dashing downward over the same single line of track.

Everything runs great

Hundreds of miles from the Smith household, Roger and his staff were chugging away on what they needed both to re-create a slice of Chicago and to erect the North Pole in John’s train room. Little things, including ground cover from Heki, Scenic Express, and Woodland Scenics, along with bushes and trees from Grand Central Gems, would help them wrap up the landscaping in a fanciful way.

Additionally, the North Pole cried out for snow! Roger informed us that “the snow effects were achieved with Liquitex titanium white acrylic paints. We sprinkled what’s known as diamond dust into the final coat while it was still wet.”

Sharing a few insights about the electronics and wiring was helpful. Roger operates under one proposition: Everything must run consistently and right.

The main loops were designed to be separate blocks, with power handled by the Legacy command-control system. Each siding, Roger notes, “is power blocked, controlled by toggle switches located next to the switch stands.”

John opted to place the switch controls on the layout surface near each turnout. “What could be simpler?,” he says, adding that having the switch controls on the layout rather than at a remote control panels make the layout more interactive.

Roger specified the different wires used. “The thickest was 12-gauge solid-core wire for the power feed, with tinned copper wire for bus power. Next came the 14-gauge stranded wire, which was great for track power. Each main line has its own color-coded type,” he said.

Accessory distribution depended on 18-gauge wire, and 22-gauge took care of the smallest accessories, specifically, the street lamps and crossing gates.

A hit with the family

All the planning and hard work has succeeded beyond what John imagined. When any of the youngest generation of Smiths stops by, they visit politely with Janet on the main floor and then dash upstairs to see the trains. Naturally, Grandpa is close behind, as eager as they are to get things moving.

A pop under the far end to play with the Thomas the Tank Engine toys precedes time pushing buttons along the edge to operate accessories.

Meanwhile, John has picked up a Legacy remote controller to launch Lionel’s Polar Express on another journey to the North Pole and back. Elsewhere, elevated trains pass through Chicago on their way to Union Station.

Landscaping that’s realistic and imaginative, contemporary models of vintage steam and modern diesel power, and children’s laughter, not to mention John’s lifetime in the hobby and Roger’s excellent work, enable these different themes and locales to blend together creating an unforgettable layout.

Subscribers can view a video of John’s layout by going to ClassicToyTrains.com and clicking on “Operating” and then clicking on “Layout Visits.”

▲ 7. The last commuter has departed another of the CTA trains just arriving at Union Station on a bright, sunny Monday morning in Chicago. She’s dashing to get to work, but the illuminated interior of this model crafted by Roger Farkash is so spectacular that she may spend a few precious minutes admiring his effort in building this large and impressive replica of the historic structure.