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# NYCENTRAL MODELER

A QUARTERLY DIGITAL PUBLICATION FROM THE NYCSHS

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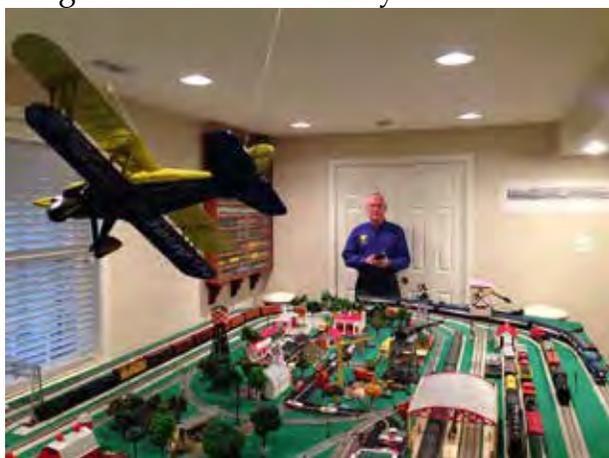
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## Modeling the NYC in S-Scale

*Article by David Horn*

I have no particular prototype railroad or railroad location for my layout. The NYC is one of my favorite roads due to their very attractive paint schemes and great engine designs like the Hudson and streamlined Hudson. The name of my fictional railroad on which a host of other railroads travel is the Reston and Elsewhere Railroad – meaning that it starts from here and goes as far as your imagination wants to take you.



*Here is where Dave enjoys running trains in the train room. The variety of running standard S gauge or narrow S gauge trains with transformers or new systems like Legacy and DCC adds to the enjoyment he and fellow S-gauge enthusiasts derive from the layout.*

I first started with American Flyer and Lionel as a child. My mother won my American Flyer set the year I was born by entering a “name the Karo Syrup Kid” contest. She won my sister’s O-gauge Lionel set the year before that by submitting a short story to *Better Homes and Gardens* magazine.

We ran both trains under our Christmas tree every year until I lost interest in them during my late teenage years. Years later

*Photos by David*

when our son was born, my parents asked if I was going to set up my train for him. Sure enough, there it was in box put away in a closet. I set up the train on a spare piece of plywood. My son and I enjoyed it. My interest in the hobby was reignited and has continued on a much greater level than ever before.

My layout is in a room in our basement. It is fairly simple with two loops of S-gauge that are interconnected with a separate third loop inside those. Inside the S-loops is a loop of Sn42 on which I run petite On30 engines that look good and fit in pretty well as narrow gauge S-gauge.



*One narrow gauge (Sn42) train pulls by the station to unload and take on passengers while another waits its turn on the mainline. The passenger 2-8-0 is by Broadway Limited and the 2-6-6-2 is by Bachmann. Both engines are pulling Bachmann rolling stock. All are On30 products, but with some imagination, 1:64 vehicles, and S-scale figures from Artissta around them they manage to play the part of narrow S-gauge quite nicely.*

I run trains from several manufacturers using remote and direct control AC, Lionel TMCC, Lionel Legacy, S-Helper,

# Modeling the NYC in S-Scale

LocoMatic, and DCC. A list of the locos and rolling stock manufacturers follows.

## S-Gauge Locomotives

- AC Gilbert American Flyer
  - Lionel American Flyer
  - S-Helper
  - American Models
  - American Hi-rail
  - Ballston Locomotive Works
  - Pennsylvania Heritage Models
- Sn42 (On30) scale locomotives:
- Bachmann
  - Broadway Limited Imports



*The ESE, Dreyfuss 20<sup>th</sup> Century Limited, and PA powered 20<sup>th</sup> Century all happen to meet at the same time at the far end of Dave's layout delighting railfans.*

## S-Gauge Freight Cars

- AC Gilbert American Flyer
  - Lionel American Flyer
  - S-Helper
  - American Models
  - Crown
  - Downs
  - S Scale America
  - Hobby Loads – coal and other loads
- Sn42 (On30) freight cars

## Sn42 (On30) freight cars

- Bachmann

## S-Gauge Passenger Cars

- AC Gilbert American Flyer
- Lionel American Flyer
- American Models

## Sn42 Passenger cars

- Bachmann

## Buildings and Accessories on the Layout

All of my buildings are from Plasticville and Littletown. Six of them are from my original childhood Christmas layout.

The accessories are by AC Gilbert, Lionel American Flyer, Lionel, MTH, Marx, Life-Like trains, Port lines Hobby Supplies (digital station sound system), MRC, and Model Train Signs and Billboards.

The accessories can be operated by using their control buttons, or by accessing them with a Legacy Cab2 via SC-2 controllers.

Three un-coupler control buttons, the 182 Lionel gantry crane controller, and an action-car track section controller are located at the main control panel, the rest are located along the front edge of the layout for easy access.

## Vehicles

All of my vehicles are 1/64 scale. I am not a scale modeler, but am particular about using S-scale vehicles and people. Trains should be proportionately large relative to cars, trucks, and people – just as they are in real life. The use of O-scale vehicles and/or people diminishes the impressive size and stature of locos and rolling stock.

## Modeling the NYC in S-Scale

Every vehicle is from the 1930s, 40s, and 50s by design, with a couple of exceptions. As many as possible have chrome instead of silver paint if they had chrome in real life. Chrome is part of the appeal and nostalgia of cars from that era.

The vehicles are from Johnny Lightning M2, Racing Champions, Hartoy American Highway Legends (AHL), Corgi, Hallmark, Toy Zone, Siku, Matchbox, Ertl, and Winross.

### Figures

All of the human and animal figures on the layout are from Arttista S-scale, S-Helper, GreenLight Collectibles, MTH (O-gauge 12-piece passenger sets #1- 4 use S-not O-scale people), Gilbert American Flyer, Scale University, and Ertl.



*While waiting on the platform for their favorite NYC passenger train to arrive, weary travelers hope that the NYC delivery truck is helping to keep concession stands inside the station well stocked with good food and beverages for next time. The Union Station is Plasticville by Bachmann. The rotating beacon in the background is by Marx. The rural freight station in the background is by Littletown (before bought by Plasticville).*

### Track and Transformers

All of the S-gauge track is S-Helper sectional S-Trax, including 13 custom sections. The minimum radius is 24" and the maximum radius is 30". The switch radius for all switches is 20".

The narrow gauge Sn42 track is Kato sectional HO Code 83 Unitrack with a track minimum radius of 21-5/8" and the switch minimum radius is 21-5/8" and the maximum radius is 34-1/8 inches.

The S-gauge and Sn42 track and switches are not nailed or screwed down to the layout. They are simply put into position on the indoor/outdoor carpet. This was done for sound damping reasons.

Lead wires from underneath the layout are connected to the tracks about every three to four feet and to the switches. Lead wires help hold the track in place.

I have experienced no shifting of the tracks, even when multiple heavy engines and trains are run on the loops at a time

S-gauge switches are controlled two ways. I use S-Helper levers at the main control panel and Legacy Cab2 addresses with two SC-2 controllers under the layout.

Five switch levers at the control panel and five addresses on a Legacy Cab2 provide two ways to operate seven switches.

Switches between Loop #1 (outermost) and Loop #2 are paired. Two switches throw at the same time to enable error-free transfer of trains from loop to loop.

## Modeling the NYC in S-Scale

Four Kato levers at the main control panel control the Sn42 switches.

Nine transformers are housed in a shelving unit out of sight under the layout.

S-gauge:

- (3) AC Gilbert AF 30B's
- (1) AC Gilbert AF 15B
- (1) AC Gilbert AF 12B
- (1) AC Gilbert AF 4B
- (2) AC Gilbert AF 1½B's
- (3) Lionel TPC 400's
- (1) Scott's Odds-n-Ends DTK-4Z Surge Protector
- (2) Lionel SC-2's

Sn42

- (1) AC Gilbert AF 16B
- (1) NCE Smart Booster
- (1) NCE PowerCab base unit and board

### Benchwork

My bench work consists of 2" x 4" legs with ¾" plywood top. I have 1" x 4" sides, 1" x 3" cross-braces, and 1" x 2" edging.

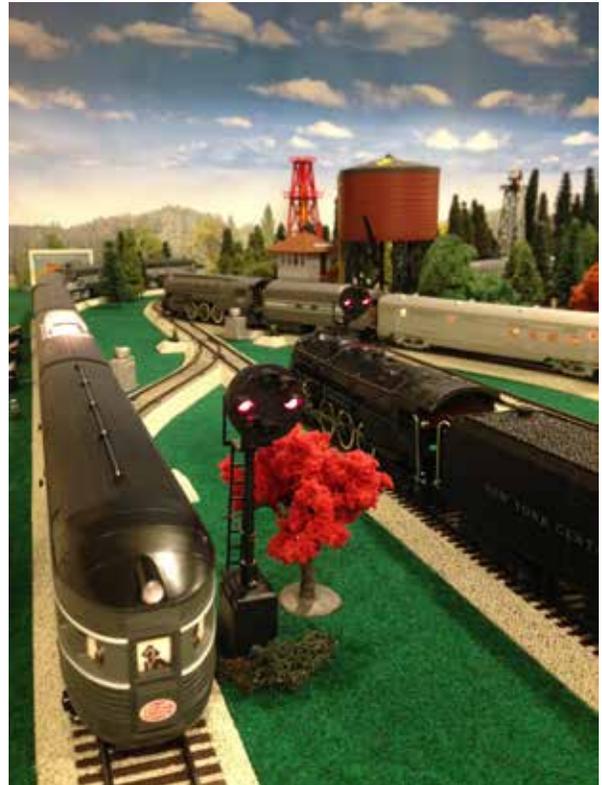
I used ¾" thick pink insulation board atop the plywood and it is framed by 1" x 2" boards to prevent it from getting crushed when people lean on the edge of the layout.

### Scenery

The primary ground cover is indoor/outdoor carpeting that is green with dark flecks or speckles.

Specific areas such as the schoolyard and barnyard have additional ground cover added for effect. Those are a vinyl mat material produced by Woodland Scenics.

There are more than 210 trees that are Bachmann, Grand Central Gems, Woodland Scenics, and others. Hedges on the layout are made by Faller and used mixed lichen by Woodland Scenics and Life-Like Trains for shrubs.



*Heading out on their respective passenger routes, NYC diesel and steam powered trains are captured here working in perfect unison with one another.*

I have a stream made with rippled clear plastic on printed-paper by Busch and lined with shrubs and water lilies. I made a fishing pond made of clear plastic on printed-paper by Busch.

The one main backdrop was created by taping a few commercially produced backdrops together and mounting them to a 1" x 2" board, and attaching them to the wall.

## Modeling the NYC in S-Scale

There is a divided street from Union Station leading to and throughout the downtown section of the layout. An undivided county road then runs along the industrial area adjacent to the downtown and extends out of town toward a farm and freight station in the rural area. Busch made both street types.



*A view from the biplane over the far end of the layout shows a narrow-gauge timber train and mixed consist parked on sidings while workers mind the rural freight station and the busy day of a farming family is underway.*

### Kitbashing

I added lights by Miniaturics and Walthers to some buildings including the Plasticville switch tower and AC Gilbert reproduction passenger terminal shed. Streetlights by those and other manufacturers were also added.

A digital American Flyer passenger station sound system with dual speakers inside the Plasticville Union Station along with the MRC City and Country sounds emitting from under the layout help create a realistic setting for trains in operation.

### Operations

The three S-gauge loops have multiple operating modes.

On loops 1, and 2 the choices are remote control AC using Lionel Track Power Controllers (one TPC 400 per loop), Lionel Legacy, and S-Helper Locomatic (one 10-button controller per loop).

Loop three (inner most loop of S-gauge) also has multiple modes - remote control AC using conventional with a third Lionel Track Power Controller (TPC), Lionel Legacy DCC PowerCab and Smart Booster, and conventional AC using a directly wired AF 30B attached to an AF Air Chime Whistle/Diesel Horn actuator button.

The Sn42 (On30) section uses DCC NEC PowerCab and Smart Booster.



*NYC passenger trains form a grand parade down the front of the layout. Trains shown are an Empire State Express (ESE) and PA's by American Models, a 20<sup>th</sup> Century Limited Hudson by American Hi-rail, and an "original" 20<sup>th</sup> Century train comprised of a NYC Hudson by Gilbert American Flyer from the 40s and more modern Pullman heavyweight cars by American Models.*

### Block Systems

S-gauge loops #1 and #2 have two blocks in each loop. Each block is controlled by a

## *Modeling the NYC in S-Scale*

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3-position toggle switch at the main control panel. Each block can be turned on, off, or to pause mode. Pause mode passes power through an AC Gilbert 709 Lockout Eliminator providing just a trickle of voltage to the tracks, which stops Gilbert engines, but does not activate their reverse units, so you start up again going in the same direction that you stopped in neutral or reverse.

Loop #2 also has two sidings. One siding passes through the main passenger station; the other one parallels the first, but is a capped or dead-end siding. Each siding is controlled by 3-position toggle switch at the main control panel - on, off, and pause mode as above with Loop #1 and #2 blocks.

Loop #3 - the inner most of the three S-gauge loops is a continuous loop without any blocks, switches, or sidings.

By turning a rotary switch at the main control panel to the appropriate position, a volt meter there indicates what voltage is getting fed to any block or siding in Loops #1 and #2, as well as to Loop #3.

Every block and siding of Loop #1, and #2, along with Loop #3 is protected by its own 7A fast blow fuse located and easily accessible at the main control panel.

Note: There are two idle sidings on the layout used to store extra rolling stock that are not attached to any loop and are not powered. Someday when Type 5 or Type 6 switches are available these will be connected to Loop #2.

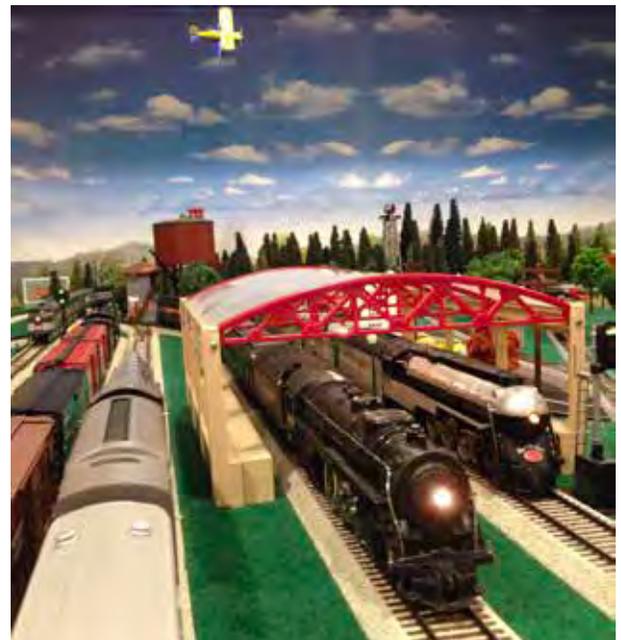
There are no blocks for the Sn42 operations and the sidings are not isolated.

The Sn42 tracks are protected by a 3A fast blow fuse located at the main panel.

### **Signals**

S-gauge: all signals by Z-Stuff. Loop #1 has as color position DZ-1080S signal with additional DZ-1075 sensors. Loop #2 has a DZ-1080S color position signal with additional sensors and a DZ-1050S three-color signal.

Sn42: Uses a DZ-1040S upper quadrant semaphore signal by Z-Stuff.



*Whether coming or going, the NYC is keeping the switch tower controller and stationmaster very busy this afternoon, especially at Union Station. The aerial photographer is getting some great shots for this edition of NYCentral Modeler.*

### **Involvement in Train and Other Clubs**

I am one of seven founding members of the W&OD Division of the Atlantic Coast

## *Modeling the NYC in S-Scale*

S-Gaugers (ACSG). We started in 2000 and now have 42 members. I am a member of the Baltimore Area American Flyer Club (BAAFC). I own and operate Precision Flyer Repairs (PFR) and have been providing quality S-gauge train maintenance, repair, and upgrade services to customers for over ten years. I am a twenty-year member of the Train Collectors Association (TCA) and a longtime member of the National Association of S-Gaugers.

*Classic Toy Trains* published an article on my layout in their February 2017 issue, and featured a photo of it in the Photo Album portion of their May 2016 issue.



*An overview of Dave's layout shows the different districts or areas - the industrial area (front-left), the downtown area (front-right), Union station (middle-left), a small orchard and fresh produce market (middle-right), the natural resources area with oil and lumber (far-left), and farming with a rural freight station (far-right). Several structures are from the layout Dave grew up with from the time he was born.*

### **Future Plans**

I plan to continue offering train repair services and recently introduced a new Onsite Layout Assistance Service (OLAS). With that I visit your layout, provide an assessment, suggestions, recommendations, and take whatever troubleshooting/remedial measures are within reason at the time. I also plan to continue collecting and operating S gauge and Sn42 locomotives, rolling stock, and accessories.



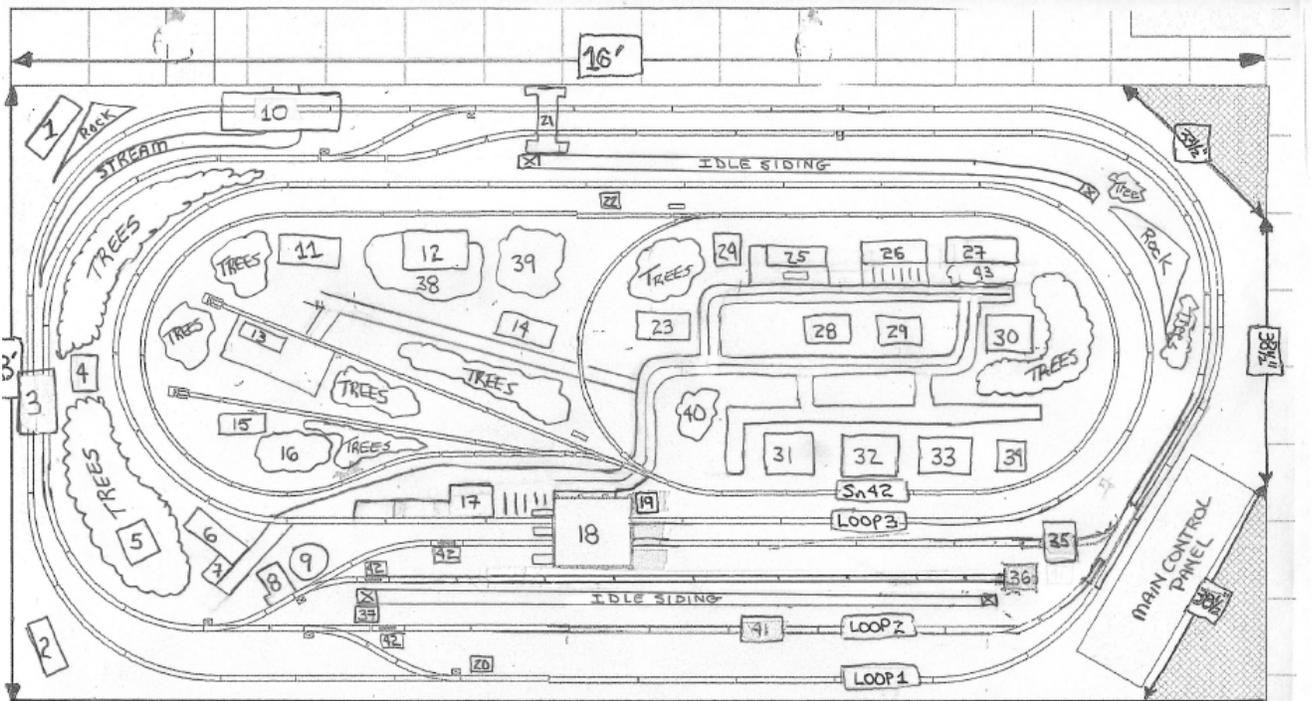
*Dave has oak display cases with grooved shelves and sliding glass doors to house and protect his collection. This is his Dreyfuss Hudson that he recently modified using information provided to him by the NYCSHS.*

In closing, I would like to extend a special thank-you to my good friend and fellow NYC System enthusiast, Bruce Tibbetts, for helping to stage the photographs used in this article including some of his NYC engines and rolling stock pictured in them.

*This is one of the very few articles about S-Scale/Gauge NYC modeling that we have featured. Our hope is that some of you S-Scale/Gauge NYC modelers out there will share your modeling with us.*

# Modeling the NYC in S-Scale

## David Horn's S-Gauge Layout



1 AF diesel horn billboard	11 Farm house	21 signal bridge	31 Lionel operating gantry crane
2 AF steam whistle billboard	12 Barn	22 upper quadrant semaphore	32 AF barrel/drum loader
3 Marx mountain tunnel	13 little town freight station	23 church	33 Lionel AF sawmill
4 Marx rotating beacon tower	14 Farmers market	24 AF bubbling water tower	34 MTH AF take the lamplighter
5 Lionel AF bubbling oil derrick	15 lumberjack cabin car	25 gas station	35 AF coal loader
6 AF oil depot	16 fishing pond	26 diner	36 Lionel AF handcar shed
7 Lionel oil pump	17 Union Station & platforms	27 school	37 color position signal
8 Switch tower	18 AF passenger terminal	28 house under construction	38 barn yard
9 AF water tower w/ spout	19 3-color signal	29 house	39 orchard
10 Lionel Truss bridge	20 color position signal	30 fire station	40 construction site
			41 op car track
			42 uncoupler
			43 school yard

David Horn  
4-25-2016



We need a volunteer willing to spend a few hours each week to help us ship items we sell in the Collinwood Shop.

Our new Shipping Agent has begun his duties of shipping most of the great NYCS items we sell in the Collinwood Shop, but we need someone to back him up when he cannot be there to do the job.

The activity is in our new Headquarters in Middleburg Heights and we will provide the training.

You would be working in the area of our archive and would be able to interact with our Archive Volunteer Crew in the facility. Most of them are in the facility several days each week, so you would not be there alone.

If you are willing to volunteer for this very important position, please send an email to [NYCSHS@verizon.net](mailto:NYCSHS@verizon.net) or call Noel Widdifield at 703-407-3059 who will explain all of the details of what is involved.

Do you love the NYC? How about helping the NYCSHS preserve the memory. Do your part.



If you have read this edition of the *NYCentral Modeler*, you can't help but be impressed by the fine modelers out there in our membership. You also should have been impressed with all of the things we are doing to help you model the NYCS. **We have been publishing great articles from many of you in all scales. We note that several other Historical Societies' modeling magazines have gone out of production from lack of member articles. Don't let that happen to us.**

We really do need your help to keep all of the momentum going in the Society. A lot of work is being done to improve our support to members. We need articles and photos for this magazine. We need some people to work with us on the Membership Committee. We could use more help in the NYCSHS archives, backup people for the website and the Collinwood Shop, and someone with some financial knowledge to help out our Treasurer.

We all are busy, but it only takes a few hours a month to help us out. We have gotten a few new volunteers now working with us. They believe that the Society is a priority for them. **How about you? Why not join the fun and excitement of involvement in something that is really worthwhile. Just do it!!!** [NYCSHS@verizon.net](mailto:NYCSHS@verizon.net)

Watch the website, [www.nycshs.org](http://www.nycshs.org), for more information and updates. For questions and inquiries, contact Noel Widdifield at [NYCBigFour@verizon.net](mailto:NYCBigFour@verizon.net)



As we head into the spring modeling season, the NYCHS would very much like to include an article by you in the next issue that will be released in the 4<sup>th</sup> Qtr. 2017 edition. You should be doing a lot more with your layout or modeling as we head into summer. If you will be building things for your railroad or running your trains, this would be a good time to take some photos and do an article for us. We really would love to hear about your modeling or see your layout. We offer a good opportunity to showcase your talents or collection. Even if you don't feel you can write an article, just send us some photos of your layout. We need them for all of our publications, but to make the next one, send them to us by August 15, 2017. [NYCSHS@verizon.net](mailto:NYCSHS@verizon.net)

## Preview Of 4th Quarter 2017 issue



Roger Murphy will update us on his NYC Marine Division on his expanding layout.

Always looking for good articles and photos for the 1st Qtr. 2018 edition. Let us see your handiwork.



Will Boyle will tell us about his "Hot Train" in the next issue.

Bob Shaw continues his feature, "NYCS O-Gauge Model Railroading" in the October 2017 issue.

