N-Circle Railroad Update 15 – October 31, 2022

In this N-Circle Railroad Update we will discuss building and detailing a bowling alley for use in multiple time periods from a very simple styrene store kit, then we will continue the discussion of mass-producing vehicle kits, this time focusing on plastic resin kits, introducing some more painting tricks.

Wirl Wind Bowling Alley

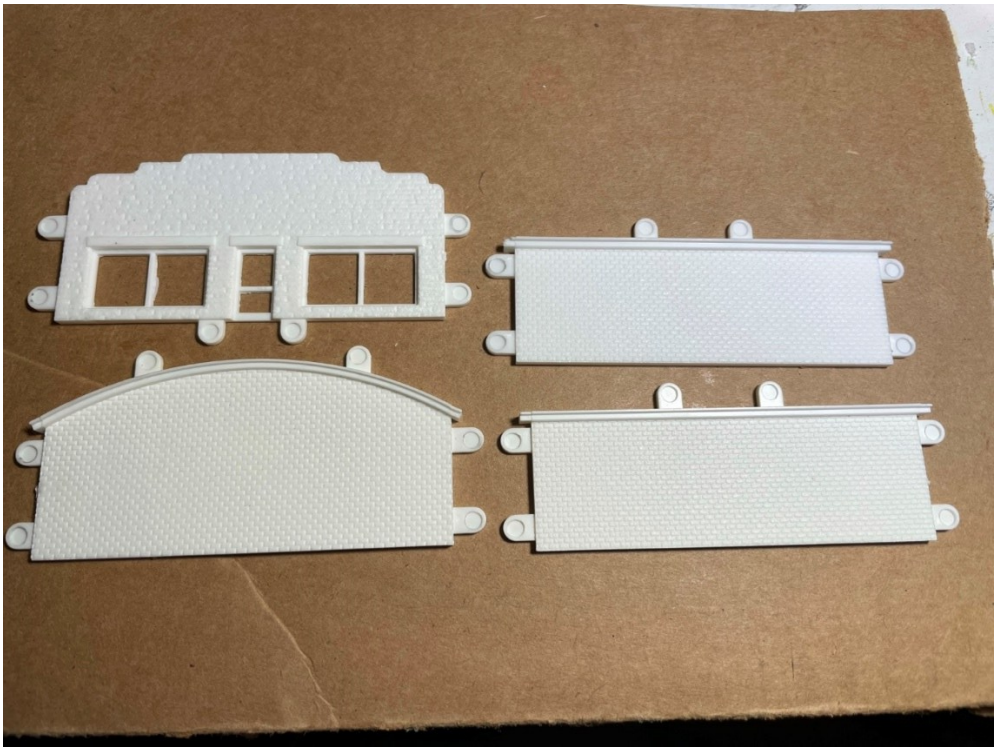
I had been looking for a while for a one-story commercial building with large windows on the front and none on the rear or sides, to use as a bowling alley. A simple structure that could serve in either the 1950s or the 1980s.

I found this Wirl Wind kit on eBay recently for only a few dollars. The instruction sheet says 1998, and I have only seen N-scale Wirl Wind kits come up a couple of times on eBay, so I assume the company came and went years ago.

It is only 40 x 40 scale feet, much smaller than a prototype bowling alley would be (a regulation bowling lane alone is 60 feet long plus 15 feet for the throwing area) but this is a compromise most model railroad layouts make given limited space. This kit will fit in my city block rows – a prototypically deep building would require placement elsewhere.

The kit contains only five pieces: four thick plastic styrene walls and a thin sheet of corrugated styrene for the roof. The walls all have “D-ring” tabs on their edges to be used later, so step one was to trim them off using plastic sprue snippers, then file down these edges. There was very little flashing on the parts otherwise.

N-Circle_22-10-04_WirlWind_BowlingAlley_1



The next step was to cement the D-ring tabs to the inside of the front wall along the line of the curved top of the rear wall, to serve as supports for the curved roof.

N-Circle_22-10-04_WirlWind_BowlingAlley_2

I applied a coat of Polly-S Dark Earth Brown on the brick exterior walls, then used Polly-Scale Vermont Green on the trim, and as a watery wash over the dark brown bricks to look like worn, faded paint. However, I didn't like the resulting color combination, so I added another watery wash of Polly-Scale Rock Island Red over the walls. It now looks like an old brick building that has been repainted multiple times with different colors of cheap paint, as an old bowling alley would!

There was no window material included in the kit, so I cemented a strip of clear stiff plastic across the inside of the front wall using superglue before assembling the four walls. Cementing the walls together was fairly easy, using the rectangular ceramic magnets on a steel cookie pan as shown in earlier N-Circle updates. However, the trim pieces on the top of the side walls are a bit higher than the ends of the rounded top of the back wall. This will make attaching the roof a bit more of a challenge later…

I added sprue pieces on the inside of corner joints to further strengthen the structure. Here we see the interior with the sprues in place, still with the magnets used for alignment during gluing.

N-Circle_22-10-16_WirlWind_BowlingAlley_2

We selected a set of food and beverage signs from multiple sets of decals from Dave’s Art, representative of various personal memories, and applied them before attaching the roof, as the roof overhangs would make it more difficult to lay the structure on its side during this work.

The roof is a single piece of arched corrugated steel, like a Quonset hut. The sheet of styrene in the kit is quite thick and stiff, yet it must be curved to the shape of the top of the rear wall, and the corresponding D-ring tabs on the interior of the front wall. I was apprehensive that styrene cement would be sufficiently strong to hold the roof in place, and thus decided to try to pre-curve the sheet before attaching it. For this, I used the small bar clamp seen in earlier Updates to squeeze the sheet into an appropriate curve. I then immersed it in hot water in the sink, hoping this would soften the styrene to acquire the new shape. Even after remaining in the clamp for a couple of days, it still had only acquired a slight curve.

N-Circle_22-10-18_WirlWind_BowlingAlley_1

Therefore, I scored the underside of the styrene with a sharp knife, in an attempt to make it more flexible. Even then, attaching the roof was a challenge. Styrene cement would not hold it in place, even after holding it tightly several minutes to allow the cement to set. The shape of the structure made it difficult to clamp. Finally, a liberal application of superglue got one side to stay in place, and I added more sprues on the inside on the underside of the roof line. The next day, more superglue got the other side to stay in place.

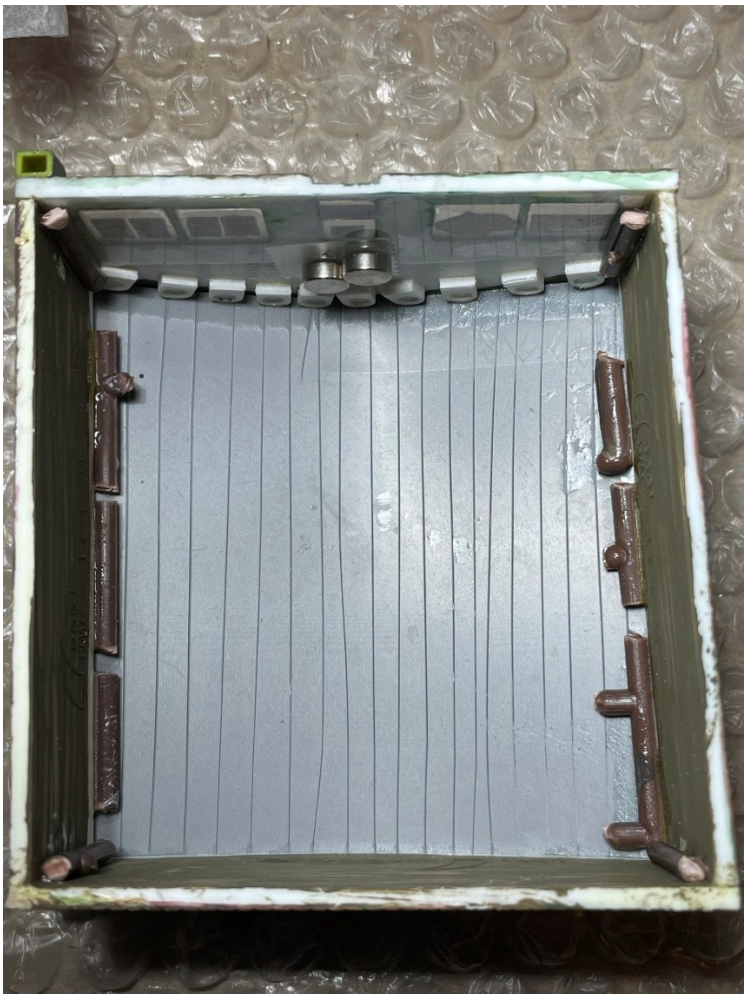
To get the final corner to stay glued, I was able to use the clamp to hold it firmly. However, when I returned later, I found I had glued the corner of the building to the workbench...after some gentle prying with a hobby knife… model railroading is fun…model railroading is fun…

I didn't add any interior details, as the signs obscure most of the view through the windows. With windows only on the front, interior lighting would be required to see much inside. I also did not mask the windows before spraying the structure with Testor's Dull Cote, being more concerned with the decals remaining adhered to the windows than with them being fogged by the coating. I did paint the interior walls brown, so it would be dark inside, and not the stark white of the plastic.

To complete the detailing, we wanted a large, colorful bowling sign for the front, but I only had a vertical “Bowling” decal sign in drab brown which didn’t really fit the bill. Therefore, we did a Google search on the web for “bowling alley sign” and captured a set of interesting image options. After selecting one, I embedded it in a Power Point slide, then shrank it down to an appropriate size for the building, added our own name below it (“borrowed” from our local bowling alley) and printed it on standard copier paper with an HP printer. I mounted the paper on a section of thin magnetic sheet cut from a charity organization’s refrigerator magnet and brushed on some weathering chalks to “age” it a bit. Two button magnets attached to the inside of the front wall using double-sided Scotch tape hold the sign in place. (Not being sure this was going to work; I didn’t want to glue the magnets permanently yet.) The hold is very weak, but sufficient to keep the sign in place. In the spirit of flexibility on the N-Circle layout, we can easily change the sign later, per our discussion of personalized signs using magnets first introduced in N-Circle Update 7 from April 2021 for the Fire Station and Police Station.

This photo from the underside shows the sprue pieces glued to the roof line joints, in hopes that the roof will not spring off the building someday. You can also see the two button magnets on the inside wall at the top of the photo.

N-Circle_22-10-29_WirlWind_BowlingAlley_1



After completing the main assembly, I added a trash can on the corner and a smoke vent from the detail parts box. In these photos of the completed building you can see the added watery wash of dark paint from the vent to the roof edge.

N-Circle_22-10-29_WirlWind_BowlingAlley_5

N-Circle_22-10-29_WirlWind_BowlingAlley_6

In this final photo we see the new bowling alley on the layout between the Café Gumbo and the W. T. Grant store with a hot rod in front and Blatz Beer making another delivery. I don't know how the bowling business is going, but they should be making money from all the beer signs on their building - one suspects bowling is not the only attraction of this joint in a small town!

N-Circle_22-10-30_WirlWind_BowlingAlley_2

With the bowling alley right across the street from the elementary school playground, the buildings may get re-arranged in future urban renewal! But for now, it nicely fills a previously empty open lot.

This project took about six-and-a-half hours to complete, much of it due to the challenges of attaching the roof and adding the signage. The basic kit was otherwise very simple.

Road Apples Plastic Resin Vehicles Kits

We will discuss mass-producing plastic resin vehicles kits, moving on from the pewter metal kits from the previous Update 14. I first did six Road Apples kits of vehicles from the 1950s – these are very simple kits, just paint the solid resin bodies, and glue on the wheels.

The first step was to label the undersides of the bodies to identify them during assembly, and because I like to be able to identify the year and make of vehicles in my collection later. I used a fine-point black Sharpie pen. Unfortunately, the undersides of most of these vehicles were rough and porous, thus the ink spread more than it would have on a solid surface, but it is still legible.

N-Circle_22-10-12_RoadApples_1_Resized

N-Circle_22-10-12_RoadApples_2_Resized

I next washed the bodies with soap and water to remove any mold residues before painting. These resin bodies had very little flash, even in the wheel wells, so no real work was required to clean them up. However, some of the bodies had pock holes from air bubbles in the surface of the resin. When applying Vallejo Grey Surface Primer paint so later acrylic paints would better adhere to the resin, I tried to fill in the pock holes with the primer.

The panel van came with a separate rear bumper embedded on a square of plastic, but it was so fragile it disintegrated when I tried to remove it.

I selected solid, dark colors for the bodies – real automobiles rarely have bright colors, unless they are sports cars or hot rods! In the interest of efficiency (and laziness…) I did two vehicles each in three different colors: Pullman Green, Prussian Blue and Rock Island Maroon. I made no attempt to determine if these colors were prototypically correct for these automobile makes…

After the bodies were dry, I painted the windows a dark grey, as with previous models. I recently found a set of super-fine micro brushes made by Alpha Abrasives, which may be intended for applying glues, but also work well for painting very small areas. They can be washed and re-used with some care.

N-Circle_22-10-18_BR-FNS-GG_3

After the window paint had dried, I applied a thin coat of Micro-Scale Kristal Klear over them, to produce a shiny glass appearance, then painted the final chrome and lights using a super-fine brush and a sharp toothpick. And added Vermont green license plates!

To add a little interest to the Chevy Panel Van, I added contrast color white panels on the sides, and applied “Farmer’s Market” decals from a “Dave’s Art” set left over from the Wayne Feeds trucks projects discussed in earlier Updates.

After all the paints and decals were dry, I sprayed Testor’s Gloss Cote on the bodies, before attaching the wheels, eliminating the need to mask the wheels as was done on vehicles in previous Updates. The Gloss Cote really improves the appearance of the otherwise drab acrylic paints.

On the plus side, all the wheels in these kits were molded in flat black, so no painting of the tires was required, just the hubs. On the minus side, most of the wheel sets were in a thick plastic backing which was difficult to cut away with a hobby knife - accomplishing this to produce round tires was not easy. One set had a thinner backing that was not nearly as difficult. I suspect those with the thick backing were a manufacturing control error, with the plastic mold having been over-filled. Not only did the thicker backing make it difficult to separate the tires, it also produced tires thicker than they should be.

I painted the wheel hubs when doing the chrome trim on the bodies, before cutting the wheels from their backing, which made holding the wheels while painting much easier. I tried a new technique from an article in the November/December issue of N-Scale Magazine. I cut a round

wood skewer off square, that is the diameter of the wheel center, then dipped it in the chrome paint and stamped it in the wheel. It works well if you are steady enough to get the stamp lined up perfectly to a fraction of a millimeter... The article discusses using a slightly larger diameter dowel to stamp a whitewall on the tire first – I haven't had the courage to attempt that yet…!

N-Circle_22-10-20_BR-FNS-GG_1_Resized

I don't recall ever seeing an article telling how to glue the wheels on kits like these to ensure all four are level, and I have never seen instructions for a kit describe how to either. The metal kits discussed in previous N-Circle Updates typically had alignment pegs of some type, but with these resin kits, you just glue the wheel into an open wheel well. Quite frankly, this did not always go perfectly with the resin vehicles in earlier N-Circle Updates. Therefore, this time I used a technique of gluing the two rear wheels and one front wheel with the vehicle upside down, then after they were dry, attaching the fourth with the vehicle on its wheels. This worked reasonably well.

The convertible came with an etched metal steering wheel. Cutting it from its surrounding cage even with a brand new, sharp hobby knife was still very difficult – I ended up distorting the wheel from round in the process but straightened it as much as possible and attached it with a drop of superglue If you come to my house and can actually see it, we will discuss it then!

In these photos of the finished models, the resin holes are no longer visible and the detailing work can be seen. The gloss coat is accentuated by the lighting for these photos – they do not look as shiny under normal layout lighting.

N-Circle_22-10-24_RoadApples_4

N-Circle_22-10-24_RoadApples_6

Note that Road Apples later became Lineside Models. I purchased these six Road Apples kits in the past couple of years “used” on eBay, not back when they were produced. They still often appear on eBay.

Other Plastic Resin Vehicles Kits

Next, I moved on to seven more plastic resin kits of 1950s vehicles produced by Bruce Richardson Cars, Fine N Scale Products and Garrick Gilhan’s. These kits are very similar to the Road Apples kits, so I used the same basic process as above, which I won’t repeat here in detail, other than to highlight differences.

N-Circle_22-10-16_BR-FNS-GG_1_Resized

N-Circle_22-10-16_BR-FNS-GG_2_Resized

Fine N-Scale Products was previously Bruce Richardson's Cars, so probably all but the Garrick Gilhan's 1955 Chevy Nomad Wagon here came from original Bruce Richardson model molds. This is further proven by observing that the Fine N-Scale Products "1939 Ford 2-Door Sedan" and the Bruce Richardson's Cars "1939 Ford Tudor" are identical, down to the imperfection in the windshield. However, the later Fine N-Scale Products version uses better resin producing sharper detail, so, if possible, look for the later FNS version if you like these kits.

Fun Fact: We probably have all seen the word "Tudor" in the names of early automobiles. However, it wasn't until comparing these kits that it hit me that "Tudor" is a wordplay on "Two-Door!" A quick Google search confirmed that Henry Ford came up with the name as a marketing gimmick for his two-door cars, playing on the Tudor monarchs in England!

These vehicle bodies had some flash to remove in the wheel wells, but it was not too bad using a hobby knife. No major surgery with a Dremel tool was required.

For the 1954 Mack B dump truck, I went with the yellow cab and dark green dump body like the 1940s International dump truck described in N-Circle Update 14, again reminiscent of my childhood hometown highway trucks.

For the automobiles, I experimented with a technique I had been thinking about for a while: to paint a set of vehicles with different colors without owning a lot of paints, paint all with the same base color coat, then for the final coat, start with the base color, add a little of another color, do a vehicle. Add a little more, do another. As can be seen in the following photos, I started with a dark Polly-S Blue on the three Fine N Scale Fords and Polly-S Tuscan on the other three cars, then added a couple drops of Reefer White to the base color to do the second car in each set, then a couple more drops to do the third.

Plastic milk bottle caps work well for mixing paints. They will hold a small amount of paint adequate for N-scale projects without consuming much space in the work area. They can be disposed of after use, and you get more for free every time you buy milk! I use wood appetizer skewers (longish, sharp toothpicks purchased in the grocery store) to extract a few drops of paint from the bottle. Much simpler than having to clean an eye dropper each time!

N-Circle_22-10-18_BR-FNS-GG_1 and N-Circle_22-10-18_BR-FNS-GG_2

I don't know that I would recommend this technique for everyone, but it was fun to play with on a set of inexpensive kits that will be background vehicles on the layout. I didn't make any attempt to measure the number of drops mixed for each color; I just added a couple drops to gradually lighten the base. This obviously would be a problem for a project where you need to match the color later, but here I was painting the entire vehicle, and if I needed to apply a third coat, could mix something up "close enough" later. But it worked pretty well, allowing to create a diversity of colors without having to buy more bottles of paint that would probably dry up before being consumed.

A nice feature of the kits from these manufacturers is that they have a ridge inside the front wheel well that allows the wheel to be mounted at an angle, Road Apples kits do not. This allows creating a few vehicles to be positioned turning at highway intersections. Be careful to position both front wheels in the same direction at the same angle!

In the following photos of the finished models, you can see the color variation dark to lighter, left-to-right, and the front wheels at an angle on some of the cars.

N-Circle_22-10-24_BR-FNS-GG_4

N-Circle_22-10-24_BR-FNS-GG_3

The dump truck came with a removeable gravel load, which I did not attach, but just detailed the top with random shades of brown paints.

N-Circle_22-10-24_BR-FNS-GG_5_Resized

N-Circle_22-10-24_BR-FNS-GG_6_Resized

Bruce Richardson's Trailers and NuComp Minatures Corvettes Kits

While I had everything set up to complete resin vehicles kits, and the warm weather in the garage continued to cooperate, I decided to do a set of three trailers produced by Bruce Richardson's Cars and complete the two NuComp Minatures Corvettes from the set discussed in Update 12 from January 2022. These kits are very similar to the kits above, so I used the same basic techniques, and will only point out the details on the horse trailer, where "Ralphie" is looking forward to a day off the farm!

N-Circle_22-10-24_Corvettes-Trailers_1_Resized

N-Circle_22-10-24_Corvettes-Trailers_3_Resized

These eighteen kits took about fifteen hours to complete, way less in this "mass production process" than if done individually. While I presented this as three separate sets of vehicles in this writing, I actually ended up working on all eighteen kits together on many of the later detailing and finishing steps.

In general, I would say these models came out "okay," not good enough to be the focal point of a scene, but good enough to use as "street and parking lot fillers." Ready-to-Run N-scale vehicles from Classic Metal Works look better but are fairly expensive even purchased used on eBay. They have a limited variety of models and colors, and they are seen in about every photo shoot of an N-scale layout. Custom painted resin kits like these described here add diversity to your layout, so the experienced viewer doesn't say "I've seen that car a million times before."

This work completed all of my vehicle kits for the 1950s, so I can fully populate the layout for 1950s operations this winter! There are still many 1980s vehicles kits in the cabinet, perhaps to be completed with the return of warm weather in the spring.

Coincidently, after writing the above sections, I received the December 2022 issue of Model Railroader magazine, which contained a brief piece about weathering vehicles. The author concluded by saying he finishes with Testor's Dull Cote. I had a few more 1950s plastic cars that I had bought pre-painted that I wanted to spray. So, thinking that perhaps the above models were too shiny, I sprayed four of these additional cars with Dull Cote. While it sealed the acrylic paints and created a smoother surface, as it does with railroad rolling stock or structures, to me it was too dull for automobiles, and I returned to using Gloss Cote. So, I would say it is a matter of personal preference and would recommend trying both on a couple of cars and decide which you prefer.

N-Scale Vehicles Storage

Completed vehicle kits and vehicles purchased Ready-to-Run are stored in microscope slide cases when not in use on the layout. These are Heathrow Scientific 100 place microscope slide boxes which can be purchased through Amazon. The two rows are designed to hold 3-inch-long glass slides in their comb-toothed racks, and these 8 x 6.5 inch cases can hold about 25 to 45 vehicles, depending on their types and sizes. The space between the teeth is 2.5 inches, so they can hold vehicles up to 33 scale feet long, sufficient for about all but modern semi-truck trailers. I cut 3-inch-long dividers from thin cardboard and use chunks of Styrofoam to hold vehicles snugly in place, so they are not damaged in the cases. The cork bottom provides protection to the wheels. The cases are organized by time periods and vehicle types, making it easy to swap the layout between 1950s and 1980s operating periods. The case number is referenced in my vehicles inventory spreadsheet for each vehicle, so I can find them when I need them!

Longer semi-trucks are stored in either their original cases or plastic boxes for N-Scale rolling stock. While Micro-Trains sells their empty boxes directly, occasionally there is a listing on eBay for empty boxes, a less-expensive source, but requiring removing old labels, etc. I have been fortunate to pick up a couple lots of these over the past few years.

N-Circle_22-10-30_Case_1

Modeler's Tip: I purchased a set of twelve multi-color Sharpie Ultra-Fine tip pens to use for fine details like red tail lights, orange marker lights, green license plates, black details, etc. which would be much easier than to open and prepare a jar of paint to use two drops!! (After I purchased the pens, I saw an article in the September/October issue of N-Scale Magazine which described this also, so not surprisingly, I was not the first to think of it!) However, I used them the first time for the green license plates on the school buses in the previous Update 14 from October 2022 and noticed that the paint ran some when I sprayed on the Testor's Gloss Cote. Therefore, before risking messing up more models, I painted a piece of scrap styrene with Polly-S tan paint, then after it dried, drew some small red and green shapes on the paint using the pens. After letting that dry, I sprayed it with the Gloss Cote, with the piece held vertically. Alas, the colors did run, so this potential clever idea doesn't work if you are going to apply a clear coat over the final model. I went back to the magazine article and found that the author did not clear coat the vehicles, so probably was not aware of this issue.

So, the pens will not be useable for detailing vehicles or structures which will be clear coated, but they should be handy for touching up printed scenery panels or paint nicks in general scenery.

N-Circle_22-10-01_SharpiePens