

# ACCURAIL'S NEW SHORT BOXCAR MODEL AND ITS MATCHES

## PART ONE: THE 1300-SERIES KITS

By Ray Breyer

*(all photos from the author's collection, unless noted)*



*CAD art of the new model, courtesy of Accurail*

In November 2015, at Trainfest in Milwaukee, [Accurail](#) announced a brand new boxcar model to be released in late 2016. The model is welcome news to anyone modeling North American railroads in the 1900-1950 period, as the model is of an extremely common prototype. As a simple, but finely detailed kit molded in styrene, it'll be the first time ever that a "modern" short boxcar has ever been offered in anything but resin (LaBelle wood kits and the old Roundhouse short boxcars are all of older, all-wood prototypes not really suitable for the post-1928 wood underframe ban period and generally reflect pre-1905 built prototypes).

Since this is a model of an older prototype, some modelers are wondering if the car will be suitable to run on their layouts. Other modelers question the era-appropriateness of Accurail's initially-announced road names and paint schemes. This PDF data sheet is the first of a series to cover these models and to answer some of those questions

Accurail has announced four variations of this new model:

- [1300-series](#): steel roof, steel ends, fishbelly center sill underframe
- [1400-series](#): steel roof, steel ends, straight center sill underframe
- [1700-series](#): steel roof, wood ends, fishbelly center sill underframe
- [1800-series](#): steel roof, wood ends, straight center sill underframe

Since this is an affordable, mass-produced plastic model utilizing as many common parts as possible, there will naturally be some compromises in the detailing. Straight out of the box none of these four versions will be 100% right; all modeling requires some forms of compromise. However, none of them will be 100% wrong either, and each of the four variants will be appropriate for several prototype cars that were built and used in large numbers before and after World War I.

I'll leave a detailed analysis of the actual models for once they're released, and will only look at the different versions of the four base models and how they might stack up against Accurail's announced road names. This first installment will focus on the 1300-series kits, with the others coming in future posts.

## THE 1300-SERIES KITS:



*NKP 10580 in Conneaut, OH, circa 1949. Howard Ameling collection.*

This is the base line model for the series. Out of the box the 1300s should be the most useful version of the four kits for the largest group of modelers, since they represent a modern technology, short boxcar that's usable for the longest period of time. With a steel roof (Murphy or Hutchins, not Chicago-Cleveland), large fishbelly center sill underframe, and 7/7 "inward" rib steel ends, the 1300-series models represent tens of thousands of boxcars built or rebuilt between 1914 and 1929. Many of these cars ran in revenue service into the 1950s, and as M-O-W cars well into the 1970s. The basic car design is from the New York Central, but don't think of this as strictly an Eastern region car.

Accurail has announced thirteen paint schemes for the initial run of the [1300-series kits](#). #1300 will be undecorated, while #1398 will be pre-painted mineral red with dimensional data, and #1399 will be oxide red with dimensional data. Ten other cars will come full decorated.

### **1301: NEW YORK CENTRAL**



*A NYC short boxcar built to their new standard by Ryan Car Co., 1922.*

Since the 1300-series models are the baseline for this kit series and are based on a New York Central prototype, we might as well start here. The NYC built around 8,400 new boxcars to this general design between 1914 and 1917. They also rebuilt close to another 25,000 cars to this basic configuration. The NYC&HR began developing steel components for their basic boxcars early in the 20<sup>th</sup> Century: by 1909, Hutchins roofs, corrugated steel ends, and steel underframes were standard elements for all NYC Lines boxcars.



*NYC&HR 100145, a one-of prototype built by the NYC's East Buffalo Shops in November, 1912.*

In late 1912, the NYC's East Buffalo car shops built a single experimental car, NYC&HR 100145. This car set the standard for all future short boxcars on the NYC, which began rebuilding as many of their older cars (represented by Accurail's 1700-series kits) as possible. Any all-new boxcars were also built to this design, starting with lot 309-B (CCC&StL 54000-55499). The New York Central stopped ordering new-built short boxcars in 1917. Their car rebuilding program started in 1910, paused for the USRA years, and then started again between 1922 and 1929. By the end of the rebuilding program the New York Central had rebuilt 15,000 to 20,000 of their freight cars to match NYC&HR 100145, including plain and automobile boxcars. They had also rebuilt several thousand older cars with straight steel underframes (which I'll get to when I review Accurail's 1800-series kits).

The last of the NYC's short boxcars dropped off of their roster by 1952 due to a combination of age and obsolescence. A few of these short boxcars soldiered on in maintenance of way service for several more decades, with the last of them finally being scrapped in the late 1970s (under Conrail!).



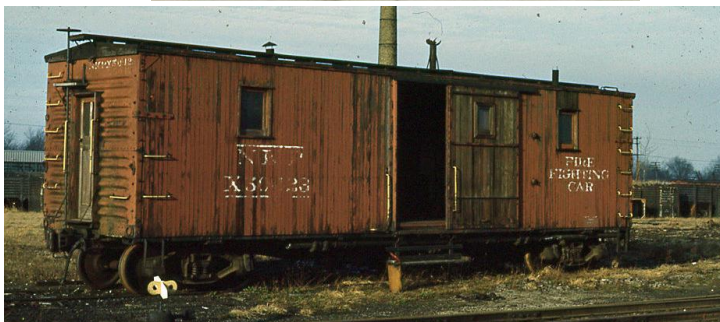
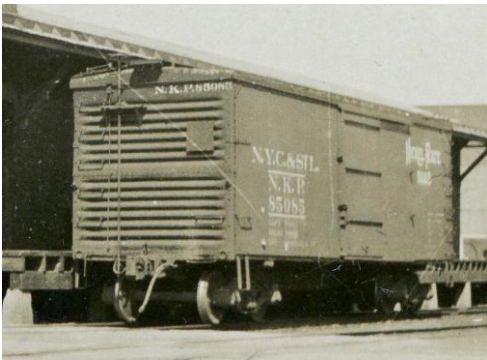


## 1302: NICKEL PLATE ROAD



*NKP 10699, new built at the ACF's St. Louis shops in October, 1916. Note the lack of the "Nickel Plate Road" slogan/nickname, which would only be added to their freight cars after 1918. ACF builder's photo, Al Westerfield collection*

From 1881 to early 1916, the Nickel Plate Road was part of the NYC Lines. Most of their equipment of that period (and generally up to the formation of the Van Sweringen-era AMC in 1929) was built to standard NYC designs. That included 1,000 boxcars ordered just before the NYC sold off the NKP. These cars, along with another 750 identical boxcars acquired when the NKP bought the Lake Erie & Western in 1922, became the standard NKP general-service boxcar well through the 1930s. The last of the revenue cars were retired in 1950, but the cars were too useful to scrap: the NKP converted 35 of them into L.C.L. rider cars in the 1930s, another 57 into cabooses during WWII, and kept over 200 around for M.O.W. service. The cabooses were retired by the N&W in the mid-1970s, and the last of the MOW cars were retired by the early 1980s.



*One basic car, many faces: a former LE&W car in the NKP's 1918-1935 standard boxcar paint scheme, a 1942-rebuilt caboose in N&W service in the 1970s, a fire fighting service and MOW bunk car. All Photos J. Anthony Koester collection.*

### 1303: MISSOURI PACIFIC

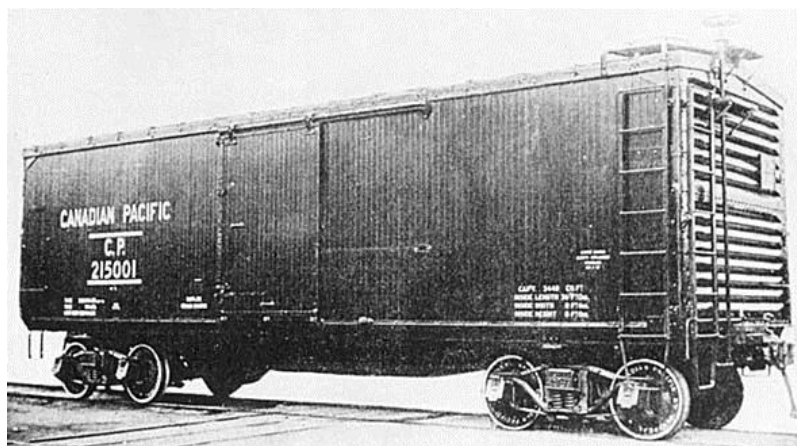


*Ted Culotta collection*

In the list of initial Accurail releases, there are two paint schemes that can be classified as stand-ins: MP and S&A. To be fair, both railroads did have boxcars that were generally similar to the base model and which share the same gross detailing similarities (the ends, roof and underframe are all related designs). Of these two the MP cars are actually pretty close to the NYC cars dimensionally, and only differ in some details, mainly the fascia along the roof.

The Missouri Pacific had a large and varied boxcar fleet through the 1960s, and short boxcars made up an important part of that mix. The road had several styles of short boxcars including modern ones built in the mid-1920s. Cars 120000-120849 were built in 1926, cars 120850-121149 in 1927, and 121150-121749 in 1928. The first two groups of cars were 38'3" long outside and only differed in their steel ends: the 120000s having 7/7 inward ends and the 120850s having early Dreadnaught. The 121150s were a foot longer but otherwise similar. So in general, the new Accurail boxcar can represent around 8% of the MP's 1930s and 1940s boxcar fleet. They best represent the 120000-120849s, which is good news for modelers in general: of the three car types, they stuck around the longest, with 700 cars in 1945, 406 in 1950, and 234 cars in 1959 (still 1% of the MP's total boxcars).

### 1304: CANADIAN PACIFIC



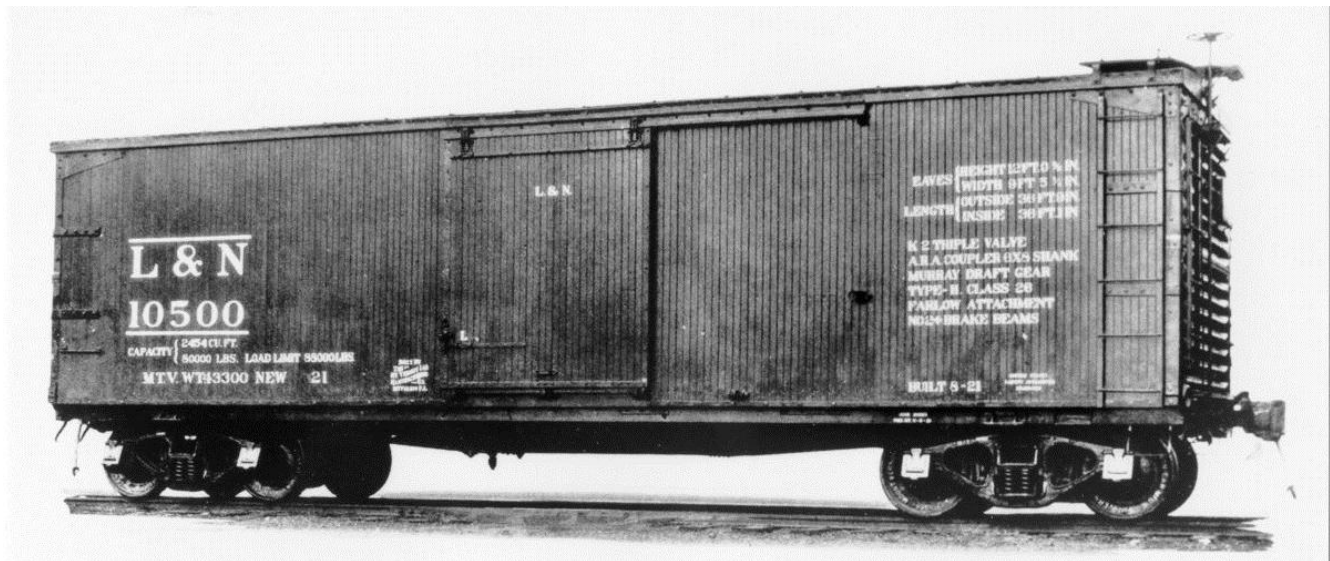
*John Nehrich collection*

Canadian railroads were generally known for their huge numbers of short Dominion (or Fowler) single sheathed boxcars, but they were still building double sheathed cars well into the 1920s. Someone in the Canadian Pacific's engineering department was obviously paying attention to the trade journals, because at some time between 1924 and 1926, they bought 1,300 almost identical copies of the NYC short boxcar design. Cars 215000-216299 were never a large portion of the CP's boxcar fleet (only 2% in 1930), but it's nice to know



these models will match a Canadian prototype car and are available. These CP boxcars lasted a long time: 1,041 were still on the roster in 1945. Their numbers shrank rapidly after that, but seven of these cars were still listed in the 1959 ORER. As with any Canadian boxcar, remember to add stirrups to the end ladders.

### 1305: LOUISVILLE & NASHVILLE

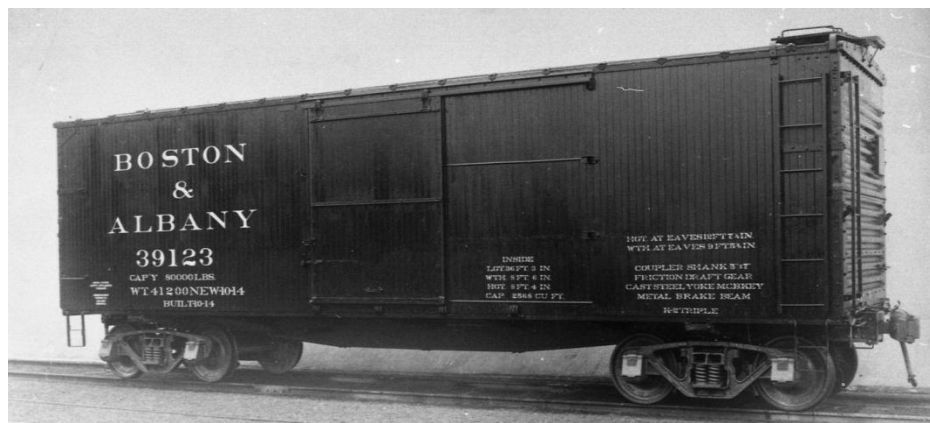


*Mt. Vernon Car Co. builder's photo*

For some odd reason the Louisville & Nashville, one of the largest railroads in North America, tends to be overlooked by modelers. That's a real shame considering it had a varied freight roster, ran all through the South and into the Midwest, hauled every commodity imaginable, and had a very attractive steam fleet. Thankfully, this new Accurail model will go a long way towards introducing modelers to L&N freight equipment, since model #1305 does a good job representing a very important car on their roster.

The L&N bought 3,000 boxcars in 1921 that were essentially clones of the NYC design. Cars 8000-8999 were built by ACF, while cars 10000-11999 were built by Mt. Vernon. Due to a combination of general age and wear, these 3,000 cars initially represented around 12% of the L&N's boxcar fleet when built, but by 1949 climbed to almost 19% of the roster. Unfortunately, the general economic recessions of the late 1940s, coupled with the looming K brake ban of 1954 spelled the end for these cars. The January 1955 ORER only shows one car, number 8769, still on the roster.

### 1306: BOSTON & ALBANY



*ACF builder's photo, Al Westerfield collection*

As it was one of the NYC Lines roads, it's natural that the Boston & Albany would have a few of these standard NYC short boxcars on their roster. And they had a lot of them: by the end of 1915 the road had taken delivery of 4,000 cars with wood ends and 905 with 7/7 inward corrugated steel ends, accounting for 65% of all of their freight cars. By 1925 the B&A was rebuilding their 4,000 wood-end cars with steel ends (mostly early Dreadnaught). The B&A's freight car fleet shrank to almost nothing after the Depression, with parent NYC either scrapping or transferring their cars to their own roster. By the end of WWII the B&A's roster of short boxcars was down to 919 cars with Dreadnaught ends and 264 with 7/7 Murphy, and by 1950 down to 33 and eight cars respectively. By 1955, all of these were long gone. Still, for nearly 30 years, if you happened to see a B&A boxcar you'd likely be looking at one of these cars.

One note: except for the Nickel Plate's 1916-built versions of this car, all non-New York Central painted cars within the Lines family had side ladders rather than grabs. Several of the copies also have this feature, including the MKT car below. So if you want a more accurate model of a B&A or Big Four car, you'll have to do some scraping and gluing to get one.

### 1307: MISSOURI-KANSAS-TEXAS

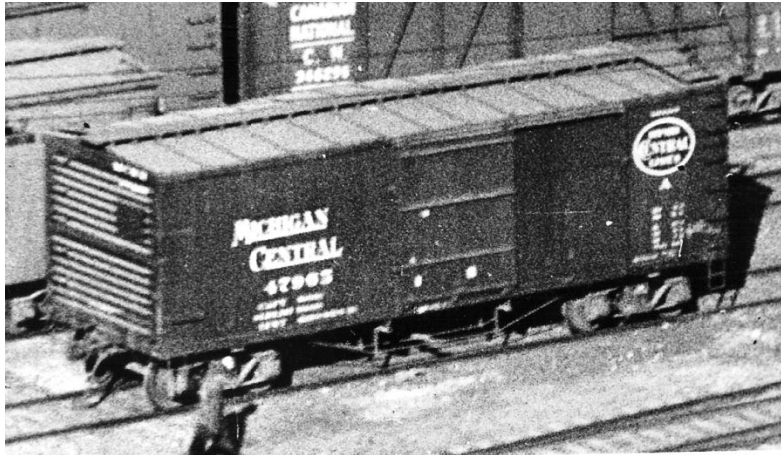


*Ted Culotta collection*

Being a small railroad, it's understandable that the Katy would lean heavily on other road's designs, and even catalog cars to fulfill their rolling stock needs. That seems to have been the case in the early 'Teens, when they took delivery of just over 1,800 boxcars built by ACF in 1913. The cars of the 74100-75679 and 170000-170228 series look to be nothing more than direct copies of the NYC's 1913 car designs. And just like the NYC, the MKT began rebuilding their cars with steel ends in the late 1920s. These boxcars, especially visible during the Depression years in their distinctive bright yellow paint, ran in diminishing numbers through the K brake ban period, which seems to be what finally killed them off. In 1930 the road had 1,487 of these cars, by the end of WWII in 1945 they were down to 322, and by 1950 the fleet had dwindled to only 75 cars. They were all gone by January 1955.



### 1308: MICHIGAN CENTRAL



*Representational photo of a rebuilt MC short boxcar; their cars with fishbelly steel underframes would look generally identical. Richard Burg collection*

Another Lines road, the Michigan Central was the second largest chunk of the greater New York Central, and moved a huge amount of traffic to and from the Detroit and Toledo areas. You would think the road would have been allocated a large number of these cars, and you'd almost be right. The MC was allocated 5,000 cars built to this general design, but only sort of: they received 4,450 auto boxcars built between 1910 and 1912, and another 450 plain boxcars in 1912 and 1913. These cars did make up a significant chunk of their boxcar fleet, but they were obsolescent within five years since the MC began taking delivery of the NYC-standard 1916 and 1922 40-foot all-steel boxcar designs. The two small groups of plain boxcars (28500-28899 and 51050-51099) were rebuilt with steel ends around 1925, but began losing their identities soon afterward: in 1936 the NYC underwent a major reorganization and consolidation, eliminating many of their subsidiary railroads including the MC. From that point on the cars were slowly repainted as NYC cars or scrapped, until only seven cars remained at the end of WWII. By 1950, all short MC boxcars were gone.

(see below for modeling the far more common MC short auto boxcars based on this design)

### 1309: SAVANNAH & ATLANTA



*Another representational photo, this time of an S&A 40-foot long boxcar. Their 36-footers would have worn the same general paint scheme. Ted Culotta collection*

Of all of the paint schemes announced by Accurail, this is possibly the largest “foobie”. The S&A was a fairly recent railroad, only being chartered in 1915. The road bought the Savannah & Northwestern in 1917, and only then actually owned any freight equipment at all. The S&A inherited 175 or so all-wood boxcars from the S&NW,



all of which were listed in the ORER as being 37' 8" long and numbered somewhere in the 1600-4049 group of cars. All of these cars were gone by 1930, meaning that they ran into the wood underframe ban of 1928/1929. The S&A 80000-8197 group of cars (pictured above) were secondhand boxcars bought during WWII and look to be 40-foot long USRA clones. These cars ran into the early 1960s. Depending on what number Accurail uses these cars should be acceptable stand-ins, although personally I'd rather they used their 1800-series kits for this road name (wood ends and straight underframes).

### 1310: BIG FOUR (CCC&StL)



*DL&W Company Photo Collection, Steamtown NPS*

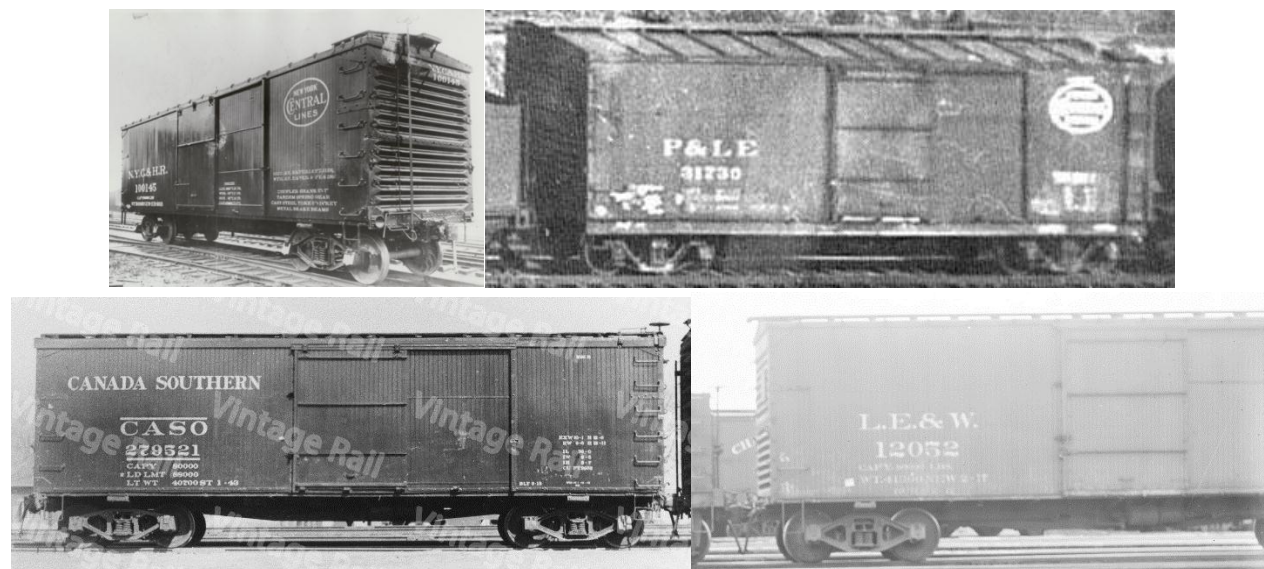
And finally for the 1300-series releases is the Big Four. The major Midwestern component of the NYC Lines roads, the NYC allocated over 6,000 of these cars to the CCC&StL, and another 550 to sub-subsidiary Peoria & Eastern. These cars were mostly all 1914-built cars with the corrugated steel ends; 1,500 of the Big Four and all of the P&E cars were built with wood ends, but later upgraded to steel. As of 1930 these cars accounted for 32% of the Big Four's boxcar fleet and 75% of the P&E's.

As with the MC above, the CCC&StL ceased to exist (except on paper) as of 1936. By 1945, only 32 of these Big Four lettered cars were still on the roster, and they were all gone by 1950. When the cars came in for repairs after 1936 and were deemed suitable for repair & use, they were relettered and renumbered as NYC cars, so they weren't all scrapped right away. The P&E lost their cars even earlier, with the last short boxcar dropping off of their roster by 1944. Note that as with the B&A and MC cars, these cars were built with ladders, not individual grabs.

## OTHER ROAD NAME POSSIBILITIES

Accurail's announced road names won't cover each and every paint scheme possibility. And that's a good thing, since that means that we'll have more cars to model! With a little digging I've come up with a small list of low-hanging fruit that can be created using the undecorated cars as a starting point. In my summary of the 1700-series kits I'll have even more, since while we often have builder's photos of the cars, in-service photos from the 1920s through 1940s are scarce.

The simplest road names to include in this list are various other NYC Lines roads. With 8,000 cars built with steel ends and over 15,000 built with wood ends later converted to steel, there are quite a few more NYC family schemes left to do. They include NYC&HR (for the few cars modified or built before 1913), Canada Southern, P&LE, PMcK&Y, P&E and LE&W (these last cars heading to the NKP in 1922 as their 85000-series boxcars).



*Various other NYC Lines road cars, demonstrating that this ubiquitous car type was spread pretty evenly among all of the NYC family properties.*

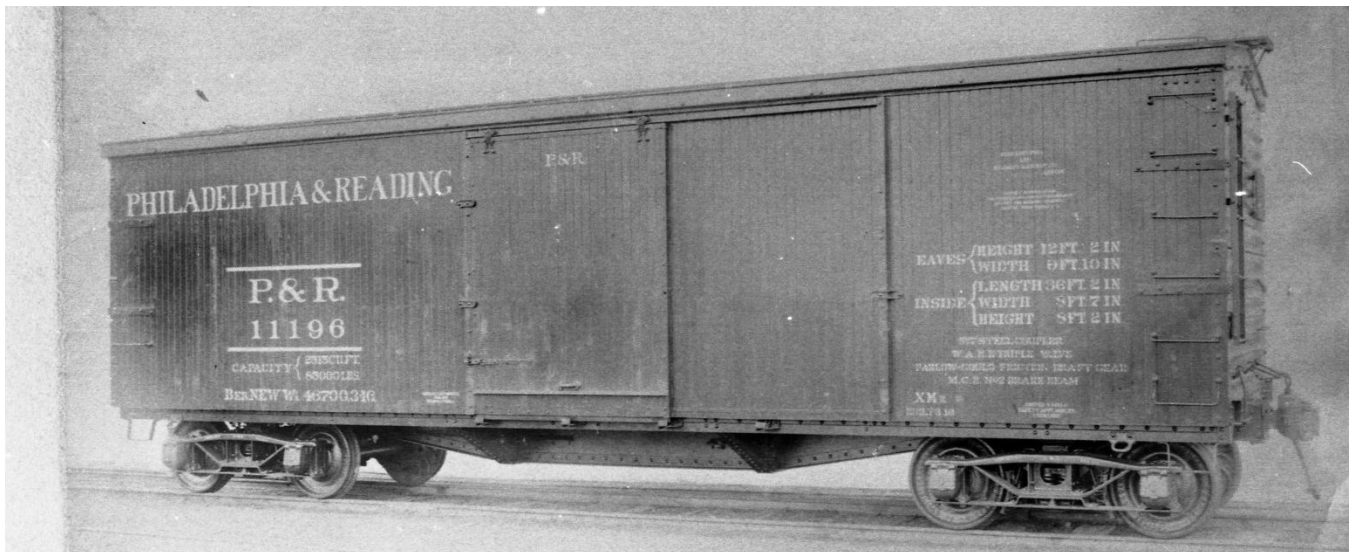
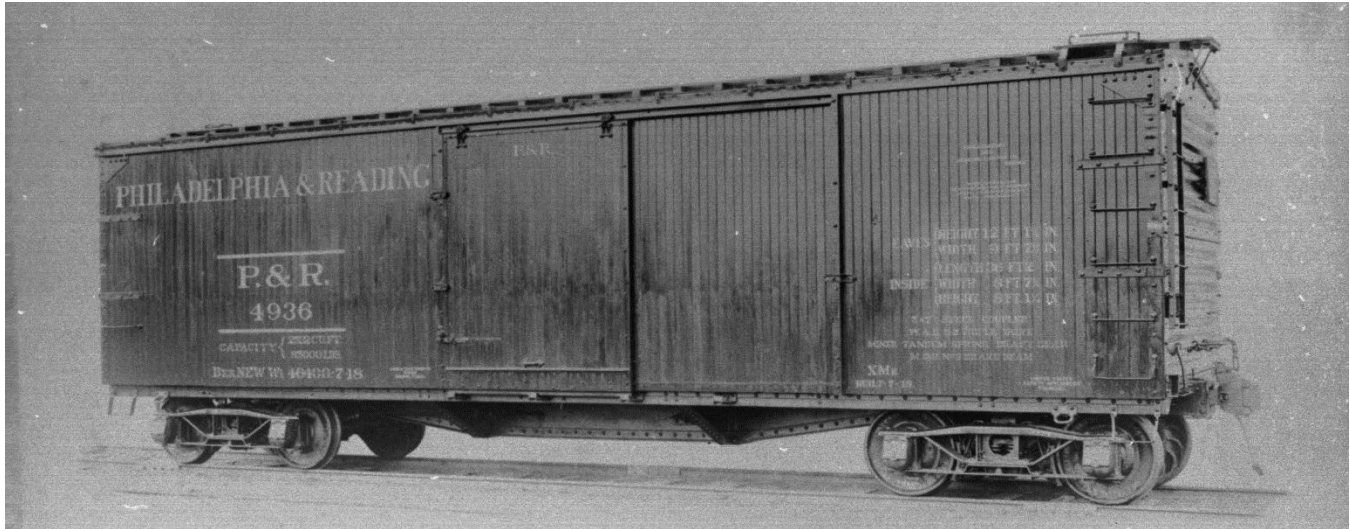
Many roads followed what the NYC was doing, and rebuilt their older boxcars to more durable standards. LV 85639, shown here on Long Island in 1933, is one such car. By 1930 the LV had 5,177 essentially identical rebuilds on their roster, accounting for over 43% of all their boxcars. Starting in the mid-1930s the LV rebuilt most of these cars into 40-footers, and by 1945 only 19 remained on the roster. Six stuck around to 1950, but all were scrapped by 1952.



*A rebuilt LV 85639 sits around in Long Island in early 1933. Note that the car, although rebuilt with many new all-steel body elements, retains its original archbar trucks.*



Other roads built boxcars that were very similar to the new Accurail kits, but which included their own peculiar in-house design biases. One such road was the Philadelphia & Reading (Reading Co. after 1924). In the decade before World War I the P&R built 8,000 boxcars in their XMk through XMr classes. All of these cars were virtually identical, with the first 4,000 being built with wood ends, and the others built with 7/7 "inward rib" steel ends. Like the NYC-designed cars they were built with durability in mind and so featured as much steel as possible in their carbodies, including a very large fishbelly underframe (slightly different than the NYC's design). By the late 1920s most of the wood-ended cars had been rebuilt with corrugated steel ends.



*Both photos: ACF Builder's Photos, Al Westerfield collection*

The Reading's new cars made up 25% of their fleet when built, but as their earlier cars fell off the roster due to age and wrecks these shorties took on more and more duties, until the 2,880 survivors in 1945 accounted for 40% of their boxcars. That would change quickly, as orders for new 40-foot, all-steel boxcars began being filled after 1947. By 1950 their short boxcar fleet was down to 116 cars, and by 1955 down to only seven. These last few cars were tenacious though, and almost outlived the railroad, finally being retired less than a decade before the formation of Conrail.

Finally, here's an example of an odd car that can be modeled using the Accurail model, plus some work.



*ACF builder's photo, Al Westerfield collection*

SSW 21902 had some VERY odd ends that may be unique to these cars. As such they're not very modelable unless you know someone that's decent with 3D CAD and can have them printed. The Wagner-like door hardware doesn't help much either. Still, in general these cars are close enough to the basic 1300-series kits that with a little imagination they can be used as a stand-in model. The Cotton Belt did have a large group of 36-foot boxcars with steel underframes, cars 24000-26998 (even numbers only), with 1,140 of these cars lasting into the Depression years. I haven't been able to find a photo of these cars yet, but they were most likely conventionally built, making the Accurail cars a decent starting point for them.

### **KITBASHING POSSIBILITIES**

Having a series of brand new short boxcar kits around will be a huge boon for pre-diesel era modelers, since they'll be very useful for modeling cars that may never be produced, even in resin. With more than a million short boxcars running between 1910 and 1950 there's no way that resin manufacturers will ever be able to make models of more than a fraction of them. It'll still be up to individual modelers to fill in gaps in their fleets with kitbashes and scratchbuilds. Here are a couple of general ideas to get your creative juices flowing!



*NYC 265547 (ex-Michigan Central) rolls though Chicago on a snowy February day in 1942.  
Jack Delano photo, Library of Congress collection*



When you think of automobile carrying boxcars you don't immediately think of short cars. But before 1916 they were more common than 40-foot auto cars, and some lasted well into the transition era. The New York Central and its Michigan Central subsidiary had the largest number of these less than 40-foot long dedicated auto carriers, but there were many roads with small numbers of similar cars.



*Richard Burg collection*

The New York Central built nearly 11,000 short auto boxcars between 1909 and 1914. Initially assigned to several of the Vanderbilt roads, they were soon consolidated into just the NYC and MC, and stayed there into the early 1950s. By 1930, the NYC was down to 2,850 of these cars and the MC down to 3,812. After the 1936 reorganization the Michigan Central's cars disappeared en masse, as the cars were downgraded to plain boxcars with 12 foot wide doors, renumbered and relettered as NYC cars. By the end of WWII, the NYC had 1,433 of these cars left on the roster, with 112 of them still lettered for the MC. The end of short wood-sided cars on the NYC came in 1951 and 1952, with the last 28 NYC-lettered cars dropping off the roster. While never a very huge group of cars on the NYC as compared to the rest of their boxcar fleet, these 10,000-plus cars were still more cars than most railroads even owned!

And as with their other cars, the NYC saw small railroads copying their designs. I'll get into these cars in detail when I discuss the 1700-series kits, but here are two Detroit-area railroads that copied the NYC's 1910 designs for their own use. In the 1920s, these cars were likewise upgraded with various styles of steel ends, and some were downgraded to plain boxcars with a single side door.



*Both photos Al Westerfield collection*

If you stare at enough pre-WWII photos of yards and freight terminals in major cities, you'll start noticing ventilated boxcars. They're absolutely everywhere and are by far the most commonly seen specialty car in early railroading. Every railroad had at least a few on their rosters at one time or another. For example, the Wheeling & Lake Erie had some and the Reading had a lot of them. But ventilated boxcars are a sadly ignored side note for manufacturers; besides the (usually unavailable) Con-Cor model and a few 40-foot resin models there are very few options for modeling these necessary cars. If you need a Southern ventilated car, or IC, or C&O, or even one from the Nickel Plate, you're forced to compromise or not have them at all. Modifying the new Accurail models will allow us to compromise a little more easily, and come up with better representational models for our fleets.

A good example of an easily-modelable ventilated car is Flemingsburg & Northern 97856, one of 20 ventilated boxcars on their roster in 1945. These cars are most likely secondhand, but I haven't been able to locate a likely original owner. The railroad shut down in 1955, and these cars were scrapped at that point.



*Ted Culotta collection*

So there you have it: dozens of uses for the Accurail 1300-series short boxcar kits, representing well over 60,000 boxcars built for American and Canadian railroads. Some of the cars I've touched on above will be compromises or stand-ins, but until companies step up and start offering more correct short boxcar models, these Accurail cars will do nicely!

In my next installation of this series, I'll take a look at Accurail's upcoming 1400-series models, which are similar to the 1300-series kits, but with straight steel center sill underframes. Stay tuned!