ACCURAIL'S NEW SHORT BOXCAR MODEL AND ITS MATCHES

PART THREE: THE 1700-SERIES KITS

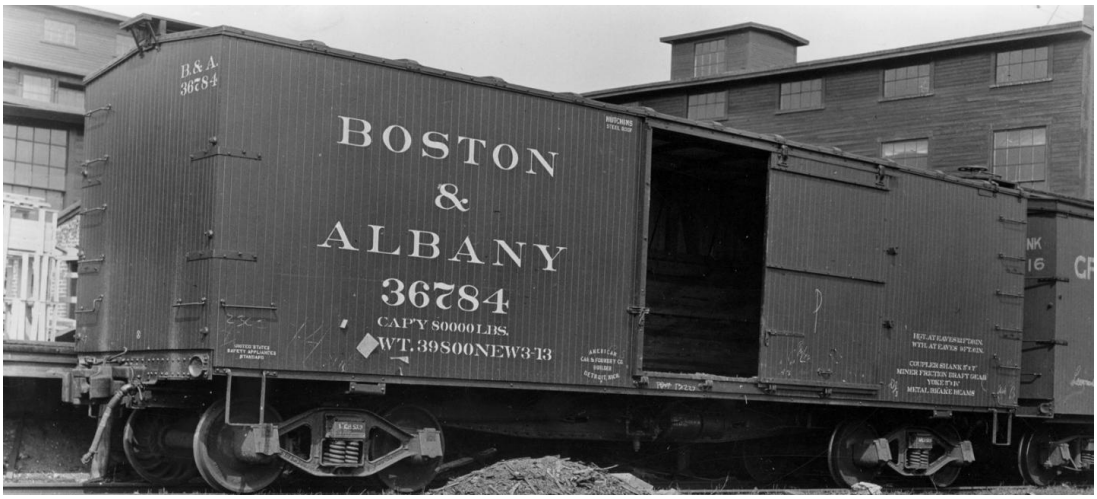
By Ray Breyer

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

Actual 1700-series body shell, fresh out of the mold! *Photo courtesy of Accurail*

Accurail's upcoming 1700-series kits will be a welcome addition for modelers who need a fleet of boxcars for the years between 1910 and 1930. The first large number of boxcars built with heavy fishbelly steel center sills, these wood-ended cars were generally built between 1910 and 1915, and survived largely unchanged up to the Depression. Many railroads experimented with this car body type, especially the underframe, which was new, strong, and promised to be very reliable. Finding paint schemes and decent matches for this base model is easy for pre-WWII modelers, while postwar modelers may generally want them for their MOW fleets.

THE 1700-SERIES KITS:



An almost brand new B&A boxcar stands ready to be loaded in mid-1913. *NYCSHS Archives*

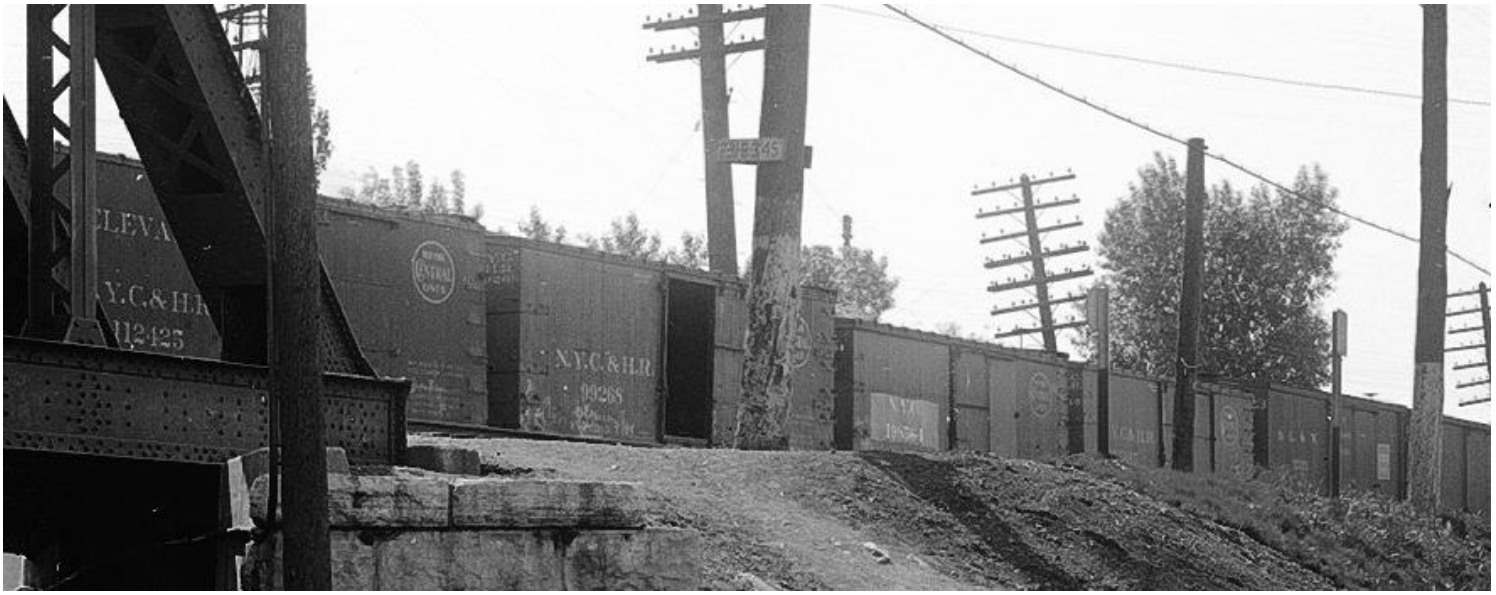
Accurail has announced an amazing fifteen road names in the initial release of the 1700-series kits, in addition to an undecorated model (#1700) and two versions painted and lettered with dimensional data only (#1798 in mineral red, and #1799 in oxide red). Be careful when choosing a particular model: these cars were built near the beginning of the 20th Century, at a time when railroad paint schemes were in constant flux, and when cars were repainted often. A 1909-built car running in 1928 would likely be wearing its third paint scheme, so the as-delivered paint won't be appropriate for that year. Additionally, most of the prototype cars built with all-wood bodies that survived into the Depression years and beyond had been upgraded in the 1920s with new steel roofs and corrugated steel ends. Those cars are best represented by Accurail's 1400-series models.

As with the 1400-series kits, the 1700s reflect a New York Central & Hudson River mechanical department freight car design. According to the NYC's 1924 freight car diagram book the company built 25,980 of these cars to the same general design, as well as 8,450 similar automobile boxcars, for eight different railroads under NYC control. That number is actually low, since it doesn't include many cars built for the LE&W, P&E and Rutland. Reviewing AC&F builder's photos for the 1909-1917 period, the number also doesn't reflect over 10,500 similar cars built for at least 14 different railroads. In all, well in excess of 40,000 boxcars were built to this general design in the decade leading up to World War I, accounting for nearly 2% of all boxcars in North America.

1701: NEW YORK CENTRAL & HUDSON RIVER

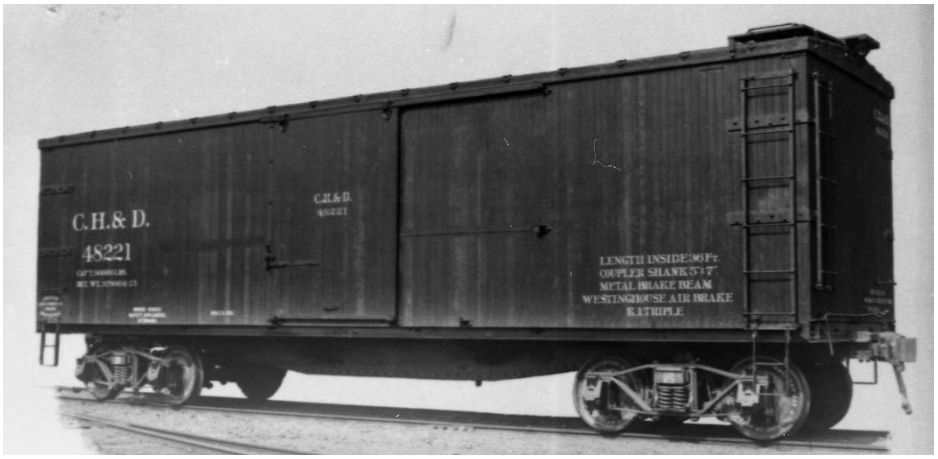
ACF builder's photo, Al Westerfield collection

Between 1910 and 1912, the NYC&HR built 9,000 of these boxcars (and 1,000 nearly identical auto cars) for their own use, in addition to several thousand more built for various affiliated railroads. In 1914 many of the Vanderbilt railroad holdings were reorganized and consolidated into the New York Central Railroad, so by about 1920 these reporting marks would have disappeared.



DL&W mainline just west of Hoboken in June 1915. The third car from the left is wearing a "patch job", showing the new company reporting marks. *DL&W company photo, Steamtown NPS collection, image number C2736*

1702: BALTIMORE & OHIO

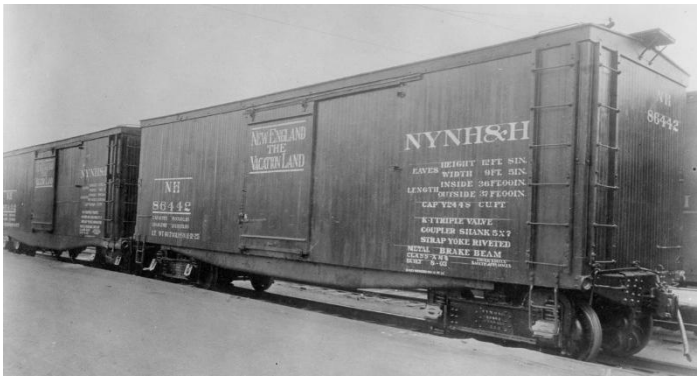


ACF builder's photo, Al Westerfield collection

The above photo is of a Cincinnati, Hamilton and Dayton boxcar, one of 1,000 boxcars that road bought from ACF in January 1915. By December 1917 the CH&D was no more, having been bought by the B&O. These cars (500 plain boxcars and 500 automobile cars) were re-lettered over the next five years or so into B&O number series 185000-185499 (class M-23, XM) and 199500-199999 (class M-22, XA). The cars ran without much in the way of upgrades, and there's no evidence that they were ever rebuilt with steel ends. There were still 936 of them on the B&O's roster in 1930, but the group was largely scrapped by the end of the Great Depression. In 1945 only three of the cars were still running, and they were all gone by 1947.

B&O 185099 in Hoboken in early spring 1926. DL&W company photo, Steamtown NPS collection, image X4523

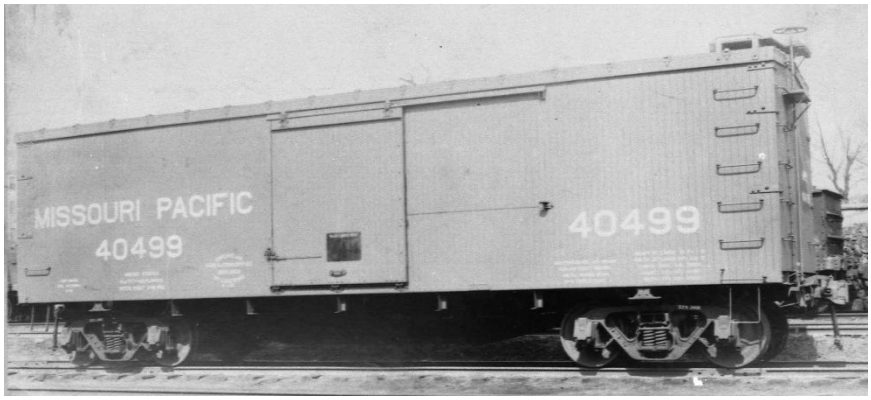
1703: NEW HAVEN



Ted Culotta collection

As with Accurail kit #1402 (see chapter two of this survey), these cars are stand-ins at best. They're mostly fine from the lower edge of the carbody up, but down to the rail heads are generally inaccurate, since the prototype cars either had straight steel center sill underframes or fishbelly side, rather than center, sills.

1704: MISSOURI PACIFIC



ACF builder's photo, Al Westerfield collection

As with Accurail's kit #1303, this MP offering is an acceptable stand-in model. The model will best match MP 40000-40499, built by ACF in 1912. The prototype cars were 9" longer and 7" lower than Accurail's model, and were built with a slightly different underframe. Still, with only a little work (cutting off the model's exposed side sill to lower the car and then adding a few new details) the model can do a good job representing these 500 cars, which lasted into the beginning of WWII. With a bit more work, the models can also be used to model the MP's 40500-40999 series cars, built by Standard Steel in 1910.

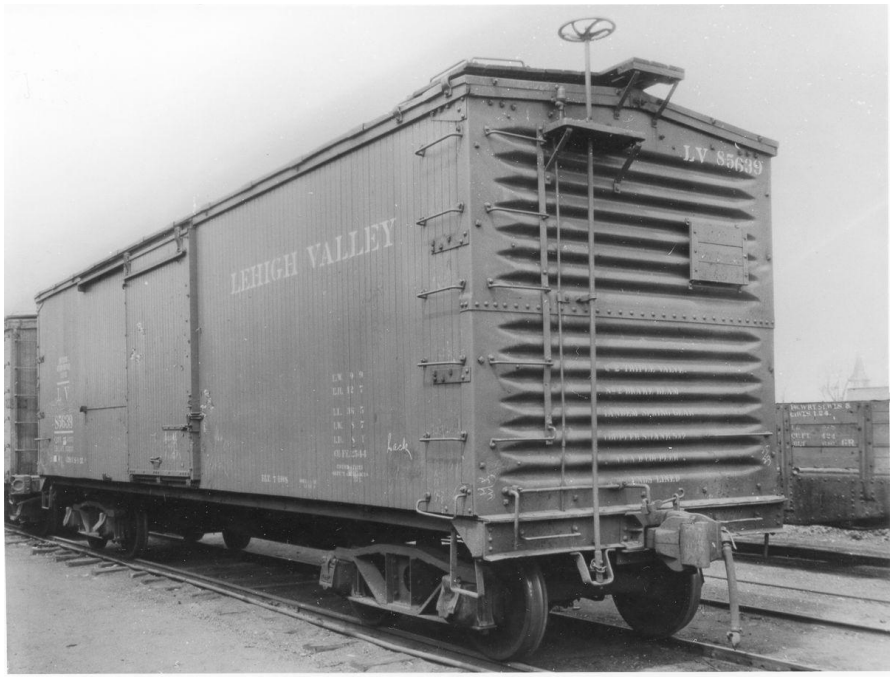
Ted Culotta collection

1705: MISSOURI-KANSAS-TEXAS

ACF builder's photo, Al Westerfield collection

This Accurail model is the as-built mate to kit #1307. Both models reflect the same prototypes, just at different periods of their lives. This kit represents the 1,800 cars of the 74100-75679 and 170000-170228 series cars from the time they were built in 1913, to the time when the last of these cars would have been rebuilt with corrugated steel ends by early 1930. Appropriately, these models will be painted brown, while kit 1307 will be yellow; running both at the same time isn't appropriate! (see Steve Hedlund's blog post on the color change for the Katy's house car fleet).

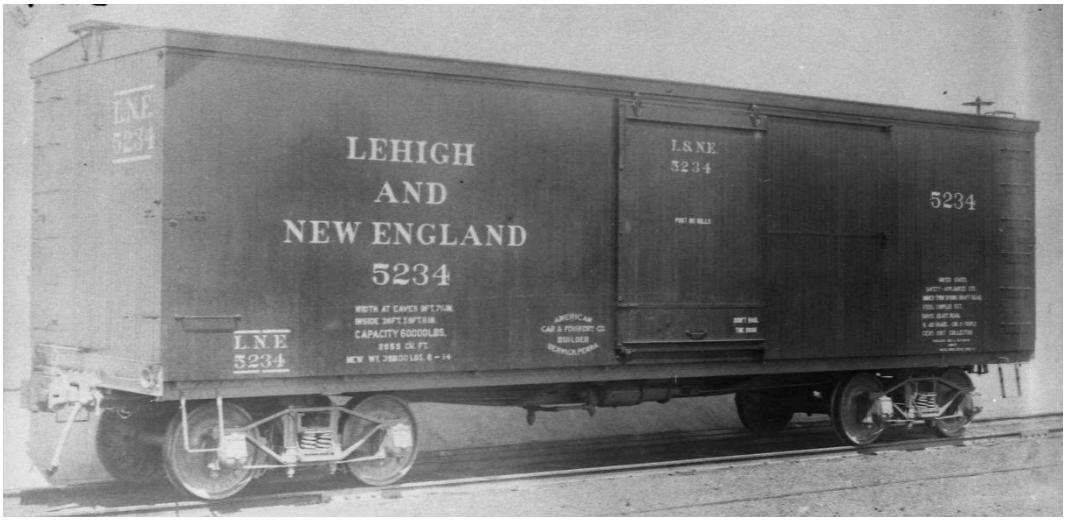
1706: LEHIGH VALLEY

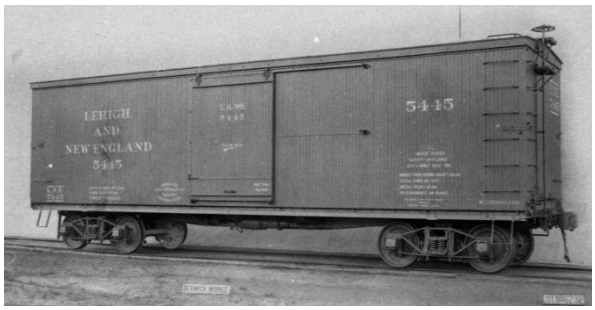


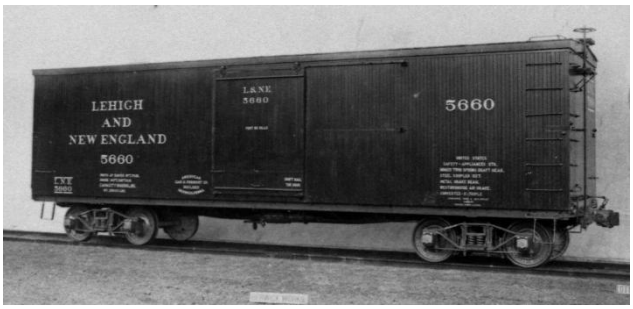
LV 85639, seen above on Long Island in 1933, is another good photo of a pre-1910 built car well after being rebuilt with steel ends. Originally from a large group of boxcars built by various Eastern car builders in the 1909-1912 period, the cars were scattered through the Lehigh Valley's 81151-88201 number series. All of them started off with overbuilt fishbelly underframes and all-wood bodies. The LV began their car rebuilding program in 1924, and by 1930 had modified about 70% of the cars with newer steel roofs and corrugated steel ends. The program was cancelled during the Depression, and the cars began to be scrapped in large numbers, some only a couple of years after being rebuilt. In 1930 these 6,740 cars represented 55% of the LV's boxcar fleet (1,475 of which retained their wood ends), but by 1945 there were only 19 of them left. In 1950 there were still seven on the roster, including one with wood ends, but by 1952 they had all been retired.

The Accurail model matches the core dimensions and general spotting features of these LV boxcars fairly well. The end beams will require some work, and the trucks might be problematic to match. Notice the one major discrepancy that the model will have: it won't have 'wrong way' doors! Those will require a little ingenuity to represent.

1707: LEHIGH & NEW ENGLAND



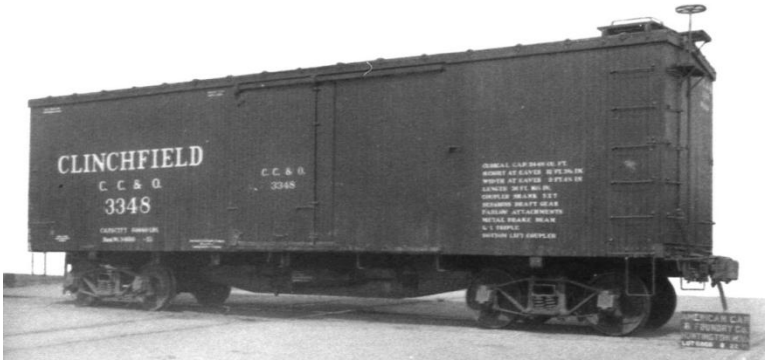




ACF builder's photos, Al Westerfield collection

The 1,100 cars of the L&NE's 5001-6100 series were built in ACF's Berwick PA shops between 1911 and 1914, and represented their entire boxcar fleet between 1916 and the late 1920s. Into the mid-1930s these cars still made up half of their boxcar fleet, even as the cars were being scrapped due to Depression-era traffic downturns. By the beginning of WWII only a handful of these boxcars were still on the roster, and they were all gone by 1943, having never been substantially rebuilt during their lifetimes.

1708: CLINCHFIELD



ACF builder's photo, Al Westerfield collection

The Carolina, Clinchfield & Ohio bought 250 of these cars from ACF in 1912, and another 475 in 1916. The cars were basically stock ACF 'catalog cars', but built with Wagner-style door hardware (a somewhat common appliance whose popularity peaked sometime around 1906). The doors were changed to a conventional outside hung style shortly after WWI, meaning that the Accurail version of these cars will be best suited for a post-1920 themed layout. 649 of the cars were still on the roster in 1930, and 46 were still running at the tail end of WWII. The last two of the cars finally dropped off the Clinchfield's roster in 1956. It's unknown if any of the cars were rebuilt with steel ends.

1709: LAKE SHORE & MICHIGAN SOUTHERN (NYC)

ACF builder's photo, Al Westerfield collection

LS&MS 86100 was one of 5,765 cars of this type that the New York Central Lines built for that affiliate road, as well as 3,000 similar auto boxcars. The NYC's consolidation in 1914 meant that these boxcars were eventually repainted and renumbered into the NYC's 248000-256749 series, with the last of the LS&MS-painted cars disappearing around 1926.

1710: ANN ARBOR

ACF builder's photo, Al Westerfield collection

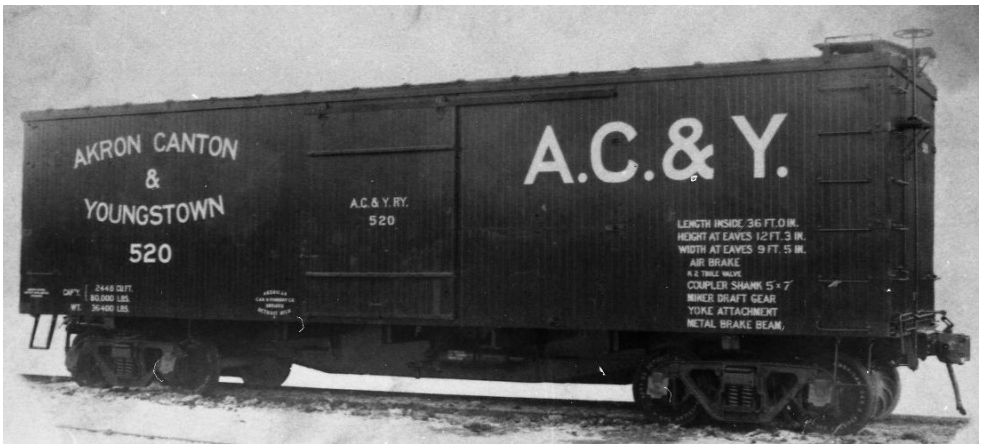
This is an unusual car. For some reason the Ann Arbor bought exactly ONE of them, along with one almost identical auto boxcar (car #10021, shown below in the kitbashing section) in 1913. The cars, except for the addition of end lumber doors, were generally identical to the NYC standard car design, and were most likely bought as trial cars. These two cars were buried in the AA's 6000-6399 car series; the rest of the cars were of a similar general type, but looked completely different. Nobody knows what happened to these two oddballs on the AA roster, but considering how durable the design was it's possible that the cars ran into WWII. The last car of the number series was retired in 1951.

1711: BIG FOUR (CCC&StL/NYC)

ACF builder's photo, Al Westerfield collection

The Big Four's share of these 26,000 NYCL-built boxcars was a paltry 1,500 cars, built in 1912. Largely rebuilt during the 1920s with various types of ends (occasionally 7/7 corrugated steel, but more commonly various types of odd metal straps added around the existing wood), the cars survived as a group up to 1936 when the NYC underwent another corporate reorganization which turned the CCC&StL into a 'paper only' company. The last of these cars were renumbered as New York Central equipment or retired by 1946.

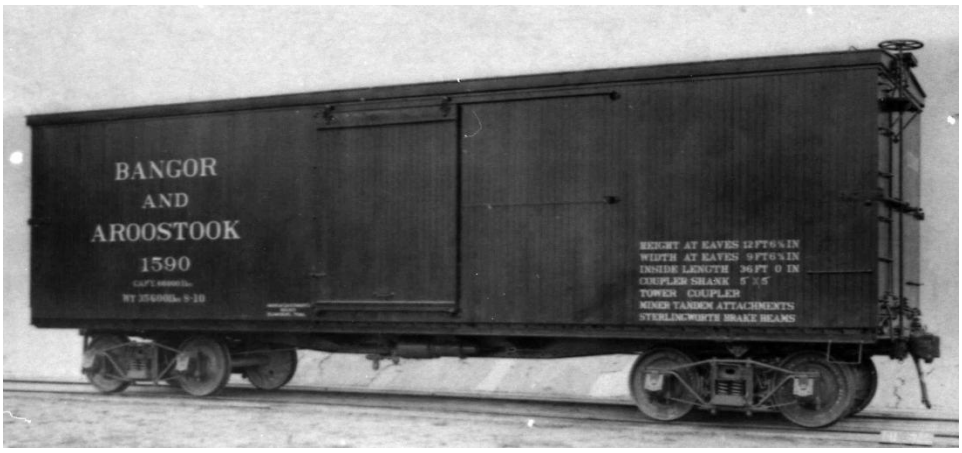
1712: AKRON, CANTON & YOUNGSTOWN



ACF builder's photo, Al Westerfield collection

A brand new railroad called for brand new rolling stock, and in 1912, the newly minted AC&Y took delivery of 100 shiny new freight cars from ACF, including 35 boxcars in the 501-535 series. These were ACF 'catalog cars', and very similar to others on this list. By the mid-1920s the AC&Y had begun re-tasking many of the cars to other purposes, and by 1926 had transformed the bulk of the fleet into 11 cabooses, 10 flats, and 5 MOW cars. The remaining seven cars were rebuilt with steel ends in 1926, and all retired from the revenue roster by 1936.

1713: BANGOR & AROOSTOOK

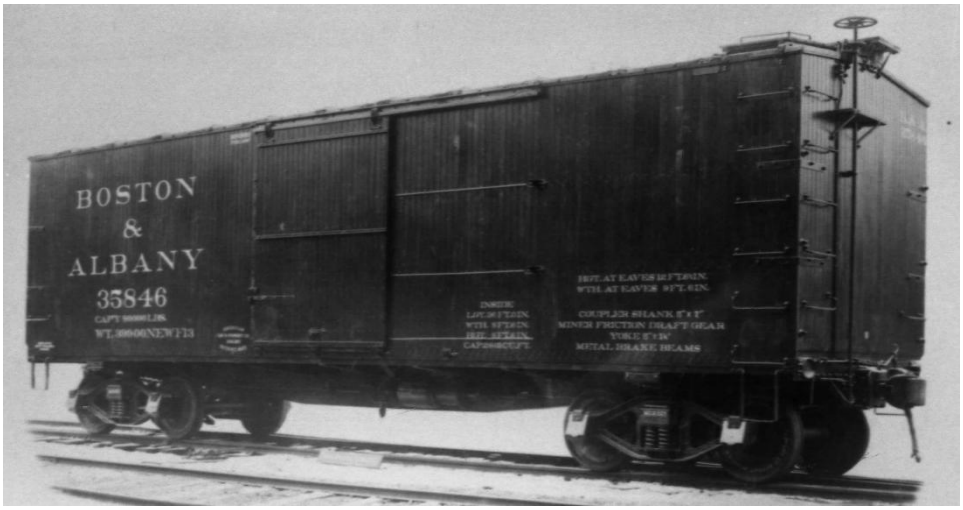


ACF builder's photo, Al Westerfield collection

The BAR bought 200 of these cars from ACF in 1910 and numbered them 1501-1700. The railroad must not have liked them very much, because although the road kept 30-ton rated 36-foot boxcars on their roster for a very long time, these cars were off their roster by 1930

Slightly smaller than the basic Accurail model, they nevertheless look the part. One feature that may seem odd to modelers used to modern eras are the use of end trussrods used to reinforce the ends before all-steel ends were fully trusted. These were far more common than most modelers think, especially in the 1905-1917 period, and are easy to model with short Tichy queenposts and a little fishing line.

1714: BOSTON & ALBANY



ACF builder's photo, Al Westerfield collection

The B&A, one of the few NYC-affiliated railroads that kept its own corporate identity through most of the 20th Century, was allocated 5,000 of these boxcars in 1912. Except for a small number of 40-foot long auto boxcars these were the only boxcars the B&A owned through the 'Teens and 'Twenties, until receiving 1,000 'USRA' steel boxcars in 1928. Even then, these cars made up at least half of the B&A's boxcar fleet through the end of WWII.

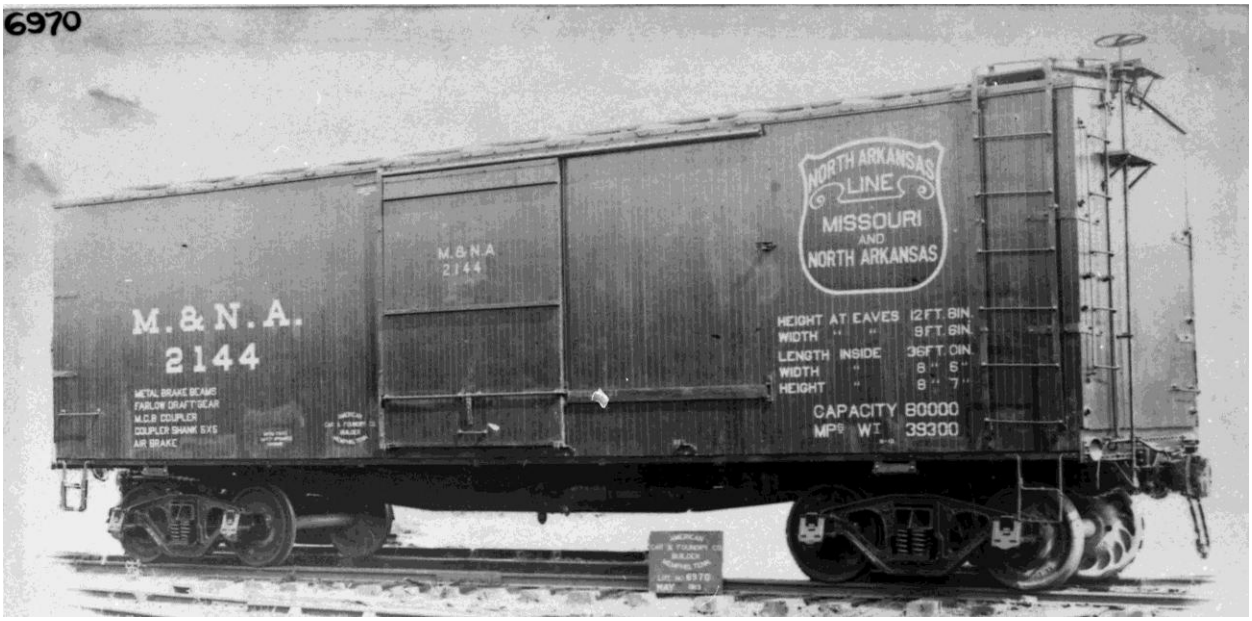
The railroad rebuilt the bulk of these cars per NYC guidelines in the mid-Twenties, with new steel roofs and corrugated steel ends ('inward' rib Dreadnaught or 7/7). For some reason the railroad didn't rebuild them all, and there were still seven of them with original wood ends on the roster in 1945, and one straggler still rolling when the last cars were retired in 1952.

1715: CHICAGO GREAT WESTERN

ACF builder's photo, Al Westerfield collection

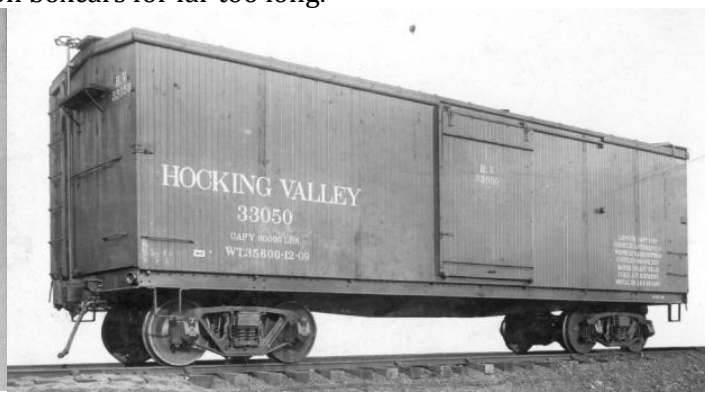
This is the only complete 'foobie' car in this group. The CGW did have short boxcars, but they all had all-wood underframes. By the time large fishbelly center sills became common the CGW, blessed with generous western-road clearances, had already transitioned to tall 40-foot long boxcars as shown by car 22392. The CGW did keep 36-footers on their roster into the 1930s (700 of them in 1930, gone by 1940), so the body's paint scheme should be good; just swap the underframes with an 1800-series kit, add trussrods, and check the road number!

OTHER PROTOTYPE ROAD NAMES

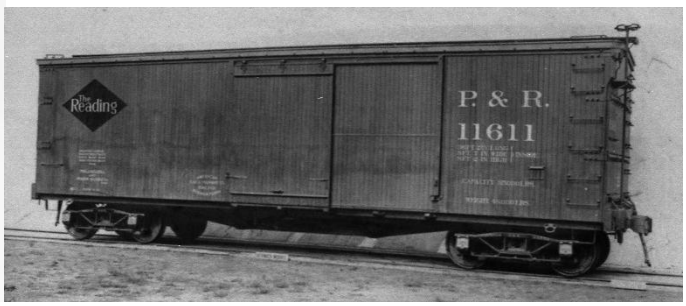


ACF builder's photo, Al Westerfield collection

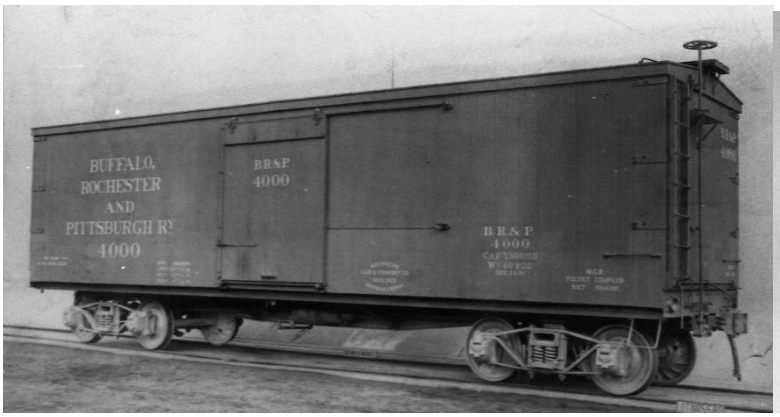
The potential for future road names in the 1700-series kit range is enormous, and is far larger than the other three types of kits combined. Just breezing through Al Westerfield's AC&F builder's photo collection I was able to find twenty other roads that Accurail hadn't even touched, and I found at least another fifteen railroads that had cars similar enough to add to the list. This is very good news for modelers, especially for those modeling the years before 1935 who have been starved for good, affordable, and common boxcars for far too long.



Rather than boring everyone with a lengthy explanation of each and every car I've discovered, I'll just highlight a few of the better ones here with photos. Tracking down number series and changes over the years is easy enough to do by reviewing various ORERs online. Not all of these cars are 'perfect' matches for the Accurail model, but with a little modeling work most will serve well enough as fleet grade stand-ins and place holders.



(as an aside, the cars pictured in this section alone account for 8,165 cars built for 13 railroads)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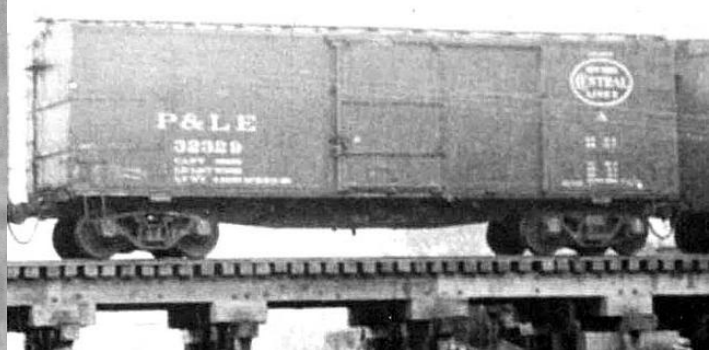
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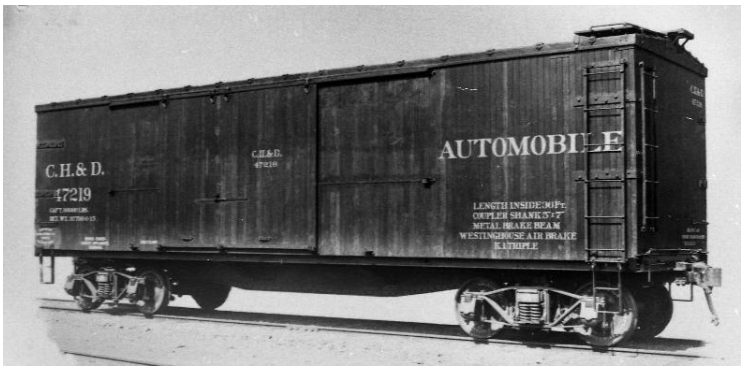
WESTERN MARYLAND
W.M.
25933

CP&StL 8114, built by ACF in August 1913, is one of the many 'catalog cars' built by ACF that were dimensionally very similar to the NYC-designed cars that the Accurail models are based on. Note that dimensionally the car is very similar to the older-technology, all-wood NYO&W car that it's coupled to (that car can be modeled by modifying an 1800-series kit). The 200 cars of the CP&StL's 8000-8199 series boxcars went to the CS&StL in the mid-1920s, and a few may have been acquired as MOW cars by the C&IM. DL&W company photo, Steamtown NPS collection, image X1630

KITBASHING POTENTIAL

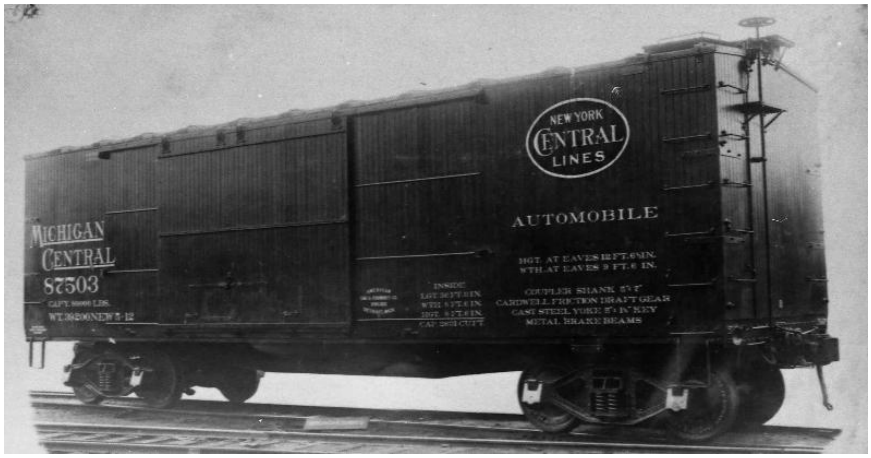
ACF builder's photo, Al Westerfield collection

As with the other kits of this range, there will be several good opportunities for relatively simple kitbashes, with automobile boxcars and ventilated boxcars being the most obvious targets. While a few of them really won't be good candidates (like the one-of Ann Arbor 10021), most were built in large enough numbers to be useful additions to any pre-1950 fleet.



ACF builder's photos, Al Westerfield collection

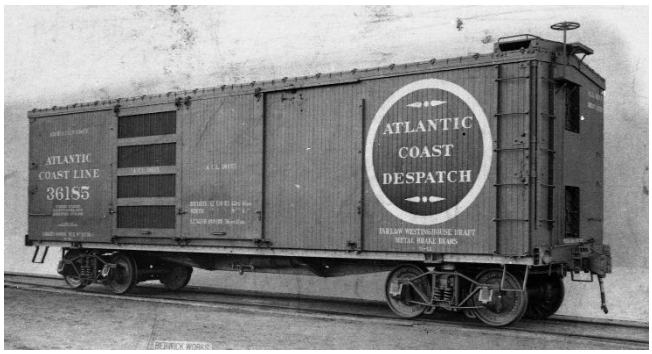
The 500 cars of the CH&D 47000-47499 series were rolled into the B&O's 199500-199999 series in 1918, and were all retired by 1947. Downgraded to plain boxcars just before the Great Depression, they always retained their double doors. Similarly, D&M 1200-1224 were downgraded to plain boxcars around 1935; all were retired by 1950.

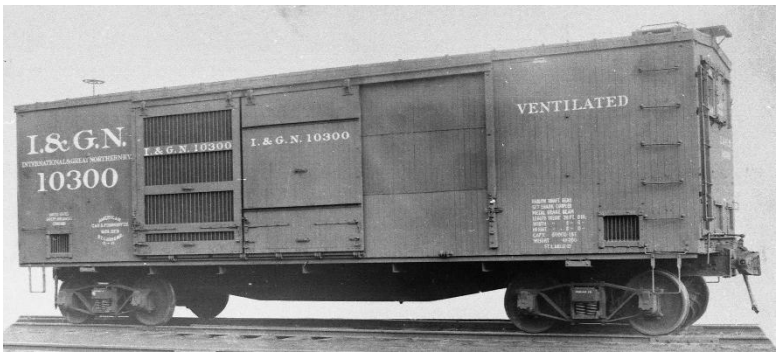


ACF builder's photo, Al Westerfield collection

The most common type of short automobile boxcar to run in North America is typefied by MC 87503. Part of 4,450 identical cars built for the MC (along with another 1,000 for the NYC&HR and 3,000 for the LS&MS), the cars remained on the MC roster until about 1926, when all of the short auto boxcars were renumbered into NYC 230000, 240000 and 250000 number series. At that point most were rebuilt with steel ends, and many were downgraded to plain boxcars, most keeping their double doors. A few with steel ends survived long enough to be photographed in color, but all were off the NYC roster by 1953.

NYC 265547 in Proviso yard, in the winter of 1942. Jack Delano photo, Library of Congress file 1a34639

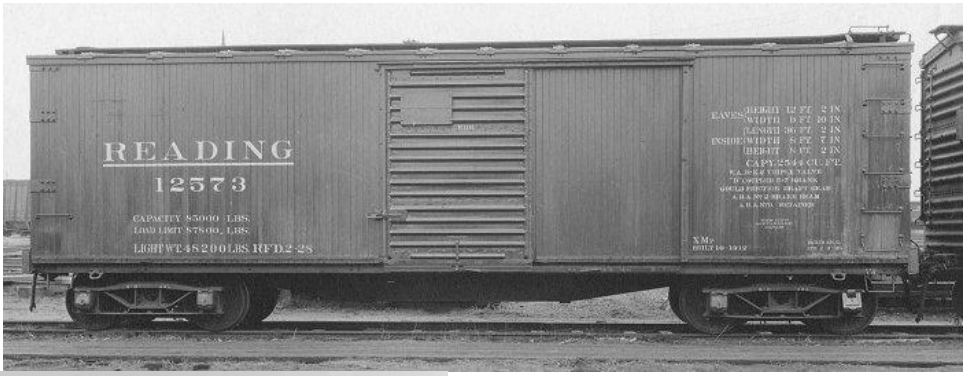


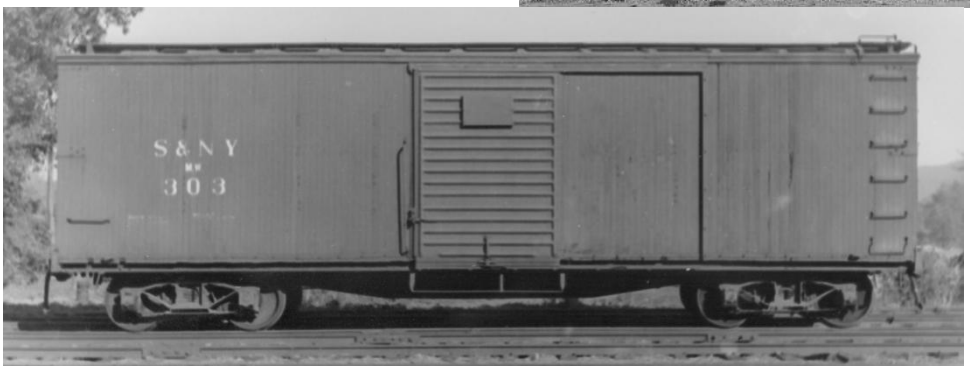


Using these new Accurail models as the starting points for various ventilated boxcars is another fairly straightforward kitbashing option. Although the end vents and secondary doors are problematic, some aftermarket parts are available from small suppliers, with many on Shapeways.

And depending on a modeler's specific traffic or locale, you might be able to justify many of these conversions. ACL 36185-41284 were built by several builders in 1911 and 1912, and represented 25% of that road's 20,383 ventilated boxcars in 1917. 4,890 of them were still in service at the beginning of the Depression, but the resulting downturn saw the ACL slash their VM fleet. By 1945 the road was down to just 2,936 of the car type, and all of these specific cars had been scrapped.

Similarly, I-GN 10101-10300 were built by ACF in 1913, and 183 of the cars survived into 1930. But the Depression era traffic downturn saw the MP scrap all of their ventilated boxcars, and these cars disappeared by 1935.





During the late 1920s and early 1930s some railroads experimented with adding all-steel doors onto short boxcars. While not common, on certain railroads there were enough cars converted this way that they're legitimate modeling subjects. For the 1400-series kits that means C&O cars, and for these 1700-series kits that means Reading cars.

The Philadelphia & Reading built 8,000 generally similar boxcars in their XMk through XMr classes. Much like the NYC's post-1910 short boxcar designs, the Reading's cars were all standardized around the same basic underframe and 'box', with gradual changes to the doors, roofs, and hardware. Beginning in 1926 the Reading began a haphazard program of adding new trucks and steel ends, roofs, and doors to these cars (see the Reading Modeler for specifics).

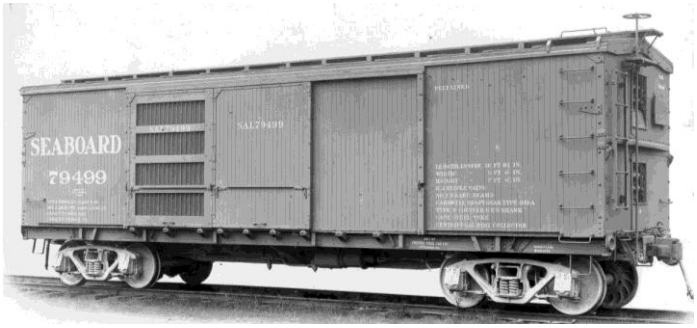
The eccentric way that the cars were upgraded means that there are plenty of opportunities to model subtle variations in this fleet of 'identical' cars.

One big problem with this sort of conversion will be in adding new doors. Youngstown doors are available from many suppliers, but most will have to be modified to fit onto this lower-height model (and to get the right number of ribs and rivet lines). Once you have a door you'll also have to figure out how to either cut out the cast-on door or sand it down to accept the new part.

The wood-ended versions of these cars were off the Reading's revenue roster by 1951, but survived into the early years of Conrail as MOW tool and bunk cars. Dozens of the cars were also sold off on the secondhand market in the years leading up to WWII, especially to industrial and short lines. S&NY 303 is one xample, having started off life as P&R 2784. The car was sold to the S&NY on 3/9/1936. By March 1942 the S&NY had shut down, and the boxcar was either scrapped in Towanda, or used to shuttle TNT around in the Susquehanna Ordnance Depot during WWII.

EXTREME KITBASHING?

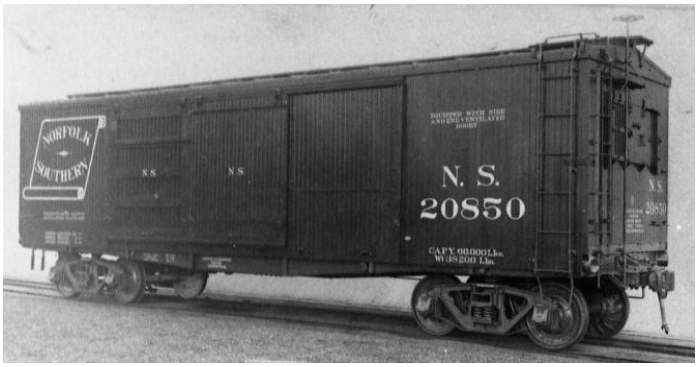
These new Accurail models will be welcome additions to many modeler's parts & projects stash. Since there were so many of the cars built, and since so many of them survived in secondary roles for decades past their revenue lives, there are ample opportunities for modelers to use the models for layouts set in the Sixties, Seventies, and even Eighties. Besides projects like the ventilated and auto boxcars above, there are projects ranging from the obscure, to extremely dedicated, to ludicrous.



Depending on how badly you need ventilated boxcars in your pre-WWII freight car fleet, you can use these models as the starting point for these 1,000 Seaboard cars. The task won't be easy: you'll have to lower the body, add new doors and associated harware, add the end vents and hat section end rib, and deepen the side sill to add the exposed side bracing. You'd be better off just scratchbuilding one of these for a resin master.

AC&YHS collection

Speaking of dedication, I've already heard from AC&Y modelers who are excited to see these models, since they will give them a good starting point for the eleven boxcars converted into cabooses. Lots of railroads brewed up these homemade boxcar cabooses before WWII; I've made a couple of the Clover Leaf versions used on the Nickel Plate. My project started off by using a Roundhouse caboose cupola and scratchbuilding everything below it. I think the AC&Y guys will be doing something similar, and scratching everything above the frame!



And finally, there's the unfortunate cases of boxcars that at arm's length might look a bit similar to these Accurail models, but which have the unfortunate habit of having fishbelly SIDE sills. The Illinois Central, New Haven and several southern-region railroads owned quite a few of these cars, making them attractive modeling subjects. Sadly, aside from one 1970s-vintage, and almost completely inaccurate MDC offering, nobody's produced this boxcar type as a kit, making this sort of 'kitbash in desperation' modeling necessary.

LATE BREAKING SNEAK PEEK!

While beginning to write this section of my review, I was greeted at my door by a little box. When opened, it contained one of each of the new Accurail car bodies, fresh out the molds (they still had new casting smell). Here's a quick look at each of them.

This view is of the ends of an Accurail 1300-1700 series car, wedged between a Roundhouse short reefer and an Accurail USRA double sheathed boxcar, to give you all some idea of the size differences between these three types of early boxcar models.