



– by *M.R. Snell*
Photos by the author

Recycling – The 35 Dollar Challenge – Part 2

Matt Snell continues his pursuit of modeling 5 modern era rail cars in HO for \$35. In this installment, Matt models an “IPD” car.



In our first installment we purchased five inexpensive cars with the idea of turning them into railcars acquired secondhand for a regional railroad – the fictitious Nebraska Gateway System. After making several simple mechanical and aesthetic improvements we are now ready to take them from stock models to customized secondhand

cars using a variety of techniques to transform them.

The first car to undergo the transformation will be HCRC 807, an Athearn boxcar factory decorated in the scheme of the Hillsdale County Railroad, one of many “IPD” (Incentive-Per-Diem) boxcars of the 1970’s and 1980’s. Under the IPD program a daily fee was paid to the

Figure 27: This installment’s finished car on the layout.

owner of the equipment regardless of who was using it. This allowed equipment to be loaded to any consignee without regard to routing, similar to the manner Railboxes operate in. Investment groups would purchase the actual boxcar, then team up with a smaller road for the use of their

name and reporting marks to fulfill the AAR's interchange requirements. In exchange the road received a portion of the profits, helping the bottom line of many struggling shortlines.

As the economy deteriorated so did the IPD program, causing many of these cars to show up in various second hand fleets, some even going on to third or fourth owners. The Hillsdale County boxcar is a prime example of an IPD car soldiering on and I based the treatment this car would receive on HS 10195, an ex-Corinth and Counce boxcar. Photographed in 2010, this boxcar

still wears the C and C livery with only the reporting marks and road number changed, carrying a name that has been defunct since the 1990's. Replicating this treatment would allow me to display a modified version of the former owner's livery, creating a unique car with a history.



Figure 28: IPD cars were common throughout the 1980s, wearing liveries of shortlines and regional roads. Some even still exist today, making this type of car suitable for a 30 year timespan.



Figure 29: This ex-Corinth & Counce boxcar still remains in its former owners full livery. Only the reporting mark and number indicate it is now owned by the H&S.

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Figure 4

Figure 4: To learn the heritage of this H&S boxcar one only has to look at the peeling CSX lettering on the upper right side.



Figure 5



Figure 6



Figure 7

Figure 5-6: Secondhand equipment often continues to wear its previous owner's livery with only a quick change of the reporting marks making it acceptable for interchange. These two hoppers, both in 'fallen-flag' liveries, illustrate examples of quick relettering, one more haphazard than the other.

Figure 7: Often secondhand equipment can be seen wearing outdated liveries, presenting us an opportunity to use a model that may be 'out of era' for the time frame we model. This ATGX covered hopper was seen in 2010 carrying 1980s-style lube stencils.

STEP 2: Weathering the Car and Changing the Reporting Marks

Once the HILLSDALE COUNTY lettering and logo had been distressed it was time to weather the car, further making it reflect its age. Weathering can be done using any method you are comfortable with including paint or chalks. I chose a mixture of black and brown chalk powders which allowed me to blend the hazy areas left from sanding with the shinier surfaces of the car sides, evening out the paint texture. Once the weathering was complete the chalk was sealed with Testor's Dullcote, preventing it from damage as I moved on to the next step – changing the reporting marks.

Cars acquired secondhand are often pressed into service with only a change of reportings marks. While the lettering is always changed to the acquiring road's, the numbering of a car is left to the discretion of the roads fleet manager. A visit trackside will yield countless examples of cars with small paint patches or decals with new letters, numbers, or both, in as many variations of color, size, and font as one can imagine. Bearing this in mind I chose to only change the reporting marks to those of the Nebraska Gateway, while leaving the factory applied car number intact to save work.



Figure 34



Figure 35

Figures 34-35: Several methods are used by the prototype when changing reporting marks. One method is to paint over the old markings and a second is to apply a colored sticker, sometimes closely matching the color of the car.

STEP 4: Reporting Marks



Figure 47



Figure 49



Figure 48



Figure 50

Figures 47-48: The new reporting marks applied to secondhand cars are not always neatly applied. This ex-CNW hopper now wearing HLMX markings illustrates marks both on and off the patches applied over the CNW markings and this can be easily replicated on a model, creating an interesting effect.

Figures 49-50: While we often focus on the sides of a car the ends also contain reporting marks that can be changed the same way, just employing smaller patches.

STEP 4: Reporting Marks *Continued ...*

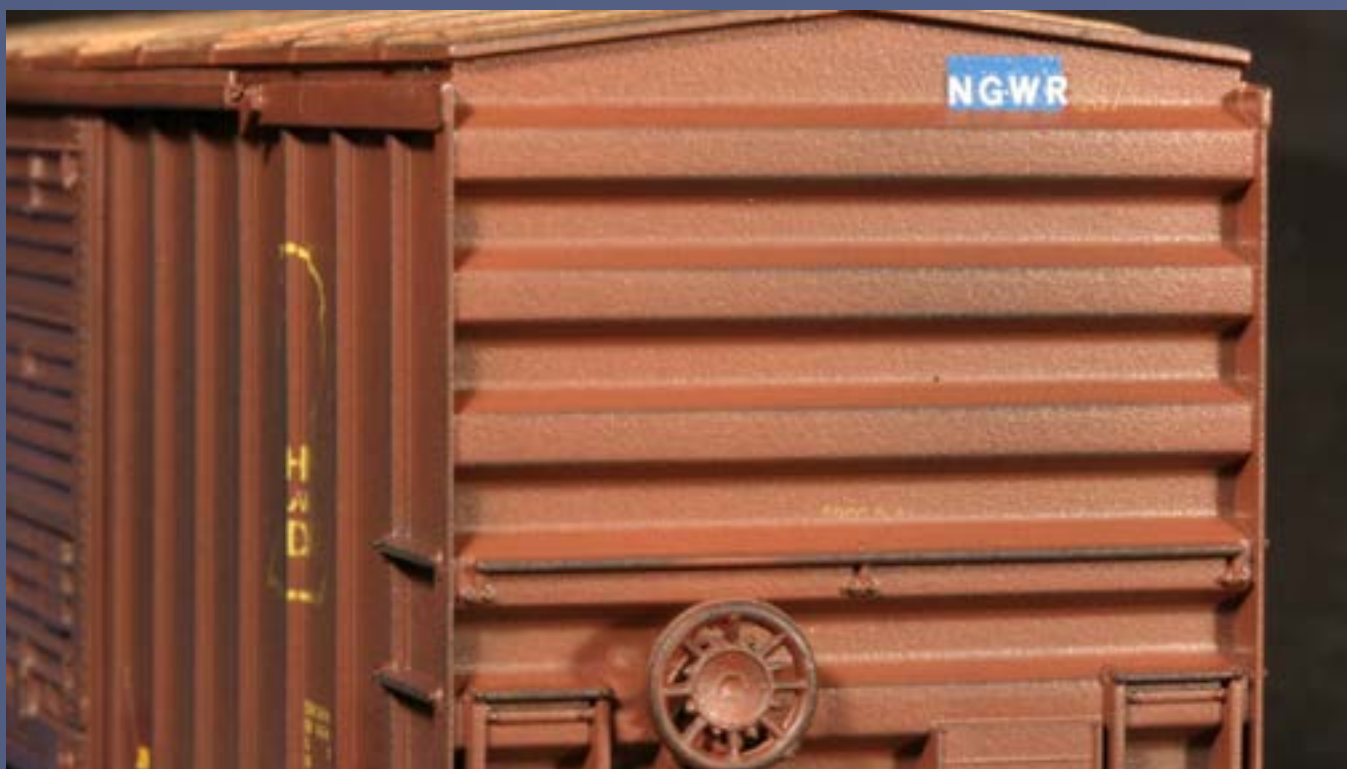
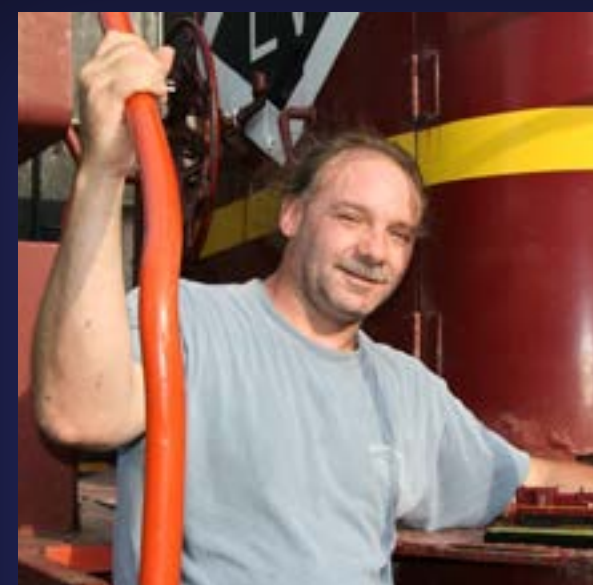


Figure 51: The addition of COTS stencils, ACI labels or wheel inspection dots can be used to date a car to a specific era. The conspicuity striping applied to this boxcar dates the era of this car to 2005 – present.

Now we have a customized car that shows both its new ownership and origins but does it truly represent the era it is destined to be used in? Over time regulations for freight car markings have changed and while it is our choice to either include or exclude older style markings we should always include the markings for the era a car is being modeled for. Fortunately the addition of COTS stencils (the small black and white rectangles found on the right side of the car), ACI labels (Automatic Car Identification labels resemble colored barcodes), or conspicuity striping can all be done with a minimum of effort using various decal sets. In the case of the ex-Hillsdale box I added a 3-part COTS stencil and yellow 4"x18" striping, broadcasting that this car with a 1978 build date was alive and well in the post 2005 era. Below is a listing of decals (available from Microscale) for several mandated freight car markings along with the approximate eras each was used in:

- MC-4280 ACI Labels 1967-1977 (Although this system was discontinued many ACI labels lasted through the 1990's until cars were rebuilt, repainted, or scrapped)
- MC-5002 COTS stencils single panel 1970's
- MC 5003 COTS stencils 2 panel 1980's
- MC-5012 Wheel Inspection Dots 1980's (Although no longer required these could be seen into the 1990's)
- MC-5004 COTS stencils 3 panel 1990-present
- MC-4389 Conspicuity Striping – 2005+ (Mandated on new or rebuilt cars beginning in 2005 these yellow stripes are being applied to older equipment as it is shopped for repair or repainting.)



M.R. (Matt) Snell has been a model railroader and railfan for 30 years. His interest in railroading grew while growing up in New Jersey surrounded by freight and passenger rail lines.

Presently residing in Ohio, Matt and his wife Debie share the hobby, modeling the area he grew up in: north-central Jersey.

Their "Conrail New Jersey Division" layout has been featured in *Great Model Railroads*, *Rail Model Journal*, and in the Allen Keller *Great Model Railroads* DVD series. Matt has had articles in *Railroad Model Craftsman*, *RailModel Journal*, *Scale Rails* and *Model Railroader*, as well as online at railroad.net.