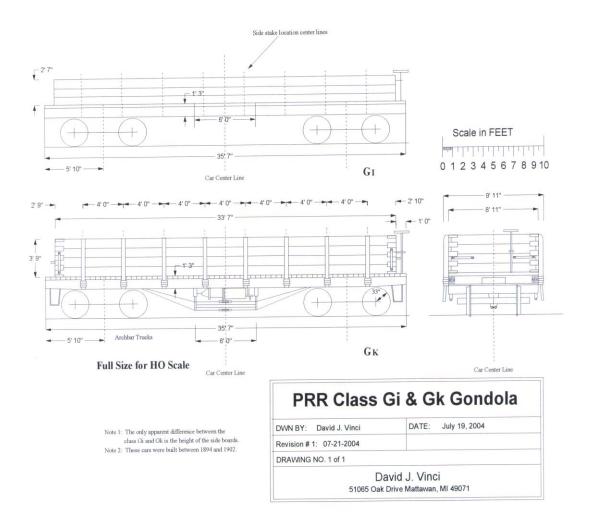# PRR Class Gi and Gk Wooden Gondola
By David J. Vinci

Most folks who model the Pennsy like the 1950s and while I share the attraction for the PRR of my childhood I like the 1920s just a bit more. So, ever since I read Ian Fischer's article in the Spring 1986 Keystone (Vol. 19 No. 1) on the Wooden Gondola Cars of the Pennsylvania System, I have been intending to model a couple of the "long Gondolas". I selected the class Gk and Gi since several hundred of each survived into the twenties, they have a fairly unique trussrod arrangement and they are essentially the same car only the Gk has one more board in height.
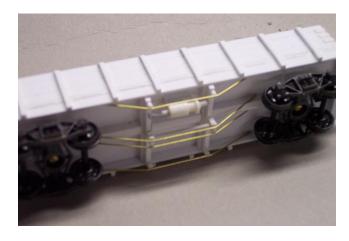
I built these wooden cars in HO scale and of styrene. Building from scratch isn't really any more difficult than a resin kit. One of the nice things about scratchbuilding is that you can decide the level of detail that you want to model. For example, I have never been able to make a straight line of rivets in any material so you won't find any on these models. I'm not a big fan of underframe detail since you really can't see it when the car is sitting on the layout, unless you flip the car off the rails, in which case the wrath of the Superintendent will be of far greater concern than the lack of underbody detail. Besides, I need some place to put weight, since the model's operational performance is also very important to me.
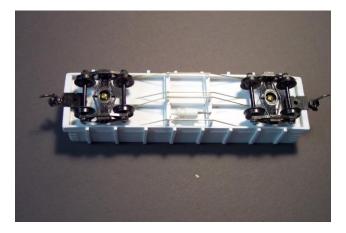
The first step for me was to study the above mentioned article and the photos and drawings. From that information I drew up some construction drawings using EasyCAD and my computer and printed them in full size for HO scale as they are presented here.

PRR Class Gi & Gk Gondola

DWN BY: David J. Vinci	DATE: July 19, 2004
Revision # 1: 07-21-2004	
DRAWING NO. 1 of 1	

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Note 1: The only apparent difference between the class Gi and Gk is the height of the side boards.
Note 2: These cars were built between 1894 and 1902.

Full Size for HO Scale

With the drawings complete, I decided to make one of each class at the same time. I first cut a floor from 0.040" plain sheet plastic 8' 11" wide by 35' 7" long. Then I cut another of 0.030" v-groove scribed material so that the scribing was parallel with the width. Then I laminated the two pieces together with liquid cement. This assembly makes a nice sturdy platform on which to construct the car. Check the floor for squareness with a drafting triangle or by measuring from corner to corner diagonally and make sure the measurements are the same both ways. It's a whole lot easier to correct this now than later. Next using a pencil, a square and your scale ruler, draw a center line from end to end on the bottom of the floor assembly and mark the truck centers and the trussrod bolster locations. You can lay the edge of the floor along the drawing and transfer the marks directly to the floor with your pencil. You can do that all during construction, which is why I like to make a full size, scale drawing.

I used a strip of 0.040" by 0.156" glued on edge to the bottom of the floor on each side. This yields a side sill height a little larger that the 1' 3" that it is supposed to be but it did a better job of hiding the lead shot I used for weight later. I used 0.125" by 0.125" stock for the end sills, the center sill, the support for the brake cylinder and the trussrod bolsters. I used a strip of 0.060" by 0.100" as the basis for the trussrod bolsters with a small length of styrene rod on each end. The center trussrod support supports a pair of rods over the center sill with a length of 0.060" square stock running between the supports. I used 0.020 brass rod for the trussrods. The truck bolsters I made using a laminated pile of five 2' square pieces of 0.040" plastic sitting on a strip of the same material that was 2' wide and the width of the car floor. Like I said, if you can't see it…
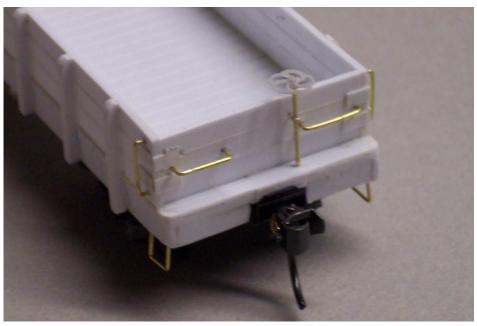
These two pictures show how the underbody came out with the trucks and couplers in place. I don't know what the actual frame work looked like but I didn't let a little thing like that stop things up. On one car I used a commercial K brake cylinder and on the other I made up one from some scrap plastic tubing and rod.

I used more plain 0.040" plain sheet to make the car sides. I cut the parts to size and then scribed the planks on both sides. The ends are made in the same way and then all four parts were glued to the floor.

The metal reenforcements that were present on the corners I simulated with some bits of 0.010" thick strips that I cut 1" long and glued in place. The ribs I made of 0.060" square stock that I cut to length and glued in place again using the drawing to mark their locations on the carbody. I left the excess hang out above the carside and then trimmed them flush. Then I added the profile at the top of the ribs all at once by sanding the top of the

carside. You have to be careful to sand only the ribs and not the edge of the side.

I used 0.020" brass rod for the grabirons, steps and brake staff because it's what I had on hand and after they're painted I think they look fine. You certainly could use flat stock for the steps and 0.015" or smaller wire for the grabirons.

I painted both cars with my version of Freight Car Red (FCR) which is currently a blend of Poly S Special Red Oxide, Reefer Orange and Caboose Red. It's mostly the Oxide with maybe 10% Orange and then I adjust with the Red. It does change a little from time to time but so did the Pennsy! The exterior and bottom of the car got 3 coats of the FCR. The interior of each car got

a coat of FCR then I added grey to simulate paint that was mostly worn away. Then I added a little further weathering with a bit of Poly S Rust, Weathered Black, and Rail Brown just to add a bit of grunge. The Kaydee archbar trucks are painted with Rail Brown and a touch of Rust and Weathered Black. By the way, I brush painted these cars.

I used some Westerfield XL decal sets for the lettering and an alphabet set for the class letters. After giving the lettering a spray of Dullcoat to seal in the lettering, I drybrushed the cars with a bit of Rail Brown. At some point if I can find something to make the stake pockets out of I may go back and add them later but for the present they're in service.

Oh yeah, I know, I have to repaint that N6a in the background… it's been on my to do list for about 20 years or so, but I'll get to it.