Customise Your Industries, Products, Cars, and Operations

By George Paxon

Some of us in the hobby seem to be happy for their layouts to be just a place for their locos and cars to exercise. These modellers are sometimes expert builders and the layout is just a necessary tool to allow the builder to see his handiwork perform. What many of these fellows love to do is build. Some only build locomotives. A great one I remember was Mel Thornburg. He had no layout that I recall: he just enjoyed building locomotives from scratch using the most basic of hand tools. And he was very good at it. I think many of his models are in various museums still. Others in this category are not builders, but buyers of fine models and use the layout, again, as a place to exercise their purchases.

For others, the layout is the main focus, not the locos and cars, and the locos and cars are mostly built or procured to suit the needs of the layout.

Many in the former category have locomotives and cars from various railroads that have been accumulated often without much more reason than the owner likes these pieces of equipment. Many in the latter category though carefully select locomotives and cars which support a well thought out operating scenario as to locale, period, etc.

Prototype modellers fall into this latter category. Some focus on a single railroad, a particular town, branch, district, division etc., or possibly a junction between selected railroads. One excellent modeller has even established a specific date for his layout and religiously limits his modelling of locos, cars, buildings, and scenery to what actually existed on that day. Others in this later group are the operators among us, and their main interest in our hobby is duplicating prototype practice. Freight forwarding systems, signalling, CTC systems, layout communication systems, timetables, etc., are often developed by the operators to add realism to their layouts.

I think it is important to point out that our hobby is big enough for all these different kinds of modellers. I am a period O gauger working in traction, but I still enjoy looking at, and appreciate, a well-built HO model of a modern diesel. All of us in the hobby need to remember that just because another individual approaches the hobby from a perspective other than our own, he, or she, is not wrong – they are just different. And the hobby is better off for them being in it no matter what modelling choices they might make.

Personally, I prefer to think of the layout as a real living thing rather than an inanimate object. I find it rewarding to go to great lengths to add as much life to the layout as can be done. Some simple things I have done to add life, and a sense of realism, to the layout include developing a history, making a map of my railroad to include its connections with other lines, and having a newspaper for my principle town. I take pleasure in creating a little world, with the layout becoming a place to go to escape the trappings and stress of modern life. And I am not a strict prototype modeller as I don't model an actual road. My Mountain Electric never existed – except in my own mind that is. But, I am taking reasonable care to insure all the various elements fit together and are plausible. Well, at least they are explainable. They may not have been real, but they could have been.

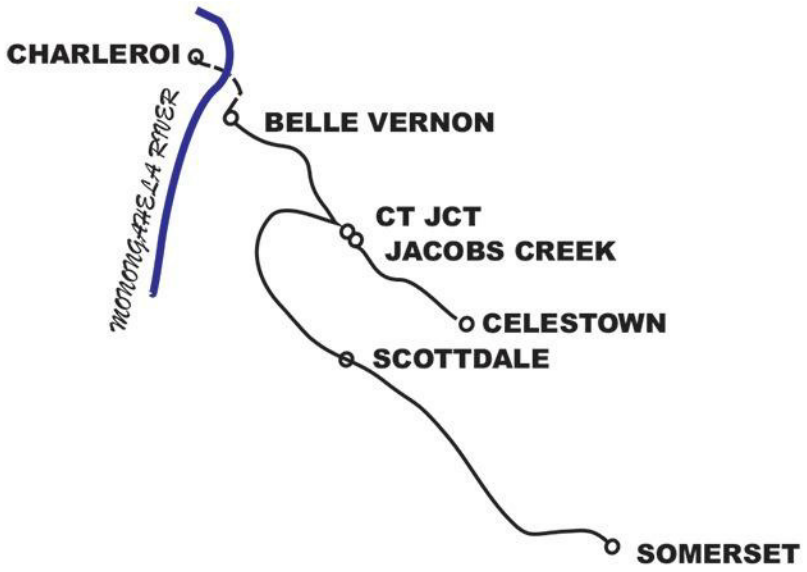


FIGURE 1
PARTIAL MAP OF THE MOUNTAIN ELECTRIC RAILWAY

A partial map of the Mountain Electric is provided as Figure 1 on the right. The first page of the local newspaper is at Figure 2 (next page).

A rather famous early modeller was a gentleman by the name of Frank Ellison. He viewed the layout as a stage with the train as the actors. The scenery was the set which supported the actors. Not a bad way to view it and I always keep some of Frank's early writings in the back of my mind as I go about planning and working on my own layout.

Customise Your Industries

A step I recommend that is best done early in the planning stage is to customise your industries. Most of us have a specific place or area in mind when we set out to build a layout. Some narrow gaugers favor the Rocky Mountains while others target the East Broad Top area in south central Pennsylvania or the California, Oregon or Washington coastal rain forest. The area you choose to model can dictate, to a great degree, what industries your layout should have.

If your interest is logging, your industry decisions seem easy. But even our logging modeller friends sometime want more than just a stump to sawmill operation. A bit of reading, googling, and thinking can help develop other industries for even the most obvious and simple of layout concepts. Take logging for example. There were allied industries that can be modelled to add more variety to your logging layout. In some parts of the country raw material to make shake shingles, called shingle bolts, was also brought out of the woods. This could supply a shingle mill. In the coal mining areas, loggers had a good business cutting smaller trees for use as mine props. In northern Pennsylvania, West Virginia, Tennessee and North Carolina loggers harvested bark and shipped it to plants for tanning leather. In Pennsylvania, wood smaller than that good for lumber was used to produce alcohol and other chemicals. Hardwood was turned into barrel staves in the eastern mountains. Pulp wood was a common commodity in New York, early Pennsylvania, West Virginia, Maine and the southern US logging areas. You may not have space to model a paper mill, but pulp wood can be harvested, loaded, and moved to a siding where it can be transferred to standard gauge cars, or to an interchanging railroad; which will, in turn, take the commodity to the paper mill located off the layout. The stumps of previously cut pine trees were harvested in Mississippi, loaded in gons and shipped off-line for the production of turpentine. In Maine, forest products were used by match factories. Almost everywhere scrap wood from sawmilling was used to make shipping boxes and some packaged and sold in cities as kindling. A logging layout could easily include a match factory, box factory, stave mill, and/or a kindling mill. On the Elk River Lumber Company/ Buffalo Creek & Gauley Railroad in West Virginia, the Company owned a dairy and milk was moved from the dairy to the mining and logging camps. The milk could have just as easily gone to the B&O interchange for transport to off-line customers as well.

In southwestern Pennsylvania, the locale I model, the primary industry was steel production. In O scale, modelling a steel mill would require serious real estate. To properly depict a classic steel mill, one would need facilities to bring in, store and handle large quantities of iron ore, limestone and coke. These products were usually heaped into great piles between tracks to await their time to feed the blast furnaces. Iron ore was difficult to deliver to mills in the winter due to ice on the great lakes. Coal and/or coke was stockpiled by many mills because the volatile labor relations in the coal mining industry often interrupted production and supply. These factors resulted in large stockpiles to avoid running out. Once you had the furnace in blast, you needed to

Figure 2 Newspaper

Celestown–Elm Park Chronicle

33rd Year | Celestown, Pennsylvania | 24 September 1935

Hole News!

County Supervisor, Mr. Wiliam Smith, announced on Tuesday that the potholes in the Celestown to Elm Park road would finally receive some attention. They are to be filled and the road graded and oiled soon. The start of work will be delayed, however, until Ralph Miller's mule gets over his current bout of diarrhea. It seems the County often contracts this work to Mr. Miller. But, the supervisor doesn't want Mr. Miller to start the work until the mule's health improves for fear the mule will splatter passing traffic on the road during repairs. Additionally, the County needs to arrange for the ME Ry to bring a few car loads of gravel and red dog to the road crossing at East Commerce Street so that it may be used to repair the road. There is a good chance the mule will grow old and die before the ME Ry gets the stuff delivered.

Big Fight at the Palace

The normal Celestown peace and tranquility was rudely interrupted last Saturday night when a fight broke out in the Palace Dance Hall. Several out-of-towners managed to get roaring drunk while waiting for the departure of the late-as-usual trolley down to Jacobs Creek. It seems one of the visitors mistook Sean Flanagan's horse for his wife as they do look quite alike. The visitor, well under the influence of the drink, propositioned Sean's horse. Sean took offense and the fight was on with other visitors pitching in to help the first, which then required the support of several of Sean's mates. After the sheriff parted the two warring groups and order was restored, Sean was heard to say that he could have forgiven the stranger for making overtures towards his wife but not his beloved horse. The visitor was heard to reply that it would not have happened if the horse had not been in the bar. The visitor's journey down to Jacobs Creek was delayed further as the sheriff put him in the town jail for the night to sober up.

BIRTHS AND DEATHS

A son was born to Bill O'Rielly and his wife Nellie. Rumor has it Bill was the one who upped the population of the town on the sign near the school on his way home after celebrating the birth for several hours at the Roosevelt Hotel bar.

Joe Gotto died when his riffle accidentally discharged. According to the sheriff, Joe's wife was cleaning the rifle at the time of the accident late one night while she waited for Joe to come home from the Palace Dance Hall.

Lousy Loafer Takes Loaf

The Elm Park Grocery store was robbed on Wednesday. It seems a man seen earlier loafing around the store made off with a loaf of freshly baked bread while storeowner Ben Butler was out front of the store filing Mrs. King's car with gasoline. The man was last seen boarding a Celestown bound trolley with the loaf still under his arm. The sheriff doesn't hold out much hope for catching either the thief or the loaf.

Mines Working Overtime

Some mines are working two ten-hour shifts a day with overtime and extra shifts on weekends to meet demand. The local manager of the Pittsburgh Coal Company said forward orders for coking coal continues to improve and that he expected continuing strong output. He is anticipating the need to put on additional men as the current workforce will not be able to increase working hours and coal production further. This reporter has counted quite a few extra trains heading down the hill loaded to capacity with our fine local coal and coke. A check with a spokesman for the Jacobs Creek Coal Company said business was also good for that firm. It would appear the Celestown economy will continue to improve because everyone in town benefits when the mines are producing strongly.

Trains Late Again/Still

The Mountain Electric Railway still can't seem to run their trolleys to the timetable. More trolleys were late than on time last week. The local agent claims the recent problems are caused by weather that has damaged some track requiring slower speeds. Also, newly purchased locomotives were heavier and causing track damage. Problems were made worse on Monday when a mid-morning trolley to Jacobs Creek was further delayed when a doctor had to be called to deliver a baby for a passenger. The trolley's conductor scolded the mother-to-be for getting on the trolley in her condition. The women replied that she wasn't in that condition when she boarded the slow trolley. Derailments have also disrupted trolleys and freight trains. With the heavy traffic on the Railway from the mines and other customers, wear and tear on the track is increasing. The MERy president was visiting from Pittsburgh last week and said that additional money was to be spent on repairing track problem areas over the next three months in preparation for the coming winter.

New Trains for Mountain Electric

Your intrepid reporter was patrolling the carbarn area the other day and noticed several new freight motors and some freight cars arriving on a train. It appears the Mountain Electric has bought a second hand Class B motor from the Illinois Traction System out in Illinois. They also purchased some box trailers and another refrigerator trailer for use in fruit service. While making the purchases, they also leased a big Class C motor for a year to help with moving the coal trains. This motor weighs over 80 tons and the Railway is reviewing all bridges to ensure no problems operating this monster on the wobbly tracks of the ME Ry. Shop personnel said this big motor is articulated and can negotiate city streets. That should be a real sight when it trundles down narrow Commerce Street here in Celestown.

Weather News

The national weather forecast from Washington, DC is for a severe drought. State agricultural officials think it will rain and are encouraging local farmers to get their winter wheat planted early this year. The State and County road departments are already bolting plows onto their trucks as they expect snow. The Farmer's Almanac says to watch for an early frost. Esmeralda, the Gypsy tarot card reader and crystal ball operator down on Railroad Avenue, reckons a thunder storm is a good bet. Since we can't get much of a consensus, we think the best forecast next week is for continuing weather.

Fresh Produce
Elm Park Grocery

keep it going constantly. It was not a process you stopped and started often. Blast furnaces, coke works, open hearth furnaces, basis oxygen furnaces, and rolling mills were all very large structures. Steel mills usually had many miles of in-house track and usually their own rail operations to move raw materials, goods in process and finished products between various furnaces, rolling mills, and storage facilities. All this adds up to one big facility even if modelled mostly with building flats.

If you model the modern era, it might be possible to model a re-melt steel mill in more modest space. The large classic steel complex with blast furnaces and big rail yards is giving way to mini-mills where scrap steel arrives by truck or rail car and is converted to finished product in a small electric furnace. Usually the liquid steel is cast directly into billets which are then immediately rolled into reinforcing rods for concrete or small angles or channels used in modern steel fabrication. These are mostly clean, green industries that could fit a modest sized layout.

But, with a bit of thinking we can limit the focus of almost any industry to something manageable. For me as an example, by moving 40 miles south of Pittsburgh and just east of the Monongahela River into the area known as the coke region, the steel industry there actually narrows to the production of coke . This coke fed hungry Pittsburgh blast furnaces for many, many years. The coke region was a contrast to urban Pittsburgh and was very rural in nature. It was mostly wild country dotted with small villages, often coal or coke company owned, that housed the coal miners and coke facility workers. Dairy, meat, and market garden farming used more land than did the primary industry here.

Pittsburgh was a large city with a great demand for food and had large rail served produce and livestock markets. A very large Pittsburgh industry was H.J Heinz. It is very plausible that coke region produce and other farm products would move from this area to the Heinz factories. Packing sheds to consolidate and ship such farm products would be needed. Farm supplies coming into the area would justify farmer's co-op stores and farm implement dealers who could be located on a siding for rail delivery. A feed mill would receive grain from rail as well as truck delivery, would blend grains for cattle and chicken feed, and could ship excess feed via rail to customers outside the region. Team tracks would be needed for off-line deliveries of hay, fertilizer, etc., and could ship products as well.

With all the steel products made in the area it is no surprise that some steel fabricators have located along my ME Ry, American Steel is one such firm. They receive carloads of structural and sheet steel in flats and gons, produce all sorts of fabricated steel products, and they ship finished products in box cars. Another firm, an old wood wagon builder by the name of Standard Wagons, has re-tooled and now makes steel wagons for farm use. It also has landed a very large contract from the US Army and is producing the small wagons pulled by Jeeps. Boxcar loads of these wagons are shipped weekly to the US Army Arsenal at Rock Island, Illinois. Another enterprising firm is Welded Wire Products. They receive carloads of coiled wire and produce mostly outdoor furniture by the carload for Sears and Roebuck, Montgomery Ward and other big retail firms.

And since the transport cost for coke is a substantial portion of the total delivered cost, foundries and forges have been attracted to the area to take advantage of the local product and cheap transport cost due to the short haul. Connellsville, the major town in the region, actually once had a locomotive works. One town on the ME Ry has a spring and axle plant, and the forge there runs day and night. There is also a large specialty iron and steel foundry along the line. The foundry receives carloads of scrap steel, pig iron billets, coke, and foundry sand. They ship castings to customers all over the US. They have opened a new division that repairs and modernises heavy machinery so now is receiving and shipping such machines. They even do custom work on steam locomotives for area short lines.

Much land in the coke region was cleared for farming. Most of the native timber in the area had been cut shortly after colonial times and second and third re-growth of hardwoods makes for a ready supply of mine prop needed in the many coal mines locally. Mine props are cut and shipped by rail to other mining areas as well. This is another easy to model industry.

Coal mines and coke works are obvious industries in the region, of course.

With a bit of such pondering, you can develop a very plausible assortment of industries that are customised for your layout. They have a purpose that well fits the scheme of things and they clearly belong. The western gold mine we see on many layouts would not be a good candidate for a coke region based layout. But, it certainly would work if your modelling area is the Rocky Mountains.

Customise Your Products

Once you have arrived at a viable mix of industries, you can determine the products you need to haul both to and from those industries. You can then determine the appropriate car types to support such industries. If a certain car type strikes your fancy and is not needed by one or more of your industries, you can go back to customising industries and look for another industry that can use such a car type, and/or look for another product you can move. This is really an iterative process that justifies considerable time and thought as we want to get it right for our layout. Don't do it in a hurry or you may limit your potential opportunities and your operating fun.

With coal and coke the major industry in my locale, it was important for me to keep in mind that coal mines can provide more rail traffic than just outbound loads of coal. Inbound freight can include gons or flats with mine props and ties for the extensive underground rail tracks, Sand and oil were commonly received and used in the coal cleaning process, rock dust was received in bags via box cars, and mining machinery might come by flat, gon or box car from time to time.

As an example of this iterative process, consider that I wanted a pulpwood rack on the ME Ry. If you are not aware, these are flat cars with sloped floors and bulkhead type ends used to move small logs from cutting areas to paper mills for the production of paper. Today, most paper feed stock is wood chips. Pulp wood is chipped in the woods and shipped to paper mills in large hopper cars. In an earlier time, much paper feed stock was the small logs though. I remember these cars from living in the south as a young fellow. The particular car I had in mind, which I wanted to build for my layout, was a wood frame, truss rod car used by the Mississippi Central.

To the best of my knowledge the local roads, Pennsy, P&LE and B&O, never had pulp racks. The state of Pennsylvania did have paper mills. So did West Virginia. The Western Maryland, making it to the coke region at Connellsville, did have pulp racks.

To accommodate my desires, I am stretching history a bit to include the pulp rack and a pulp wood loading facility on the ME Ry. Like hopper cars, pulpwood racks did not venture far from the owning railroad. The Mississippi Central car has obviously been purchased second hand either by my ME Ry or a paper mill. (Ya gotta have a story!)

Pulpwood loading (as I remember it as a kid) could require nothing more than a rail siding with a dirt track alongside. Small second-hand trucks were modified by welding a few upright posts to the bare truck frames to contain the pulp log loads. These trucks would pull up next to the pulp rack and logs were manually transferred from truck to rail car one at a time. Such trucks probably would have carried 4 to 5 tons of pulp logs, so 8 to 10 truck loads were needed to fill a pulp rack.

Sometimes there would be a small scale and a shed at the siding where truck loads were weighed on their way to and from the rail car. Small pulp cutters formed "co-ops" so that a few such suppliers could load a car in a hurry to reduce the demurrage the railroad would charge if the car had to wait on the siding for one such supplier to make many trips to and from the cutting area with enough truck loads to fill one car. Truck weights were used to determine how to divide the proceeds from the carload among the small suppliers belonging to the

co-op. And, some wood yards probably bought the pulp wood from the small suppliers, stockpiled it, ordered a rail car, or cars, when sufficient material was on hand, loaded, and on sold the pulp wood to the paper mill.

This is a very simple industry that will require very little real estate and provide some additional interesting traffic on the ME Ry.

I personally don't remember anyone cutting paper wood when I was growing up in southwestern Pennsylvania. I suspect most wood of this size had a ready market as mine props. And most trees in southwestern Pennsylvania at that time were hardwood. Hardwood is used for some high quality paper, but most paper produced goes for newsprint and cardboard. Softwood like pine is sufficient and preferred for this use. We did not have much pine in the coke region. But, there still could have been some paper wood shipped!

We have already looked above at some obvious products that directly relate to the customised industries. Make sure you also give thought to the byproducts of major industries, even when you cannot incorporate the industry itself.

One of the major byproducts from the production of steel was slag. Slag is basically limestone rock that was used as flux to convert iron ore into iron. Initially it was a nuisance material and it was thrown away. It was hauled as short a distance as possible and dumped for disposal. Eventually, enterprising firms found it could be had for next to nothing and resold for a nice profit. The dumps were mined, the slag crushed and used for railroad ballast, road gravel, etc. My ME Ry moves some processed slag and makes some revenue from it.

Another waste product is ash from the burning of coal. Many traction lines were associated with electrical companies. Early traction lines were often required to build their own power plants to generate the electricity they needed as there was none available. Often traction lines fell upon hard times trying to move people, but made a fortune selling electricity. Quite a few actually turned into electricity suppliers exclusively. The ash was another initially useless byproduct of generating the electricity. And many traction lines used the ash for ballast as did some down-and-out steam railroads. In many cases, ash was not hauled as a revenue producing product but for company use. By using the ash, they were able to forgo the purchase of rock or other ballast material and thereby saved money. When I was growing up, the waste ash was also stockpiled by towns, counties, and even the state and used in the winter on icy roads. I am not sure if the government bodies bought the ash or just collected it from the power companies who were glad to be rid of it. On my ME Ry, we use a lot of ash as ballast along the line and we get a bit of revenue hauling it to places where the government bodies need it.

As coke production moved from the smoky beehive style ovens to the more modern byproduct facilities, chemicals became a very important part of coke manufacturing. All the gases and oils driven out of the coal in roasting it were on sold and used to make kerosene, benzene, and thousands of chemical products. Where I came from, U S Steel had a very large coke works at the Clariton steel mill. For miles up river from Clariton there were chemical plants. I assume they were located there to make products from the coke work byproducts.

One byproduct from making coke from coal was tar. Coal tar was hauled by tank car and used among other things for road building. Some tar was shipped from coke works to steel mills and used to fuel the old open hearth furnaces. On the ME Ry, we have traffic in coal tar for road sealing as well as in a more refined form, known as creosote, for wood preservation. We have dedicated tank cars that move road tar from Jones & Laughlin Steel Works and creosote from Koppers to customers on line.

With a bit of thought, you will discover more such byproducts all of which can all provide relevant traffic on your layout.

Customise Your Car Fleet

John Armstrong made a point about having a car fleet that reflects your railroad's location and connections. Northeastern roads had lots of hoppers for coal, and gons for scrap steel. Far western roads generally had few hoppers and a lot of stock cars. Southeastern roads had pulp wood racks. Roads operating through Texas and Oklahoma had lots of tank cars for the oil and chemical traffic. Roads in the upper Midwest had a high proportion of ore cars.

Another point John made was that the number of cars was a rational mix with home road cars, usually the majority, then cars of adjacent interchanging roads the next in numbers, and then less cars for more remote roads. I think his ideas are valid and worth keeping in mind.

There are exceptions of course. If you model a shortline, there may be very few home road cars since small roads usually didn't own many cars. As a result, the majority of cars on a shortline layout would be from the roads with which the shortline connected. Consider photos of the Maryland and Pennsylvania for example. This fantastic little shortline had very few cars in revenue service, but many cars in its trains were from the Pennsy and B&O with which it connected at either end of its run.

And just about every road seems to have some Pennsy cars on it since the Pennsy owned so many and their fleet was actually a large percent of the total US rail car pool. It would be rare to find a Pennsy hopper in Southern California, but a Pennsy box car there would certainly not be out of place.

The mix of cars in the modern era has changed somewhat, so you need to consider what is logically appropriate for your layout.

I think John's analysis and advice are quite valid and worth considering if you want your layout to be realistic.

Based on the map of my line, we interchange with the P&LE(NYC) at Belle Vernon, with the P&WV just out of Belle Vernon, and with the B&O at the other end of the line at Somerset. We interchange with the Pennsy via the P&LE. We also interchange with the Pittsburgh Railways at Charleroi and with the West Penn Railways at Scottdale. There was no car load freight on either of these prototype Pittsburgh area traction lines. (Remember, these lines were actually broad gauge which is a minor fact we tend to overlook on the ME Ry by the way.) The ME Ry does, however, forward some traction freight trailers via Pittsburgh Railways to customers in the Pittsburgh area. And, we receive some car load freight in traction freight trailers from other traction lines, such as the Harmony Route (the Pittsburgh, Harmony, Butler & New Castle Railway), Penn-Ohio System, and Northwest Pennsylvania Railway via the Pittsburgh Railways connection. Using John's guidance, we have a reasonable, but limited proportion of cars from these various interchanging roads. Cars from other more remote roads are certainly much fewer in number.

I have built a few models of cars I really liked from some traction lines that could not, even with the wildest stretch of the imagination, have been routed to a line in the Pittsburgh area. Such lines include Illinois Traction System, Cincinnati & Lake Erie, Indiana Railroad, Indiana Public Service and even the Central California Traction Company. On the Mountain Electric, these are not interchange cars at all. According to the railroad history and local newspaper accounts, these cars have been purchased by the ME Ry from these lines, and due to the heavy traffic on the ME Ry, and the chronic shortage of cars, have been put in service immediately before going through the shops for repainting and re-lettering. Well, that is my explanation. Again, pure fiction, but it could have been!

Another method I suggest is to customise some cars in your fleet. Having cars that relate directly to some of your road's customers will go a long way to making your layout come alive. Above, we discussed the industries on my coke region based layout, and H.J Heinz was mentioned as a large Pittsburgh industry in need of farm

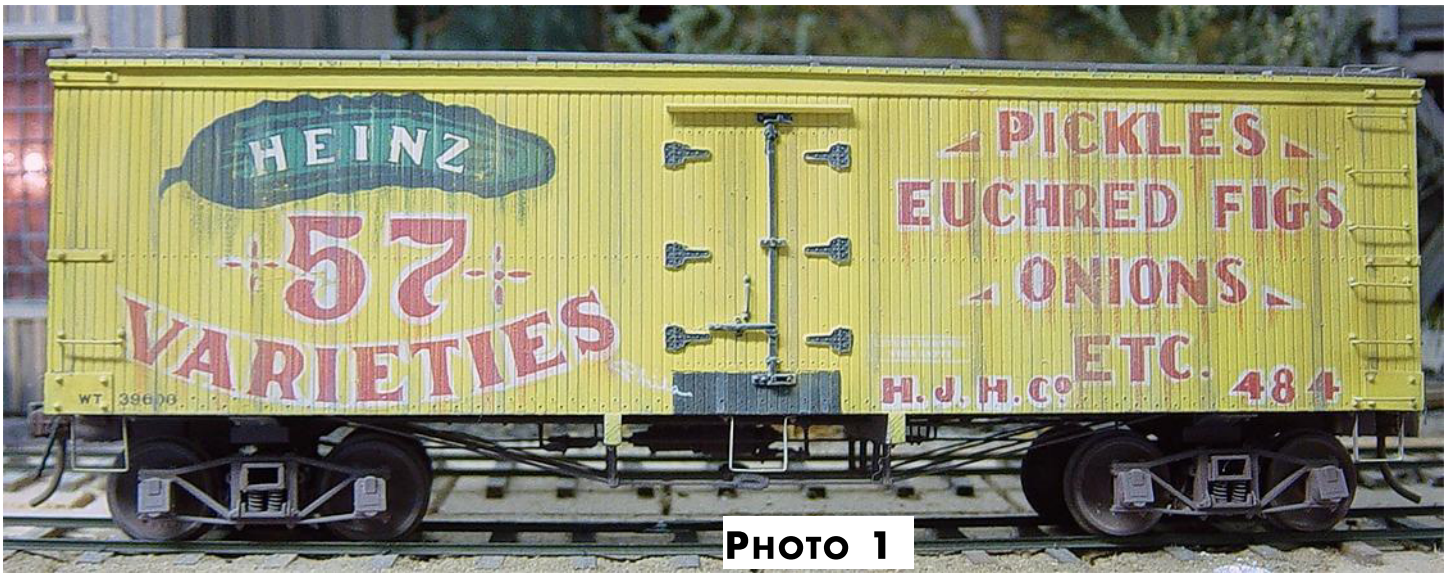


PHOTO 1

products. My Mountain Electric Railway is always short of cars. To provide some relief, and to insure they receive the needed farm products, Heinz sends their company owned reefers to packing sheds along the ME Ry where they are loaded and returned to the Heinz plants in Pittsburgh. Photo 1 shows the Heinz reefer.

Having grown up in the area, I recall Iron City beer as one of the local brews. I left the area before I reached drinking age, but did manage to sample some of the product anyhow. Iron City was produced in Pittsburgh and was well thought of by many locals. My ME Ry hauls Iron City into the coke region to quench the thirsts of the

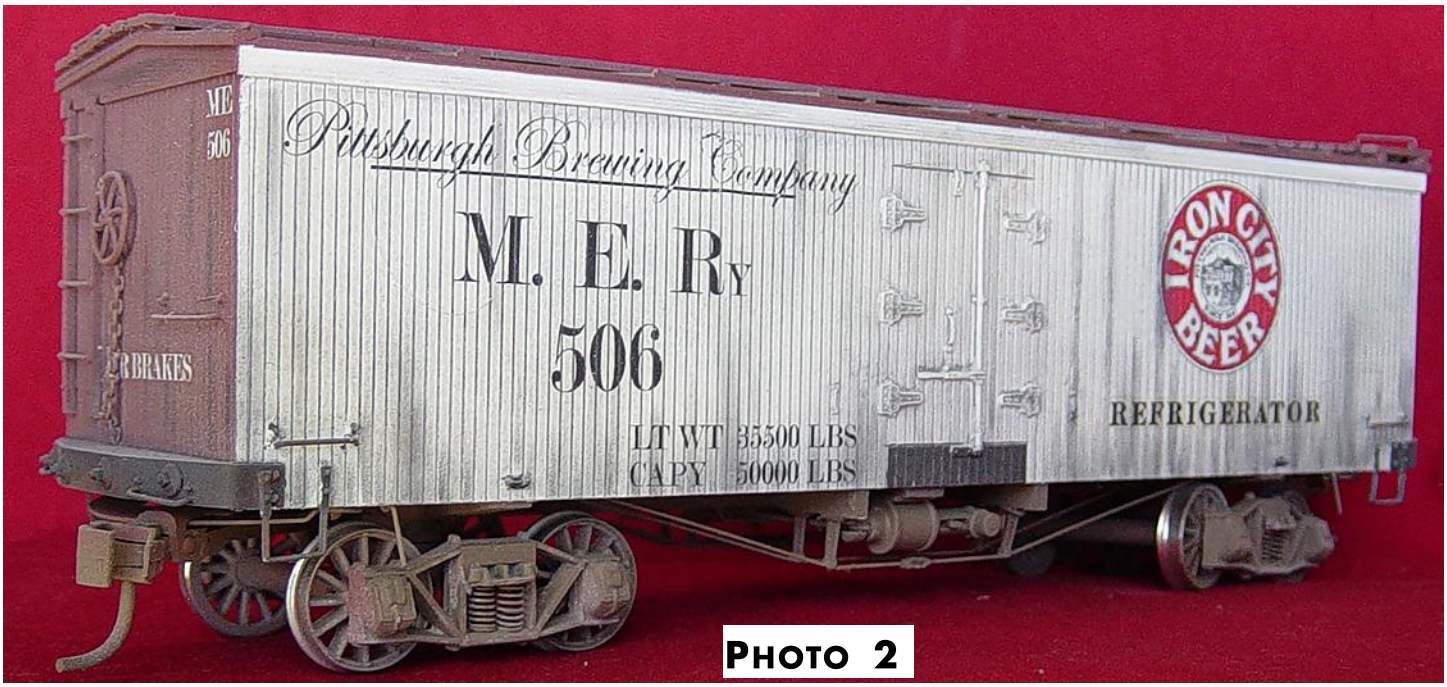


PHOTO 2

miners and coke workers. The service is provided in a dedicated ME Ry reefer painted up with the Iron City logo as you can see from Photo 2. I found the logo on a site that caters to collectors of beer labels. (Some people really need a new hobby! Maybe we should talk to them about model railroading.) I made a decal for this car from the period beer label artwork and from fonts found on the Internet.

As dairy farming is substantial along the ME Ry, it makes sense to have a dairy industry. Towns in the area at one time had plants that consolidated milk received from individual farms, pasteurized it to stop bacteria development, cooled it, and forwarded it on to facilities that bottled it for home delivery and turned it into other products such as cheese and ice cream. Again, the MR Ry provides a dedicated car to move the milk from the

PHOTO 3

collection industry in the coke region into Pittsburgh via the Pittsburgh Railways and to manufacturing firms there. The local industry is a member of the Dairy League Co-operative so the car is lettered accordingly as you can see. I am not sure if the Dairy League actually operated down into southwestern Pennsylvania, but it does on the ME Ry. Photo 3 is a shot of the ME Ry reefer dedicated to moving the pasteurised milk from the local dairy into the city via the Pittsburgh Railways. As you can see, it is one of my conversions of a D&RGW narrow gauge car to traction use.

With produce being a substantial part of the business on the ME Ry, it stands to reason that some cars would be dedicated to this important service. Most food products needed clean cars, and most railroads usually had cars reserved for such service. To emphasize the importance of such traffic on our railroad, antique traction box trailers are painted and labeled for the special service. According to the local newspaper, the line still is not providing enough cars to satisfy the area farmers who feel inadequate transport is limiting their ability to satisfy

PHOTO 4

the market for their products. Some people are never happy I guess. Photo 4 shows a motley assortment of the "Fruit Express" box trailers. From left to right; car 612 was rebuilt by the ME Ry from an old ex-Pennsy class XD ventilated box car from 1893; car 510 is another 40 foot ex D&RGW narrow gauge reefer converted to traction; and, car 615 is an old ex-Illinois Terminal System box trailer.

The ME Ry has moved into the container business. Gons specially built for the container service haul containers from steam road connections to points along the line. I hope to provide more information on this new ME Ry revenue line in a future article.

And, we need not forget that the cars we operate can help to reinforce the location of our Railroad. Take gasoline tank cars for example. In our region of interest, we had Esso, Gulf, Texaco, Mobil, and American gas

stations on most street corners. Tank cars, and the fuel distribution industries, should reflect these firms doing local business. Conoco, Clark, Chevron, and Zerolene products were marketed in other parts of the country so industries and cars with these logos would not be common in the coke region.

With coke production the primary industry, hoppers and gons were certainly in the majority. Owning roads for these cars were primarily the roads with tracks in the area that included Pennsy, P&LE (NYC), and B&O. A few other nearby roads may have had their cars confiscated and used which was quite common. Such cars might have been stenciled for the Montour, P&WV, B&LE, and maybe a few others. There would have also been some private cars such as Westmoreland Coal. Some of the local steel firms, such as Carnegie Steel and Jones & Laughlin, may have sent cars into the region for loading as car shortages were chronic in the entire Pittsburgh area in the late 1800s and lasting well into the 1900s.

In an article for OSR not too long ago on building an early steel drop bottom gon, I explained that the ME Ry was a subsidiary of Pittsburgh Coal Co. As a result, it would be natural to have Pittsburgh Coal Company cars on the ME Ry, and having PCCo cars helps reinforce the story line supporting the history of the ME Ry.

We have a local industry by the name of Mountain Petroleum Services. It is a crude oil loading business. We have a small fleet of leased Union Tank Line cars that move the crude oil from the on-line loading facility to refineries located off-line. Again, due to chronic car shortages on the ME Ry, the refineries sometimes need to supplement the car fleet by sending Gulf and Mobil tank cars to insure they get sufficient crude oil for their refineries. I also hope to tell you more about the crude oil business on the ME Ry in a future article.

Some freight cars did not stray far from home, while others roamed the entire rail system from Canada, all through the 48 states, and even into Mexico.

Hoppers were mostly found on the owning road. Quite a few did make it to connecting roads; however, it would be most unusual to find a hopper from an east coast road on the west coast. On our layout, we have hoppers from the Pennsy, P&WV, B&O, B&LE, and Montour. We probably should have some from the P&LE, but have yet to get around to them. In the good old days before oil and gas and then electricity became common for home and business heating, anthracite coal was popular for domestic fuel as it was much cleaner burning than the more common bituminous coal. Anthracite coal came from a small region in northeastern Pennsylvania served by the Reading, Lehigh Valley, and some other “anthracite” roads. Hoppers from these roads probably roamed a bit further than hoppers in general, and would probably have served markets in major eastern cities such as New York and maybe Chicago.

Gons were somewhat more nomadic because, as well as hauling mineral products, which would generally keep them close to home, they could be used to ship structural steel, pipe, machinery, and other general freight products that would move across the rail system.

The common box car could be found just about anywhere on the three country rail system, probably in proportions as indicated by John Armstrong.

Customise Your Operations

Tuning your operations to accommodate some particular needs of your railroad’s customers is another method for making your layout appear more realistic and giving it added life. As examples, here are a few ideas used on the Mountain Electric.

An early morning run collects the full cans of milk from loading platforms along the line and takes them directly to the local dairy. A similar reverse run later in the day returns the empty milk cans to each platform. Farmers are relieved of the task of hauling their milk all the way to the dairy over the primitive mud and gravel

roads that prevail in the region. This is of particularly great benefit in the winter when roads are often clogged with ice and snow.

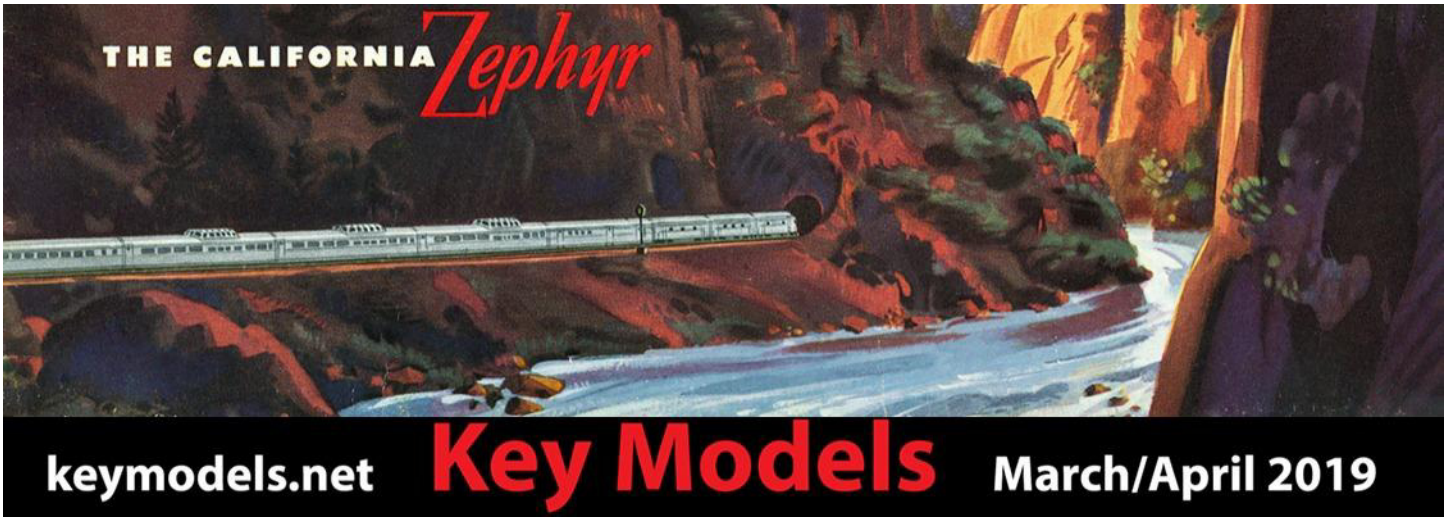
In many cases, the milk collection platforms are located at the farmer's gate so he does not need to take the milk far to start it on its journey to market. It is seen as a good service and the farmers are happy to pay to have this work done reliably to free them up for other essential tasks. The times for the milk collection runs are changed between summer and winter to allow the farmer to take advantage of the early sunrise and get more work done during the daylight hours. This also helps to get the raw milk off the loading platforms as early as possible before the sun has an opportunity to heat up the cans.

Fruit and vegetables are perishable products that need to be moved from the packing sheds to the produce markets in the larger cities as expeditiously as possible. By providing a priority service to Pittsburgh over the connection with Pittsburgh Railways, the ME Ry helps the local farmers get a premium price for their perishable goods. This superior service also keeps this business from going to the competing Pennsy, or trucks.

A freight motor pulls an LCL trailer on a schedule much like a passenger train. This ensures the merchants in the region, that rely on the service for goods delivery, know when they can expect their orders to arrive. This provides a level of service far superior to that of Railway Express Agency on competing steam roads. As a result, the ME Ry has won most of the area's LCL business.

We make freight deliveries at night to several customers located on a main track, and without a siding, so that they have more time to unload freight without interfering with passenger schedules. This has successfully kept much of this business from going to competing trucking companies.

Passenger service schedules are tuned to provide cars at the gates of major industries at shift change times to ensure workers can get to and from their jobs as efficiently as possible. This reduces the need, or urge, for many to purchase one of the "new-fangled" automobiles. Once a traction customer owns his own automobile, he will tend to drive it to work and he would no longer be a traction line customer not just to and from work, but also on weekends and for shopping trips, etc.

By customising your operations to your customer's needs, you can add quite a bit of life and realism to your layout. Your layout can be seen as solving real world problems and addressing substantial transport issues.

Customising your industries, products, cars, and operations is mostly a thinking process. The results of this process can help guide your purchases and tailor your car building program to better tune your fleet for your layout. It can do much to help increase the realism of your layout.