



## The Phil Jensen Story Delton To Hartland – Life as a Product Designer

(An Interview with Delton & Hartland Product Designer, Phil Jensen)  
By David Fletcher with Phil Jensen

This is the untold story of **Delton Locomotive Works**, **Hartland Locomotive Works**, and the Genesis of Large Scale model trains in the US.

**Delton Locomotive Works** was a model train company that lasted less than 10 years, was not the first nor last to produce large scale trains. Delton didn't produce trains that were the cheapest, nor the most mechanically efficient, nor the most readily available, but what they produced has had a lasting influence on the shape of American large scale model trains. Long after Delton closed its doors amidst economic turmoil of the early 1990s, their Classic models live on in the catalogues of **Aristocraft** and **Hartland Locomotive Works**, and their spirit lives on in the large scale models of **Lionel** and **Bachmann**.

The products Delton produced were very much the result of the personal efforts of the company individuals. When we purchase a ready to run model, we rarely think about who it was that actually researched, designed, scratch built the prototype, and put that model into production. It takes a special kind of person to do that kind of work and put it onto the market for all to scrutinize, measure, and argue its accuracy. Some of us try a bit of scratch building to win the local train show trophies, but there are people out there who build models every day, never see a trophy, and whose names remain anonymous.

Some model makers will know the feeling when a particular model project is just not going well; parts just won't stick, won't go on straight, or stay together, and the paint just wants to do things other than what you intend! This, above anything else, is a pretty clear indication that the model is trying to tell you something! It is true that models, particularly model locomotives, have a personality; sometimes they run well, other times for no reason at all, they refuse to run. Does a model Locomotive have a soul? The answer is yes, regardless of scale, the model has the soul of its maker. The maker's vision, feeling, and passions are tied up in every curve, color and molding of the model. This is also why it's so easy to look at a particular model and know which company made it. The models may be representations of 1:1 prototypes, but the models themselves have their own very distinctive character.

This story reveals the background and people who built **Delton Locomotive Works**, with a focus on an individual whose contribution was at the very core of the style we have come to know as **Delton** and in a broader sense, whose contribution has helped shape the nature of large scale railroading as we know it. His influence touched not only **Delton**, but most other US based model railroad companies, including **Lionel**, **Aristocraft**, **Kalamazoo**, and **Hartland**. Some folks are Doctors, others are Engineers or Architects, there are Accountants and Optometrists, even fewer are Astronauts... and then there are a very select few who design the models for the manufacturers of trains that we all love so much. One such gentleman is **Phil Jensen**.

### The Beginnings of Large Scale Model Trains in the US

The Delton story begins in 1980, when a keen model railroader, by the name of **Bob Schuster**, with his partners, formed a company in **Kalamazoo Michigan**, to produce the very first US style plastic large scale trains to run on 45mm, #1 gauge track. Their first prototype, hand made entirely of resin castings and

brass, was displayed at the **1980 National TCA Meet**. The locomotive was an American 4-4-0, and by today's standards would be considered little more than a toy. This was a time when the only plastic ready to run locomotives available for 45mm track gauge were European prototypes, made by **LGB**. The 4-4-0 entered the market as a well engineered, fully injection molded toy under the name of **Kalamazoo Trains**. The locomotive was more a caricature of a 4-4-0, representing no real prototype or scale.



*Kalamazoo's entry into Largescale model trains. This plastic 4-4-0 was developed in 1980 by Bob Schuster and partners.  
(Photo D. Fletcher)*

### **Delton Locomotive Works is Born**

Bob Schuster's partnership with **Kalamazoo** was short lived for as good as the 4-4-0 was, it lacked that special style, or quality that Bob was after. The 4-4-0 was a long way shy of being a finely detailed scale model. Bob Schuster had the dream to create the ultimate product for people to enjoy for a lifetime. Setting up a workshop in the backyard of his home near the small town of **Delton, Michigan**, Bob began a new line of largescale trains under the new company name, **Delton Locomotive Works**.

**Delton Locomotive Works** came to life with the production of just one outstanding 1:24 scale model in 1983. This first limited run model was hand fabricated in brass, had a paint job like nothing ever seen and was the first Colorado narrow gauge prototype to be made for 45mm track. The model was the famous **Denver South Park & Pacific RR 2-6-6T, Mason Bogie #15 "Breckenridge"** in 1:24 scale. This model was without doubt the first true scale model of a US prototype to be made in the US for the Largescale market. A year later, the leading European maker of trains for 45mm track, **LGB** of Germany, was to release their first US narrow gauge prototype, the **1884 South Park Cooke 2-6-0** and Largescale railroading in the US was alive.

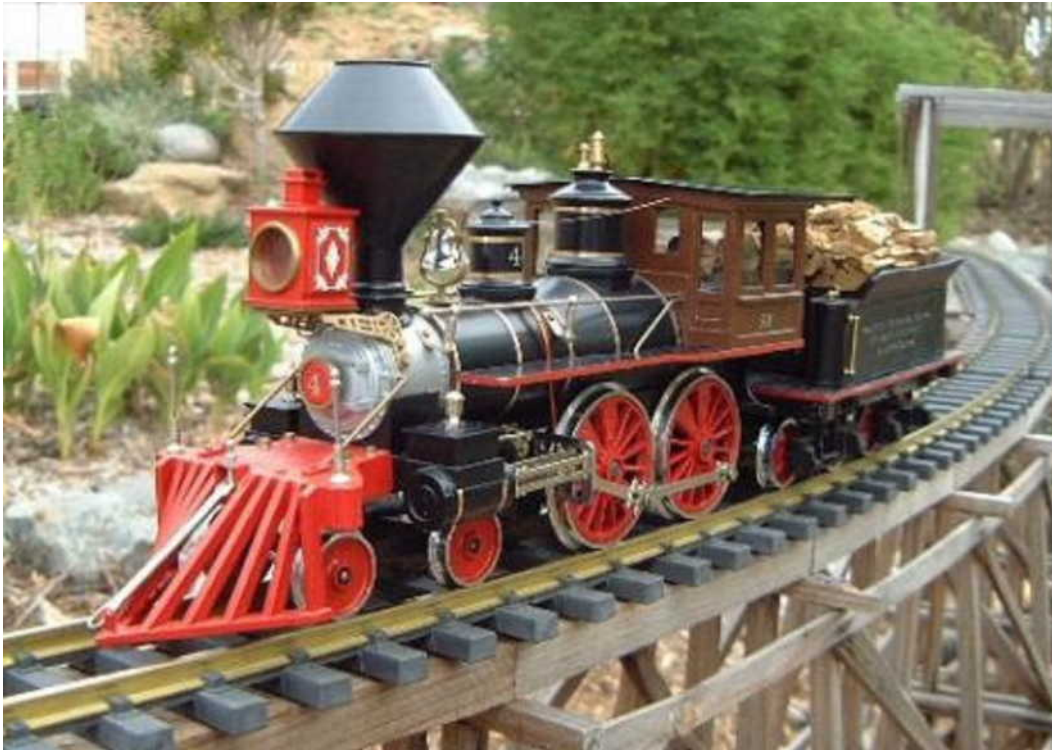


*Delton's first footsteps into largescale model trains was truly inspirational with the release of this 2-6-6T Mason Bogie in 1:24 scale.*

The expense of Delton's Mason Bogie ensured it was a limited run product, but pictures of the model appeared in all the major magazines, and few model railroaders could deny not being inspired in some way. Some even pondered...largescale? Mmmm....

### Delton – the Brass Era

During 1984 and '85, Bob continued to produce high quality brass 1:24 scale models, including the famous **4-2-4 CP #1 "C.P. Huntington"**, 0-6-0s, 0-4-0s and 2-6-0s under the Delton name, seven different locomotives in all, in a variety of paint jobs. The models had everything he'd been striving for; quality, realism and for the first time the character of the 1870s 'industrial art' period of railroading in the US could really be felt in a model. The models were expensive and their 100 plus parts were assembled by hand, requiring about eight to twelve hours from start to completion. The Delton models were designed with all the style and charisma of the locomotives that were part of yesteryear. Even original "true" colors of the real engines were used on the Delton products.



*The Delton 4-4-0 in brass.*



*Delton Models always featured their own builder's plates.*



A Delton brass 0-4-0 switcher.

Bob Schuster designed, researched and made the prototypes for the Delton brass trains himself. The only problem was that Bob could not share these models with everyone. Only 200 of each type of locomotive was made. While high quality brass models of US prototypes had a particular niche market, to make his models available to everyone, Bob would have to produce injection molded models and go up against the known leader of largescale trains in the world: **LGB**.

## Enter Phil Jensen

In 1983, Bob Schuster took his new brass Mason Bogie model to a Train show. A train enthusiast by the name of **Phil Jensen** also happened to attend, and as Phil explains...

***"The first time I met Bob Schuster he was exhibiting Delton's Breckenridge at a show in Pittsburgh. I thought it was the most beautiful locomotive I had ever seen and I fell in love immediately! When I asked the price I decided that I would just have to admire it from afar. It cost \$1600 (US) in 1983, a huge sum at the time. But fate works in strange ways and a couple of years later Bob gave me one! What a surprise!"***

Phil Jensen was not a 'largescaler' at that time, but on occasion made models in all scales for friends, so it was in 1984 that Phil scratch made a rather nice largescale hopper car in styrene for his friend, Jim Brown.

***"In 1984 there was a meeting of LGB Freaks at Rockford, Illinois, and my friend attended, taking along and showing my scratch built Hopper Car. Bob Schuster was there and saw it. He got my phone number from Jim and called me. He asked if I could build models for him that could be molded in plastic. Bob sent me a picture of a Trussed Wooden Hopper Car that he wanted me to make and I was off on my first commercial venture. Life as I knew it was never to be the same! I mailed him my product and anxiously awaited his comments. He loved it and sent me the 'Surprise' Breckenridge. God, Life is Good!"***

The 41 year old Phil Jensen at that time was an Accounting Manager for AT&T, but with that special Trussed Hopper car, Phil's life was to take a dramatic new direction into model trains. Phil would become a leading expert in largescale train manufacturing and devote the next 17 years to expanding the largescale world.

## Delton Enters the Plastic Market

Delton's first injection molded model was Phil's 1984 Wooden Trussed Hopper car, released onto the market in 1987. This was a model based on one used on the Quincy and Torch Lake Railroad.



*The Delton trussed hopper car was Phil Jensen's first commercial model making venture, and Delton's first plastic freight car offering. Prototyped by Phil Jensen in 1984, released for sale in 1987.*

*(Photo D. Fletcher)*

***"The Trussed Hopper was the only car that Bob ever asked me to build. After that I was pretty much on my own, free to choose my own prototypes."***

Shortly after, Phil visited the Delton factory.

***"Bob invited me up to his house outside of Delton, Michigan. I spent a couple days there and saw Delton Locomotive Works for the first time. The factory was located in Bob's 'Carriage House,' a two story barn behind his house. At the time Bob had about five people making Brass Locomotives in the barn. There was a small foundry and the various pieces of metal working equipment necessary to fabricate most of the brass parts. Turned parts were contracted out to 'Caledonia Express', a local machine shop. Assembly and painting was also done in the barn. At that time Bob was making the Mason-Bogie and a little 0-4-0 switcher in brass."***

Bob discussed the possibility of Delton producing a plastic locomotive and asked Phil if he could build a pre-production prototype of such a loco. Phil had made many cars before, but never a locomotive.

***"I returned to my home in Omaha with some of the brass locomotive parts and built the Brooks 2-6-0 C & S # 22 that was featured in a later Delton catalog. The picture in the catalog was of my model. The 2-6-0 engine was dropped in favor of the C-16 project, and was never produced."***



*This was Phil Jensen's first hand made steam outline model. This pre-production model could have been Delton's first plastic steam locomotive, 1984.  
(Photo P. Jensen)*



*Phil Jensen's Mogul as it appeared in the 1987 Delton Catalogue.  
(Photo DLW)*

### **Delton Enters the Plastic Market (cont.)**

After the Trussed Hopper, Phil went on to build prototypes for a complete line of Colorado based narrow gauge models, including a D&RGW 3000 series box car, reefer, long caboose, gondola and flat car, all in 1:24 scale. These were to be Delton's first plastic mass produced models. Several trips were made to the Colorado State RR Museum to photograph and measure the potential prototypes.

***"The Box Car, Reefer, and Caboose that followed were models of D&RGW Equipment. The Gondola and Flat Car were from the C&S Road. A tank car prototype was built, the Conoco #5, but it was never produced by Delton - LGB wound up doing it."***



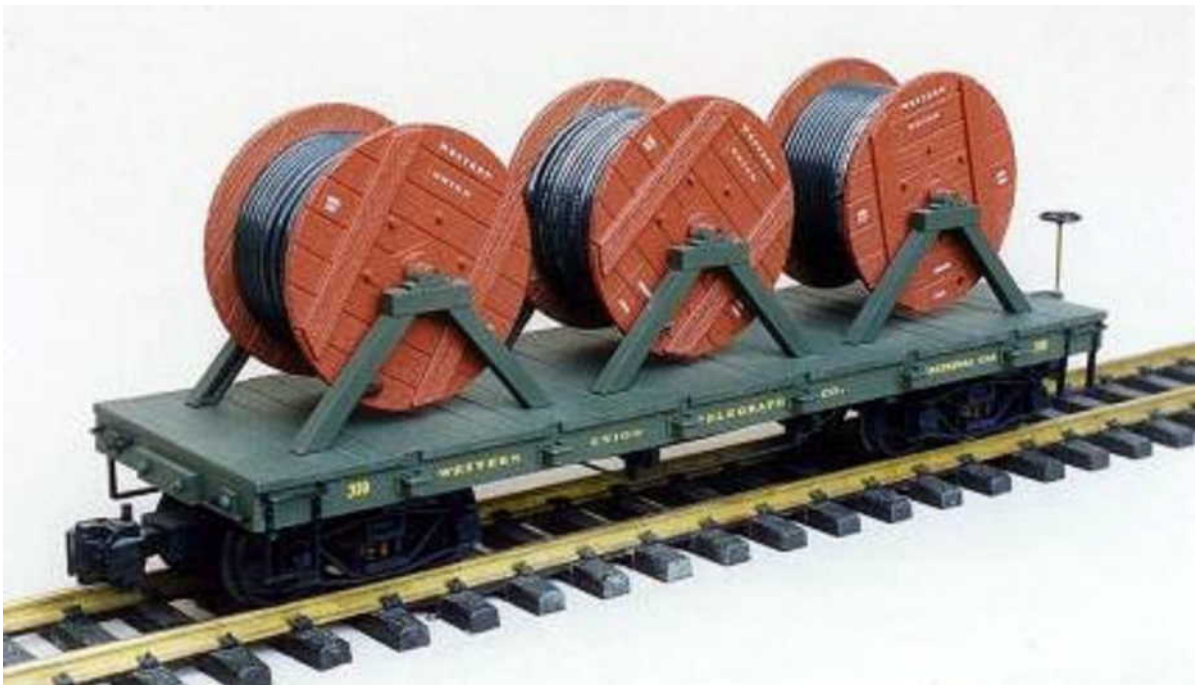
*Delton's D&RGW 3000 series box car of 1987.  
(Photo D. Fletcher)*



*The 1987 refer was based on a D&RGW prototype... again a 30ft car, this one in C&S livery.  
(Photo D. Fletcher)*



*Delton's long caboose is based on the famous long cabooses of the D&RGW, model developed in 1987.  
(Photo D. Fletcher)*



*The Delton flat car based on a C&S prototype, this one features telegraph spools, 1987.  
(Photo D. Fletcher)*

The Delton line of plastic freight cars were the most detailed and accurate cars available to the largescale market and even today remain among the most respected largescale narrow gauge models. They featured fully sprung trucks, all separate detail parts including grab rails, roof walks, opening doors, underfloor detail, wood graining detail and operating knuckle couplers - the first offered in Large scale.

Phil Jensen's pre-production prototype of the Delton Conoco #5 tank car appeared in the 1988 Delton catalogue along with the preproduction models of all the freight cars pictured above. Phil also prototyped a Delton stock car that sadly was never produced.





*Phil Jensen's pre-production model of the Delton stock car, never put into production.  
(Photo P. Jensen)*

### **Delton Enters the Plastic Market (cont.)**

Passenger cars were next on the agenda. Two lines were produced, the 'short' passenger cars were offered as a coach and combine set. The 'long' passenger cars came in a set comprising, Coach, combine and RPO (Railway Post Office). The cars featured fully detailed and illuminated interiors including seating, toilet and hand basins and the cutest pot belly stove seen in a largescale car!

***"The passenger cars were actually based on Standard Gauge Prototypes. The Short Cars were shortened versions of the Sierra Railroad's Cars. The long coaches were based on early New York Central Cars. Both lines were "edited" for a narrow gauge look."***

Phil's pre-production samples were fabricated from styrene and wood, including a carved wood roof. The tooling (or production of injection molds) was usually contracted outside to private firms. The tool makers used Phil Jensen's hand made models to pattern their tooling. To this day, there has never been another narrow gauge largescale passenger car to rival the quality, detail and pure style of these Delton models.



*Delton's delightful short passenger car, based on the Sierra RR's lil cars at Jamestown California, 1988.  
(Photo D. Fletcher)*



*Delton's long passenger cars featured full interior including cute pot belly stove and toilets, 1988.  
(Photo D. Fletcher)*



*The Railway Post Office (RPO) was one of the cars in the Delton long passenger car set, 1988.  
(Photo D. Fletcher)*

Sales of injection molded products began in 1987. The first car sold was the wooden hopper car. Shortly thereafter, the box cars and reefers were introduced. The long and short passenger cars appeared in 1988, also the long caboose.

***"By the next time I went to Michigan Bob had moved the factory to an old lumberyard in Delton. He had installed a tool shop and hired toolmakers and was starting to make the molds for the wooden hopper car. He had contracted with several local tool shops to make the molds for the passenger cars and freight cars."***

### **Delton's First Mass Produced Locomotive The D&RG Class 60 / C-16 2-8-0**

Bob Schuster had been toying with the idea of an injection molded locomotive to be offered to the mass market as early as 1984. The loco would be the flagship of the new Delton line of plastic trains and would have a style, quality and appearance consistent with the limited edition brass models Delton was producing at that time. It was a gamble to be sure, a plastic Delton locomotive would have to go up against the best available, in particular LGB's recently released South Park Mogul. Much thought went into the selection of the prototype. Phil had already made a pre-production model of a possible C&S 2-6-0, but when LGB's mogul hit the market, there seemed little point in Delton's first plastic loco also being a 2-6-0 from the South Park Line. The tooling costs alone for a new locomotive were to be up near the half million US dollar mark. Delton's first loco would have to be nothing short of a Bonanza!! The decision was not that difficult, there was only one loco to make; the famous D&RG Class 60/C-16, 2-8-0.

***"The C-16 was chosen to be our first plastic loco because it was good looking and was run on almost every narrow gauge railroad across the country. Baldwin built a gazillion of them."***

The D&RG had a couple of hundred similar 2-8-0s, and very similar 2-8-0s ran on the South Park, C&S, North & South Pacific Coast, ET&WNC and many others.

After a meeting at Delton Michigan in 1986, the locomotive selection was agreed and Phil returned to Omaha to build the first pre-production prototype.

***"Again the tooling was contracted. Bob Gibbs was Delton's engineer and produced all the drawings for the C-16 project. When molds were ready Bob would have local molding plants make the parts. They would be brought to the factory for assembly, painting and decorating. In the mean time, the brass line was being produced and new brass models added but I had little to do with those other than to admire them."***



*A view of Phil Jensen's hand made, as yet unpainted pre-production model of the famous Delton C-16, 1986, note the construction method used, including brass castings, styrene and PVC.*

*(Photo P. Jensen)*

The Delton C-16 hit the market in early 1989. It was nothing short of fabulous; it looked exactly like another brass model from Delton, only for a fraction of the cost. Many of the loco's components were machined brass or lost wax brass parts. The model was a highly detailed, 1:24 scale 1880s style locomotive. For the first time a largescale plastic locomotive featured the all-American air gap between the frames and boiler, including full spring rig suspension detailing above the frames. The model also had a Russia Iron boiler jacket painted in the one of the correct colours of this elusive technique. The model was pure style.

The original Delton C-16s were produced in both an 1880s D&RG paint scheme and an equally stylish C&S version. Over the years that followed, the little C-16 would wear many colour schemes. The locomotive was not only an apt model as flagship to Delton's line of plastic trains, but was complementary to LGB's South Park Mogul. It was the most accurate plastic largescale locomotive to date.



*The stunning production model of the Delton C-16, D&RG 1880s Class 60 2-8-0, as delivered to the market in 1989.  
(Photo D. Fletcher).*



*A rear view of Delton's First plastic steam locomotive, 1989.  
(Photo D. Fletcher).*



*The original Delton C&S C-16 of 1989*

### **Delton –The Happy Years**

In about 1987 **Lionel** became interested in entering the largescale market. At first Lionel approached Delton with the idea that it might purchase Delton outright and use it to gain a foothold in the large scale arena. However, Delton's shaky financial position made that course of action less than desirable. Bob had obtained much financial aid in the tooling up of the largescale plastic line and C-16, and it would be sometime before real profits were to be seen. Instead, Lionel contracted with Delton to design their first large scale train and to produce the tooling for it. **The Gold Rush Special** was created by Delton for Lionel: a small, ornate 0-6-0, a small flat car, a small Gondola Car, and a short caboose with a baggage door on one side were produced.

***"I designed that set and hand-built two sets of samples. After the tooling for the set was produced by Delton, Lionel manufactured the set in its factory near Detroit."***



*Lionel's first largescale locomotive was this cute lil 0-6-0T, designed by Phil Jensen, developed and tooled by Delton Locomotive Works in 1987.*

Lionel went on to produce a complete line of both 1:24 and 1:32 scale narrow gauge and Standard Gauge models.

## Delton's affordable line of Trains The Genesis of the 'Value Line'

*"For the next few years I would do shows with Bob and visit the factory every few months. In Omaha I made prototypes of several smaller locomotives and a series of smaller cars that were never produced. I built a Little Mack Switcher and Bob had a tool shop start making molds. This project was never finished and the Mack Switcher never saw the light of day under the Delton name plate."*

These were intended to be affordable smaller type trains, offered to the entry level largescale. Several pre-production prototypes were made including box cars, flats, gondolas, tankers and cabooses and a side door drover's caboose.

The hood of the unfinished Mack switcher did find a use, becoming a special feature of an unusual Jensen designed Delton kit-bash – the **Delton Doozie** rail bus.



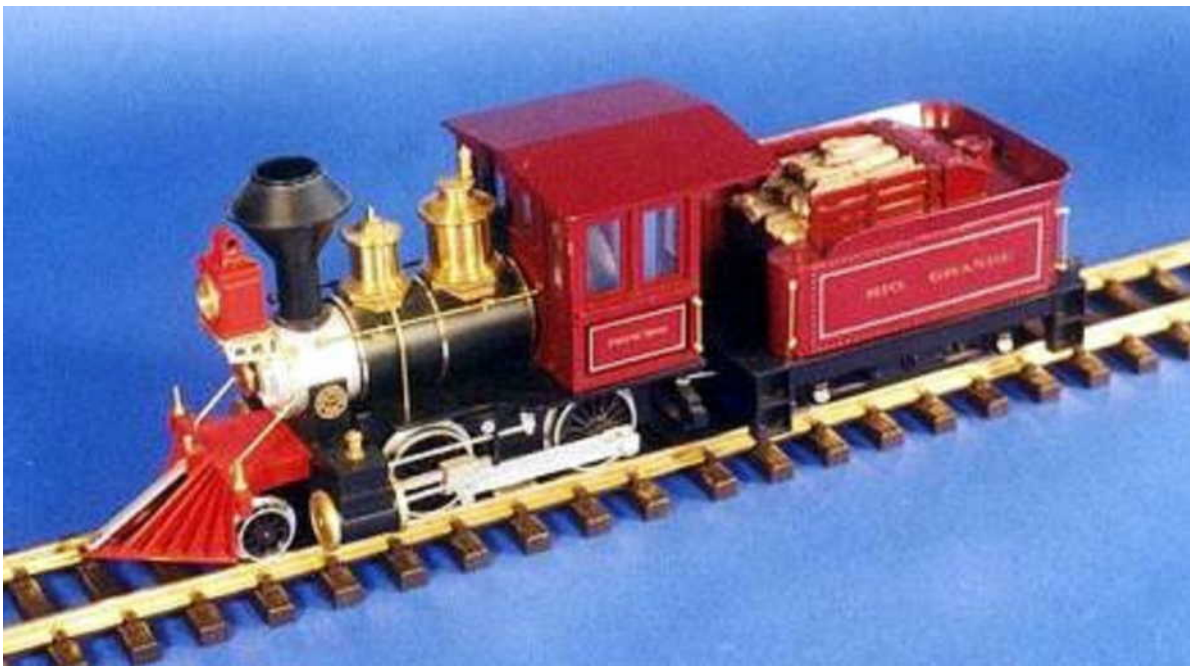
*These shorty 22' freight cars were developed by Delton for a proposed affordable entry level line of trains, sadly the models were never put into production, 1987.*

*(Photo DLW)*



*This 4 wheel C&S caboose was also proposed in the 'value line' but was never produced, LGB ultimately produced a similar C&S caboose some years later.  
(Photo DLW)*

Phil Jensen also prototyped a 2-4-0 and 0-4-2T locomotive for the entry level largescale modeller, but sadly these locomotives were never put into production.



*The pre-production model of the Delton 2-4-0, 1984, never produced.  
(Photo P. Jensen)*



*The pre-production model of the small 0-2-4T loco, developed 1984 but never produced.  
(Photo DLW)*

### **Delton –The Happy Years (cont.)**

The pre-production model of the side door drovers caboose was a stunner, but Delton's financial status in 1989 contributed to the model never being put into production.



*A view of Phil Jensen's pre-production prototype of the side door drovers caboose, prototyped in 1989, but never produced.  
(Photo P. Jensen)*





*A view of the 'door' side of the side door caboose, pre-production model of 1989, model never produced.  
(Photo P. Jensen)*

While Phil's side door drover's caboose never became a reality, a version of this caboose was produced in the form of a kitbash using the Delton shorty combine and D&RGW long caboose cupola.



*This cute drover's caboose was kitbashed by Phil Jensen as a replacement to the never produced side door caboose. The caboose hit the market in 1990.  
(Photo D. Fletcher)*

## The Delton Doozie – The Little Railbus That Could

Aware of the increasing debts burdening Delton Locomotive Works, Phil set about turning existing products and tooling into new products. This type of resourceful company kitbashing would become an almost central part of Phil's life in later years, when new products were necessary in keeping a company's cash flow up, without the capital outlay of all new tooling. Phil took Delton's existing shorty combine passenger car, and added a kitbashed front incorporating the hood from the unfinished Mack switcher. The famous **Mack Truck Bull Dog** front, was the corporate image of the truck company in the 1920s, and Mack had delved into rail buses during that period.

***"I kitbashed the first Doozie just before the 1988 Garden Railway Convention in Denver. I showed it there and it caused much excitement. Bob Schuster had not been able to attend and was totally unaware of this project. I called him right after the convention and told him we were going to build a "Delton Doozie" and his response was "What in the hell is that?"***

Many early owners of the Delton Doozie would have noticed the little tale written on Delton Letterhead that came included in the model's box. The fiction outlines how a run down backwoods railroad overcame their problematic financial position, when the road's shop foreman 'Phil' kitbashed a rail car to cheer up the road's saddened owner 'Bob'!! Delton went on to produce several thousand Doozies in many paint schemes. It was one of Delton's real winners.



*The adorable Delton Doozie, Mack Rail bus, 1988.  
(Photo D. Fletcher)*



*The Denver South Park & Pacific version of the Delton rail bus sported a cool snow plow.*

## The Modern 'Coal' C-16 Delton's Last New Model

Phil hadn't finished turning bashed Delton models into new products.

***"When the first C-16's were built in the 1880's style, I kitbashed them to look like the prototypes did forty years later and those went into production."***

This 1920s version of the C-16 was to be the last new product offered by Delton in late 1989.



*Phil Jensen's pre-production model of the modern C-16 developed in 1989.  
(Photo P. Jensen)*



*The actual production model of the Modern C-16 as delivered to the Market, 1990.  
(Photo D Fletcher)*



Amidst ever increasing debt, Delton pressed on with the design and construction of preproduction steam outline models as a follow up to the C-16. A 2-6-0 C&S Mogul was again planned that would share C-16 parts, but no tooling was ever made. A 4-4-0 was also planned by Delton and prototyped but was never produced.

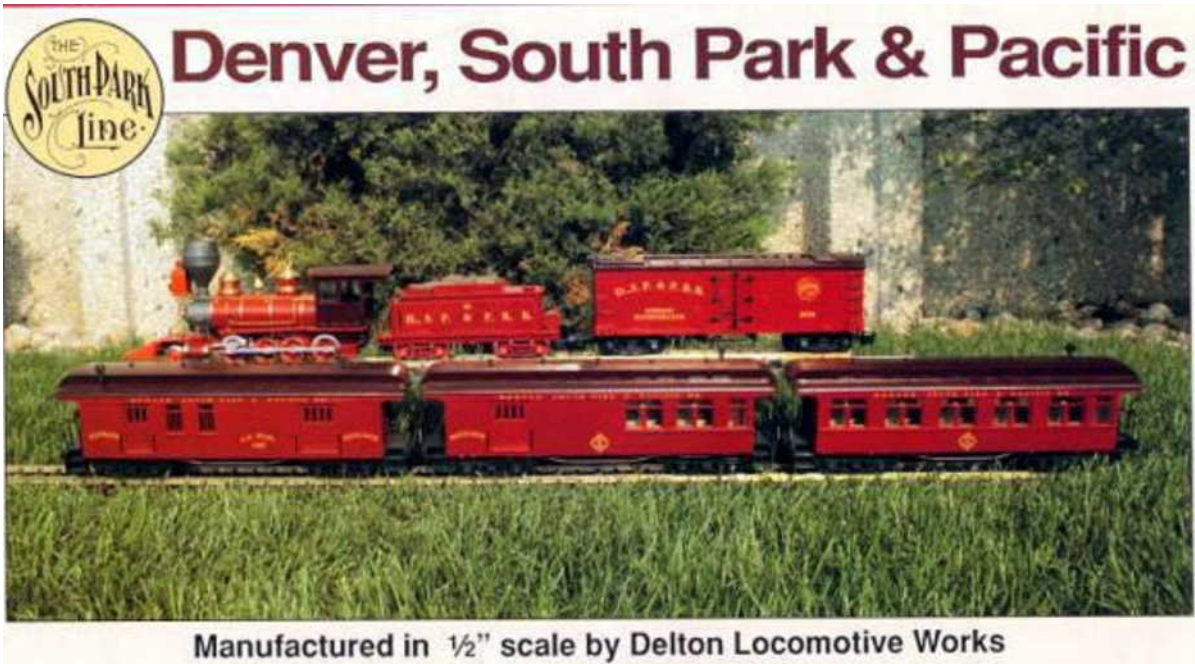


*The Delton C&S 2-6-0 could have followed the C-16 into production. Sharing many of the C-16's parts, this pre-production model never made it to the market, 1990.  
(Photo P. Jensen)*



*Delton's pre-production model of a possible 4-4-0 also shared C-16 parts. This model was never put into production... many of its features were later used to upgrade the Kalamazoo 4-4-0. 1990.  
(Photo P. Jensen)*

**"Those were happy years. Bob was selling everything he produced but there was a Huge Problem Looming: Money! Bob had spent so much on tooling that all his capital was exhausted and no one would lend him more. He sought new partners (with financing) but that was in vain. Suppliers demanded payment and stopped shipments of vital parts. The tool shops also wanted their money. Bob had tried to go too far, too fast and it had all caught up with him. By 1990 the end was near. Bankruptcy was on the horizon."**



*This ad, appearing in Garden Railways Magazine in 1990, highlights the optimism of Delton Locomotive Works even when times were tough. What a stunning set this would have been.  
(Photo DLW for Depot G)*

### **Delton Locomotive Works in Chapter Eleven**

Bob Schuster was known by his friends as a great dreamer. He had a driven soul and liked to move from one project to the next very quickly.

***"Bob has always been a great optimist and his optimism has gotten him in trouble several times: He had difficulty estimating costs of production and times to prepare tooling and bring a product to market. Needless to say this trait has wreaked havoc with cash flow and is perhaps the biggest reason for Delton's failure. The other major contributing factor was Bob's desire to go too far too fast with too little capital."***

Estimating the costs of largescale trains in those early days was difficult, and coupled with great ambition, the production of Large scale trains was a gamble at best. But without Bob's vision of what he wanted Delton to be, largescale US style trains might never have progressed past the toy-like Kalamazoo 4-4-0 of 1980. Without Bob, there would have never been anything like the style and quality of the trains that were produced by Delton. Sadly by late 1990, Delton Locomotive Works was in receivership.

***"Clarence Slaughter who owned 'Caledonia Express' was one of Delton's major part suppliers. His firm produced all the machined brass parts used by Delton. When Delton declared bankruptcy Clarence was one of the largest creditors. As a part of the reorganization, the court allowed Clarence use of the Delton tooling in return for a royalty payment for their use. From 1991, and for a couple of years, Clarence attempted to continue the production of Delton Trains and to make it profitable. I provided some help to Clarence in providing new paint schemes, but no totally new products were introduced during the Caledonia Express period."***

Caledonia Express had a background in metal work, machining and casting. They had in the past produced die cast auto models. The first Delton C-16s were generally considered to be 'underpowered'. One of the first projects Clarence took on was to totally redesign the C-16's drive train and gearbox. A whole new cast metal gearbox and motor mount was developed, which floated with the 3rd axle. Traction tires were also added to the rear drivers. The C-16 finally had a mechanism with the power and reliability to match its appearance. Sadly, relatively few of these upgraded C-16s were made before Caledonia Express felt the financial strain.

# Delton is back on track!

Limited Editions in 1/2" scale exclusively for Depot G Hobbies



Now in progress at Delton's new manufacturing facility:

**Modern C-16, Western Union Cars, and Galloping Goose.**

*An ad appearing in Garden Railways magazine in 1991 illustrates some of the products Caledonia proposed to produce, including some of the new paint schemes proposed by Phil Jensen... some became reality, some did not. Note the Silver Delton Doozie railbus... this 1991 pre-production prototype of a possible Rio Grande Southern- Galloping Goose railbus #8 was never produced by Caledonia, but found wings when re-produced by Hartland in 2000. The fun of the railbus, Galloping Goose #8, was that the Rio Grande Southern only ever had Geese numbered up to #7... this RGS#8 was a cool 'What If?'.  
(Photo DLW for Depot G)*

***"Ultimately it became apparent that Clarence wouldn't succeed and the bankruptcy court ordered Delton's assets liquidated so creditors could be paid wherever possible."***

In 1993, all production of Delton trains ceased. All the Delton tooling was sold at Auction except for the tooling of the long and short coaches.

***"When Bob Schuster had the tooling made for the long and short passenger cars, he persuaded an investor to buy the tooling and lease it back to Delton. Because Delton did not own the coach tooling, this tooling was not a part of the Delton Bankruptcy and was not sold by the bankruptcy court. Instead, after the demise of Caledonia Express, the passenger car tooling was purchased by another company, Early American Trains."***

The **Early American Trains** company continued to produce Delton trains for a couple of years. With only the use of the Delton coach tooling, and boxes of unused C-16 parts, Early American Trains continued to offer a limited number of Delton trains through to 1995. The coach tooling was then sold.



*One of the later versions of the Delton C-16s to be produced was this unusual Milwaukee Road Coal Burner.*

## Life After Delton

1990 was a big year for largescale trains. This year saw the end of the original **Delton Locomotive Works**, but it was the year **Bachmann** entered the Largescale market with their first electric 'Big Hauler' line... a new beginning. Delton had failed as a company, but had set the standard for largescale models in the US. Their contribution was also one that encouraged new companies to take the largescale gamble. **Lionel** began its largescale adventure with the Delton designed 0-6-0T set in 1987, **Bachmann** had entered in 1988 with a good looking battery powered 4-6-0 set, made in China. **REA**, later to be known as **Aristocraft**, also began largescale manufacturing with the release of their Rogers 2-4-2 set, and **Kalamazoo** were still pushing on with their toy trains for 45mm track. All the while, **LGB** were still producing the South Park 2-6-0.

With the demise of Delton Locomotive Works, Bob Schuster moved to Florida to run a train shop and Garden Railroad display. You can visit Bob's model empire in Orlando today. Running around the perimeter of his yard, Bob has his own ride-on railroad, pulled by a Bob Schuster designed, 0-4-4 Mason Bogie, with a paint job reminiscent of the Brass Mason Bogie he'd made all those years before.

***"Bob is now operating a small train museum in Orlando with an operating "G" scale layout inside and a 2 foot gauge train ride outside. The train ride is quite an experience. The locomotive is a baby Breckenridge, a very nice 0-4-4t, and is powered by a Diesel Hydraulic System rather than steam."***

The end of Delton had been a blow to Phil Jensen, the models had been getting better with every new product designed, and he had learned so much about manufacturing.

***"I'd like to say that the models I made were OK because of my skill, but most of it was just good luck. I had never seen an injection mold when I started designing for Delton and had not a clue about manufacturing plastics. My experience with large scale trains has been almost like going to a technical college. I have learned about characteristics of engineering, toolmaking, molding, assembly, and the various types of plastic. I only wish that I already had this knowledge when I started in the Delton Company. Perhaps things would have been different. I know tooling costs would have been much less because the parts would have been interchangeable and fewer would have been required. Also, the molds could have been designed to be simpler without loss of detail. Ah, hindsight!"***

## The Kalamazoo Connection

In 1991, during Delton's Caledonia era, Phil would find himself involved with the original **Kalamzoo** company that Bob Schuster had founded back in 1980 with the toy 4-4-0.

***"The Delton and Kalamazoo factories were located within a few miles of one another and Bob Schuster had been involved with both companies, so there always was some level of cooperation. For example, Kalamazoo Trains bought knuckle couplers from Delton. While I was working for Delton, I became acquainted with Jim Munzer who ran Kalamazoo Toy Trains. After Delton's bankruptcy in 1990, Jim had me come to Kalamazoo's factory to see about updating its line."***

The line of Kalamazoo trains had a reputation of being very well engineered toys, and the rolling stock, by comparison to the Delton line, was very toy like. There was no question, the toys had potential, and Phil began his second life as a product designer rebuilding and retooling the Kalamazoo toys into a respectable line of model trains. Delton had done some advanced work on a 4-4-0 project before the end, and Phil had built a pre-production sample. While a Delton 4-4-0 was never produced, Phil was to apply many of the design principles into the Kalamazoo 4-4-0. Benefiting from a joint agreement between Caledonia and Kalamazoo, enabling Kalamazoo access to some of the C-16 tooling, a new Kalamazoo 4-4-0 began to take form. The domes, cab, steam chests and headlights of the Kalamazoo 4-4-0 were upgraded using Delton C-16 tooling. When Caledonia faced financial difficulties, and the courts ceased the Delton tooling in 1993, the new look Kalamazoo 4-4-0 was left with no access to many of the necessary parts.

***"Some of the 4-4-0 tooling was modified, but only a few updated locomotives were produced. Jim had other interests and Kalamazoo Trains were taking too much of his time. Kalamazoo limped on for a few years until Hartland Locomotive Works (H-L-W) purchased it's tooling and began to make it's trains again."***



*One of the handful of updated 4-4-0s produced by Kalamazoo in 1991, involving the many changes developed by Phil Jensen. Note the use of the Delton C-16 headlight, domes, steam chest covers, air compressor and cab. A huge improvement over the original Kalamazoo 4-4-0 of 1980.  
(Photo D. Fletcher).*

In 1996, under the **Hartland Locomotive Works** banner, the 4-4-0 would see its re-tooling completed. All new tooling would be provided to replace the missing parts originally to be supplied by Delton. The locomotive would ultimately become known as '**Vonita Jean**', named after Phil Jensen's wife, and today is the flagship of the Hartland Locomotive works catalogue.

### **Delton Lives On**

In 1996, **Aristocraft Trains** won the Delton tooling at Auction from Bankruptcy Court, and shortly after a new line of 1:24 scale trains were to emerge in the Aristocraft Catalogue, under the special name of "**Delton Classics**". It wouldn't be until 1999 that the fine lines of the Delton C-16 would be seen in the hobby shops once more. Over the years since the Delton tooling was ceased, many smaller parts had been lost. Aristocraft invested time and money into the classic locomotive to re-tool the missing parts and also build a whole new drive system to enhance the locomotive's pulling power.





*The Delton C-16 hits the market again in 1999, with some replacement tooling, a totally redesigned chassis, and drive mechanism and a host of new paint schemes.  
(Photo D. Fletcher).*

Hartland Locomotive Works would also benefit from the Delton legacy.

***"Hartland Locomotive Works acquired the tooling for the long and short passenger cars in 1997 and added those cars to its line of trains made from the old Kalamazoo Line and the new stuff I had designed for them."***

The roof pattern to the Delton long coaches had been incorrectly tooled due to a misunderstanding by the tool maker, and as a result, the original Delton coaches had no clearstory windows inserted where they were supposed to be. One of the first things Phil did at Hartland trains, after regaining access to the coach tooling, was to rectify the clearstory detailing... one of the best largescale coaches was now ever better.



*At Hartland the Delton Long coach tooling is finally perfected, along with the addition of low drag electrical pick-ups on the wheel axles. A great coach is made even better.  
(Photo H-L-W)*

## Hartland - A new Beginning

**"The first trains made by Hartland were the little 0-4-0 tea kettles. They ran well but were ugly and did not sell well. After about a year of operation, the Gods of Hartland summoned me to the factory where I started the still ongoing process of redesigning the entire line and adding new products. That was about seven years ago, and as I look back I'm amazed at how much has been either redesigned or introduced. I'm especially proud of the "Vonita Jean" 4-4-0 and the "Lilly Belle" (our latest 4-4-0 offering based on Walt Disney's special locomotive). We've come a long way!"**



*One of the versions of the Hartland 4-4-0, the modern coal type is the redeveloped version of the Kalamazoo 4-4-0 of 1980.*

*(Photo H-L-W)*

Delton had investigated a 'value line' of trains, featuring small rolling stock and locos. Phil had built several pre-production samples of the tiny Mack Switcher, a 2-4-0 'Princess' and an 0-4-2 Forney type loco. These models were never produced, but under the Hartland name, the 'Value Line' became reality. The ugly Kalamazoo 0-4-0 switcher became the basis for several small H-L-W locomotives, particularly a new 2-4-0 called 'Dutchess' and a 2-4-4 Forney named 'Princess'! The Mack Switcher had a tale all her own. Twelve years after tooling began on the tiny Mack switcher, Phil finally finished this chapter in the Delton story when the new switcher hit the market at the head of the H-L-W, 'Value line'. The Hartland 'Value line' or 'Mini series' wagons are the lowest cost largescale wagons on the market, and a kit bashers delight!



*The Hartland 2-4-0 'Dutchess'. – Note the resemblance to the 2-4-0 'Princess' prototyped by DLW 10 years before.*

*(Photo H-L-W)*



*The Hartland Forney 'Princess' again had its roots in the DLW 'Value Line'.  
(Photo H-L-W)*



*The Hartland 'Mini series' cars - low cost modelling.  
(Photo H-L-W)*

### **The Mack Switcher – The Lil Loco With A Big Story**

In around 1987, Phil produced the first pre-production sample of a tiny 4 wheeled Gas-electric switcher locomotive, originally built by Mack Trucks in the 1920s. The model would have been Delton's most affordable loco. Phil ended up hand building several prototypes for advertising purposes and for the tool makers. Tooling was begun with the cab and Mack 'Bull Dog' Hood components being tooled up by outside contractors. No Chassis or roof was ever made. Delton started to hit financial troubles in late 1989 and the tooling was not completed.



*Some of the hand made pre-production models of the Mack switcher made by Phil Jensen in the late 1980s. Tooling for the production models by Delton was never completed.  
(Photo DLW for Depot G Hobbies)*

The hood tool of the proposed Mack switcher was used on the Delton Doozie rail bus, but the cab tool promptly disappeared because Delton was never able to pay the tool maker for his work. As a result, the tool maker kept the cab tool and kept it for many years! The cab tool was not part of the Bankruptcy proceedings, was not part of the auction, nor was it purchased by Aristocraft Trains.

A couple of years after Hartland was under way, the tool maker approached the Hartland chiefs and said, "I Have this old Delton cab tool...dono what it's for but you might be able to use it!" Phil recognised it immediately...the Mack Switcher's, long lost cab tool! The bad news was that Aristo had acquired the Bull Dog Mack hood tool and was about to use it on their new Reo Rail bus. H-L-W had the cab, but not the hood. H-L-W made a new hood tool, and tooled up the rest of the chassis that Delton had never made... it only took 12 years from inception, but the Mack Switcher finally saw the light of day under the H-L-W name. In making the tool for the hood, H-L-W was able to re-release the Delton Doozie once more, using the Delton Shorty combine.



*The Mack switcher finally goes into production in 1999 at Hartland trains, this unusual green pre-production prototype had a story all her own.  
(Photo D. Fletcher)*

Keep a watchful eye on the lil Mack Switcher, for her tale is not over. For the little switcher that refused to be forgotten, she has proved to be remarkably adaptable. Check out 'Old Sparky' an electric Switcher, and the 'Juice Jack', all based on the Mack's tooling.



*'Old Sparky' – The Electric adaptation of the Mack Switcher.  
(Photo H-L-W)*

### **Hartland – The Present**

Today, under the Hartland banner, the Classic Delton Doozie rail bus has made its return, there are Inner Urban tram cars and Diesel Rail Cars flowing forth, all based in part on those Delton passenger cars. The Inner Urban car is a first in LS modeling, and is highly representative of the classic urban railway and electric traction units. The RMC had a role in both narrow and standard gauge railroading, and today, at the East Broad Top, a similar RMC is in operable condition, known as the 'M1'.



*The Delton Doozie returns at Hartland, with a seriously upgraded power plant, and the cheeky Rio Grande Southern Goose #8 paint job. The RGS paint job was originally prototyped by Phil in the early 1990s for Caledonia Express, but never produced at that time.*

*(Photo H-L-W)*



*Hartland's beautiful Innerurban traction unit has Delton heritage within, utilizing the Delton long coach and a host of new tooling, parts and cab.  
(Photo H-L-W)*



*The new Hartland Rail Motor car has evolved from the Delton Long Combine, with new tooling, new drives and the new cab detail.  
(Photo H-L-W)*

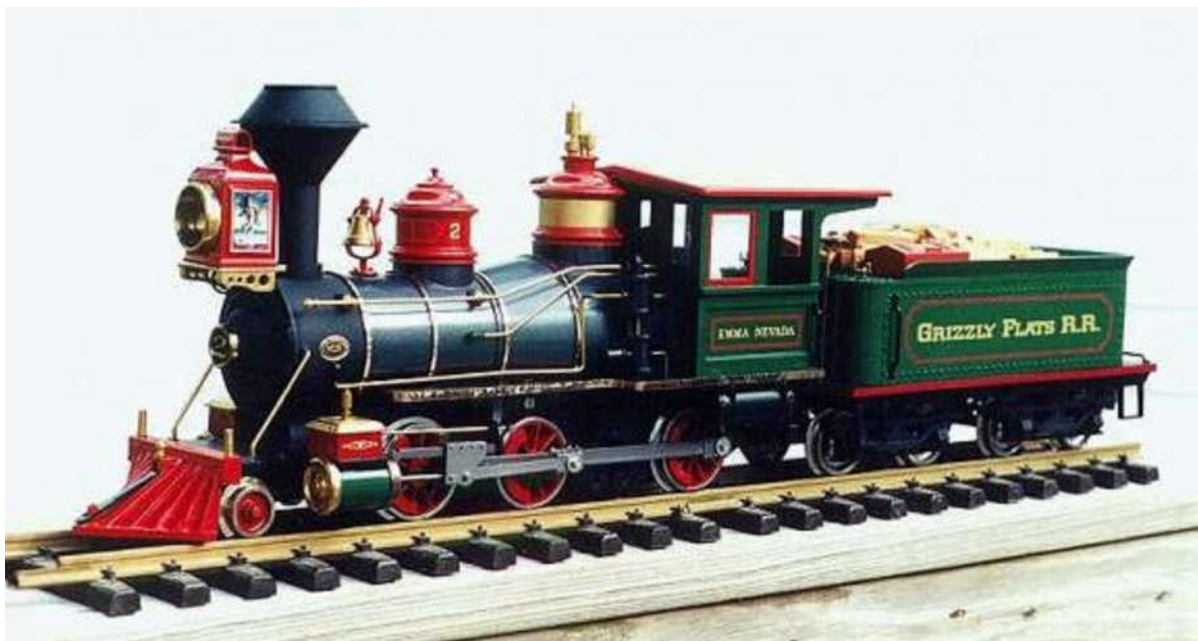
The older Kalamazoo freight cars are in the process of being upgraded, and in years to come, these products will return with new tooling, and improved detail, along with some completely new products. A new drive system is in development which will enable many different steam profile wheel arrangements. The first model to be released is Ward Kimball's classic 'Emma Nevada' 2-6-0. This loco had a special place in Phil's heart.

***"I am very pleased to report that Ward Kimball, at the grand young age of 87, is just as sharp as ever. I have been to his house on several occasions and have been able to see his fantastic collection of all manner of railroad collectibles. He and his wife, Betty, are wonderful people and he keeps you in stitches with his tales of him and Walt Disney. Theirs was a love/hate***

***relationship and the jokes they played on one another were a riot. I am very proud also that on his mantle in his living room in a glass case is a model of my special H-L-W 4-4-0 'Vonita Jean'.***



*Ward Kimball's Emma Nevada – Hartland's newest locomotive, features an all new drive train, with the versatility to enable many wheel arrangements. This 2-6-0 is sure to have many faces...so 'watch this space'!!  
(Photo H-L-W)*



*Photo of Phil Jensen's pre-production model of Hartland's Emma Nevada, due for release in 2002.  
(Photo P. Jensen)*

## **Co-operation Within the Industry**

### **The Rebirth of the Delton Drovers Caboose**

In 2001, a co-operative effort was made between Aristocraft Trains and Hartland to re-introduce the cutest of all largescale cabooses, that of Delton's classic 'Drover's caboose'.

***"I have been friends with Lewis Polk for many years and though competitors in some respects, we work back and forth sharing parts and thoughts on many occasions. The Garden Railway Convention Car, The Drovers Caboose, was made possible because Hartland obtained certain parts from Lewis. Many smaller fittings from Lewis are used throughout our line."***

Aristocraft had won the Delton D&RGW long caboose tooling at auction. Hartland had purchased the tooling for the Delton shorty cars. The Delton Drivers caboose was the product of a typical Jensen kitbash for the Delton company... it used the Shorty combine, and the long caboose's cupola. Between the two companies, the whole car could be re-produced. The first of the reproduced drivers cabooses were offered as a convention car for the 2001 Garden Railways meet at Seattle. Expect further cabooses to be released in D&RGW and other road names. This type of corporate co-operation could prove to be of great benefit for future product offerings. When tools can be shared and new products produced without the huge expense of all new tools, everyone wins. Continue to look hard at new product releases and you might on occasion recognize components from other makers.

## **The Jensen Philosophy**

Largescale model manufacturing is expensive, it is also risky; there is nowhere near the market share that the HO manufacturer's enjoy. The tooling costs of Largescale trains are at least twice that of smaller scales. While it is a growing hobby and new products are released every year, much consideration goes into the design of these new products. The lesson from Delton's failure was the need to be more resourceful with company assets, in particular the tooling of the models that cost so much.

***"I am not a rivet counter. Scale details are nice and I appreciate them but the Models are too fragile. I believe that large scale models must be reliable and rugged: they are intended to be run. However, I do try very hard to capture the flavor of the prototype. As a designer I am aware that tooling is the largest cost of a large scale model. I try to design parts and components with multiple applications to help keep those costs under control. "In an ideal world if I could do what I wanted, I would make each of my models to be as much like its Prototype as possible. I'd make only the concessions necessary to ensure that it would operate reliably and have sufficient strength and durability so that it could be handled without fear of breakage.***

***"In an ideal world if I could do what I wanted, I would make each of my models to be as much like its Prototype as possible. I'd make only the concessions necessary to ensure that it would operate reliably and have sufficient strength and durability so that it could be handled without fear of breakage.***

***"But reality doesn't allow this. With the cost of tooling for a brand new locomotive now running about half a million dollars, one must adopt a different approach: 'Evolution tooling' must be developed that can be used for several applications, thereby sharing its cost with several projects. When I design a part or a sub-assembly I try to make it a 'Family' product that will have future uses down the road.***

***"But this approach is prototypical. Look at Baldwin Locomotive Works. It assembled standard Sub-assemblies into locomotives designed for a special customer. Though the locomotive looked quite different, 75% of their components were 'Standard'.***

***"Hartland's Popular 2-4-4 Forney loco is an example. Look closely at it and you will see that it is basically the Butt-Ugly Kalamazoo 0-4-0 with a new frame and parts stolen from the revised Kalamazoo American.***

***"Again, compare the original Kalamazoo American. It has evolved through careful tooling changes into the Disney 'Lilly-Bell'.***

***"As for total 'Brand New' products, the answer is probably not. But look for 'New Products' that look brand new but are actually made up of components used in other projects and have maybe 20% new tooling.***

***"The recent 2-6-0 locomotive, based on Ward Kimball's Emma Nevada will consist of mostly off the shelf parts but has one major new assembly, a brand new drive unit. This drive unit is revolutionary and when you see it you will see that it shouts the Jensen Philosophy: Versatility."***

There is no finer example of Phil's resourceful approach to the design of new models based on existing generic parts as seen in Hartland's adorable 'Big John' logging locomotive. This unusual model uses the tooling from an old Kalamazoo flat car/gondola, the boiler from the 'Butt Ugly' Kalamazoo 0-4-0 and the cab, tender elements and headlight from Hartland's Vonita Jean 4-4-0.

The pre-production sample was intended to represent fictitious back-woods geared loco, somewhere between Climax and Heisler. Often said about backwoods railroads is that if you've thought of some unusual locomotive, the chances are that somewhere on some little known line, some poorly paid shop crew invented the



very same locomotive. As for Hartland's 'Big John', the design is reminiscent of the unusual New Zealand built version of the Heisler, but also shares many of its features with the Dunkirk geared locomotives. Regardless of its prototype heritage, the model is a rugged, powerpacked little beast.



*'Big John'*

### The Evolution of the Kalamazoo 4-4-0



*Kalamazoo (Schuster) 1980*



*Kalamazoo/Delton (Jensen) 1991*



*Hartland 2001*

Hartland's 'Lilly Belle' is the latest evolution of the Kalamazoo 4-4-0. Note the evolutionary changes from Bob Schuster's original ugly 4-4-0 of 1980, the changes from the 1991 Kalamazoo/Delton 4-4-0. The Lilly Belle represents 22 years of evolution tooling. There is barely a single part of the original 1980 Kalamazoo 4-4-0 that hasn't been upgraded in some way, and the story has yet to see the conclusion. The tooling for the smokebox and boiler is again under consideration.



### The Lesson of Efficient Tooling

The Delton tools or molds were state of the art at the time they were made and are still regarded as very high quality. Fashioned from steel, these tools will be capable of running Delton models for many more years. The Delton tools were complex and very expensive. It was common during the Delton years to produce tools that could cast whole assemblies in one pour. For example, the Delton 3000 series box car body was a one piece tool. One very large, multi-faced, complex tool could cast all 4 side walls and floor in one piece, with detail applied to all surfaces. The C-16 smokebox component is another example, again a single tool can cast the entire smokebox in one unit, with detail to all sides, including saddle, stack flange and fully detailed smokebox front. The greater capital cost of these complex tools is then offset by the concept that assembly costs are less, as there are fewer parts to be manually assembled.

The lesson of the Delton tooling was that while these tools were a work of art, their enormous up-front capital cost drove the company into financial difficulties. The question faced by the model company is this: **do we spend big on tools now and have cheaper overhead costs in the future as assembly of the models is less....or do we spend less on tools now and pay for workers for ever more to assemble the parts?** To the model company the difference in capital costs between the two approaches can come right down to either being able to produce the model in some form or never producing it.

Phil has taken this issue on board at Hartland and developed a principle for tooling which balances the labor content with the capital costs of the tools. The Delton C-16 cab typically was a one piece extremely complex tool, incorporating the 4 walls, and rear supports, fully detailed on all sides, all in one casting. When Hartland had to produce their own C-16 type cab tool in order to complete the 4-4-0 upgrade project, the cab tooling was developed as 5 separate, very simple flat tools. Thus all 4 walls were cast separately in flat tools, and the rear cab support in an additional tool. The cab would then be hand assembled by snapping the 5 parts together, and welding. It is true, the labor content was greater, but the upside was that the overall up-front capital costs of the cab tooling was much less than the C-16's cab tool, and thus placed much less strain on the company and its financiers. Where the Delton C-16's box headlight was made as a one piece casting, the very similar H-L-W headlight was fabricated using two tools, at considerably less cost.

### Building Pre-production Prototypes

In model firms of today, the art of bringing a model to the market place has changed greatly, with the role of computer modeling. Today pre-production prototypes are produced nearly entirely in 'cyberspace' and no real physical model is seen before the first samples come off the production line. It wasn't always like that and there is still the desire to have a new model tested as a sample before committing the money to tooling. Traditionally, a pre-production model would be hand made and the molds and tooling copied from that model. As a designer of model trains, Phil Jensen would not only have to think about the process of manufacturing the model components, but would have to be an excellent model maker. Every detail would be duplicated by the tool makers, including every mistake that might be on the model.

***"I work with Styrene and ABS Plastic as my main modeling materials. I have a lathe and a milling machine and find that plastics machine beautifully and very quickly. Glue beats soldering every time as far as I'm concerned. I use kitbashed parts or commercially available parts whenever I can to save time. I also cast urethane parts in rubber molds when I have to create a part that see lots of use before we can mold it.***

***"I paint with automotive acrylic lacquers using a Binks 115 Detail Spraygun. I use Dry Transfer Lettering that a buddy of mine produces to my needs.***

***"I like to use existing motor block assemblies if I can but they only go so far. I now have a new system in the works that will be the slickest thing since sliced bread. I'd tell you about it but then I would have to kill you!***

***"I am pleased to report that whenever I built Prototypes for Delton or whomever I always made two: one for the manufacturer and one for yours truly. I'm glad I did because in some cases the prototypes sent to the factory were destroyed by over zealous toolmakers trying to figure out how the hell I put them together. So at least one of each has survived. And, yes, the locomotives were powered."***

Phil is very much the train enthusiast as much as he is a commercial model maker. On his work bench among the many pre-production model projects, he has kitbashing and scratch building projects underway of a personal nature. We share these photos of his model of the famous Virginia & Truckee 4-6-0 #25, the real loco now preserved in operating condition at the Nevada State RR Museum. Carson City. His V&T #25 was bashed from a H-L-W 4-4-0, and is remarkably close to the prototype...is this an upcoming H-L-W offering? Possibly, possibly not, but he loves the challenge of a good model any day.



*The V&T #25, bashed from the Hartland 4-4-0..at this stage this is a cool personal kitbash.. .but what the future holds is anyone guess!*

*(Photos P. Jensen)*

***"The V & T 25 is one of my favorites. If you look closely at it you will discover that it is basically a stretched Hartland 4-4-0. It shares the frame design with the Ward Kimball 2-6-0 Model.***

***"Side rods!!! An interesting problem. They present a challenge both from an appearance and a mechanical viewpoint. They are very much in the foreground of what one sees on a locomotive so one must take care to make them look right. But mechanical requirements are even more critical. If they're not perfect the evil gremlin "side-rod-bind" comes knocking on the door.***

***"I make my side rods out of either ¼" wide ABS or brass strips. Details are glued on with plastic weld solvent or A.C.C. To make sure the crank pin holes are spaced right, I use the frame of the locomotive with the axle hole sleeves as a drill jig for crank pin holes."***

Beyond Phil's outstanding skill as a model maker, the success of so many of Phil's models is due to his knowledge of railroading history and equipment, and his imagination and resourcefulness. This is where the difference between a keen model railroader and a good product designer rests. Within budgetary constraints, a new model is developed with a clever re-use of some existing tooling to keep costs under control, the knowledge and historical understanding to know the model being prototyped is founded on reality, and an understanding of the market to know that the model will be desirable. As each model becomes successful, the product designer is allowed to be more and more ambitious. As for future of Hartland Trains...its easy to see the company is in good hands. With 20 years of experience and Delton's heritage behind it, the future is bright. Here's just a small preview of what is to come!!



## **The Sum Of Its Employees**

The story of **Delton Locomotive Works** through to **Hartland** highlights a point so often ignored in the fast paced corporate world, a company is the sum of its employees; their talents, philosophies and dreams make it what it is. In the context of the Delton company, the models that opened the US to largescale trains, and the style of these trains we've found so endearing are in part the work of Phil Jensen. Within every model, his passions, styling and philosophy are present.

***"I want to emphasize that I was/am only one member of a highly talented team of engineers and craftsman who all contribute to making the product what it is. If not for them my fantasies could never have become realities. "Through the efforts of Aristocraft and Hartland, Delton lives on. I know I am prejudiced but I really believe that no better large scale trains have ever been produced."***

## **The Delton History Time-Line**

**"1983**

***Delton started producing trains in 1983. The first item produced was the Breckenridge Mason Bogie. Production of Brass Locomotives continued until the Bankruptcy in 1990.***

***Brass locomotives in seven different wheel configurations were produced in a variety of colors and fittings. No more than about 200 of any type were made and far less than 200 of some of them were made. There were also several hundred brass tank cars in many different road names produced.***

**1984-1986**

***First pre-production prototypes for injection modeled products produced. Brass Line continues.***

**1987**

***Sales of injection molded products began in 1987. The first car sold was the wooden hopper car. Shortly thereafter the box cars and reefers were introduced. Delton helps Lionel into the Largescale market.***

**1988**

***The long and short passenger cars appeared in 1988, also, the long caboose.***

**1989**

***1989 was a big year! The C-16 (early version) made its appearance. The Doozie was a huge success. The flat car and the Gondola came on the scene. Late in the year the more modern C-16 was sold.***

**1990**

***In 1990 the Drover's Caboose was introduced. Tooling was started for the Little Mac Switcher but the Wolf was at the door and it was never completed. Bankruptcy interrupted manufacturing.***

**1991-1993**

***In 1991, Caledonia Express resumed production of Delton Trains. Caledonia Made Delton Trains until 1993 but no completely new products were developed. New paint schemes appeared but that was all.***

**1994**

***Early American Trains then produced the Delton line from inventories of Delton parts. Again nothing new was introduced. This company was short lived.***

**1996**

***In 1996 Aristocraft started making Delton Trains with the tools bought from the bankruptcy court. Aristocraft got the tooling for the C-16 and the freight cars.***

**1997**

***Hartland Locomotive Works acquired the tooling for the passenger cars in 1987 and added those cars to its line of trains made from the old Kalamazoo Line and the new stuff I had designed for them."***



*Phil Jensen enjoys the right hand seat of the 1875 Baldwin 4-4-0 'Eureka' at Silverton 2001.  
The man behind so many of the Delton and Hartland models we enjoy so much.  
(Photo D Fletcher)*

## Acknowledgements

This article was made possible by the very kind assistance of **Phil Jensen** of **Hartland Trains**, who undertook a series of e-mail interviews between March and May 2001 to tell the Delton & Hartland story.

## Narrow Gauge Down Under

Much of this story has been re-printed from the article by the same author published in the Winter/Spring 2001 issue of the Australian publication, **Narrow Gauge Down Under**. We thank **Bob Reid, Editor**, for permission to use these extracts.

This type of article, along with stories about all facets of narrow gauge history and modeling is the realm of **Narrow Gauge Down Under**. Check **Narrow Gauge Down Under** at:

<http://www.narrowgagedownunder.com>

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## Hartland Locomotive Works

For more Information about **Hartland Locomotive Works**, go to:

<http://www.h-l-w.com>

## Aristocraft Trains

For more information about **Aristocraft Trains**, go to:

<http://www.aristocraft.com>

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