# *Behind the scenes at*

# *Koster's Miniature Railroad Supplies*

By Wilfred C. (Bill) Koster

Those new to the hobby have probably never heard of the name but old timers may remember that forty years ago ***Koster's Miniature Railroad Supplies*** was one of the few suppliers. A friend recently said "I never realized you made that much equipment." Looking back, I myself am amazed just thinking of all we produced in our dozen years. *Koster's* was started in 1970 and sold to *Cannonball* in 1982.

Let me introduce myself first, I am Bill Koster. You might say I have been in model railroading since the age of five, with my first *Lionel* train set. By the age of sixteen I worked for a hobby shop as their model train repairman and custom layout builder. I had an older man whom I worked with and he helped me out in the beginning.

I served four years in the Navy in electronics technician and then started with AT&T in 1956. I worked for them until 1987 when I retired. Most of my career with AT&T was on the night shift. Always wanting to stay busy

I built an addition to our first house, and then by 1963 I built our house on one acre of land. I filled one end of the basement with a 25’ x 26’ HO gauge model railroad.

Larger size trains had always been on my mind. I had first seen ¾” scale steamers on Long Island in 1948. About the same time I went to a hobby show in Philadelphia where ***Robert Miller*** exhibited his 7 ½” gauge equipment. I had a ***Little Engines*** catalog and picked up a pair of trucks and some parts from ***Bethlehem Pattern Shop*** in 1964.

Finally, at a ***National Model Railroad Association*** Sunshine Division Convention in 1968, I met Ed Pruitt, who was building a 7 ½” track in North Palm Beach. I hurriedly built a four wheel switcher. Then I drove the 115 miles each way to run it on his track. While there, Ed told me about some items he wanted for his railroad. I decided to help him out, building signals, motorizing switches, building a water tower and detailing a box car. By 1969 I had installed a loop of track around my backyard.

I subscribed to ***Live Steam*** magazine, and realized how few suppliers there were in the hobby. By 1970 I felt that others would appreciate another Miniature railroad

supplier. I advertised in ***Live Steam***, and from there my business grew. My goal was to build scale looking equipment in a medium price range.

I had very little experience in sheet metal fabrication, but luckily there was a local sheet metal shop, willing to work with me. In the *Winton* catalog, Winton spoke of using 16 gauge steel, so that is what I used at the beginning. I found out that 16 gauge is about 1/16" thick, and the smaller the number, the thicker the metal. I used a powered saber saw to cut the steel.

**A four wheel switcher**

For my first locomotive, a 4 wheel switcher, I used the plans in a ***Model Railroader*** magazine. I located a ¼ hp.-12 volt motor and a right angle gearbox with a 3:1 reduction, then used sprockets and chain to power the axles. The big challenge was speed control. I decided to use nichrome wire as a resistor grid and built it on an asbestos shingle. Little did I know at that time about the warnings that would come out later about asbestos!

Needing a switch to connect with parts of the resistor grid, I used a multi step switch made for RV trailer brakes. I found that while the resistor did the job, it was not the best under actual circumstances. Downhill even the lowest setting provided too much speed and uphill it was necessary to use the top speed, since the resistor dropped too much voltage.

For the body, I got some steel from the sheet metal shop, and went home and cut it to size. I took the parts to the sheet metal shop and had them form and weld the body. I use 16 gauge steel and found that an experienced welder had no problem welding the parts. I built this locomotive for myself and still have it over 45 years later.

## More 4 wheel switchers

With the popularity of my first 4 wheel switcher, I decided to produce more of them. I made two patterns to make iron castings for the deck and chassis. A pair of end pieces bolted on to complete the chassis. Again a 16 gauge steel body was made for the switcher. Later models had a diode voltage dropping arrangement, as explained with the GP-7 story. I sold close to a dozen 4 wheel switchers, with some of them in kit form.


**A GP-7 locomotive**

My next project was to build a GP-7 type of locomotive. One of the problems was to get trucks for it. The ***Bowlus*** diesels offered by ***Winton*** had beautiful trucks but at a price I could not afford. The only other diesel truck that I knew of was offered by the ***Bethlehem Pattern Shop***. It did not come close to resembling a GP-7 truck. It was up to me to come up with a suitable sideframe.

My father-in-law was always making castings in his back yard for homemade telescopes. I asked him for

advice in making my patterns. He explained how you had to allow for shrinkage (aluminum shrinks about ¼" per foot when cooling). He explained how you always have to have taper or draft so the pattern can be removed from the sand without damaging the mold. He and I cast some side frames. I can tell you, it was hot work, to perform in south Florida! From that experience I had everything else cast commercially. I learned more about castings and making patterns from people at the local foundry.

I liked the idea of electric drive. I first used a 3 ¾ H.P. motor with a driveshaft running the length of the locomotive and sprockets and chain to right angle gearboxes on the axles. I wanted something closer to the prototype. Knowing traction motors are axle hung, with the motors between the wheels I looked for a motor that would fit with a gearbox in the space between the wheels. At that time small permanent magnet motors were not available. I found a wound field motor rated at .55 H.P. about 6" in length. Perfect, but the speed was 7,500 RPM. This needed to be geared down to about 500 rpm at the axle for about 7 miles per hour.

Speaking about motors, I had an interesting experience. At a meet at John Cassady's track down here in Florida I

ran into a steamer by the name of John Teker, from Erie, PA. He had worked for ***General Electric*** in the traction motor design department, designing motors for the ***Alco*** PA's and other locomotives. I asked him an opinion as to how much you can operate a motor above its rating for a short time. Being an engineer, he wanted all of the parameters: air temperature, time, winding insulation, etc. I said, lacking that information - say you are at a meet. You have been running the locomotive – you come to a grade. How much can you overload the motors for a minute or so? He replied in that case you can double the current rating.

I first tried a double reduction gearbox. While in theory it was good, the practical aspects ruled it out. Next I tried a worm gear arrangement with a cast gearbox. This worked but had the disadvantage of locking the axle when the motor was not turning. I had the ***Boston Gear*** handbook and decided I should use a 20 pitch gear. The pitch refers to the number of teeth per inch of diameter, thus a 20 tooth / 20 pitch gear would have a diameter of one inch. I wanted the largest axle gear possible and decided to go with 72 teeth, or 3.6" diameter. This left room for the gearbox and track clearance. ***Boston Gear***

listed 20 pitch gears with as few as 5 teeth. Meanwhile, their advice was to not use smaller than a 14 tooth gear. I compromised with an 8 tooth gear. This provided a 9:1 gear ratio. This gave the locomotive a top speed of about 11 (88 scale) mph.

As to gear ratio, I feel that you should gear the locomotive for the top speed desired. That way you will get more power from the motors. Many clubs are now limiting speed to between 5 and 8 mph. Thus more reduction would have been nice, but I felt the 8 tooth gear was as small as I wanted to go.

Next, I needed a gearbox. I wanted the gears enclosed to keep them dirt free and lubricated. Initially I fabricated a gearbox out of steel, with bronze bearings. This became labor intensive so I made a pattern and had it cast in bronze. This way the gearbox itself was the bearing. With no room for oil seals I recommended using STP oil additive or a very heavy oil.

For the body and chassis I again went to my nearby sheet metal shop. Since they were not model railroaders, I worked with them most of the time, to be sure they did it right.

Next my project was to design a speed control. I looked to many sources, even ***Model Engineer***, the English publication. I tried one of their methods, using a lot of switching. Finally I thought to myself, model railroaders are using a diodes for the forward voltage drop of eight tenths of a volt. Why not use them on my diesel? I looked for large current diodes on the surplus market. Mostly I used 250 amp diodes, but at times I would use smaller diodes and parallel them to add to the capacity. To get sufficient voltage drop for the first speed I used 27 diodes. I could now tap off at various voltage steps. For heat sinks I mounted the diodes on aluminum angle. The angles were then bolted to a ***Masonite*** panel.

Mainline diesels had an 8 notch speed control. I wanted to duplicate their throttle operation. For that reason I used a rotary switch, with the 8 speeds operating high current relays to connect at the appropriate voltage step. Run 1 gave the motors 3 volts, run 2 – 6 volts, etc.

The GP-7's were built capable of MU operation. For the MU connections, a 7 and 9 pin miniature tube socket was installed. To get all of the necessary functions with only 16 wires called for some changes to the throttle connections. On the 9 pin socket, pins 1 through 4 were

for run speeds 1 to 4. Pin 5 was for transition. When it was energized, pin 1 became 5, 2 became 6, etc.

This New York Central unit was another of several GP-7's to roll out of the ***Koster*** shops. It is pictured running long hood forward, as was NYC practice. Our GP bodies were built with a long hood that lifts off by itself. The cab and short hood assembly was another unit. We built a total of five - GP-7's with other units made from our parts.


**New York Central GP-7**


## A Santa Fe 4-6-4

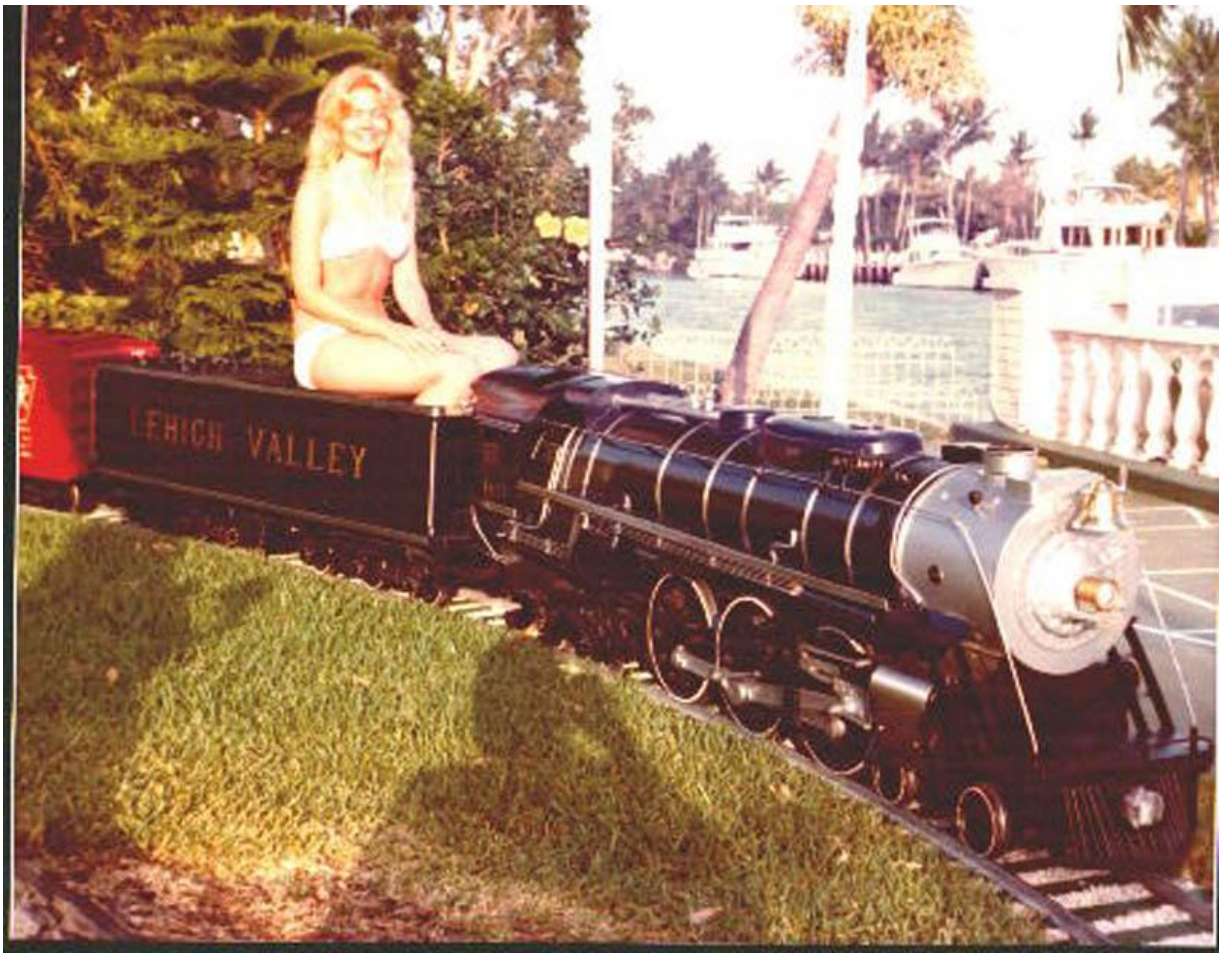
About the time I finished my GP-7, I had a customer ask me about a locomotive. But he wanted a steam locomotive. I explained the advantages of an electric drive simulated steam locomotive. Several of the obvious advantages are that you can use the locomotive immediately, not waiting for the fire to build up pressure, simplicity – anyone can run it, and not sending smoke and ashes to nearby residences. He agreed and my next project was a Santa Fe 4-6-4 Hudson type. To make it more accurate I went out west and photographed the prototype.

A lot of parts were needed that were not available so I made patterns for the drivers, trailing truck, tender truck, domes, side rods and smoke box front. Everything else was fabricated or machined in my shop. I should add, I had a minimum of shop equipment, with a lathe but no milling machine. The frames were welded up from ¾" square bar stock. To get the journal boxes for the drivers and the drivers machined and quartered I went to a local machine shop.

The drive system consisted of a 3 ¾ H.P., 24 volt motor mounted in the firebox. It was connected by roller chain to the rear drivers. The side rods transmitted power to the other axles. Also in the firebox was a 1 H.P. motor powering a compressor for the whistle. The compressor was connected so that it would not turn on until the locomotive reached half speed, hiding somewhat the noise of the compressor. I asked the customer what top speed he wanted and his reply was "100 scale MPH." The Hudson would reach 12 ½ MPH at top speed.

The cylinders were made of 16 gauge steel. The piston rods went into brass pipe, placed as a bearing surface. To counter balance the weight of the motors in the firebox, 50 pounds of lead was poured into the cylinders. The

locomotive & tender were 13 feet in length and totaled 1,300 pounds with batteries installed.




**Second 4-6-4 type locomotive**

The tender held the batteries and was detailed by adding rows of #2 drive screws to simulate rivets. The throttle was located at the front of the tender for an engineer seated on the tender top.

I built two of the Hudson type locomotives. On the first one, for some unknown reason, the customer wanted it painted Pennsylvania. I held on to the second one for a

while myself until a customer came along wanting it. He requested we dress it up with stainless applied to the boiler bands and the cylinders. He also wanted an oversize bell and for the locomotive & tender to be painted royal blue and lettered Lehigh Valley.

## Freight trucks

Early in the business I realized that it would be a good thing to supply freight trucks. I used prototype plans of the Bettendorf truck. They were designed to 1/8 scale, but to allow for 7 ½" track gauge. These were some of my earliest patterns and I am glad to say the trucks worked out well. I made all of the trucks with cast iron side frames, bolsters and wheels. Using the cast iron has two advantages – it keeps the weight down low and if the paint should chip, the truck will look rusty, just like the prototype. They were made to be drilled to accept a 1 1/8" outside diameter bearing. Though I don't have an exact record I know that several hundred pair of these trucks were sold.


## F-7 type locomotives

I wanted to build F-7 type locomotives. The big problem was in making the nose of steel, as used in all of the equipment I have made. I made a pattern from some blocks of wood and fabricated the nose from a number of small pieces, welded together. After welding we had a bumpy nose. Then with a lot of grinding and a lot of welding to fill in the voids a smooth nose was formed. For the headlight, a piece of pipe was welded in place.

The number boards were fabricated for the first unit, then 2” x 4” box tube was used for later number boards.

Another problem was the rivet strips on the sides. I solved this by using ***Dymo*** tape, setting up a jig with a plate with recesses and a male die in a drill press.

The grills on the sides were constructed using 12 gauge copper wire, soldered to uprights. I soon discovered that you must work from one end to the other, since the wire will expand when heated. A jig was made to hold the wires at the right spacing when soldering.

To make it easy to get to the batteries or the electrical system the bodies were hinged at one end. Lift from the other end and you have full access to everything inside the locomotive.

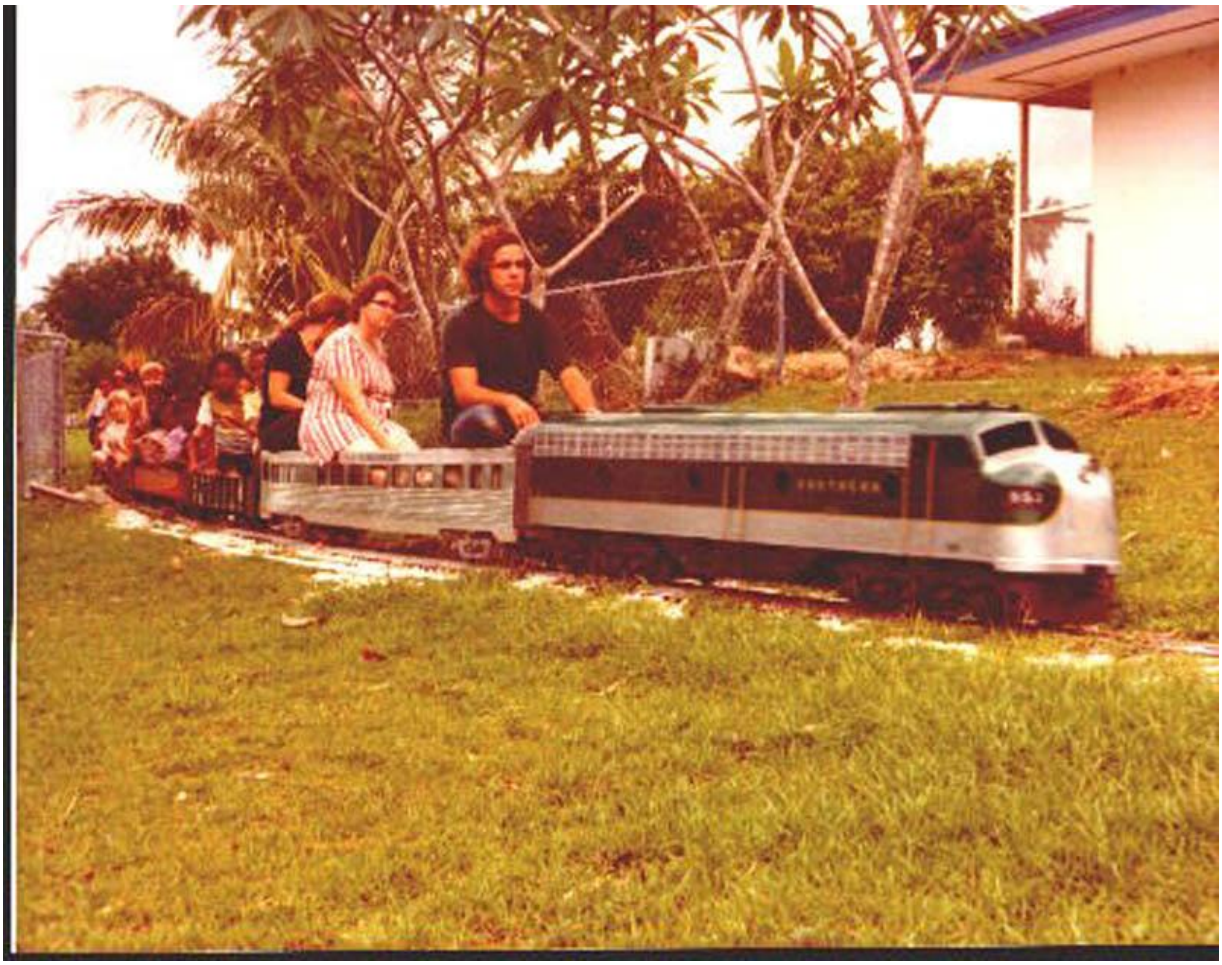
Wanting to show the pulling power of the motor drive system the first F-7 was equipped with only one truck powered. I would explain that if one powered truck would pull all of this, think what two powered trucks would do. Having a spare unpowered axle, I connected a speedometer calibrated to scale speed. It was fun to zip along and see that you were going 80 (scale), 10 actual mph.

After building the first F-7 body, we produced a run of 5 F-7's and an E unit body, hoping to reduce the cost per unit. Two units of this run were added to the first unit for an A-

B-A configuration. In addition to these 7 units, we had a customer order an A-B-A set of F-7's. While the Santa Fe paint scheme was our most popular we also did some units in Pennsylvania and Clinchfield.


**Three unit F-7 locomotive and passenger cars**

This photograph was taken on my curved trestle on Koster's Backyard Railroad in Homestead, Florida



## E – 8 Diesel

While fabricating the F-7 bodies, I decided that we should build an E-8. The nose was identical to the F-7; it just needed a longer body. For the trucks, our 6 wheel tender trucks that we made for the 4-6-4 were similar. We did the same as the prototype, powering only the outboard axles for an A-1-A configuration. We first painted it for the Preamble Express in red, white & blue. Later we painted it Southern and sold it painted for the Chicago & Northwestern.


**SDP – 45 Diesel**

A customer requested an SDP-45 locomotive. The body was not as challenging, as it didn't have the rounded nose. It was built with an opening in the roof for the engineer.

This became the only 6 motor diesel we ever produced. Since the motors were rated 22 amps at full load, 6 motors totaled 132 amps. I figured a 200 amp – current limiting controller would do. Wrong! In track testing I found that you could easily exceed the 200 amps, reducing the power

to the motors. I had the E unit available at the same time. Since the trucks were powered like the prototype A-1-A configuration or two motors per truck, it did not have this problem. Replacing the 200 amp controller with a 300 amp rated unit solved the problem.


**New York Central S-1**

I had a customer request a New York Central S-1. I thought why not? For the frame, we used bar stock, similar to what had been used on the 4-6-4. The body called for a lot or rivet detail, again using #2 drive screws. The four golf cart batteries fit nicely in the cab section and one end

was used for the electronic controller. The locomotive proved popular enough that we made three more.


**GP – 20 Diesel**

A customer liked our GP-7's but wanted a rare type, a GP-20 painted in Norfolk Southern colors. By the time we made this one I had changed to make the body and chassis in 1.6" to the foot scale. This is a more accurate scale for 7 ½" track gauge.

The handrail stanchions were stamped out by the sheet metal shop and we used 3/16" rod for the rails.


**GP-40 type Diesel at the Goleta Valley RR**

All of the GP-40's were built to 1.6" scale. One of our challenges on these units were the fan housings on the roof. We used sections of pipe, brazed to a bottom plate. We used braze so we could machine the fillet. A fan blade was available from ***Grainger's*** as well as a guard, which we cut down to fit in the assembly.

Since the motors were rated at 27.5 volts and there was sufficient room, 5 batteries were used on the GP-40's. They weighed in at 800 pounds each. Five GP-40's were produced.


## Mountain Valley Line GP-40

The Mountain Valley Line #655 was one of two GP-40's that we supplied with a ***Kohler*** gasoline engine driving a 100 Amp/24 volt alternator to recharge the batteries. These units permitted operating without starting the alternator. With the generator running you could expect a longer operating time. However, many customers have said they can get more than a full day of operation on a single battery charge. Recharge overnight and you are ready for the next day of operation.


## 70 Ton Switcher

We built this switcher for a customer who wanted a smaller, lighter locomotive. The trucks were made using ***Bethlehem Pattern Shop*** side frames and roller chain drive to the axles. Instead of golf cart batteries, 12 volt trolling motor batteries were installed.


**4 wheel switcher made with standard traction motors**

This locomotive was built for a customer who wanted our standard motor gearbox drive. It was powered with two axle hung motors. The number (1277) indicates the month and year finished.

**FA style toy locomotive**

An attempt was made to sample the market for toy trains for 7 ½” gauge. To go with the locomotive a small simple gondola was offered as well as a toy box caboose.

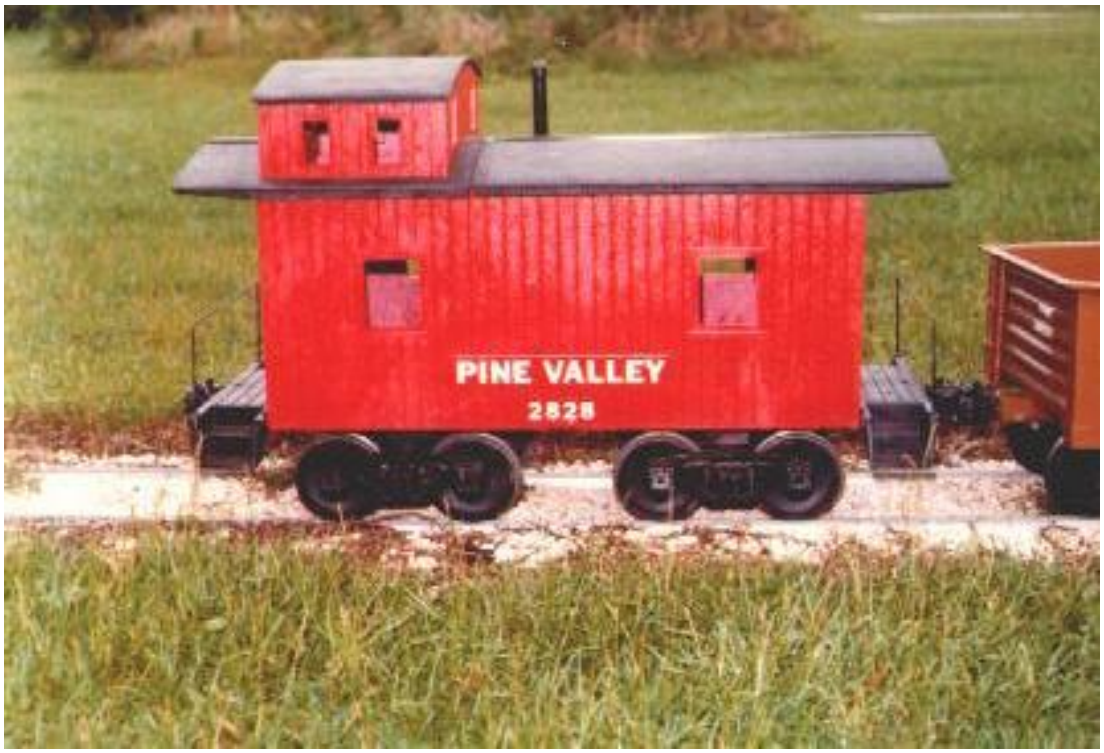

**Santa Fe caboose**

This was our favorite caboose. We made it with a peaked roof style as well as the round roof style shown here. We also made an economy version without rivets. Number 2 drive screws were used for the rivets and the corner posts were separate from the sides and ends and welded in place. The entire roof lifted off as well as the roof of the coupola. For one customer we added interior detail, complete with lighting.


# Mountain Valley Line caboose


# Erie caboose


# B&O Chessie caboose




# Toy Box caboose

As can be seen by the preceding pictures, we made cabooses of a number of styles, per the customer's request. The newest style represented by the Chessie was made of 10 gauge steel, to make a heavy solid caboose. The toy box caboose was made from a plastic toy box with a steel underframe installed.

All of our rolling stock was based on using a 1" x 2" box tube down the middle. This provided the strength needed as well as the coupler pockets at each end.


**DL&W 40 foot box car**


**Pennsylvania 40 foot Box Car**

My first box car was all steel, as in everything I have built. A young girl asked if she could ride inside. I said "sure" but after the ride she had trouble getting out. Since then, all of our boxcars have been made with a lift off roof.

I made cast iron ends for the box cars, but the two shown here did not use them. The DL&W had flat steel ends, per the prototype and the PRR had a more modern end style.


**Pennsylvania 50 foot flat car**

This car was all steel except for the deck which was oak flooring, cut to fit. It was one of several flat cars.

**Sugar Cane car**

I received an order for two 4 wheel sugar cane cars. For durability they were all steel, as we had built all of our cars.


**A shipment of 6 gondola cars**

The cars shown here were examples of some of my early production. A pattern was made for the ends and cast out of aluminum. The ribs were of square bar stock. The cars were basically made of one sheet of steel, hemmed for the top angle, then folded twice, to put the floor higher than the bottom of the side with this repeated on the other side. This was the construction method used on all of our

gondolas. With the solid steel construction, these cars would last for years.


**Molly RR 40 foot gondola**

The Molly gondola was one of my later model standard 40’ cars. It had ribbed ends which were stamped out of 20 gauge steel. The ribs were another stamping, but made of 16 gauge steel.


**Rock Island 50 foot gondola**

To obtain the tapered sides this car was built differently than my standard design. Otherwise the car was identical to the other later gondolas with stamped ends and stamped ribs. It was built in 1.5 scale which produced a length of 75”. The cars could be used for passengers or in hauling ballast to a location on the track.


**50 foot heavy duty gondola**

This series of cars were built using an angle iron on the bottom. Otherwise, except for height and length they were built similar to the 40 foot cars. For grab irons we had a stamping die which turned them out from heavy steel wire stock.

In the 70's the high quality, computer generated letters were not available. We painted the letter color, applied letters from a stationery store, applied the final color and removed the letters before the paint was totally dry.


**Twin hopper cars**

In a trade with a customer I ended up with 14 sheets of 16 gauge steel. One of the projects done with the steel was to make a series of twin hopper cars. I had some employees who needed to learn more about welding, so each one was assigned a car to assemble. The floors were left flat for rider's feet. Angle iron was welded a few inches lower than the sides for a seat to be placed on it. The cars are shown on the 5 foot high wooden trestle I had in Homestead, FL.


**Chesapeake & Ohio triple hopper car**


**Weyerhaeuser triple hopper car**


**Santa Fe quad hopper car**

Our hopper cars came in various designs and sizes. All were made from 16 gauge steel with stamped steel ribs. I supplied more than a dozen hopper cars. One of the hopper cars had working hopper doors, all of the rest had flat floors.

All of our freight cars were equipped with ***Koster*** Bettendorf trucks. We never made couplers, first using ***Karlson (***now ***Cannonball)***, then ***Mercer*** couplers. Most of my later production was done in a shed I set up with a welder in our back yard.


**Tropicana Orange Juice Car**

This car was built and lettered following an HO model. Since then, I found that all ***Tropicana*** cars are orange color. I assumed we had done it wrong until I saw an old movie recently with this paint scheme.

The ends were two gondola ends, stacked one above the other. The door opening was but 8” x 12” however somehow Monica squeezed through. This photo was done without ***Photoshop.***

Our teen aged daughter painted the little Tropicana girl on the sides of the car.


**Warren petroleum tank car**

For this car I found cast iron cookware that would work for the ends and dome. For the tank, I used 16 gauge steel, rolled to shape. It remained a non- working tank, for appearance only.


**Texaco tank car**

For this car I located a company which stamped out tank ends. I purchased a few to use on cars such as this tank car. We rolled some 16 gauge steel to the diameter and butt welded the ends on the tank. For handrails I used 3/16” steel rod. The platform assembly was made with ½” angle iron. Expanded metal was used for the floor of the platform.


# Mountain Valley Water Tank car


# Gulf Oil Tank Car

**Heavyweight Steel Observation car**

This was our first scale passenger car. The roof lifted off and there were cushioned seats inside. The trucks were our standard switcher trucks which had been modified to resemble a passenger truck. It was built to a scale 70' length. With the observation end, complete with a railing and curtains overhead it was an interesting car.


**80 Foot Streamlined car**

I decided it was time to try building a streamlined passenger car. We made this one with a steel structure overlaid with aluminum. For the corrugations the aluminum was run through some rollers, one ridge at a time. The car had a lift off roof and seats inside. I used the modified switcher trucks on this car. Painted silver they fit right in. Windshield wiper hose, split to fit was the glazing around the windows.

# Stainless steel 64 foot passenger cars

I had a customer who wanted passenger cars to go behind his 3 unit diesel. He had sharp curves so this time we made the cars 8 feet (64 scale feet) long. The cars had a steel frame and stainless sides. This time we made the corrugations with multiple passes in the brake. The roof was especially challenging as the model we were following had crosswise ribs on the rounded roof. The pictures were taken at the customer's track which we had installed for him.

**80 Foot business car**

This car was a special order. We even fabricated 6 wheel trucks for this car. It also was made of stainless steel.

During the 12 years in business, I supplied components for a number of styles of trucks including F/GP trucks, SW switcher trucks, SD trucks, CNJ diesel trucks, freight trucks, passenger car trucks, trolley trucks, trolley arch bar trucks and toy box caboose trucks.

I supplied motor drive unit parts, headlights and roof vents for diesels. I stocked ***Karlson*** couplers and ***Nelson Gray*** glad hands. I sold rail and custom made switches as well as switch kits.

One special order was for a half scale traffic light, to help in teaching retarded children when it was safe to cross the street.

## A brief history of Koster's

This all occurred in a 12 year period of my life. During that time I also worked full time as an Electronics Technician at an AT&T office.

For help, I at first hired a retired man. After my employee had a stroke, I worried about having an older

person working with power tools. A friend had a teen age son, who fit right in working in the shop. He was followed by other teen age employees. Likewise, teen age girls were hired to staff the office, pack and ship small merchandise and some even worked in the shop. The girls pictured with the trains were mostly employees.

For a shop, I first used half of our two car garage. Then as business grew, I took out my HO gauge layout in the basement and the shop moved there. This, I might add, was to my knowledge, the only basement in a home in Homestead, FL.

My tools were mostly hand tools, a drill press and 3 lathes. I did not have a milling machine, so some small work was farmed out. I added a stick welder and we started doing most of the welding in our shop.

I was glad to have assistance from Bill Oberpriller and the late Stacey Tucker in their home shops.

Due to other commitments I sold the business to Cannonball Enterprises in Oklahoma City in 1982.

It was a pleasure to have been involved in building the various cars and locomotives for customers.

## The Live Steam Hobby in 1970

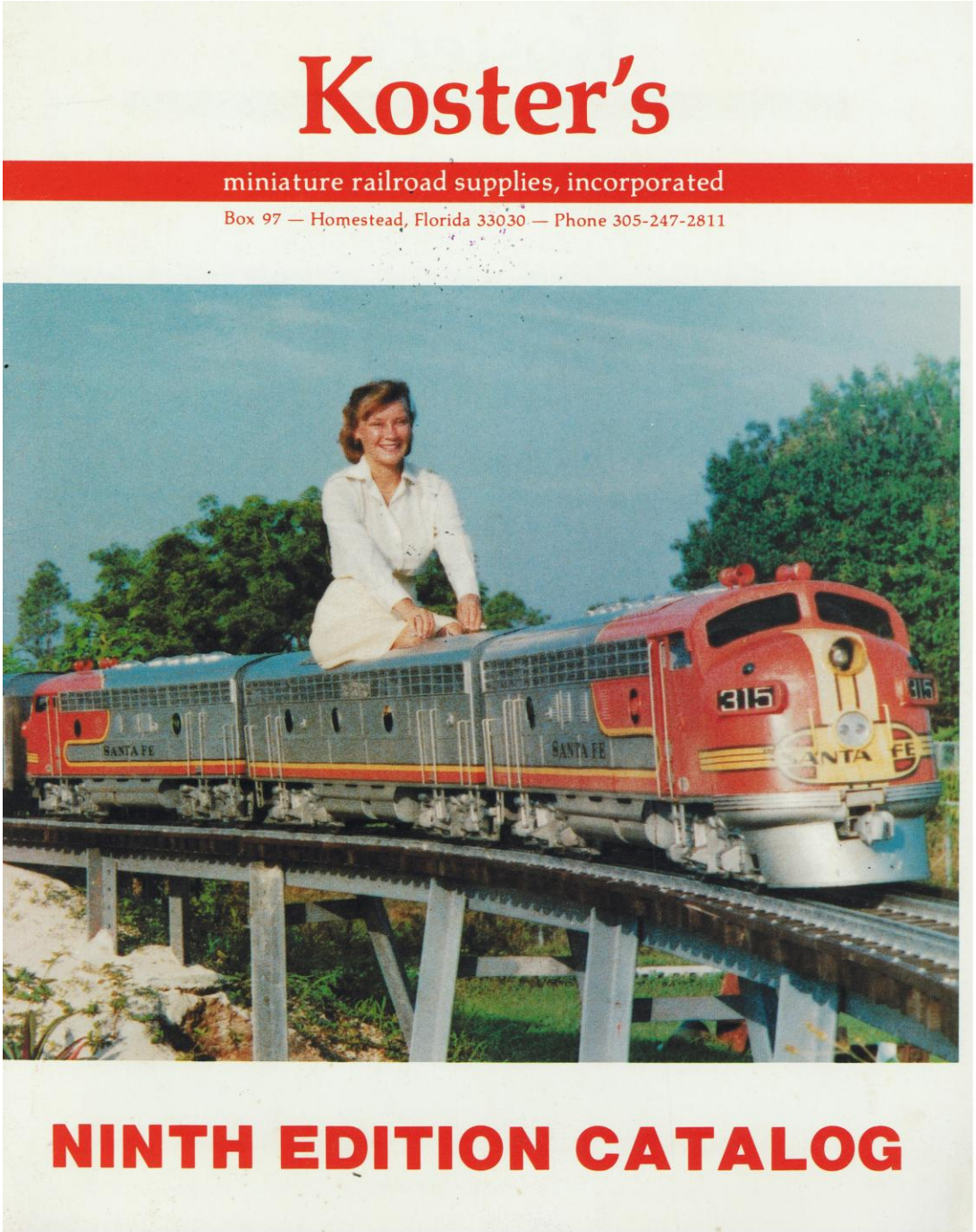
When I started my business, there were very few suppliers to the hobby. In addition, I did not know of another 7 ½" gauge track in Florida. By 1972 the Florida Live Steamers club was formed. We now have a listing of over 300 hobbyists. In Florida alone we now have about a half dozen "club" tracks and probably 30 or more tracks total.

In 1970, most people built all of their equipment. Now we have a number of suppliers of equipment ready-to-run. Most of the equipment back then did not include scale cars, but just a simple riding car or gondola. Now there are many scale cars offered with prototype lettering to make a realistic train.

In 1970, diesel locomotives were frowned upon by many of the steam engineers. I would go to meets to ensure there was at least one diesel at the meet. At most meets now days you will find more diesels than steamers.

I have noticed that the quality of the locomotives – Steam or Diesel – has improved greatly through the years. One can only wonder what this hobby will be like 40 years from now!

Wilfred C. "Bill" Koster




*Catalog from 1982*


Freight train powered by 3 battery-powered electric drive diesels connected in multiple unit power. First is a Norfolk Southern GP-18, owned by Bill Bedell of Sanford, FL; followed by a SCL GP-40, owned by Tom Hill of Sanford, FL: followed by a Chessie GP-40, owned by Elliot Gross of Long Island, NY. Photo taken on Tom Hill's track in Sanford, Florida.