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G-Scale at the National Toy Train Museum

First in a Series of Articles

By Mike Frieders

This is the first of a series of articles about the G-Scale layout at the National Toy Train Museum in Strasburg, Pa. This article will be an overview of the Museum and the layout. The first thing to know is that the National Toy Train Museum is a part of the Train Collectors Association's (TCA) National Headquarters Building. As members of the TCA's Museum and Education Committee, Twila and I, with help from Jerry and Becky Lawson, have improved and maintained the G-Scale layout over the last two years.



The Train Collectors Association was founded in Yardley, Pennsylvania in 1954. The first meeting was held in the barn of noted rail historian Ed Alexander. In the same year, collectors on the West Coast met and organized the Western Division. The result of these two meetings was the formation of the Train Collectors Association.

In 1957, the Train Collectors Association was incorporated as a non-profit corporation under the statutes of the Commonwealth of Pennsylvania. In 1977 the members of the Association built and dedicated the National Headquarters and Museum Building in Strasburg, Pennsylvania. In 1983, an addition of 3,200 square feet was added to the Headquarters and Museum building. The building houses the national business office and The National Toy Train Museum.

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The Museum has one of the finest collections of toy trains on display along with operating layouts in Standard, "O", "G", "S" and HO gauge. Members are admitted into the Museum free of charge and are encouraged to lend their special trains to the Museum for display.

The G-Scale layout occupies a space which is about 10 feet wide by 17 feet long. The layout itself is about 30 inches off the floor on a heavy duty wood and steel supporting structure. The layout is surrounded by plexiglass panels that allow full view of the layout, but keep curious hands out of trouble. The area under the layout is open, lighted, and wired for electrical power. There is an access panel at one end of the layout. At the other end of the layout is the control panel that runs the trains and accessories. G-Scale trains are displayed on a series of shelves that fill the wall at the back of the layout.

The layout features three operating lines. There is a point to point trolley line that runs along the entire length and width of the layout at the outer edge. The main line operates at the same level as the trolley line, and has a meandering route that includes two tunnels. There is a large Pola European train station on the main line. The upper line is a small oval on an elevated portion of the layout. The elevated portion provides some interesting tunnels for the main line. There are quite a few Pola and Piko buildings, as well as a custom built coaling station decorating the layout.



When we began working on the layout in January, 1998 we discovered a layout that was in very poor operating condition. All three operating lines had

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been run continuously for 8 hours each day, all year. The locomotives were in poor condition. The condition of the track on the upper loop was the worst I had ever seen. The rail profile was gone, and the area was littered with very fine lengths of brass shaved from the track by the locomotives. Plastic wheels had taken their toll everywhere, leaving large piles of plastic dust between rail joints, and plastic dust on everything else. There was no layout control panel. All of the trains and accessories were running from a couple of small HO power packs laying on the floor underneath the layout. The Museum staff would just turn a key to start the trains running in the morning, and then turn it off at closing. No other controls were available without going under the layout to make adjustments. The Museum Committee was aware of the deteriorating condition of the G-Scale layout, and was looking for experienced in G-scale volunteers to help out. That's where Twila and I came in.

In the following articles I will describe how we restored the G-Scale layout to excellent operating condition, and what we did to improve the layout. A lot of changes were made in operating concept, wiring, control, and accessories. Some of the improvements we made have been so successful they have already been carried over to the other operating layouts in the museum. Watch this space for more next month!!