



From the top: The condition in which the Andover Historical Society received the freight car after it sat for many years on a siding in Concord • Sandblasted, with two coats of epoxy primer applied • The authentic "boxcar blue" finish coat goes on • Dale Flewelling of Art Attack tackles the B&M logo, just in time for the freight car's unveiling at the Old Time Fair on August 5.

Photos: Larry Chase

## B&M from page 1

Some of the uses for this series included hauling bagged cement, packaged flour, spent grain, wood flour, meat refuse, and food products. The car was renumbered "4503," a special designator, and was assigned to transport spent grain, the residue from the beer brewing process. This product would be taken to an animal feed manufacturer and used as an extender or filler in either pet food or farm animal food (ref. Al Campbell).

The car was originally painted blue with a black door and tracks and a large intertwined "BM" on the right side. The car has been repainted at least once. Other modifications included replacing the ladders on the right side with half ladders. Of particular interest are the various markings on the sides. On a boxcar there is an L half way up the car side ahead of the door and an R on the opposite side to designate the left and right side.

The ACI plate, an early bar-code system that used an optical sensor alongside the tracks while the train was in motion, consists of a red-, white-, and blue-striped panel below the logo. The layout of colors is unique to 4503 and identified its use.

A second panel, called the lube plate, records maintenance. A third marking is a yellow wheel inspection dot. The dot indicates that the wheels are approved for type and load. Those having high carbon content were subject to cracking and were marked with a white dot. Cars repainted after 1978 had no dot markings.

Perhaps the most intriguing feature of 4503, which also proved to be the most frustrating, is the paint color. Typically, boxcars manufactured in the early 1900s were painted a rust-colored red, primarily due to cost. They were so predominant that paint companies now refer to some of their colors as "boxcar red."

When Patrick McGinnis took over the B&M in 1955, he put a lot of effort into showy graphics. After several experiments, his designer produced a couple of boxcar schemes: the 50 foot PS-1s (77000 series) were delivered with a blue body and black door, with an interlaced "BM" herald in white (B) and black (M, with white trim) to the right of the door.

A little later, the third order of 40 foot PS-1s (76000 series) was delivered with a blue body and door, with an interlaced "BM" herald in white (B) and blue (M, with a white border) on a black panel to the right of the door. Lettering remained white. Later boxcars used a simplified all-white herald (contributed by Tim Gilbert).

Since the time of its delivery, 4503 has served as a storage unit for the Society—a rusted reminder of her glory days. While other major projects continued to occupy center stage, 4503 finally came to the head of the list. The Society's president, Pat Cutter, announced this year that a

committee consisting of Chris and Tim Norris and Arch Weathers had been formed to spearhead the project. Three challenges quickly became apparent to the committee: determining the level of restoration, dealing with lead paint, and finding a lead-paint-licensed contractor who was competent in all phases of the project.

The committee felt strongly that cost should certainly be a consideration but not the limiting factor. We were all interested in delivering a product that accurately reflected the authenticity of the original design and thus started interviewing several companies. We soon learned that these guys don't grow on trees; moreover, our concern focused on whether we could obtain more than one quote!

In researching the first issue—an acceptable level of restoration—we were fortunate to discover Bob Cusack from Sherwin-Williams, who heads up the marine and protective coatings sales for the northeast. Bob recommended Jim Doherty from Target NE, a company that specializes in restorations of this nature and in whom Bob had confidence. We liked the idea of a contractor and supplier with a relationship and were able to negotiate a very fair price for the job.

Ultimately, the committee decided the restoration should consist of sandblasting the entire superstructure except the top and underside, but to include the trucks. We would use two protective primer coats with an epoxy base specially formulated by Sherwin-Williams, followed by a finish coat of color. This combination would assure a high-quality, lasting finish. The last stage of restoring the lettering and logos was done separately.

The final challenge was to determine the exact color code of the original paint. This proved to be the most difficult process. Neither the B&M folks nor the Railroad Historical Society could provide us a definitive answer. The literature was filled with references to B&M "boxcar blue," and photos were plentiful, but no formula could be found.

The answer, after days of searching the Internet and countless phone calls, came in a surprisingly simple manner. Model railroaders used one company for their paints, and lo and behold, there was "B&M boxcar blue" in their online catalogue! We ordered a sample. The Sherwin-Williams people scanned it, and the final piece of the puzzle was now in place.

On June 25, AHS contracted with Target NE, a historic restoration outfit in Alton, to start work. The car was completely sandblasted with appropriate safety equipment and techniques required to safely remove and dispose of the blasting aggregate and paint. A special sealant primer coat followed by an epoxy base second primer prepared the surface for the final color. Each primer was properly tinted to blend with our "boxcar blue."

While the finish coat was setting up See B&M on page 23