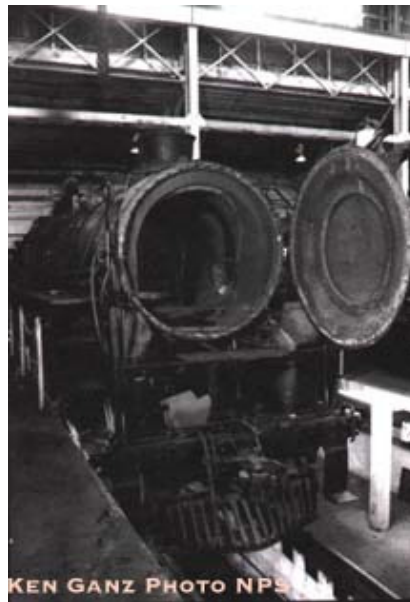




3713 Special Edition

Winter 2001

RESTORATION WORK ON 3713 CONTINUES



Boston & Maine No. 3713 with smokebox door opened, showing tubes, draft gear and flues removed (10/1/1999)

B&M 3713 RESTORATION WORK PROCEEDS

The Boston & Maine 3713

Restoration project has continued since June, 1999, with major portions of the work continuing as you read this newsletter. Work began with the disassembly and cataloging of the parts by the shop workers at the Steamtown National Site. Once this was completed, the L&WV Chapter hired a contractor, at a cost of \$25,000, to remove the asbestos from the locomotive.

During 2001 our contractor completed approximately 2400 hours of work, with an additional 376 hours approved for continuation of the boiler restoration. The work is made possible by continued donations that have been received from people who have responded to our fund raising drive, and by visitors to the Steamtown site who have contributed money in the various donation boxes.

The locomotive is currently being restored at the shops of the Steamtown National Historic Site in Scranton, Pennsylvania. When you visit Steamtown, find out about the free shop tour, and see for yourself what has been done. If you have made a donation to the fund drive, see what your contribution has helped make possible.

TASKS PERFORMED AND EQUIPMENT REMOVED TO BE RESTORED :

1. Draft Equipment and Cinder Guards.
2. Petty Coat Pipe, Blower Pipe and Exhaust Pipe.
3. Super Heater Tubes were taken out and hydrostatic testing performed.
4. Thermal Siphons were relieved by removing the original welds and rewelded. Also several area of the right side sheet was repaired.
5. All piping and brackets from cab interior and cab were removed.
6. Stoker assembly and fire doors.
7. All piping outside of fire box and boiler along with turrent and valves were separated from the locomotive.
8. All brackets and valves were removed from the firebox.
9. All caps were disassembled from the flexible stay bolts.
10. Two wash out plugs and sleeves from firebox.
11. Approximately 241 flexible stay bolts and sleeves. Holes were repaired and all holes re-tapped.

12. Three flexible stay bolts, which were welded, to the top left corner of the firebox. Holes were repaired and cleaned.
13. All lubrication distribution blocks and lines from bottom of boiler.
14. Approximately 400 studs were burned off and ground. Holes were cleaned and repaired were needed. Also holes were re-tapped one size larger than the original hole diameter to receive new studs being made at Steamtown.
15. All drawings of fire box, boiler, and smoke box were revised to reflect all changes.
16. All parts that were removed were inventoried and tagged with proper identification.

ADDITIONAL WORK TO BE PERFORMED WHEN TIME OR MONEY IS AVAILABLE:

1. Remove approximately 150 rigid stay bolts so that repairs can be made to boiler sheets.
2. Remove an additional 50 flexible stay bolts of there 50, approximately 20 sleeves need to be removed.
3. All hollow stay bolts must be drilled and cleaned.
4. The following units must be removed, cleaned and rebuilt and/or repaired as necessary :
 - a) main valve assembly for the booster unit
 - b) feed water pump
 - c) two air compressors
 - d) two boiler checks
 - e) turret
5. The brake rigging must be disassembled, inspected and repaired along with the brake cylinders.
6. The smoke box is to be cleaned from all rust by either sand blasting and/or needle scaling. Repairs to be made as required.
7. The locomotive frame is to be cleaned from the grease and oil residue accumulated over the years of operation.
8. All valve steams and airlines are to be removed, cleaned, repaired and/or replaced.

On any given day, when you visit the Steamtown National Historic Site in Scranton, Pennsylvania, at least three tours of the locomotive shop are scheduled. These one hour long walking tours are led by rangers of the National Park Service and include many aspects of locomotive repair. If your are lucky enough, you can see one or more of the craftsman making or repairing the steam engines or rolling stock. Since 1998 Boston and Maine No. 3713 has been an

important component of these tours. Since most visitors do not stay long enough to see significant changes made, the rangers have to provide background information as to what a rebuild entails. "I like to tell the story of the engine's name", says Ranger Sue Rzdilski, referring to The Constitution, the name given to the 1934 Lima built locomotive and the contest the Boston & Maine Railroad had in the 30's with the schools along the route. This can make the engine more understandable to people who get lost in technical terms. "Definitely the name and contest are interesting parts of the engine's life", adds Ranger Sharon Biglin. "I tell also how the appearance of the 3713 changed over the year, how it had elephant ears near the smoke box, a shroud atop the boiler, and how the restoration process may not bring it back to its 'as built' look". Sharon regularly consults with Bill Fredrickson, the man conducting the restoration so she can share information with people taking the tours without interrupting Bill while he is working. Ranger Bill McCarthy waits for Fredrickson to take a break to discuss the engine with people on the tours. "They prefer to hear it directly from Bill than from me; it makes it more personal"

Ranger Don Myer prefers to talk about the matters at hand. "Bill told me that for every hole in the firebox, he has to put 8 to 10 hours into removing, cleaning, and reaming the holes - each hole. This is even before all the staybolts go back in. I also explain the ultrasound process, used to determine whether the boiler is worth restoring at all." Ranger Caroline Dann points out that there were no blueprints available for Bill Fredrickson to consult, so he had to draw his own and sketch and color code each staybolt and rivet to identify the good and bad ones. Ranger Kelvin Shultes shows the people on the tour what a staybolt and its cap and sleeve look like. "With all the holes in the firebox, it's good to show what goes into each of them, demonstrating what a restoration requires".

At present a visit to the Steamtown back shop is a rare experience with four steam locomotive being repaired - the 3713, Pennsylvania Railroad K-4 1361, Baldwin Locomotive Works 26 and Canadian National 3454. Ranger Tim O'Malley keeps a piece of fire tube in this spot to show visitors what is inside the huge boilers. Nearby tubes and superheaters are visible waiting the installation in one of the locomotives. "In visitors' minds", O'Malley explained, "they can assemble the parts of the parts of the engines, getting a better idea of how things work".

While the visitors' goal is to be entertained for an hour or so, the tours lead then further in to the job than they expect. The engines gain a bit of personality, and with luck, the visitors learn where the restoration projects are going. Steamtown's goals have always furthered the understanding of steam railroading, and with these tours through what Ranger Ken Ganz describes as the "Land of the Giants", we find out what is involved in the many levels of repair. "We also learn", Ganz notes, "why railroads got out of the steam business".

The projects continue with skills of Bill Fredrickson and the descriptions of the various park rangers who try to tell the visitors the story of steam railroading and why it disappeared from the scene. Thanks to the cooperative efforts of the Steamtown National Historic Site and the Lackawanna & Wyoming Valley Rail Historical Society, we look forward to the day when 3713 leads the tours and the rangers can rest for a while.

Thanks to Ranger Tim O'Malley and Steamtown National for permission to use portions of On Tour with 3713: What You'll See at Steamtown NHS.

[HOME](#)