

Juniata Shops, Erecting Shop and Machine Shop  
East of Fourth Avenue between Fourth and Fifth streets  
Altoona  
Blair County  
Pennsylvania

HAER No. PA-232-D

HAER  
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7-ALTO,  
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
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JUNIATA SHOPS, ERECTING SHOP AND MACHINE SHOP

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Location: East of Fourth Avenue between Fourth and Fifth streets, Altoona, Blair County, Pennsylvania

USGS Quad: Altoona, Pennsylvania (1:24000)  
UTM: 17 E.721700 N.4490250

Date of Construction: 1925

Builder: Pennsylvania Railroad

Present Owner: Conrail

Present Use: Manufacturing Railroad Rolling Stock

Significance: The Erecting Shop and Machine Shop was the largest part of the last major expansion of the Altoona Works.

Project Information: This project was undertaken by HAER in conjunction with America's Industrial Heritage Project as part of an architectural survey covering a nine-county region in Southwestern Pennsylvania, Randall Cooley, Director. See HAER No. PA-108, Pennsylvania Railroad, Altoona Works, Altoona, Blair County, Pennsylvania for further project information and documentation.

Compiler: Peter Stott, Historian  
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History:

The Erecting and Machine Shop was the largest part of the last major expansion of the Altoona Works. The 5.5 acre shop was called "one of the largest locomotive building and maintenance plants operated by any railway in the world." In the 1920s, the Altoona Works supplied three quarters of the Pennsylvania Railroad's locomotives, as well as one half of the repaired motive power. The need for the new shop was dictated by the continuing increase in size and weight of modern locomotives. Such locomotives could not be handled efficiently in small shops such as those at Altoona, where construction activity was concentrated at a small number of the better equipped shops. The extension of the Juniata facilities was part of a plan to alleviate this problem.

The new erecting and machine shop, covering practically the full width of the shop yard, is divided transversely into four bays, of which the outer two bays are for the erecting pits and tracks, and the inner two bays comprise the machine shop. The bays are 85' wide and each of the erecting bays has twenty-seven pits and two crane runways, an upper and a lower runway. The upper runway contained a 250-ton crane and a lower runway contained five 15-ton "messenger" cranes. The machine bays are equipped with motor driven machine tools, and each of the machine bay crane runways are equipped with one 50-ton and two 15-ton cranes as well as a total of thirty-five pillar and jib cranes.

In 1945 Works Manager Grimshaw wrote that the shop handled fifty locomotives at one time in the erecting bays. In the center bays, three Machine Shop departments handled repairs to the running gear of the locomotives undergoing repair. By the mid 1940s, the Juniata Shop handled practically all of the heavy class repairs on steam locomotives, with an output of 5.5 engines per day. In addition to the repair work, the Juniata complex was building both steam and electric locomotives.

Today, the shop facilities have been given added space by enclosing, in the late 1970s, the craneway which ran the length of the west side. The shop currently turns out 480-500 diesel engine repairs each year.

Sources:

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"Pennsylvania Reconstructs Juniata Shops on a Large Scale," Railway Age 79 (21 November 1925), pp. 935-939.  
"Repairing locomotives at Pennsylvania Railroad Juniata Shop," 2 part article in Railway Mechanical Engineer 100 (April 1926, May 1926), pp. 237-245, 291-296.