

HISTORIC AMERICAN ENGINEERING RECORD

MOUNTAIN FORK BRIDGE

HAER NO. AR-34

**LOCATION:** Spanning the Mountain Fork Creek on Polk County Road #38 approximately 1 mile west of the town of Camp Pioneer, Polk County, Arkansas.

UTM: 15/3821420/371540

Quad: Zafra

**DATE OF CONSTRUCTION:** ca. 1926

**STYLE:** Two span, pony Pratt steel truss bridge.

**BUILDER:** The builder is unknown. It is assumed that Polk County officials contracted with an unidentified bridge company to construct the Mountain Fork Bridge in the first quarter of the twentieth century.

**MAJOR ADDITIONS:** The central piers have been replaced with a cast reinforced concrete pier. Date unknown.

**PRESENT CONDITION AND USE:** The Mountain Creek Bridge is in fair condition and is currently being used for vehicular traffic.

**ADDITIONAL INFORMATION:** AHTD Bridge No. 16149, AHPP Resource No. PL0009.

**SIGNIFICANCE:** The Mountain Fork Bridge is an excellent Arkansas example of a pony Pratt steel truss bridge. This bridge design was very common in the state in the late nineteenth and early twentieth century and readily available to county judges from a variety of bridge companies. Its design reflects the bridge engineering period before the Arkansas Highway and Transportation Department (AHTD) standardized a majority of the most common bridge designs used in the state beginning in the 1920s. (A good example of an AHTD influenced Pratt design can be seen in the Eight Mile Creek Bridge Report, AR-17).

**HISTORIAN:** Michael Swanda  
Survey Coordinator  
Arkansas Historic Preservation Program

**DATE:** August 26, 1988.

## STRUCTURAL SYSTEMS

The Mountain Fork Bridge uses Pratt steel trusses. The majority of the truss webbing: top and bottom chords, diagonals, and verticals, consists of built-up members made from channels, angles, continuous plates, and batten plates that are assembled with rivets. The floor girders are I-beams, bottom laterals are round rod, and the stringers are timber. The road deck is covered with timber planking. The guardrail is made from angles. Piers consist of cylindrical steel rings, riveted together and filled with concrete. The connections of the two main spans are rigidly joined with plates and rivets. This bridge is not pin connected. The approach spans are steel stringers supported by piers constructed with built-up members made from angles and single lacing bars.

## DIMENSIONS

The Mountain Creek Bridge is 406 feet long. The two main spans are each 80 feet in length and the nine approach spans measure 26 feet each.

## SOURCES OF INFORMATION

Bridge Division Files, Arkansas Highway and Transportation Department, Little Rock.

Historic Bridge File, Arkansas Historic Preservation Program, Little Rock.

McClurkan, Burney B. Arkansas' Historic Bridge Inventory, Evaluation Procedures 1987 and Preservation Plan. Manuscript of file, Environmental Division, Arkansas Highway and Transportation Department, Little Rock.