

Abstract Submitted
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Measuring the Force in Beams of Truss Bridges BRET HENDERSON, Millikin University — The purpose of this experiment was to predict the forces present in beams of bridges under load and then compare those predictions to experimental results. The equipment used was a PASCO model bridge building kit and four force sensors. Because the bridge was in equilibrium, I was able to calculate the forces on some of the beams of a Howe Truss style bridge. The calculated values and experimental values did not match up and the answer to the problem was not solved until it was too late. I discovered that the system was extremely sensitive to the way the beams were attached, and further research requires careful attention to this property of the system.

Bret Henderson
Millikin University

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