Abstract Submitted
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Computer Based Gas Gun Control Using National Instruments (NI) LabVIEW Development Environment[1] R.A. SAAVEDRA, P.A. RIGG, S. DIMARINO, M.E. BYERS, N.S. KHALSA, J. MAESTAS, Los Alamos National Laboratory — The high performance two-stage light gas gun located at Los Alamos National Laboratory has been in continuous operation since 1968 with the original remote control system largely intact. The primary goal of this project was to replace the existing 120VAC push button control system with a safer 24VDC system. This work involved using NI hardware and the LabVIEW programming language to implement the design of a computer based control system for the two-stage gun and a 40 mm powder gun located in the same facility. The control system is simple and easy to maintain, and the software based nature of the system makes it very easy to reconfigure and add components. Details of the control system will be presented and simple strategies to create a maintainable system using LabVIEW will be discussed.

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