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Title: An Introduction to VERA: A Low-Cost, Low-Acceleration Transonic Impact Gun

Abstract Text: NAWCWD's Ordnance Test and Evaluation Branch recently achieved IOC with a new transonic impact gun, the Variable Energy Research Accelerator (Vera). While not a panacea, Vera was designed to address specific perceived shortcomings of other ordnance laboratory guns. Specifically, Vera was designed to: Minimize acceleration forces (typically <600 Gs to 1000 ft/s) to minimize payload modifications required to survive launch. Easily allow for cabled instrumentation of payloads while in the barrel. Allow for large or oddly shaped projectiles (Vera has a 19" bore). Be operated with minimal crew and logistics requirements. In brief, Vera was designed to launch live missile and bomb components to transonic velocities while minimizing component structural modification requirements and related costs. This briefing is intended as an introduction to Vera's capabilities and associated design philosophy.