

TEST APPARATUS FOR MUNITIONS PRIMERS

Sponsor: ATK, Lewiston, ID

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This project seeks to create a user-friendly test fixture for primers in full-length cases that can be sampled directly off our assembly line in Lewiston, Idaho. A previous capstone project demonstrated the feasibility of monitoring energy release from centerfire primers in a cylindrical cavity. This required significant machining of casings to produce test specimens with a low enough profile. It is believed that the combustion chamber can be redesigned to be more cylindrical, allowing unmodified casings to be tested with reasonable accuracy. High performance pressure transducers and a high-speed data acquisition system are available for the design team to use on campus during prototype development and testing.