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**Bullet Impact Safety Study of PBX-9502<sup>1</sup>** LOUIS FERRANTI, Lawrence Livermore National Laboratory — A new small arms capability for performing bullet impact testing into energetic materials has recently been activated at Lawrence Livermore National Laboratory located in the High Explosives Applications Facility (HEAF). The initial capability includes 0.223, 0.30, and 0.50 testing calibers with the flexibility to add other barrels in the near future. An initial test series has been performed using the 0.50 caliber barrel shooting bullets into targets using the TATB based explosive PBX-9502 and shows an expected non-violent reaction. Future experiments to evaluate the safety of new explosive formulations to bullet impact are planned. A highlight of the new capability along with discussion of the initial experiments to date will be presented including future areas of research.

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> Louis Ferranti Lawrence Livermore National Laboratory

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