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Proton Radiography of PBX 9502 Detonation Shock Dynamics Confinement Sandwich Test TARIQ ASLAM, SCOTT JACKSON, JOHN MORRIS, Los Alamos National Laboratory — Recent results utilizing proton radiography during the detonation of the high explosive PBX 9502 will be presented. Specifically, the effects of confinement of the detonation are examined in the LANL detonation confinement sandwich geometry. The resulting detonation velocity and detonation shock shape are measured. In addition, proton radiography allows one to image the reflected shocks through the detonation products. Comparisons are made with detonation shock dynamics and reactive flow models for the lead detonation shock and detonation velocity. In addition, predictions of reflected shocks are made with the reactive flow models.

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