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Transverse Initiation of an Insensitive Explosive in a Layered Slab Geometry ERIC K. ANDERSON, TARIQ D. ASLAM, SCOTT I. JACKSON, Los Alamos National Laboratory — Experiments are presented that explore the shock initiating layer dynamics in an insensitive high explosive. Tests were conducted with a PBX 9502 slab bonded on one side to a PBX 9501 slab. For each test, a planar detonation in the PBX 9501 was generated to drive a shock into the PBX 9502. The thickness of the PBX 9501 layer was varied to control the strength and duration of the transmitted shock. Phase velocities at the explosive outer surfaces, wavefront breakout shapes, and post-shock particle velocity histories associated with the detonating and initiating zones in the two explosives are reported and discussed.

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