

Abstract Submitted  
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**Initiation Studies of Annular-Shaped PBX 9502** LARRY VAUGHAN, TERRY SALYER, Los Alamos National Laboratory — A series of tests has been conducted to evaluate the initiation limits of annular-shaped PBX 9502. The center of the PBX 9502 annulus is packed with a donor charge (such as XTX 8004) that is sufficiently extended above the annulus opening to achieve a steady detonation prior to entering the main charge. The initiation effects of donor charge type, size, and shot temperature are examined via witness plate and streak camera visualization at the output of the explosive train. The streak camera allows for distinguishing between direct radial initiation from the donor charge and initiation from the high-pressure juncture at the witness plate surface. These tests are designed to examine the effects of non-planar initiation of insensitive explosive in a divergent geometry.

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