

Abstract Submitted  
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**Modeling Shock Desensitization of Composition B Explosive**

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The NOBEL multimaterial adaptive grid Eulerian hydrodynamic code was used to model a shaped charge jet formation, its interaction with a steel plate, and shock formation of a bow shock in front of the jet that shocks and desensitizes a cylinder of Composition B (60/40 RDX/TNT at 1.715 g/cc) explosive so that when the jet arrives it fails to initiate detonation in the desensitized explosive. The jet passes through the Composition B explosive cylinder, an air gap, and then initiates propagating detonation in a second Composition B explosive cylinder that has not been desensitized by a preshock. The experimental arrangement was studied using X-ray radiography at the Material Research Laboratory in Melbourne, Australia.

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