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Enhanced Blast Effects of Reactive Structural Materials Used For Cased Explosives WILLIAM WILSON, Defense Threat Reduction Agency, L.V. BENNINGFIELD, Applied Research Associates, KIBONG KIM, Advanced Energetics Research — The performance enhancement of reactive case materials has been measured for several typical explosive formulations and a number of different case materials. It has been demonstrated that reactive cases can enhance the blast effects of these explosive formulations over that produced using a steel case of equal mass in a well vented confined space testbed. The Defense Threat Reduction Agency (DTRA) has been actively investigating novel energetic materials performance in its Advanced Energetics program and has generated a significant database of cased explosive devices in a two-room, non-responding, vented structure. The testbed and standard test configurations are defined and the reactive case data are compared to the standard steel case designs.

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