

DETONATION OF A BOMB ON A BURIED STRUCTURE: PREDICTIONS, DESIGN AND RESULTS

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This paper describes a portion of Dipole East 25, the first full-scale test supporting the Consecutive Miracles concept. Consecutive Miracles, differing from previous air delivery modes (TELL 91, 1992), requires a dual bomb attack where the first bomb creates an open cavity from the surface to some depth that remains open for roughly a second, through which the second bomb is placed (Henny, 1999). Thus the primary objective of DE-25 was to quantify the time history of the cavity formation and collapse from the detonation of a buried bomb and second to quantify damage to the underlying concrete structure on which the bomb was placed (Henny, 1994).