

## AIRBLAST INTERACTIONS FROM MULTIPLE BURSTS (MULTIBURST)

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The objective of the MULTIBURST program was to experimentally determine the air blast field near the center of azimuthally uniform arrays of three, four, and six high explosive bursts.

Matched spheres of LX-10

weighing 3.623 gm (8lb) were used for the high explosive charges. The charge arrays were: (1) equidistant from the array center and detonated simultaneously (the perfect spike attack), (2) equidistant and non-simultaneous, or (3) non-equidistant and non-simultaneous, i.e., rational spike attacks. The bursts radii from the array center were chosen to give single bursts overpressure of interest to military targets.

The paper describes the design, construction, and unique features of the test bed necessary to carry out the variety of gage layouts for the diverse burst configurations. Results are presented for three bursts arrays for cases (1), (2), and (3).. The reflected overpressure at the shock convergence point are compared with theoretical results and an algorithm is presented which describes the decay of peak reflected overpressure with distance from the convergence point.