

THE EFFECTS OF DUST ON MACH REFLECTION AND BLAST PARAMETERS IN EVENTS DIRECT COURSE AND MIGHTY MACH

NEEDHAM,C.E.;CREPEAU,J.E.;KENNEDY,L.W.

Theoretical calculations have been completed for 2 high explosive detonations over clean and dusty surfaces. Special attention was given to dust entrainment. The presence of dust delays Mach stem formation and enhances the pressure. Results of the clean and dusty calculations are compared. Effects on triple point path, overpressure and dynamic pressure waveforms are examined. Calculational results are compared with experimental data from MIGHTY MACH and DIRECT COURSE. Good agreement between calculation and experiment is shown.