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Oscillations of a standing shock in the Richtmyer-Meshkov instability $(II)^1$ KARNIG MIKAELIAN, Lawrence Livermore National laboratory — In a typical Richtmyer-Meshkov experiment a fast moving flat shock strikes a stationary perturbed interface between fluids A and B creating a transmitted and a reflected shock, both of which are perturbed. We propose shock tube experiments in which the reflected shock is stationary in the laboratory. Such a standing shock undergoes well known damped oscillations. We present the conditions required for producing such a standing shock wave which greatly facilitates the measurement of the oscillations and their rate of damping.

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