

Experimental study of shock waves in the soap films

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ABSTRACT

ABSTRACT the bursting of plane vertical soap films has been studied by means of the high-speed flash photography and a new imaging technique of using a line CCD camera. An aureole and a " shock wave " preceding the rim of the expanding hole has been clearly observed. the analogy between thickness jumps in the soap films and shock waves are then investigated. Photographs of supersonic flow over blunt bodies are also presented. The results suggest the feasibility of the " soap film shock tube " .

Keywords : Shock waves .High-speed flash photography .Line scan CCD camera .Analogy

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