

DETERMINATION OF CONSTITUTIVE RELATIONS FROM
PLANE WAVE EXPERIMENTS[†]

Richard Fowles*

Shock Dynamics Laboratory, Washington State University

ABSTRACT

Recent developments in experimental methods for measuring the characteristics of plane compression waves are reviewed, and analytical methods for inferring constitutive relations from measured wave profiles are discussed. A general method, requiring only pressure or particle velocity measurements, is proposed that is applicable to arbitrary waves in which equilibrium or steady state may not obtain. A summary of current knowledge of constitutive relations obtained from plane wave experiments is also presented.

[†]Basis of a talk given Tuesday, August 26, 1969, 1:30 p.m., at Symposium 2, "Characterization of the Dynamic Behavior of Materials," at the A.S.M.E. Applied Mechanics Western Conference in Albuquerque, New Mexico, August 25-27, 1969.

*Current address: Physics International Co., San Leandro, California.

STATEMENT OF THE DIRECTOR GENERAL

OF THE BUREAU OF LAND MANAGEMENT

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The Bureau of Land Management, U.S. Department of the Interior, has the honor to acknowledge the receipt of your letter of the 10th day of January, 1964, regarding the proposed withdrawal of certain lands from the public domain for inclusion in the Grand Staircase-Escalante National Monument. The Bureau is currently reviewing the proposed withdrawal and will advise you of the results of its review as soon as possible.

Very truly yours,
Director General